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David Jablonsky

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# National Power

DAVID JABLONSKY

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"I put for a general inclination of all mankind, a perpetual and restless desire of power after power, that ceaseth only in death." -- Thomas Hobbes[1]

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Thomas Hobbes personifies the realist approach to international relations in a world of anarchy and self-help, in which individual man and men aggregated into states seek to maintain or to increase power. In the modern era, this approach is reflected quintessentially by Hans Morgenthau, who presents national power not only as an end in the Hobbesian sense that "power is always the immediate aim," but as a means to that end.[2] The study of strategy also deals with power primarily from the national perspective, an acknowledgment that the nation-state is still the most important actor in the international arena. This perspective is tempered, however, by a recognition that forces and trends in recent decades have produced a multi-centric world of transnational actors that coexists with the traditional state-centric world. Both worlds must be considered when examining the concept of national power.[3] There is also the acknowledgment of power as an end or objective in the sense of Morgenthau's description of national interests defined in terms of maintaining, balancing, or increasing national power. But the emphasis here is primarily on national power as means or resources to further national strategy, defined by the Department of Defense (DOD) as the "art and science of developing and using the political, economic, and psychological powers of a nation-state, together with its armed forces during peace and war, to serve national objectives." [4]

Most scholars, in fact, focus on power as a means, the strength or capacity that provides the "ability to influence the behavior of other actors in accordance with one's own objectives." [5] At the national level, this influence is based on relations between nation-state A and another actor (B) with A seeking to influence B to act in A's interest by doing x, by continuing to do x, or by not doing x. Some governments or statesmen may seek influence for its own sake. But for most, influence, like money, is instrumental, to be used primarily for achieving or defending other goals, which could include prestige, territory, raw material, or alliances. To achieve these ends, state A can use various techniques of influencing, ranging from persuasion or the offering of rewards to threats or the actual use of force.[6]

From this standpoint, the use of a nation's power is a simple relational exercise. But in dealing with the concept of national power, as Clausewitz remarked of war, "everything . . . is very simple, but the simplest thing is difficult." [7] To begin with, there are subtle characteristics of power that render its use in the national strategic formulation process more art than science. Moreover, relationships among the elements of national power as well as the context in which they are to be used to further a nation's interests are seldom clear-cut propositions. All this means that in the end, national power defies any attempts at rigorous, scientific assessment. The purpose of this article is to demonstrate why this is so and, more important, why, all the complexity notwithstanding, the concept of national power remains a key building block for understanding and developing strategy.

## The Context of National Power

National power is contextual in that it can be evaluated only in terms of all the power elements and only in relation to another player or players and the situation in which power is being exercised. A nation may appear powerful because it possesses many military assets, but the assets may be inadequate against those of a potential enemy or inappropriate to the nature of the conflict. The question should always be: power over whom, and with respect to what? [8]

**Multidimensional Interrelationship.** National power is historically linked with military capacity, a natural relationship since war in the international arena is the *ultima ratio* of power. Nevertheless, one element of power alone

cannot determine national power. For instance, there is the huge size of Brazil, the large population of Pakistan, the industrial makeup of Belgium, and the first-class army of Switzerland. Yet none of these states is a first-rank power. Morgenthau calls the mistaken attempt to define national power in terms of one element of that power the "Fallacy of the Single Factor." Another aspect of this fallacy is the failure to distinguish between potential and actual power. Part of the problem stems from the fact that the term "power" has taken on the meaning of both the capacity to do something and the actual exercise of the capacity. And yet a nation's ability to convert potential power into operational power is based on many considerations, not the least of which is the political and psychological interrelationship of such factors as government effectiveness and national unity.[9]

In this context, the elements of national power, no matter how defined, can be separated only artificially. Together, they constitute the resources for the attainment of national objectives and goals. And while those goals may be judged as moral, immoral, or amoral, the elements of power are simply means to national strategic ends and as such are morally neutral. It is possible, in other words, to reject the cynic's belief that God is on the side of the largest number of battalions, as well as the assumption that the side with the smallest number always fights for the right.[10]

**Relations and Dynamics.** National power is relative, not absolute. Simply put, a nation does not have abstract power in and of itself, but only power in relation to another actor or actors in the international arena. To say that the United States is the most powerful nation on earth is to compare American power with that of all nations as they currently exist. Nevertheless, leaders of a nation at the peak of its power can come to believe that such power has an absolute quality that can be lost only through stupidity or neglect. In reality the superior power of a nation is derived not only from its own qualities, but from that of other actors compared with its own. Many observers in the late 1930s, for example, perceived France as more than a match for Nazi Germany, since the French military of that era was superior in quality and quantity of troops and weaponry to the victorious French forces of 1919. But the French military power of 1919 was supreme only in the context of a defeated and disarmed Germany; that supremacy was not intrinsic to the French nation in the manner of its geographic location and natural resources. Thus, while the French military of 1939 was superior to that of 1919, a comparison of 1939 French military power to that of Germany in the same year would have shown a vastly different picture for many reasons, not the least of which was the German adoption of the military doctrine of blitzkrieg.[11]

Closely allied to all this is the fact that national power is dynamic, not permanent. No particular power factor or relationship is immune to change. In this century, in particular, rapid changes in military technologies have accelerated this dynamism. America's explosion of a nuclear device instantly transformed its power position, the nature of warfare, and the very conduct of international relations. A war or revolution can have an equally sudden effect on power. The two world wars devastated Europe, caused the rise of the flank powers, the United States and the Soviet Union, and set the developing world on a road to decolonization that in less than 50 years dismantled a system that had been in existence for over three centuries. Economic growth can also quickly change a nation's power position, as was the case with Japan and Germany after World War II. In addition, the discovery of new resources, or their depletion, can alter the balance of power. Certainly OPEC's control over a diminishing supply of oil, coupled with its effectiveness as a cartel, caused a dramatic shift in power relations after 1973.[12]

Such shifts are not always so immediately discernible. Power, as Hobbes long ago pointed out, is what people believe it is until it is exercised. Reputation for power, in other words, confers power on a nation-state regardless of whether that power is real or not. At the same time, there are examples throughout history of nations that continued to trade on past reputations, only to see them shattered by a single event. For France, the battles of Sedan produced just such effects in 1870 and again in 1940.[13]

This subjective characteristic of power also plays a key role in deterrence, the exercise of negative power as state A influences actor B *not* to do x. The influence is effectively exercised because B perceives that A not only has the capability to prevent B from doing x, but the willingness to use that capability as well. In other words, national credibility must be a concomitant of national capability for deterrence to work. When the combination doesn't occur, as Britain and France discovered when Hitler discounted their guarantee of Poland in the summer of 1939, the result can be war. "*The men of Munich will not take the risk,*" the Nazi leader explained to his commanders on 14 August 1939.[14]

**Situational.** Some elements of national power or combinations of power cannot be applied to certain situations involving certain actors. The United States in 1979-80, for instance, was powerless to rescue American citizens held hostage in Teheran, and American nuclear power during the Cold War had little value in causing nonaligned countries to modify their policies; nor did it deter North Korea or North Vietnam in their attempts to unify their countries.

The Vietnam War also illustrates another contextual aspect of national power, that of cost-risk-benefit analysis, in which power can be exercised but the costs and risks are perceived to be disproportionate to the benefit achieved. Power, in other words, must be relevant in the existing circumstances for the particular situation. This explains why, during the 1973 Arab-Israeli War, the United States was not able to persuade its European allies to allow American planes to use NATO bases for refueling and maintenance. The overall economic and military strength of the United States as well as the political bonds of alliance solidarity proved less influential on European decisionmakers than the possible economic loss of their access to oil. This type of American power was equally irrelevant in late 1994 when Britain and France, with troops involved in peace operations on the ground in Bosnia, turned down a US plan for NATO air strikes to support Muslims in the besieged town of Bihac.[15]

This aspect of the contextual nature of national power introduces even more complications when the diversity of actors in the international arena is taken into account. In an increasingly multi-centric world, nation-states will increasingly deal with transnational actors in the exercise of national power. The European Union is just one example of international government organizations in which the confluence of political and economic trends has created a supra-national regional unit that transcends in many ways both the legal- territorial aspects of the state and the psychological unity of the nation. This type of challenge is abetted by international nongovernmental actors ranging from multinational corporations focused on self-interested profit and national liberation movements seeking to establish new governments within existing states, to organizations such as Amnesty International or Greenpeace, seeking to mobilize international public opinion in order to bring pressure on national governments to alter particular policies.[16]

Some of these actors respond more willingly to one aspect of national power than to another. Multinational corporations, for example, will generally react to economic factors more rapidly than the United Nations or a national liberation movement. Conversely, negotiations and appeals to human morality may prove to be more powerful at the United Nations than in the corporate boardroom or in the field. And the allegiance of an uneducated people in a newly independent country may help create a powerful national liberation movement, yet be meaningless for a multinational corporation or the United Nations. National power, then, is contextual not only in its application to other states, but to other global actors as well.[17]

## **The Elements of National Power**

It is convenient to organize the study of national power by distinguishing between natural and social determinants of power. The natural determinants (geography, resources, and population) are concerned with the number of people in a nation and with their physical environment. Social determinants (economic, political, military, psychological, and, more recently, informational) concern the ways in which the people of a nation organize themselves and the manner in which they alter their environment. In practice, it is impossible to make a clear distinction between natural and social elements. For instance, resources are a natural factor, but the degree to which they are used is socially determined. Population factors, in particular, cut across the dividing line between both categories. The number of people of working age in the population affects the degree of industrialization of a nation, but the process of industrialization, in turn, can greatly alter the composition of the population.[18]

### *Natural Determinants of Power*

**Geography.** Geographical factors, whether they are location and climate or size and topography, influence a nation's outlook and capacity. Location, in particular, is closely tied to the foreign policy of a state. Vulnerable nations, like Poland caught geographically between Russia and Germany, have even had to deal with the loss of national existence. Conversely, Great Britain, the United States, and Japan have been protected by large bodies of water throughout their histories. Each, in turn, used the combination of a large navy and overseas trade to become a great power. With its oceanic moats, the United States was able to follow George Washington's advice to avoid entangling alliances and expand peacefully for almost a century, free of external interference. In addition, that expansion came about primarily

without conquest, through the purchase of huge land tracts from European powers that found the location of the territories too remote to defend easily.

The connection between foreign policy and location is, in fact, so fundamental that it gave rise in this century to geopolitics as a field of study. At its most extreme, geopolitics can succumb to Morgenthau's "Fallacy of the Single Factor" or be distorted as it was at the hands of Karl Haushofer and his disciples into a kind of political metaphysics with a call for adequate national living space (*Lebensraum*) that was put into ideological service for Nazi Germany. At its best, geopolitics has many insights to offer. Consider, for instance, the connection between the British and American development of democracy and civil rights and the relatively secure strategic locations of both countries, as opposed to the authoritarian regimes of Germany and Russia, direct neighbors for much of history, lying exposed on the North European plain. Or consider the continuing Russian drive for warm-water ports and the continuing value of choke points, as was demonstrated when Egypt's closure of the Straits of Tiran in May 1967 led to war. The persistence of this field of study was reflected in the Cold War by Raymond Aaron, who described the forward deployment of US troops as analogous in geographical terms to earlier British policy:

In relation to the Eurasian land mass, the American continent occupied a position comparable to that of the British Isles in relation to Europe: the United States was continuing the tradition of the insular state by attempting to bar the dominant continental state's expansion in central Germany and in Korea.[19]

Location is also closely tied to climate, which in turn has a significant effect on national power. The poorest and weakest states in modern times have all been located outside the temperate climate zones in either the tropics or in the frigid zone. Even Russia has chronic agricultural problems because all but a small part of that country lies north of the latitude of the US-Canadian border. Russia is also a good example of how geographical factors such as size and topography can have advantages and disadvantages for a nation. The Soviet Union, with its 11 time zones, was able to use its vast size during World War II to repeat the historical Russian military method of trading space for time when invaded. At the same time, that immense size certainly played a role in the complex ethnic and political centrifugal forces that eventually pulled apart the Union of Soviet Socialist Republics. In a similar manner, the predominantly north-south Russian rivers are great natural resources that would have been economically and politically more valuable had they run in an east-west direction. In the future, technology may mitigate some of these factors in the same way that intercontinental missiles affected the importance of insular locations. But here, as in other areas, there are many geographical obstacles to the acquisition of power that are costly or impossible to overcome.[20]

**Population.** Demographics in the form of size, trends, and structure are an important aspect of national power. A large population is a key prerequisite, but not an automatic guarantee of strength. Thus, there is Canada, more powerful than the more populous but less industrialized Mexico. And Japan, with a small population marked by widespread technical skills, has been able to exercise national power far in excess of China for all its masses. At the same time, trends in population growth and decline can have significant effects on national power. The Prussian unification of the German-speaking peoples in 1870, for example, instantly created a great power with a population that grew by 27 million between then and 1940, even as that of France reflected the shift in European power, increasing by only four million in the same period. In another example, the historical increase in American power was partly due to the arrival of more than 100 million immigrants between 1824 and 1924. During the same century, Canada and Australia, comparable in territory and developmental level but with populations less than a tenth of America's, remained secondary powers. That such trends could have more complex causes dealing with other elements of power was illustrated by the Austro-Hungarian Empire, which had a large and growing population during most of that period, but also remained a secondary power because it was divided ethnically, weak politically, and at an extremely low level in terms of industrial development.[21]

In the future, global trends also will affect the structure and balance of national populations, particularly those of the poorest countries. In 1830, the global population reached one billion for the first time; it required 100 years to double. It took only 45 more years (1975) for the population to double again to four billion. In the next 21 years the population increased almost two billion, reflecting a growth rate of about 90 million a year. For the next several decades, 90 percent of this growth will occur in the lesser-developed countries, many already burdened by extreme overpopulation for which there is no remedy in the form of economic infrastructure, skills, and capital.[22]

Population structure and balance are also significant for developed nations. Important here is the percentage of the population in the most productive cohort, generally considered to be somewhere between the ages of 18 and 45, that can best meet the needs of the nation's military and industry as well as create the following generation. Comparing the numbers in this group to those in the younger cohort also provides a more accurate picture of population trends and the interaction of demographics with all power elements. Israel, for example, has to deal with its relatively small population and the fact that the military siphons off a significant segment of the civilian workforce in the middle cohort. One consequence is government emphasis on education across all age groups. Another is the government's military focus on sophisticated weaponry, mobility, air power, and the preemptive strike in order to avoid drawn-out land warfare that could be costly in manpower. Finally, a comparison of the middle population group to the older will provide a picture of trends that can have significant consequences for a nation's power. For example, any nation with an increasing cohort of retired people coupled with generous social welfare benefits will eventually have to face hard choices between guns and butter on the one hand, and possible limits to its national power as well as to its investment and economic growth potential on the other. These choices already face the United States as the "baby boomer" generation approaches retirement age against the backdrop of a staggering explosion in social entitlements.[23]

**Natural Resources.** Large amounts of natural resources are essential for a modern nation to wage war, to operate an industrial base, and to reward other international actors through trade and aid, either in modern industrial products or in the raw materials themselves. But these resources, whether they be arable land and water or coal and oil, are unevenly distributed around the world and are becoming increasingly scarce. Moreover, as in the case of the geopolitical ownership of strategic places, the physical possession of natural resources is not necessarily a source of power unless a nation can also develop those resources and maintain political control over their disposition. In their raw state, for example, minerals and energy sources are generally useless. Thus, the Mesabi iron deposits had no value to the Indian tribes near Lake Superior, and Arabian oil a century ago was a matter of indifference to the nomads who roamed above it. Conversely, those nations with great industrial organizations and manufacturing infrastructures have traditionally been able to convert the potential power of natural resources into actual national power.

Very few nations, however, are self-sufficient. A country like the United States has a rich store of natural resources, and yet may be dependent on imports because of its voracious consumption. Japan, on the other hand, has few natural resources; it is dependent on imports for 100 percent of its petroleum, bauxite, wool, and cotton; 95 percent of its wheat; 90 percent of its copper; and 70 percent of its timber and grain.[24] Nations have traditionally made up for such difficulties in several ways. One time-honored method is to conquer the resources, a principal motivation for the Japanese expansion that led to World War II and the Iraqi invasion that led to the Gulf War. A second method is to develop resources in another country by means of concessions, political manipulation, and even a judicious use of force--all used earlier to considerable effect by the United States in Latin America. In an age of increasing interdependence, this type of economic penetration has long since lost its neocolonial identity, particularly since both of America's principal World War II adversaries now regularly exercise such penetration in the United States.

The third and most common method for obtaining natural resources is to buy them. In recent years, however, the combination of rapid industrial growth and decline of resources has changed the global economy into a seller's market, while providing considerable economic leverage to nations in control of vital commodities. OPEC's control of oil, for example, provided its members influence all out of proportion to their economic and military power. A similar transformation may occur in the future with those nations that are major food producers as the so-called "Green Revolution" faces the prospect of more depleted lands and encroaching deserts. Finally, there is the short supply of strategic and often esoteric minerals so necessary for high technology and modern weapons. One consequence of this diminishment of raw materials has been the emergence of the sea bed, with its oil and manganese reserves, as a new venue of international competition, in which those nations with long coastlines and extensive territorial waters have the advantage. Such shortages are a reminder of how closely connected is the acquisition of natural resources to all the elements of power, particularly for a truly dependent nation like Japan, which can neither feed its people nor fuel its high-technology economy without access to overseas markets. Absent its alliance with the United States as a means to ensure its access to such resources as Persian Gulf oil, Japan would be forced to expand its "self-defense" military force, perhaps even becoming a declared nuclear power.[25]

**Economic.** Economic capacity and development are key links to both natural and social determinants of power. In terms of natural resources, as we have seen, a nation may be well endowed but lack the ability to convert those resources into military hardware, high-technology exports, and other manifestations of power. Ultimately, however, economic development in a nation flows from the social determinants of power, whether they be political modernization and widespread formal education, or geographic and social mobility and the ready acceptance of innovation. All this, of course, is worked out against the backdrop of balanced military investment. An excess of military spending can erode the underlying basis for a nation's power if it occurs at the expense of a larger economy and reduces the national ability to invest in future economic growth. For developing countries already short of economic investment capital, military spending represents a serious allocation of resources. But even advanced countries, especially since the end of the Cold War, have to make some choices between guns and butter. Because a nation's political stability as well as the legitimacy of its government are increasingly linked to domestic economic performance, excessive military spending, as the former Soviet Union discovered, can be dangerous for large and small countries alike.

Strong domestic economies also produce non-military national power in the international arena. Leading industrial nations have available all the techniques for exercising power, including rewards or punishment by means of foreign trade, foreign aid, and investment and loans, as well as the mere consequences their domestic policies can have on the global economy. This type of power can be weakened, however, if a nation suffers from high inflation, a large foreign debt, or chronic balance-of-payment deficits. In short, the strength of a nation's economy has a direct effect on the variety, resiliency, and credibility of its international economic options. The size of the US budget and trade deficits, for example, means that the Federal Reserve must maintain interest rates high enough for deficit financing, which limits its ability to stimulate the economy with lower rates. And American foreign aid is becoming less influential as an economic instrument of power as budgets decline. On the other hand, US trade policy has become increasingly important to the US economy, with American exports, as an example, expected to create 16 million jobs by the year 2000.[26] That such economic considerations are closely interrelated to other elements of power is demonstrated by the perennial question of whether most-favored-nation status, which is nothing more than normal access to US markets, should be made conditional on progress in human rights by countries such as China.

Finally, increasing interdependence has caused major changes in the economic element of national power. National economies have become more dependent on international trade and on financial markets that have become truly global in scope. This in turn makes it more difficult for a nation to raise short-term interest rates or to coordinate monetary policy with other international actors. In a similar manner, the ability of nations to use exchange rates to further their national interests has declined as governments deal more and more with international capital flows that dwarf the resources available to any nation to defend its currency. From a security perspective, this type of economic interpenetration is reflected in the mutual vulnerability of national economies. Moreover, a nation's economic policy is now influenced by myriad international governmental organizations such as the International Monetary Fund (IMF) and the General Agreement on Tariffs and Trade (GATT), while multinational corporations stand ready to manipulate the domestic politics of nation-states to further their transnational interests.[27]

**Military.** Military strength is historically the gauge for national power. Defeat in war has normally signaled the decline if not the end of a nation's power, while military victory has usually heralded the ascent of a new power. But military power is more than just the aggregation of personnel, equipment, and weaponry. Leadership, morale, and discipline also remain vital factors of military power. Despite rough quantitative parity between the Iraqi military and the allied coalition, the dismal Iraqi performance in the Gulf War demonstrated the enduring relevance of those intangibles. That performance also showed how political interference or the gradual infection of a nation or its military by incompetence, waste, and corruption can weaken a nation's armed forces. By contrast, there is the example of the US military working over the years in tandem with political authorities to move from the hollow force of the immediate post-Vietnam period to the joint military machine of Desert Storm.[28]

The Gulf War also highlights how important power projection and sustainability are in the modern era for military effectiveness. For a global power like the United States, the focus on these factors produced not only the unique air and sea lift capability that provided transportation for a half million troops to the Persian Gulf in 1990-91, but incredible resupply feats in an environment in which a single division during the 100-hour ground offensive consumed 2.4 million gallons of fuel, brought forward in 475 5000-gallon tankers.[29] Allied to these factors, of course, are readiness

considerations ranging from training and maneuver opportunities to the availability of fuel and repair parts. In a similar manner, a nation's potential for rapid mobilization may also play a key role. Israel, for example, has a permanent force of only 164,000 highly trained and ready soldiers. But that force can be augmented within 24 hours by almost three times that many combat-ready troops. And Sweden has the capability to mobilize a force almost overnight that can equal many European standing armies.[30]

The quality of arms technology also has become a vital military factor for all nations in a period marked by rapid and important scientific breakthroughs. Timely inventions ranging from the crossbow to the airplane have often been decisive when accompanied by appropriate changes in military organization and doctrine. When these two components lag technological change, however, as they did in the American Civil War and World War I, the results can be horrific diminishment and waste of military power. In addition, new technologies in the hands of rogue states or non-state actors such as terrorist groups will continue to be an important consideration for nations in the exercise of military power. Weapons of mass destruction are and will probably continue to be of primary concern in this regard. But even relatively cheap, recently developed conventional weapons in the appropriate situation can be decisive, as was illustrated by the American-built, shoulder-fired Stinger anti-aircraft missiles that enabled the Afghan *mujahedeen* guerrillas to neutralize Soviet air power. Finally, technological advances are a useful reminder once again that military power, like all elements of national power, is contextual. Technology is not an automatic panacea for producing quick victories and low casualties, particularly absent clear political direction and coherent strategy. There comes a time, as Britain's thin red line discovered under the weight of the Zulu offensive at Isandhewana, when quantity has a quality all its own.[31]

**Political.** This element of power addresses key questions, many of which are related to the psychological element: What is the form of government, what is the attitude of the population toward it, how strong do the people want it to be, and how strong and efficient is it? These questions cannot be answered with simple statistics, yet they may be paramount in any assessment of national power. If a government is inadequate and cannot bring the nation's potential power to bear upon an issue, that power might as well not exist. Nor can an analysis turn upon the type of government a state claims to have, for even the constitution of a state may be misleading. The 1936 Soviet Constitution, for example, was a democratic-sounding organic law that had little in common with the actual operation of the Soviet regime. And the German Weimar Constitution, a model of democratic devices, did not prevent Hitler from reaching power and from creating his own "constitutional law" as he proceeded.

What is clear is that the actual forms of government, each with its own strengths and weaknesses, play a role in the application of national power. An authoritarian system, for instance, restricts in varying degrees individual freedom and initiative, but permits formulation of a highly organized state strategy. Democratic systems, by comparison, require policy formation by consensus-building and persuasion in an open, pluralistic society. Consequently, it is extremely difficult for democracies to develop and implement a long-range state strategy or to change policy direction as abruptly as, for example, Nazi Germany and the USSR did in the ideological volte-face marked by the August 1939 non-aggression treaty. In addition, the level of political development within a state is also important. This development involves both the capability, and more particularly the efficiency and effectiveness, of a national government in using its human and material resources in pursuit of national interests. Thus, administrative and management skills are crucial if a nation is to realize its full power potential.

A government also takes the shape and operates the way it does for very complex reasons, many of which reflect the experience of a people and their attitude toward, and expectations of, what the government is to do and how strong, as a consequence, it should be. For example, a fear of too much state power caused the Founding Fathers deliberately to make the United States government inefficient (in the sense of a quick, smooth operation) by means of "checks and balances." In a similar manner, the French fear of a "man on horseback" in the wake of their second experience with Bonapartism caused a curtailment of executive powers that resulted in the weakness of the French governments after the Franco-Prussian War. Under both the Third and Fourth French Republics, as a result, the French strengthened the legislative branch to a degree that made strong executive leadership almost impossible. The French preferred to suffer the executive weakness rather than run the risks entailed in a strong government. Consequently, while the United States had 14 administrations between 1875 and 1940, and the British 20, France had 102. After World War II, the Fourth French Republic averaged two regimes a year.[32]

**Psychological.** The psychological element of power consists of national will and morale, national character, and degree of national integration. It is this most ephemeral of the social power determinants that has repeatedly caused nations with superior economic and military power to be defeated or have their policies frustrated by less capable actors. Thus there was Mao's defeat of Chiang Kai-shek when Chiang at least initially possessed most of China's wealth and military capability, the ability of Gandhi to drive the British from India, and that of Khomeni to undermine the Shah. And it is almost a cliché that any measurement of US economic and military power vis-à-vis that of the North Vietnam-Vietcong combination during the late 1960s would have led to the conclusion that US superiority in these two categories would result in an American victory. Harry Summers recounts a story, in this regard, that was circulating during the final days of the US retreat from Vietnam:

When the Nixon Administration took over in 1969 all the data on North Vietnam and on the United States was fed into a Pentagon computer--population, gross national product, manufacturing capability, number of tanks, ships, and aircraft, size of the armed forces, and the like.

The computer was then asked, "*When will we win?*"

It took only a moment to give the answer: "*You won in 1964!*"[33]

National will and morale are defined as the degree of determination that any actor manifests in the pursuit of its internal or external objectives. For a given international actor, however, will and morale need not be identical at all levels of society. During 1916 and early 1917, the Russian nobility continued to plan for new offensive action even as Russian troops were abandoning their weapons and their battlefield positions. National character has an equally complex relation to national power inasmuch as that character favors or proscribes certain policies and strategies. Americans, for example, like to justify their actions. Thus, the United States did not enter World War I until Wilsonian idealism had to confront the loss of American ships and American lives. The elevation of "moralism" in the conduct of foreign policy, in turn, diminishes the ability of the United States to initiate a truly preemptive action. In the Cuban missile crisis, for example, the choice of a blockade over an air strike was based in part on the argument that from the standpoint of both morality and tradition, the United States could not perpetrate a "Pearl Harbor in reverse." [34] In all such cases, as with will and morale, it is extremely difficult to identify the constituent parts of and sources behind national character. Historical experiences and traditional values undoubtedly are important, as are such factors as geographic location and environment. Russian mistrust of the external world, for instance, is historically verifiable as part of the national character, whether it is because of the centuries of Tartar rule, three invasions from Western Europe in little more than a century, or something else. And Russian stoicism is a character trait, whether the cause is Russian Orthodox Christianity, communism, or the long Russian winters.[35]

Finally, there is the degree of integration, which refers simply to the sense of belonging and identification of a nation's people. In many ways, this contributes to both national will and morale as well as character. In most cases there is a direct correlation between the degree of perceived integration and the extent of ethnic, religious, linguistic, and cultural homogeneity, all of which contribute to a sense of belonging, manifested in a sense of citizenship. On the other hand, despite examples to the contrary (Belgium, Canada, and the states of the former Yugoslavia), a lack of integration need not necessarily cause a lack of identity. Swiss unity has continued across the centuries despite low degrees of integration in ethnicity, language, and religion.[36]

**Informational.** The communications revolution, which began over a century ago with the advent of global transmission of information, has taken on new momentum in recent decades with the development of fax machines, television satellites, and computer linkages. As the revolutions in Central and Eastern Europe demonstrated in the fall of 1989, a new fact of life in the international arena is that it is no longer possible for any nation-state to deny its citizens knowledge of what is taking place elsewhere. Ideas, in other words, move more freely around the world than at any other time in the past. This has had particularly fortunate results for the United States. Even as some other aspects of power have gone into relative decline, America's influence as a source of ideas and as a shaper of culture has increased. This "soft power," in Joseph Nye's words, has been a major factor in formulating the US national security strategic objective of "enlargement." [37] So in one sense, information has contributed to the concept of the world as a global village.

This combination of enhanced communication and dissemination of information, however, is a two-edged sword that cuts across all the social determinants of power in national strategy. In the economic realm, for instance, global interdependence has been enhanced by information-communication improvements. On the other hand, near instantaneous downturns of major economies are always a possibility with the immediate transmission of adverse economic news concerning any nation-state or transnational economic actor. Politically, instantaneous and pervasive communication can enhance the ability of governmental elites to lead the people in a democracy or to act as a national consoler in times of tragedy, such as the *Challenger* explosion or the Oklahoma City bombing. At the same time, these developments can also aid the demagogues, the great simplifiers always waiting in the wings to stir fundamental discontents and the dark side of nationalism. In terms of psychological power, Winston Churchill demonstrated repeatedly that the pervasive distribution of targeted information can have momentous effects on intangibles such as national will. Conversely, however, this type of ubiquity has the pernicious potential of altering in a matter of years basic values and cultural beliefs that take generations to create.

Nowhere is the effect of developments in communications and access to information more far-reaching than on warfare. In the purely military realm, information dominance can create operational synergies by allowing those systems that provide battlespace awareness, enhance command and control, and create precision force to be integrated into the so-called "system of systems." One result of all this is to compress the strategic, operational, and tactical levels of war, previously considered as separate and distinct loci of command and functional responsibilities. The commander will be faced in the future with the much more complex job of recognizing those events occurring simultaneously at all three levels and integrating them into the calculation that results from the traditional consideration at the operational level of which tactical battles and engagements to join and which to avoid. Equally important, shorter time for decisions--occasioned by both the compressed continuum of war and electronically gathered information--means less time to discover ambiguities or to analyze those ambiguities that are already apparent.

At the higher level of cyberwar, the two-edged potential of communications and information is even more evident. In the future, nations will wage offensive information warfare on another state's computer systems, targeting assets ranging from telecommunications and power to safety and banking. Such an onslaught could undermine the more advanced aspects of an adversary's economy, interrupt its mobilization of military power, and by affecting the integrity of highly visible services to the population, create almost immediate pressure on government at all levels. As activities rely increasingly on information systems rather than manual processes and procedures, information infrastructures of the most developed nations, such as the United States, become progressively more vulnerable to state and non-state actors. Even as there are advances in information security technologies, hacker tools are becoming more sophisticated and easier to obtain and use. One analyst concludes in this regard that, for the United States, "the possibility of a digital Pearl Harbor cannot be dismissed out of hand." [38]

## **Evaluation**

Evaluation of national power is difficult. The basic problem, as we have seen, is that all elements of power are interrelated. Where people live will influence what they possess; how many they are will influence how much they possess; what their historical experience has been will affect how they look at life; how they look at life will influence how they organize and govern themselves; and all these elements weighed in relation to the problem of national security will influence the nature, size, and effectiveness of the armed forces. As a consequence, not only must each separate element be analyzed, but the effects of those elements on one another must be considered. These complexities are compounded because national power is both dynamic and relative. Nation-states and other international actors change each day in potential and realized power, although the rate of change may vary from one actor to another. And because these changes go on continually, an estimate of a state's national power vis-à-vis the power of another actor is obsolescent even as the estimate is made. The greater the rate of change in the actors being compared, the greater the obsolescence of the estimate.

In other words, like all strategic endeavors, more art than science is involved in the evaluation of where one nation-state stands in relation to the power of other regional and global actors. This has not deterred one former government official from creating a formula to develop a rough estimate of "perceived" national power--focused primarily on a state's capacity to wage war: [39]

$P_p = (C + E + M) \times (S + W)$  in which:

$P_p$  = Perceived power

C = Critical mass: population and territory

E = Economic capability

M = Military capability

S = Strategic purpose

W = Will to pursue national strategy

Regardless of its prospective contribution in calculating a  $P_p$  value, this formula has some important lessons. The more tangible elements (C, E, M) that can be objectively quantified also involve varying degrees of subjective qualifications: territory that is vast but covered with mountain ranges and has few navigable rivers; a population that is large but unskilled and uneducated; or cases in which, despite qualitative military superiority in technology and weapons on one side, the opponent is able to prevail through superior intangibles ranging from leadership to morale. Most important, by demonstrating that national power is a product--not a sum--of its components, the formula is a reminder of how important the relational and contextual aspects are. The United States discovered in Vietnam that no matter how large the sum of the more tangible economic and military capabilities in relation to an adversary, their utility is determined by the intangibles of strategic purpose and national will. Zero times any number, no matter how large, is still zero.

These considerations are particularly important in evaluating what some might consider to be irrational acts by states that use force to alter the status quo. In fact, these states may simply differ from others in the perception of low risks where others perceive high ones, rather than in the willingness to take risks. There is growing evidence that the 1990 Iraqi invasion of Kuwait falls into this category. In another era, many of Hitler's "Saturday surprises" in the 1930s were considered reckless by those who would eventually have to redress their consequences. These incidents came about, however, not because the Nazi leader willingly tolerated a high probability of conflict, but because he was certain that the other side would back down. When the German military opposed such policies as the Rhineland coup and the *Anschluss* on the basis that they were too dangerous, Hitler did not argue that the risks were worth the prizes, but that instead, taking the social determinants of power in Germany and the other countries into consideration, the risks were negligible. In terms of the concept of gain and risk assessment displayed in Figure 1 below, Hitler's analysis of potential opposition came to rest at the MAXIMIN approach of Quadrant 2, not that of MAXIMAX in Quadrant 1.[40]

		Risk	
		High (MAX)	Low (MIN)
Gain	High (MAX)	1 (MAXIMAX)	2 (MAXIMIN)
	Low (MIN)	3 (MINIMAX)	4 (MINIMIN)

Figure 1. Gain and Risk Assessment.

In the Rhineland episode of 7 March 1936, for example, the military correlation of forces was quantifiably against Germany, as Hitler was well aware. "We had no army worth mentioning," he reflected later; "at that time it would not even have had the fighting strength to maintain itself against the Poles." [41] But unlike his military advisors, who were focused firmly on French military capabilities, the Nazi leader considered other elements of power, particularly the lack of political integration and coherency in the French Popular Front government and the connection to the psychological component of French national will. As a result, he concluded that France had no intention of responding militarily to the German military incursion. On 9 March, the Wehrmacht commander received warning of impending French military countermoves and asked to withdraw troops from major cities in the Rhineland. Hitler, however, was still taking an essentially MAXIMIN (Quadrant 2) approach and correctly discounted the possibility of intervention by a

French government vacillating between two incorrect positions: MAXIMAX (Quadrant 1) and MINIMAX (Quadrant 3).[42]

## Thinking In the Box

A great deal of lip service has been paid of late to the need for students of strategy to "think outside the box." The "box" in this case presumably contains the traditional approaches to those issues that affect America's national security. It is natural, of course, in a time of great change to search for a "Philosopher's Stone," or to look for the sword that can, in one clean stroke, preclude the tedious unraveling of the Gordian knot of post-Cold War strategy. And perhaps this will all be possible in an extra-box environment of the future. But such explorations cannot and should not be made until the student of national security has learned to think inside the box, and that begins with an understanding of concepts like national power.

The concept of national power helps to provide an initial organizational focus as students deal with the deceptively simple thought process that links strategic ends, ways, and means. National elements of power, however they are described, provide the conceptual foundation for this process at the national strategic level. An understanding of the characteristics and the interrelationships of these elements allows the student to expand the process to comprehend how derivative instruments of power can be combined most effectively as policy options to achieve national strategic objectives. This is a key step in strategic maturation that will play an increasingly larger role in the future for military and civilian professionals concerned with national security strategy.

Military planners already deal with Flexible Deterrent Options, in which military instruments of power are matched with instruments derived from other elements of power. Military options in response to a challenge could include an increase in specific reconnaissance activities, the exercise of certain prepositioned equipment, or the deployment of small units. Politically, this could mean consultation by executive branch elites with congressional leaders or initiation of a specific diplomatic demarche. At the same time, economic options might include, alone or in combination, the enactment of trade sanctions, the freezing of assets, and the restriction of corporate transactions. In all this, the effectiveness of small discrete response options depends upon how well the instruments of power are wielded together. And that will depend to a great deal on how well military strategists and their civilian counterparts understand the elements of national power from which those instruments are derived.[43]

The focus on these elements of national power as means to national strategic ends also serves as an organizational link to the overall strategic formulation process. That process begins by demonstrating how national strategic objectives are derived from national interests, which in turn owe their articulation and degree of intensity to national values. This linkage is also a useful reminder that power, the "means" in the strategic equation, ultimately takes its meaning from the values it serves. Absent the legitimation provided by this connection to national values, national power may come to be perceived as a resource or means that invites suspicion and challenge; at worst it could be associated with tyranny and aggrandizement. Without the bond of popular support and the justification that comes from an overarching purpose, national power can be quick to erode and ephemeral as a source of national security.

In the end, what takes place within the box in dealing with concepts like national power is an educational process, a not inconsiderable achievement in an era mesmerized by techno-chic innovations which tend to confuse training with that process and data collection with knowledge. The need to maintain such distinctions was summarized by Michael Howard almost 30 years ago in his report on service colleges to the British Ministry of Defence:

There will always be a prime need for the fighting leader in the armed forces; but . . . today the junior fighting leader often needs to exercise a considerable degree of independent and informed judgment . . . while the demands made on his seniors find little parallel in any civil profession. To fit officers for so testing a career . . . it is as necessary to extend their intellectual powers as it is to strengthen their moral powers and their capacity for physical endurance.[44]

In the final analysis, the study of national power is a valuable educational objective because it is so difficult. Aspiring strategists must grapple with concepts that overlap, that are subjective in many cases, that are relative and situational, and that defy scientific measurement. All this teaches flexible thinking--the *sine qua non* for a strategist. In short, it is this very complexity that causes students to mature intellectually, to understand that within the box there is no such

thing as a free strategic lunch. Equally important, students learn that they cannot escape these limitations by moving outside the box, a lesson that many futurists need to absorb.

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## NOTES

1. Thomas Hobbes, *Leviathan* (Indianapolis: Bobbs-Merrill, 1958), p. 86.
2. Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 4th ed. (New York: Knopf, 1968), p. 25. Although Morgenthau sees the concept of national interest defined in terms of power, much of this discussion is under a sub-heading that treats political power "As Means to the Nation's Ends." Ibid.
3. The terms were originated by James N. Rosenau, "Global Changes and Theoretical Challenges: Toward a Post-International Politics for the 1990s," *Global Challenges and Theoretical Challenges: Approaches to World Politics for the 1990s*, ed. Ernst-Otto Czempiel and James N. Rosenau (Lexington, Mass.: Lexington Books, 1989), pp. 1-20.
4. Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, JCS Joint Pub 1-02 (Washington: GPO, 23 March 1994), p. 255. Realists often assert that states primarily seek power as opposed to security or autonomy. This assertion, Robert Keohane points out, is inconsistent with realist balance-of-power theory in which states "moderate their efforts when their positions are secure." Robert O. Keohane, "Theory of World Politics: Structural Realism and Beyond," *Political Science: The State of the Discipline*, ed. Ada W. Finifter (Washington: American Political Science Association, 1983), p. 515. See also Barry R. Hughes, *Continuity and Change in World Politics: The Clash of Perspectives* (Englewood Cliffs, N.J.: Prentice Hall, 1991), p. 55.
5. John Spanier and Robert L. Wendzel, *Games Nations Play*, 9th ed. (Washington: CQ Press, 1996), p. 128. See also Theodore A. Coulombis and James H. Wolfe, *Introduction to International Relations: Power and Justice*, 2d ed. (Englewood Cliffs, N.J.: Prentice Hall, 1982), p. 64. Many scholars use this broad interpretation of influence in their definition of power: "the ability to influence the behavior of others in accordance with one's own ends." A. F. K. Organski, *World Politics*, 2d ed. (New York: Knopf, 1968), p. 104, and "the ability of an actor to influence the outcomes of international events to its own satisfaction." Walter S. Jones, *The Logic of International Relations* (Boston: Little, Brown, 1985), p. 245. For arguments against mixing power and influence, see Robert A. Dahl, *Modern Political Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1976), p. 29; Daniel S. Papp, *Contemporary International Relations: Frameworks for Understanding* (New York: Macmillan, 1984), p. 308; and Michael P. Sullivan, *Power in Contemporary Politics* (Columbia: Univ. of South Carolina Press, 1990), p. 98.
6. K. J. Holsti, *International Politics: A Framework for Analysis*, 5th ed. (Englewood Cliffs, N.J.: Prentice Hall, 1988), pp. 142, 152-53. On patterns of influence, see *ibid.*, pp. 154-56. On similar methods or techniques of exercising power, see Organski, pp. 112-15. Realists, in general, treat power as the "currency of politics." Just as economists focus on the definition and variety of currency types, students of international relations define and distinguish the types of power. See, for example, Klaus Knorr, *The Power of Nations: The Political Economy of International Relations* (New York: Basic Books, 1975).
7. Carl von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1976), p. 119.
8. On the context of power, see Spanier and Wendzel, pp. 144-45; Papp, pp. 309-11; and Gordon C. Schloming, *Power and Principle in International Affairs* (New York: Harcourt Bruce Jovanovich: 1991), p. 528.
9. Morgenthau, p. 153; Spanier and Wendzel, pp. 128, 131; and Organski, p. 102. In English and German (*Macht*), for example, "power" indicates both capacity and the exercise of that capacity. In French, however, there are two words: *puissance*, indicating potential or capacity, and *pouvoir*, indicating the act or the exercise of power. Dennis H. Wrong, *Power: Its Forms, Bases and Uses* (New York: Harper & Row, 1979), pp. 9-10. Frederick Hartmann deals with the distinction between potential and real in his definition of national power as "the strength or capacity that a sovereign nation-state *can use* to achieve its national interests." Emphasis in original. Frederick H. Hartmann, *The Relations of Nations*, 5th ed. (New York: Macmillan, 1978), p. 43.

10. Organski, pp. 101-02.
11. Ibid., p. 121; Morgenthau, pp. 149-51; Spanier and Wendzel, p. 128; and Eugene J. Kolb, *A Framework for Political Analysis* (Englewood Cliffs, N.J.: Prentice Hall, 1978), pp. 50-52.
12. Organski, p. 110; Kolb, pp. 50-52; Morgenthau, pp. 151-53; and Schloming, p. 527. For the declinist approach to the dynamic nature of national power, see Paul M. Kennedy, *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500-2000* (New York: Random House, 1987); Mancur Olsen, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (New Haven, Conn.: Yale Univ. Press, 1982); Aaron L. Friedberg, *The Weary Titan: Great Britain and the Experience of Relative Decline* (Princeton, N.J.: Princeton Univ. Press, 1988).
13. Organski, pp. 108-09; Spanier, p. 128; and Hobbes, p. 106.
14. Emphasis in original. Franz Halder, *The Halder Diaries: The Private War Journals of Colonel General Franz Halder*, ed. Arnold Lissance (Boulder, Colo., and Dunn Loring, Va.: Westview Press and T. N. Dupuy Associates, 1976), I, 8. After the Munich Conference, Mussolini appraised the British leaders as "the tired sons of a long line of rich men." Winston S. Churchill, *The Second World War, Vol. I, The Gathering Storm* (Boston: Houghton Mifflin, 1948), p. 341. On the concept of negative power as used in this context, see Holsti, p. 144, and Dahl, p. 43. On a different view of negative as well as positive power, see Organski, pp. 118-19. See also Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, *Psychology and Deterrence* (Baltimore: Johns Hopkins Univ. Press, 1985).
15. Papp, p. 311; Spanier and Wendzel, pp. 144-45; Kolb, pp. 49-50.
16. Sullivan, pp. 21-24; and Papp, p. 12.
17. Barry O'Neill, "Power and Satisfaction in the United Nations Security Council," *Journal of Conflict Resolution*, 40 (June 1996), 219-37; and Papp, p. 311.
18. For the distinction between natural and social determinants of power, see Organski, chaps. 7, 8. Morgenthau, p. 106, breaks the elements down into "those which are relatively stable and those which are subject to constant change." See also Coulombis and Wolfe, pp. 65, 73-78, who break national power into two categories: tangible (population, territory, natural resources, industrial capacity, agricultural capacity, military strength and mobility) and intangible (leadership and personality, bureaucratic-organizational efficiency, type of government, societal cohesiveness, reputation, foreign support and diplomacy, accidents).
19. Raymond Aron, *Peace and War* (New York: Praeger, 1966), p. 1. See also Derwent Whittlesey, "Haushofer: The Geopoliticians," *Makers of Modern Strategy*, ed. Edward Mead Earle (Princeton, N.J.: Princeton Univ. Press, 1973), pp. 388-414; Colin S. Gray, *The Geopolitics of the Nuclear Era: Heartlands, Runlands, and the Technological Revolution* (New York: Crane, Russak, 1977); Hartmann, pp. 49-52; Morgenthau, pp. 106-08, 153; Spanier and Wendzel, p. 132; Hughes, p. 91; and Organski, pp. 126-38, who believes that geography's effect on national power has been exaggerated.
20. Schloming, p. 530. Hartmann, p. 49, believes climate is the most important geographical factor. *Life* magazine listed the air conditioner as one of the most important inventions in world history because it would enable tropical areas to begin industrialization. The shape of a nation is also important, as witness Israel's difficulty in returning to its pre-1967 configuration of long frontiers and very little depth. Spanier and Wendzel, p. 132. See also Isaiah Berlin, *Against the Current: Essays in the History of Ideas* (New York: Viking Press, 1980), p. 258, who attributes the aggressive nationalism of such leaders as Napoleon, Hitler, and Stalin to their geographical origins on the borderlands of the empires they will later rule.
21. Schloming, p. 531, and Julian L. Simon, *Population Matters: People, Resources, Environment, and Immigration* (New Brunswick, N.J.: Transaction Publishers, 1990).

22. Nafis Sadik, "World Population Continues to Rise," *The Brown and Benchmark Reader in International Relations*, 1992, ed. Jeffrey Elliott (Dubuque, Ia.: Wm. C. Brown, 1992), pp. 291-96. See also Spanier and Wendzel, pp. 135-36; Hartmann, pp. 46-49; Schloming, p. 531; Organski, pp. 153-54, and George D. Moffett, *Global Population Growth: 21st Century Challenges* (Ithaca, N.Y.: Foreign Policy Association, 1994).
23. Hartmann, p. 47; Schloming, p. 532; and Peter G. Peterson, "Will America Grow Up Before It Grows Old?" *The Atlantic Monthly*, May 1996, pp. 55-92.
24. Spanier and Wendzel, p. 139. See also Schloming, p. 531, and Organski, pp. 138-41.
25. On problems with the most basic of all resources, see Miriam R. Lowi, *Water and Power: The Politics of a Scarce Resource in the Jordan River Basin* (New York: Cambridge Univ. Press, 1995). See also Organski, p. 142; Schloming, pp. 533-34; and Morgenthau, pp. 109-12.
26. National Defense University, Institute for National Strategic Studies, *Strategic Assessment 96* (Washington: GPO, 1996), p. 49. See also Organski, p. 169. Hartmann, pp. 52-56, includes natural resources in the economic element of power.
27. *Strategic Assessment 96*, p. 51, and Schloming, p. 158.
28. For questions concerning the jointness of Desert Storm, see Michael R. Gordon and Bernard E. Trainor, *The General's War: The Inside Story of the Conflict in the Gulf* (Boston: Little, Brown, 1994). Stalin's great purges of the 1930s are an extreme example of political interference. In addition to the roughly 800,000 party members who were killed, about half of the army officer corps, some 35,000 in all, were eliminated despite the weakness it imposed on the USSR in a time of growing foreign danger. Gordon A. Craig, *Europe Since 1815* (New York: Dryden Press, 1974), p. 383.
29. US Department of the Army, FM 100-5, *Operations* (Washington: GPO, June 1993), p. 12-21. See also Spanier and Wendzel, p. 143.
30. Switzerland is another prime example with the capability of mobilizing in excess of a half million troops in less than two days. Schloming, p. 543.
31. In the subsequent battle of Rourke's Drift, of course, technology plus an inspired combination of all the intangibles ranging from leadership to unit cohesion produced a British victory in which 11 Victoria Crosses were earned. On revolutions in military affairs, see the Strategic Studies Institute monographs from the fifth annual US Army War College Strategy Conference, April 1994. See also Schloming, p. 540.
32. Papp, p. 316; Hartmann, pp. 59-60; and Morgenthau, pp. 133-35.
33. Emphasis in original. Harry G. Summers, *On Strategy: The Vietnam War in Context* (Carlisle, Pa.: US Army War College, Strategic Studies Institute, 1983), p. 11. See also Papp, p. 378.
34. Graham T. Allison, *Essence of a Decision: Explaining the Cuban Missiles Crisis* (Boston: Little, Brown, 1971), pp. 123-24. See also Papp, pp. 382-84, and Morgenthau, pp. 122-34.
35. On the Russian national character, see Morgenthau, pp. 125-27, and Papp, p. 383. On the American character, see Spanier and Wendzel, pp. 186-92.
36. Papp, pp. 386-87.
37. Joseph S. Nye, Jr., *Bound to Lead: The Changing Nature of American Power* (New York: Basic Books, 1990) and "Understanding U.S. Strength," *Foreign Policy*, No. 72 (Fall 1988), 105-29.
38. *Strategic Assessment 96*, p. 197. See also *ibid.*, pp. 195-96 and chap. 15; Joseph S. Nye, Jr., and William A.

Owens, "America's Information Edge," *Foreign Affairs*, 75 (March-April 1996); and Roger C. Molander, Andrew S. Riddle, and Peter A. Wilson, *Strategic Information Warfare: A New Face of War* (Santa Monica, Calif.: RAND, 1996). A recent Defense Science Board report on information warfare repeated this warning. Thomas E. Ricks, "Information Warfare Defense is Urged: Pentagon Panel Warns of 'Electronic Pearl Harbor,'" *The Wall Street Journal*, 6 January 1997, p. B2.

39. Ray S. Cline, *World Power Trends and U.S. Foreign Policy for the 1980s* (Boulder, Colo.: Westview Press, 1980), p. 13. See also Papp, pp. 308-09; Hartmann, p. 67; and Couloumbis and Wolfe, pp. 66-67. For another approach to quantifying and ranking the actual and projected capabilities of states, see Karl Deutsch, *The Analysis of International Relations* (Englewood Cliffs, N.J.: Prentice Hall, 1968), pp. 21-39.

40. Robert Jervis, *Perceptions and Misperceptions in International Politics* (Princeton, N.J.: Princeton Univ. Press, 1976), p. 52.

41. Albert Speer, *Inside the Third Reich*, trans. Richard and Clara Winston (New York: Macmillan, 1970), p. 72. General von Blomberg pointed out after the war that if the French had resisted, the Germans would "have to have beat a hasty retreat." And General Keitel confided that "he wouldn't have been a bit surprised" if three battalions of French troops had flicked the German forces right off the map. G. M. Gilbert, *The Psychology of Dictatorship* (New York: Ronald Press, 1950), p. 211.

42. This did not mean that Hitler was not nervous. "The forty-eight hours after the march," he stated, "were the most nerve-wracking in my life." Allan Bullock, *Hitler: A Study in Tyranny* (New York: Harper & Row, 1962), p. 345. For additional measures Hitler took to make the operation as unprovocative as possible, see John Thomas Emmerson, *The Rhineland Crises* (Ames: Iowa Univ. Press, 1977), p. 101.

43. For the flexible deterrent options, see *The Joint Staff Officer's Guide 1993* (AFCC Pub 1) (Washington: GPO, 1993), pp. 6-11 to 6-16. For some reason, JCS currently defines *national security strategy* in terms of instruments of power (diplomatic, economic, military, and information) as the means "to achieve objectives that contribute to national security." JCS Pub 1-02, pp. 254-55. The same publication, however, defines *elements* of national power as "the means that are available for employment in the pursuit of national objectives" (*ibid.*, p. 130). The use of power elements as the "means" in the definition of *national strategy* (*ibid.*, p. 255) is in keeping with the Goldwater-Nichols terminology concerning power and strategy. Professor Michael Morin, USAWC, 21 November 1996. See also note 4.

44. Michael Howard and C. R. English, *Report of the Committee of Enquiry Into Service Colleges*, 29 July 1966. Quoted in Michael Brock, "Michael Howard's Contribution to Historical Studies," *War, Strategy, and International Politics: Essays in Honour of Sir Michael Howard*, ed. Lawrence Freedman, Paul Hayes, Robert O'Neil (Oxford, Eng.: Clarendon Press, 1992), p. 198. For the limits of technology in the classroom as a means to improve learning, see Fletcher M. Lamkin, Jr., "Academic Limits, A Vision for Teaching and Training with Technology," *Assembly*, 54 (July-August 1996), 32. Brigadier General Lamkin is the Dean of the Academic Board at the US Military Academy.

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Dr. David Jablonsky (Colonel, USA Ret.) is Professor of National Security Affairs in the Department of National Security and Strategy at the US Army War College. He is a graduate of Dartmouth College and the US Army War College, has an M.A. from Boston University in international relations, and holds M.A. and Ph.D. degrees in European history from Kansas University. Dr. Jablonsky has held the Elihu Root Chair of Strategy and the George C. Marshall Chair of Military Studies at the War College. His most recent books are *Churchill and Hitler, Selected Essays on the Political-Military Direction of Total War* and *Paradigm Lost? Transitions and the Search for a New World Order*.

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Reviewed 11 February 1997. Please send comments or corrections to [carl\\_Parameters@conus.army.mil](mailto:carl_Parameters@conus.army.mil)