THE PRESIDENT AND THE POLITICAL USE OF FORCE

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*T*hroughout the post–World War II period the president has been called upon to make decisions concerning the use of force as a political instrument. The explanation that is offered is based upon a characterization of the president as a cybernetic human decision maker facing limitations. These limitations, in conjunction with the complexity of the environment, lead presidents to develop and use a relatively simple decision rule. The dependent variable, which is the probability of the use of force at any point in time, is explained in terms of enduring and essential concerns, which are operationalized as coming from the international, domestic, and personal environments. Data are taken from Blechman and Kaplan's Force Without War. On the basis of our estimation and evaluation, presidential decisions to use force are based on factors in all three arenas.

As the leader of one of the world's great powers, the president of the United States is charged with the responsibility of guiding and implementing policies to protect and advance U.S. interests abroad. This is an onerous responsibility; the fortunes of various presidents have risen or fallen on the basis of the American public's satisfaction with their performance in this capacity. However, this responsibility also represents an arena of decision making in which the president has a relatively free hand to operate according to his own dictates, and one in which he can command on his own a wide variety of instruments of policy in implementing his intentions.

One such option is obviously the use of the United States military. With extensive capabilities and global reach of the U.S. armed forces, components of it can be directed by the president to undertake a broad spectrum of foreign policy activities, ranging from the transporting of military equipment and advisors, to "showing the flag" with minor maneuvers, to engaging in military combat with an opponent. Certainly the most momentous and costly act of foreign policy is the fighting of a full-scale war. Our interest, however, is focused on the use of the U.S. military by the president in circumstances short of involvement, or intended involvement, in extended military combat. In these instances, the armed forces may be said to have been engaged not for the achievement of a military objective per se, but for "political" purposes, and their actions said to constitute "political uses of the armed forces"—that is, overt policy acts directed by the U.S. president that

fall somewhere between acts of diplomacy and intentional uses of military power such as in Korea and Vietnam.

In a recent study, Blechman and Kaplan (1978) demonstrate convincingly that the use of force has proved, in the postwar era, to have been a frequently employed instrument of foreign policy. They show, for example, that between the years 1946 and 1976, the U.S. deployed military units abroad for political purposes 226 times. In light of this historical record, it is surprising to find that little has been written about these uses of force, as a set of events, or about the use of force as an instrument of U.S. policy, or about the decision-making process which precipitates these results.[1]

The Political Use
of Major Force

Blechman and Kaplan (1978, p. 12) define the political use of armed forces as

> physical actions . . . taken by one or more components of the uniformed armed military services as part of a deliberate attempt by the national authorities to influence or be prepared to influence, specific behavior of individuals in another nation without engaging in a continuing contest of violence.

For these authors, decisions by the U.S. to use force in this manner are political in that actions are taken for nonmilitary objectives, and in that they take effect within the external environment of the U.S., involving the clash of the international political interests of many parties. Blechman and Kaplan go on, in their empirical work, to examine and classify the various types of international situations in which uses of force were undertaken, and to assess the effectiveness of different sequences and configurations of U.S. force deployments. Our interest in the political use of force by the U.S. differs from and extends the work of Blechman and Kaplan in three ways.

First, we wish to concentrate on the subset of Blechman and Kaplan's data in which *major* or *nuclear-capable* levels of force were used.[2] These uses, hereafter referred to as *major uses of force*, are presented in the appendix. We maintain that by restricting our focus to these incidents we have isolated the most important and consequential of U.S. political uses of force in this period.

Second, we posit that these incidents can be specifically characterized and studied as a set of presidential foreign policy decisions. This assumption rests on the facts that the president bears legal responsibility for the use of force, must sanction such uses, and will be given credit or blame for the success or failure of these ventures. Since the president is ultimately responsible, we assume either that he was directly consulted and gave his consent before any major force deployment was made, or that a choice was made according to his established guidelines. We are aware that the degree of direct involvement in these incidents was variable. However, a search of postwar presidential biographies and memoirs indicates that, with very few exceptions, all the major uses of force listed in the appendix were recognized as prominent presidential decisions.

Third, having identified the president as *the* relevant decision maker regarding political uses of major force, we wish to construct a model of his decision-making process. The president will be viewed as operating within three capacities—as chief executive, commander in chief, and political leader. He operates over time with the goal of effectively managing, or simultaneously balancing, his interests in the international, domestic, and political arenas. The president is faced with the need to monitor these various fronts, with a good deal of uncertainty about the effects of chosen forceful actions. In seizing certain opportunities to use force but rejecting others, the president clearly operates in a "political" fashion. He

assesses a range of actors, not only in the international context, but also in the American domestic context and in the context of his political leadership. The president will, for instance, consider his domestic political standing, his relations with Congress, the public's attention or inattention to foreign policy matters, the public's dissatisfaction with the progress of the economy, etc. Also, whether an election is forthcoming and whether the president has a strong resource base of popular support may well be important in presidential calculations about acting in the international arena. In short, the set of variables monitored by the president, in the context of a decision on the major use of force is likely to come from international, domestic, and political sources.

Thus, as part of a larger research effort, this study attempts several steps toward a better understanding of the political uses of force by the United States and of presidential foreign policy decision making. By constructing a model that takes into account the trifold context in which decisions to use force are made, positing the effects of foreign, domestic, and political contextual factors, we provide a more complete understanding than has been previously available from studies which examine a less complete and/or exclusively domestic or international set of factors (e.g., Blechman and Kaplan, 1978; Mahoney, 1976; Stoll, 1984). Furthermore, our model of presidential decision making assumes that presidents throughout the postwar period have behaved as boundedly rational, cybernetic decision makers. We build upon and extend the work of Simon (1959, 1969, 1979), Steinbruner (1974) and others who established this tradition in the foreign policy decision-making literature.

The second major goal of this study is the operationalization of the decision-making model and its application to the Blechman and Kaplan (1978) data set of major uses of force in order to see how well the model, as specified, accounts for the occurrence and nonoccurrence of uses of force on a quarterly basis from 1948 to 1976—that is, the presidential terms of Truman through Ford.[3] Upon presenting our results we go on to assess the overall success of the model, looking at the relative impact of international, domestic, and political factors, and to examine how well it captures the record of individual presidents, testing our assumption that a common cybernetic mode of decision making effectively accounts for their actions.

A Cybernetic Model of Presidential Decision Making

There is widespread agreement in both the crisis and non-crisis literature as to the three competing characterizations of decision making—rational actor, cybernetic, and cognitive process (e.g., Gallhofer and Saris, 1979; Maoz, 1981; Ostrom, 1978; Steinbruner, 1974). In this regard, we assume that the president behaves not as a rational decision maker, but in a fashion similar to that suggested by the cybernetic approach to decision making. Operating in a context that has been described as "structural uncertainty" (Steinbruner, 1974, p. 18), the president is not able to determine the state of the environment, locate available alternatives, or assess the consequences of those alternatives—in short, the raw materials of rational choice are absent. In place of the rational choice perspective, we will argue that the cybernetic perspective is more appropriate, because it provides an understanding of how human decision makers reach decisions in highly complex and volatile environments by formulating simple and manageable decision algorithms. The mechanics of choice are simple: the president monitors a limited set of essential or critical factors, and considers a restricted set of decision options. Choice is tied to

the essential variables by a relatively simple decision rule.

Underlying the cybernetic characterization of decision making is the following principle: "A man, viewed as a behaving system, is quite simple. The apparent complexity of his behavior over time is largely a reflection of the complexity of the environment in which he finds himself" (Simon, 1969, p. 25).[4] To model the environmental connection in a cybernetic fashion, Simon (1959) argues that it is necessary to take into account (a) the cognitive structure of the president-as-a-decision-maker, (b) the formulation and content of his decision premises, and (c) the logic of the inference process (or the decision rule) followed to reach a decision. We turn now to the task of delineating each of these specifically for a model designed to explain the series of U.S. presidential decisions to use major levels of military force in foreign affairs in a political fashion.

Cognitive Structure

A process of simplification will lead the president to develop a stable means for dealing with the complexity of the environment. First, as a decision maker, he will focus on a small and relatively fixed number of environmental factors that will be regularly monitored. The fact that the president operates at the nexus of numerous actors who are "pushing and pulling" him means that he will constantly be reminded of various factors that need to be taken into consideration. Second, the president, however, will perceive these multiple inputs in terms of quite gross distinctions. He will not attempt to catalog exhaustively the actual state of the environment and each and every one of the options or decision choices open to him; instead, only very general aspects of the environment will be monitored. In short, we assume that the president will have a stable cognitive structure that conditions the decision to use force.

We further assume that all presidents in the postwar era have adopted, to a large extent, a similar role in office, and thus may be characterized by a common model of decision making. As Simon (1959, p. 274) points out, "A role is a social prescription of some, but not all, of the premises that enter into an individual's choices of behavior." In these terms, the role of president brings with it certain premises that will be shared by all occupants of the Oval Office. Insofar as the political use of force is concerned, a similar role is manifested by presidents not because they all share all of the same individual beliefs or possess similar personalities, but rather because they are assumed to share three basic overarching goals: a preference for action, anticommunism, and "containment" of the U.S.S.R. Kegley and Wittkopf (1982, p. 36), in summarizing the literature, argue that these three tenets have remained uppermost in the minds of U.S. foreign policy makers:

1. The United States must reject isolationism permanently and substitute for it an active responsibility for the direction of international affairs.
2. Communism comprises the principal danger in the world, and the United States must use its power to combat the spread of this menace.
3. Because the Soviet Union is the spearhead of the communist challenge, American foreign policy must be dedicated to the containment of Soviet expansionism and influence.

These beliefs have led U.S. presidents to identify most unrest and turmoil as the result of the international communist movement, and to focus on the U.S.S.R. as the primary challenger to U.S. international interests. Furthermore, these beliefs have created a presumption that forceful actions are a necessary component of the containment strategy. In short, political uses of the military repre-

sent a very important component of U.S. foreign policy.

As a result, these shared assumptions will have led all presidents to react, evaluate, and behave in a similar fashion. The differences that one might ascribe to the different men that have occupied the Oval Office are, in part, a result of the differences in the contextual configurations (i.e., the environments) in which they were forced to operate. It shall be assumed that presidents have operated according to a common model of decision making by structuring and simplifying their need for information; by interpreting their role as entailing the monitoring and management of the domestic, international, and political environments; and by focusing generally upon the same essential concerns (termed *decision premises* below) in each of these environments.

In practice we will construct and apply a model to explain the use of force decisions throughout the 28-year span from 1949 to 1976. However, after assessing the capacity of this model in general terms, attention will focus on whether the decisions of some presidents are not accounted for as well as others—that is, is there an indication of idiosyncratic behavior or is there support for the validity of our assumption of commonality across individual office holders?

Decision Premises

The cybernetic decision maker structures his consideration of information and alternatives around a select number of *decision premises*, each premise specifying the "computational procedures for *assessing* the state of the environment and its implications for action" (Simon, 1959, p. 274). Following this logic, we maintain that the president selects or establishes his decision premises on the basis of his three major functional responsibilities: commander-in-chief, chief executive, and political leader. As commander of the U.S military, the president is bound to

protect the interests of the United States and to maintain strength and credibility in the ability of the U.S. to realize and protect its interests. Critical indicators of his achievement in this capacity, not only for himself but also for the U.S. public and for our opponents and allies abroad, will be matters such as the state of relations with our superpower adversary and the status of the relative strategic balance. As chief executive, the president is expected to meet the expectations of the American people at large concerning peace, prosperity, domestic tranquility, and leadership. In order to do so, he must not only monitor and act to preserve and enhance his power and credibility in the national environment, but must also be alert to "transfer effects" of his actions in the external arena (and vice versa). From this perspective, the president will be sensitive to public attitudes towards international tensions and involvement, as well as to domestic considerations such as the state of the economy. Finally, as political leader of the government, the president will be concerned with maintaining and enhancing a "political resource base" in order to assure his political survival, freedom of action, and the electoral fortunes of his party. Doing so naturally focuses his attention on factors such as his current and relative popularity and the U.S. electoral calendar.

Thus, the president will be viewed as operating within a tripartite context. He will be seen to monitor salient dimensions in the domestic, international, and political arenas, and in his decision making will assess the relative importance of each of these dimensions before taking action. Based upon our earlier discussion and assumptions about the president as a cybernetic decision maker, we view the number of such dimensions as limited. To be specific, we posit that the decision premises of the president are structured according to the following list:

I.   International environment

A. Level of international tension
B. Relative strategic balance
C. Extent of U.S. involvement in ongoing war

II. Domestic environment
A. Public attitude toward risks of international involvement— international tension
B. Public attitude toward risks of international involvement— strategic balance
C. Public aversion to war
D. Condition of the domestic economy

III. Political environment
A. Level of public support
B. Overall political success
C. Position on the electoral calendar

We proceed to provide a brief rationale for each of these separate decision criteria. Although this list is admittedly abbreviated, our model advances previous considerations of presidential foreign policy behavior by (a) positing a tripartite distinction among his decision criteria and (b) explicitly taking into account the potential impact of domestic conditions and public attitudes in determining external actions taken by the president.

**Decision Premises:
The International Environment**

Any deployment of major force by the U.S. can be expected to have international ramifications—escalation, involvement of the U.S.S.R., further commitment of men and material. The president is seen as considering the following three international decision premises to determine the likely consequences of a use of force.

Level of international tension. The degree of tension in the international system is determined by the aggregation of the actions and statements of a wide variety of actors. However, while many nations play a role, the U.S. and U.S.S.R. are the most active and direct contributors to the overall level of international tension. Furthermore, the basic goals of U.S. foreign policy have led presidents to view the U.S.S.R. as the primary adversary of the U.S. Indeed, if there are to be any ramifications emanating from a use of force, it is likely that they will involve the U.S.S.R. Hence, the president will be centrally cognizant of the level of tension existing between the two superpowers. Furthermore, we posit that, *ceteris paribus*, the higher the existing tensions between the superpowers, the more likely it will be for the president to consider acting in a forceful manner. Failure to act or backing away from confrontations means that the president runs the risk of diminished stature or resolve (see Wills, 1982, on Kennedy). A president will seek to maintain his international and domestic credibility by indicating his willingness to use force—particularly, perhaps, for "political" ends—so as to demonstrate simultaneously U.S. resolve to act tough and U.S. restraint at not engaging in direct conflict (Schell, 1976, pp. 366-67).

Relative strategic balance. In both symbolic and real terms, the U.S. is preoccupied with its relative strategic power (e.g., Prados, 1982). A key consideration is whether the perceived strategic nuclear balance has an impact on the exercise of force for political purposes. Despite the fact that the use of strategic capabilities may not, in any given situation, be directly or immediately contemplated, there will be a level of assurance and confidence provided the president by the perception that the U.S. is strategically dominant within the international environment as a whole. It is possible that an increased propensity to use force grows out of perceived strategic inferiority; the less secure the president is, the more likely he is to engage in bellicose actions to demonstrate to our opponents that the U.S. is not

cowed. This suggests, in turn, that the greater the dominance, the less likely the president will feel the need to run either the risks that could arise from the escalation of local or regional violence, or the direct or indirect involvement of the U.S.S.R. We subscribe to this view and posit that the president has little to gain when the U.S. is strategically dominant. In such circumstances, if the use of force is not successful, the symbolic power attached to strategic dominance will be reduced. Since it seems that risks of use may, other things being equal, outweigh the gains, we argue that the greater the strategic dominance, the lower the propensity to use force.

Extent of U.S. involvement in war. During the post–World War II era, the U.S. has become involved in two wars: Korea and Vietnam. In each instance, the commitment in terms of lives and funds has been great, and involvement in war has brought the president under intense and close scrutiny (e.g., Mueller, 1973). The longer a conflict drags on, the more risky and costly it becomes for the president. For example, an enemy offensive may indicate the U.S. commitment is less than sufficient or poorly orchestrated; battle casualties and/or troop levels increase the importance of victory (Gelb and Betts, 1979). Citizen dissatisfaction with a war ultimately can undermine the president's overall ability to govern effectively (e.g., Lyndon Johnson in 1968). Thus, once involved in a major regional conflict, the president will concentrate most of his energies on the conduct of the war. Military manpower and reserves will be focused on the actual violence, and, as U.S. involvement in a fighting war intensifies, the president will be less likely to contemplate undertaking other actions that, even if noncombative to start, run the risk of engaging the military in further action, especially in other regional contexts.

Decision Premises:
The Domestic Environment

There are significant ramifications in the domestic arena for the use of force abroad. If there is a general consensus on the part of the public that the risks associated with such actions are acceptable, the credibility and future effectiveness of the president may be enhanced. However, the converse will be true if the public does not feel that the risks are acceptable, or if the venture is unsuccessful (e.g., Jimmy Carter and the abortive hostage rescue mission, 1980). We assume that the following four decision premises represent the president's attention to the domestic environment in his consideration of the use of force.

Public attitude toward risk of international involvement—international tension. The president's stability and willingness to participate in international affairs will be affected not only by his assessment of international tension, but also by the public's perception of this tension level and the attendant risks of international involvement by the U.S. and its personnel. In fact, his estimate of this latter effect may be more important than his individual "objective" assessment. To take into account this "filtered" or interactive effect, the president will be alert to the issues that concern the public and the extent to which its feelings are optimistic or pessimistic regarding action in the international arena. Thus, there are times when the American public views foreign affairs with trepidation because of the perceived danger of major foreign involvement or an elevated possibility of nuclear war. When international tension is high *and* the general public expresses concern about international affairs, as was true throughout the 1945–62 Cold War era, the consequences, both foreign and domestic, of presidential failure will increase. Therefore, we posit that during

those periods when the American public views foreign affairs with trepidation, higher levels of international tension will cause the president to lower his willingness or propensity to use force in a political fashion in foreign affairs.

Public attitude toward the risk of international involvement—strategic balance. To the extent, however, that the public views the U.S. as maintaining strategic dominance over its major rivals, the public's focus on foreign affairs may be interpreted, unlike instances of tension, as a call to action. In such circumstances, the political use of force will be seen as a less risky undertaking, perhaps even as a legitimate expectation of the U.S. in a role as world peacemaker or policeman or defender of democracy. The president, cognizant of these attitudes, will reverse his propensity to use force (as far as strategic balance is concerned). We argue, therefore, that whenever the American public views foreign policy matters as most important, the previously noted reluctance to use force in the face of a favorable strategic balance will be offset. In short, the risks will be worth taking.

Public aversion to war. If the U.S. is involved in a military confrontation resulting in the loss of life of U.S. service personnel, the public's attitude toward the risk of foreign involvement is effected during and after the period of fighting. (See for example, Holsti and Rosenau's [1984] analysis of the effects of Vietnam.) Furthermore, the greater the involvement in a "shooting" war, the longer will be the time period following the war in which the public will resist any further or additional involvement that might lead to U.S. casualties. It would be unwise for the president to consider undertakings with the risk of additional casualties, because of the lingering resistance to foreign involvement that follows such outbreaks of violence. Therefore, we expect that in periods following U.S. involvement in a shooting war, the president's propensity to use force will be markedly reduced.

Condition of the domestic economy. On the domestic front, the public's attention is often preoccupied with economic prosperity (i.e., general economic conditions). The state of the economy has a major impact on both popular support levels (e.g., Ostrom and Simon, 1985), and electoral outcomes (e.g., Tufte, 1978). It is an essential concern of the president, at times one which will preoccupy his attention at the possible expense of foreign relations. However, there may be an important indirect relationship between the use of force and the economy. The more prosperous the economy, the higher the president's prestige and anticipation of electoral successes. The absence of prosperity has the opposite effect, and, in times of economic misery, may lead the president to look for strategies to deflect attention from the lack of economic success and to bolster his sagging image. Publicized deployment of the U.S. military represents one possible lever at the president's disposal; another may be the engineering of visits with international leaders. Therefore, although it may be debatable, we will argue that as the state of the economy worsens, the overall propensity of the president to use force will increase.

Decision Premises: The Political Environment

Any major use of force draws great public attention to the president as an individual, and the anticipation of such visibility and attendant public scrutiny will have an impact on presidential decision making.

Level of public support. In making almost any decision, including a foreign policy decision, the president must consider his personal resource base. Given the critical importance of popular support as a

resource, it can be expected that the president will manage it with care. There are two basic outcomes to a use of force. If the action fails or the U.S. gets drawn into a much bigger and/or costlier event, the president stands to see his credibility, his popularity, and the support for his party in Congress undermined. If the action is "successful" in the eyes of the public, not even necessarily in objective terms—e.g., Kennedy's involvement in the 1961 Bay of Pigs fiasco—the president's resource base stands to be enhanced. Hence, it can be expected that, all other things being equal, the president will act when he perceives he can afford to lose or when he possesses a "popularity buffer." We are led to argue that the higher a president's current approval rating, the greater will be his propensity to use force. Presidents with relatively low levels of popular support, and in turn congressional support, will tend to become immobilized.

Overall political success. When making a decision on the use of force the president will consider his long-term "track record" as well as his immediate domestic support base. Neustadt (1980) argues that the best indicator of track record in terms of success, power, and prestige is revealed in the comparison between the president's initial level of popular support and his current popularity. If, during the course of his tenure in office, the president has been successful, his popularity will have remained relatively constant (or have risen). If the president has been less successful, his popularity will have declined. The relative level is important because it represents an easily accessible summary measure of the degree to which the president's performance has matched his perceived promise. Large drops in approval during the course of a president's tenure in office are taken as reflecting fundamental and broad-based dissatisfaction with the president's stewardship. During times when the president is experiencing little

overall success, it will be natural for him to pursue actions that will deflect attention away from failure. A "successful," highly visible use of force may be seen as a needed tonic. Consequently, we assume that a decline in presidential success will promote the acceptance of risk and a greater propensity to use force in the international arena.[5]

Position on the electoral calendar. Finally, it may be that the electoral calendar has an impact on presidential propensity to use force. During an election campaign period the president may well try to look "presidential." The anticipated favorable attention following a political use of force may be an incentive for the president to initiate such actions to boost his and/or his party's electoral chances. Also, in such circumstances a president is likely to downplay the risks of such involvement. This argument suggests that during quarters encompassing midterm and presidential elections, there may be more "strategic" behavior on the part of the president. Therefore, the propensity to use force will be greater during electorally important periods.[6]

In summary of our discussion of the decision premises considered by the president, we posit that the propensity of post–World War II presidents to use military force for political purposes is effected in the following ways.

By international contextual factors:

1. High levels of international tension between the superpowers increase the propensity to use force.
2. However, the greater the strategic dominance of the U.S., the less the likelihood that force would be used.
3. The deeper the involvement of the U.S. in a shooting war, the lower the propensity of the president to exercise force elsewhere in the international arena.

By domestic contextual factors:

4. During those times when the U.S. public is concerned about the level of international tension, the propensity to use force will be reduced.
5. During those times when the U.S. public is aware of the relative strategic dominance of the U.S., there will be a greater propensity for the president to use force.
6. In the period following involvement in a war, the propensity to use force will be affected negatively.
7. As the state of the domestic economy worsens, there will be an increased propensity to use force.

By personal and political contextual factors:

8. The higher the president's current approval rating, the more his propensity to use force will be expected to decrease.
9. However, as the overall success rating of the president declines, this propensity will be increased.
10. During national electoral campaigns, the propensity to use force will increase.

As can be seen, the effects of these decision premises considered separately are not mutually reinforcing. In virtually all instances, the president will experience crosspressures and internal conflicts in deciding whether or not to employ force. We are particularly interested, for example, in the possibility of discovering any differential effects on presidential decision making of international tension and of the relative strategic balance between the superpowers, depending on how the U.S. public views these factors and transfers its concerns to the president. For example, with high levels of international superpower tension the president's propensity to use force may be enhanced, but if the public expresses concern over the dangers of international involvement, this may well contribute to a lessening of the president's initial positive reaction, highlighting our general argument that foreign policy decisions can and will be affected by considerations other than international affairs.

A Presidential Decision Rule

Having discussed the president's cognitive structure and the substance of his decision premises, it is necessary to turn our attention to the form and structure of his use of the major force decision rule. Simon (1979, p. 3) observes that

> human powers are very modest when compared with the complexities of the environments in which human beings live. If computational powers were unlimited, a person would choose the course of action that would yield maximum utility under the given circumstances. . . . But real human beings . . . cannot follow this procedure. Faced with complexity and uncertainty, lacking the wits to optimize, they must be content to satisfice—to find "good enough" solutions to their problems and "good enough" courses of action.

The alternatives or possible responses have to be sought out and evaluated in order to make a decision. Search, furthermore, "takes place in a space that is essentially infinite" (Simon, 1979, p. 3). This, coupled with limited computational powers, compels human beings to limit their search by evaluating a small number of options and choosing the first one that is "good enough."

Thus, the first task in setting up a decision rule is to identify the choice set or set of alternatives that the decision maker seeks to evaluate. Following the logic of the cybernetic perspective, and thereby seeking to ease the burdens of calculation, we assume the president's choice set to be limited to two alternatives: (a) do not use major force and (b) use major force. Let Y_t represent the president's choice set, with $Y_t = 0$ for (a) and $Y_t = 1$ for (b).

In the current context we are evaluating the degree to which the president monitors, evaluates, and responds to "essen-

tial" aspects of the international, domestic, and political environments when deciding each quarter upon the political use of force. To accomplish these tasks the president simplifies his evaluation by developing a composite evaluation of the environment and determining the values of the composite index that are conducive insofar as the use of force is concerned.

In order to resolve the inherent conflicts among the 10 decision premises, we assume that the president, at each point in time, develops a composite index in which the evaluation of the decision premises is simplified in such a way that any set of environmental factors can be placed on a single scale of propensity to use force, Y^*_t.[7] The larger the value on the composite scale, the more conducive the environment is to major uses of force. To make such a placement, and thereby integrate the evaluation of the 10 premises, the president must complete two tasks. First, the salience of each of the decision premises must be determined so that each is weighted in a manner consistent with its importance to the president. Second, once weighted, the premises must be combined to yield a single position on the composite scale. One very plausible method is the accumulation or addition of the individual weighted components. This may be formally represented by

$$Y^*_t = \sum_i a_i I_{it} + \sum_j b_{jt} D_{jt}$$
$$+ \sum_k c_k P_{kt} + e_t, \qquad (1)$$

where I_{it}, D_{jt}, and P_{kt} are the essential variables identified by the international, domestic, and personal decision premises, respectively; a_i, b_j, and c_k are the weights for the international, domestic, and personal variables, respectively; and e_t recognizes the fact that other factors will impinge on the decision in an unsystematic fashion.

To identify environmental states that

are conducive to and thereby complete the decision making process, it is our contention that there exists a threshold, h, which, from the standpoint of the president, represents the point at which the environmental evaluation moves from being unfavorable to favorable and vice versa. In other words, it is the *critical value on the propensity to use force scale*. A major use of force will be chosen ($Y_t = 1$) whenever

$$Y^*_t > h, \qquad (2)$$

where h is some point on the composite environmental evaluation. Therefore, the threshold identifies the range of Y^*_t for which the environmental context is conducive to major uses of force. Since any value of Y^*_t greater than h leads to the same decision—that is, to use force—decision making is greatly simplified.

It should be clear that the results of the composite environmental evaluation are not observable. When this is coupled with the fact that the evaluation is affected by random shocks (represented by e_t), it is clear that we must model the presidential decision rule in a probabilistic fashion. Taken together, equations (1) and (2) suggest the probability that the president will decide to use major levels of force during quarter t can be characterized in the following manner:

$$Pr(Y_t = 1) = Pr(Y^*_t > h)$$
$$= Pr[(\sum a_i I_{it} + \sum b_{jt} D_{jt} + \sum c_k P_{kt}$$
$$+ e_t) > h]. \qquad (3)$$

Several implications of this characterization of the cybernetic decision rule are noteworthy. First, the number of decision options each quarter is reduced to two alternatives. Second, presidents simplify their environmental evaluations by developing a single, composite index. Third, presidents use a threshold to determine whether major force is to be used; the environment is either conducive to a

major use of force or it is not. Fourth, the presidential decision rule can best be represented as a step function. A change in the value of Y^*_t does not always lead to the same degree of change in Y_t. Only those changes that pass the threshold will lead to a change in behavior. All in all, equation (3) presents a probabilistic model of the president as a cybernetic decision maker.

An Operational Model of Presidential Decision Making

The Dependent Variable

The dependent variable, Y_t, is operationalized utilizing the data on the political uses of force presented by Blechman and Kaplan (1978). Note once more that we restrict our attention only to those occasions in which major force components or nuclear-capable U.S. forces were deployed (see Appendix).[8] These major political uses of force are aggregated on a quarterly basis over the time period 1949-1976. Y_t is given a value of one if one or more political uses of major force occurs in a given quarter; it takes on the value of zero otherwise.

It is important to understand that our's is a *time series* model in which we seek to predict, for each quarterly period, the probability of a major use of force given the particular configuration of environmental factors at that time. Thus, we are not trying to model decisions to use major force in specific instances as responses to "opportunities" and/or in specific regions. This is an important and interesting question that to be answered requires quite different model constructions and data that are not currently available.

Independent Variables

The next task in developing the model is to operationalize the essential concerns in the president's use of force decision calculus. A single variable is defined for each of the decision premises described earlier.

International Variables. The first international factor operationalized in the model is international tension, I_{1t}. This variable has been devised, utilizing the COPDAB monthly event data base, to reflect an overall level of tension in the bipolar international environment (Azar, 1982). The international tension measure is an index representing the difference between the total directed conflict and cooperation between the U.S. and the U.S.S.R. for each quarter divided by the total directed behavior of either a conflictual or a cooperative nature.[9] Consequently, I_{1t} ranges from -1 (pure cooperation) to $+1$ (pure tension). The greater the level of international tension, the more likely the president is to engage in a political use of force.

The second international factor is strategic balance, I_{2t}, a variable designed to represent the relative strategic power of the U.S. with reference to its major opponent in the international system, the U.S.S.R. I_{2t} is an index ranging from -1 (total U.S.S.R. dominance) to $+1$ (total U.S. dominance), calculated by taking the difference between U.S. and U.S.S.R. strategic capabilities and dividing by the total capabilities of both actors. Data on strategic forces is taken from Squires (1982).[10] It is posited that presidents are less likely to take risks when they have a strategic advantage—i.e., that the strategic balance (I_{2t}) and the propensity to use force will covary negatively.

The effects of the magnitude of any current U.S. involvement in major conflict are represented by the third measure, I_{3t}. The effects of war are viewed as cumulative, and thus the marginal impact of each additional death decreases as the number of deaths accumulates. For the years when the U.S. was participating in the Korean and Vietnam wars, the war variable, I_{3t}, takes on the value of the logarithm of the sum of battle deaths (Mueller, 1973). It is

assumed that war (I_{3t}) will play an inhibitive role upon Y^*_t during the relevant time periods, because the president will be increasingly unwilling to risk further loss of life and/or material in other foreign policy actions.

Domestic Variables. The first and second domestic concerns operationalized in the model, D_{1t} and D_{2t}, are variables designed to reflect the degree to which the public is likely to sanction uses of force during those periods when it indicates attentiveness and concern over foreign policy issues facing the country. The overriding fact is that the American public has not frequently indicated in opinion surveys that it was concerned about high-risk foreign policy issues such as threat of war or nuclear war, relations with the Soviet Union, and resistance to communist expansion. However, when the public does identify high-risk foreign policy issues as most important, then the existing level of tension and the relative strategic balance are likely to be viewed as critical to the people and, in turn, to the president and his propensity to employ force. In operational terms, D_{1t} is equal to I_{1t}, and D_{2t} is equal to I_{2t} *in those quarters in which high-risk foreign policy issues are identified by the public as the most salient;* otherwise they are equal to zero.[11] Recall that we argued that during times in which high-risk foreign policy issues are dominant, international tensions will decrease the propensity to use force, but existing strategic balance will increase the propensity to use force.

The third domestic variable, aversion to war, D_{3t}, is designed to represent the lingering impact of war on the attitude of the public toward subsequent international involvement. It is our view that the lingering impact of war is a mirror image of the seriousness and longevity of the previous war. Therefore, we have operationalized the aversion to war as a mirror image of the war measure (i.e., $I_{3t-\Delta t} =$ $D_{3t+\Delta t}$), to represent the aversion to risk on the part of the public with a presumed negative impact on the president's propensity to use force.

The measure of economic well-being, the misery index, D_{4t}, is operationalized as the sum of the unemployment and inflation rates multiplied by the percentage of the U.S. public identifying the economy as the most important problem (Ostrom and Simon, 1985, pp. 342–43). This combined measure reflects the overall level of "misery" imposed on the public by the state of the economy weighted by the salience of the economy to the public. The weighted misery index posits that the impact of economic performance is dependent jointly upon the seriousness of economic problems and the number of people paying attention to the problems. In discussing the connection between the economy and the use of force, presidential attempts at deflection of attention from domestic economic conditions was stressed. Thus, it is hypothesized that the higher the misery index, the higher will be the propensity to use force.

Political Variables. A quarterly presidential approval variable, P_{1t}, has been determined by applying a set of coding rules to the record of answers to the question asked of the public in Gallup surveys: "Do you approve or disapprove of the job (*name of president*) is doing as president?" The coding rules were as follows:

1. If only one opinion poll was conducted during a given quarter, P_{1t} is equal to the approval percentage for that quarter.
2. If the question was not asked during a given quarter, P_{1t} is interpolated by averaging the approval percentage on both sides of the gap.
3. If the question was asked more than once during a quarter, P_{1t} is the average of all approval percentages during that quarter.

4. When the question was asked over two successive quarters, that approval percentage is used for both quarters.

It argued that the president will be more likely to use force when his level of approval is high.

The president's current "power situation" (e.g., Barber, 1977) is assumed to play a prominent role in the determination of whether to use force. Defined as the difference between his initial level of public approval upon taking office and his current level of approval, the relative power variable (P_{2t}) is designed to measure in relative terms the "success" of the president during his tenure in office in satisfying the expectations of the public. It is hypothesized that P_{2t} is positively related to the propensity to use force, keeping in mind that positive values of P_{2t} are indicative of drops in public approval. Thus, the argument is that the president will move to counter these declines with an increased likelihood of foreign action.

The electoral variable, P_{3t}, designates those quarters that are electorally prominent. It takes on the value of one during the third quarter of even-numbered years —the periods in which the midterm and general election campaigns are winding to a close. In our view, the propensity to use force will increase in these periods, as presidents seek to enhance their credibility as action-oriented leaders.

Model Evaluation

The Estimation Procedure

To evaluate empirically the cybernetic model depicted in equation (3), it is necessary to obtain estimates of a_i, b_j, c_k, and h. This is accomplished using an ordered probit model (Aldrich and Nelson, 1984; McKelvey and Zavoina, 1975). In the dichotomous case (i.e., two-element choice set), the threshold (h) is set to zero and the parameters are estimated using maximum likelihood. Consequently, the estimated model predicts the president will use a major level of force during quarter t if Y^*_t is greater than zero; that is, when the environmental evaluation is "good enough." He will not use a major level of force during quarter t if Y^*_t is less than or equal to zero; that is, when the environmental evaluation is not "good enough." The probability $[Pr(Y_t = 1)]$ resulting from the model is an estimate of the conditional probability that a president will use force given the status of the international, national, and political contextual factors.[12]

The Estimated Cybernetic Model

Table 1 presents a number of summary measures of the overall performance of our cybernetic model of presidential decision making. As can be seen, the model performs very well. All of the estimated coefficients for the essential variables have the hypothesized sign, and 8 of the 10 coefficients are significant, in terms of a one-tailed test, at the .05 level. On average, our model's use of force predictions are correct for three of every four quarters during the 1948–1976 period. This is noteworthy when one considers that there is a 45-55 split between use and non-use. As such, the model represents a substantial increase in predictive success over the naive alternative model that predicts the most frequent category continually. Note that the overall measure of fit (i.e., $-2 \times LLR$) is statistically significant at the .001 level. There is substantial empirical support, therefore, for our general assertion that a model of decision making based upon contextual factors can account for U.S. political uses of major force aggregated on a quarterly basis.

Closer examination of the model reveals interesting results regarding the differential impact of international, domestic, and political factors. To assess the relative impact of the three sets of variables, an instrumental variable was

Table 1. Parameter Estimates

Variable	Descriptor	Maximum Likelihood Estimate (MLE)	Standard Error (SE)	MLE/SE	Change in Decrease[b]	$Pr(Y_t=1)$[a] Increase[c]
I_{1t}	International tension	1.288	.590	2.184[d]	−.203	.223
I_{2t}	Strategic balance	−1.301	.940	−1.384	−.185	.203
I_{3t}	Cumulative war dead	−.198	.110	−1.797[d]	−.152	.159
D_{1t}	International tensions when foreign policy is primary public concern	−2.120	.863	−2.454[d]	−.260	.293
D_{2t}	Strategic balance when foreign policy is primary public concern	1.374	.769	1.788[d]	−.218	.241
D_{3t}	Aversion to war	−.202	.104	−1.940[d]	−.145	.151
D_{4t}	Weighted economic misery index	.180	.093	1.925[d]	−.206	.227
P_{1t}	Presidential approval	.087	.032	2.683[d]	−.352	.417
P_{2t}	Overall presidential success	.058	.029	2.000[d]	−.260	.290
P_{3t}	National elections	.491	.401	1.222	−.061	.064
Constant		−5.315	2.358	−2.254[d]		

$N=112$; 75% correct; 55% correct—null; -2×33.28, $p < .05$.

[a]Change in $Pr(Y_t=1)$ given a one standard deviation change (both probability enhancing and probability decreasing) while all variables take on their mean value. When all variables are held at their mean, $Pr(Y_t=1) = .44$.

[b]Decrease refers to change in probability brought on by a one standard deviation change in the variable in the direction that decreases the probability of using force.

[c]Increase refers to change in probability brought on by a one standard deviation change in the variable in the direction that increases the probability of using force.

[d]Significant at the .05 level.

created for each of the three types of variables, and the probability of use was predicted using the three instrumental variables.[13] The resulting beta weights of .605, .671, and .856 for international, domestic, and political instruments respectively, provide a rough indication of the relative importance of the three sets of environmental factors. Even though the use of force decision is grounded in the state of the international environment, the impact of the international variables is far from dominating in the model. In fact, $Pr(Y_t=1)$ is also quite responsive to changes in the domestic and political environments, with the political variables exerting the largest combined impact. This finding provides a foundation for greatly expanding the implications of the adjective *political* in the political use of force.

These general conclusions can be supplemented by a consideration of each of the individual coefficients. It is difficult to assess the impact of probit coefficients, since the estimation technique is nonlinear. To provide one means of assessment we offer an impact range. Table 1

presents the maximum likelihood coefficients (MLE) along with the impact that a decrease or increase of one standard deviation in each variable has on the $Pr(Y_t=1)$, assuming that all other variables are currently at their mean.[14] As such, the impact range provides an indication of the range of the effect of the variable in probability terms (i.e., how much change in $Pr(Y_t=1)$ results from changes in the environmental variables). For example, the impact range of P_{1t} is from $-.352$ to $+.417$, indicating that when all other variables are held at their mean, a one standard deviation drop in approval (13 approval points) from its mean (55) causes a drop in the predicted probability of major use from .44 to .09, while a one standard deviation rise in approval causes an increase in the predicted probability of major use from .44 to .85.

The index of U.S.-U.S.S.R. conflict and cooperation, I_{1t}, has a persistent impact on the predicted probability of the political use of force. Evaluating the coefficient in terms of a decrease or increase of one standard deviation, changes in I_{1t} can lead to a change of $\pm.20$ in the probability of using force (the probability of use would be .24 or .64). Based on the estimated model, higher levels of I_{1t} in the international system increase the probability of the use of force.

However, the second international variable, I_{2t}, has a statistically insignificant impact on the predicted probability of the political use of force. Therefore, contrary to our initial argument, there is no indication that in periods in which the U.S. has been dominant in terms of strategic forces, the president is more likely to use force.

The predicted probability of the use of major force for political purposes is affected in a negative fashion by the extent of current U.S. involvement in war. The third international variable, war casualties, has a statistically significant impact. Thus, in our model, as U.S.

battle deaths increase—that is, accumulate over the course of the hostility—the president is less and less likely to use the U.S. military elsewhere, even for so-called "political" purposes.

Our results contrast with Blechman and Kaplan (1978, p. 27), who suggest that international factors are most important in their analysis, and that current or recent involvement in war has a positive impact on the use of force. However, these authors were analyzing data including both minor and major uses of force—the former constituting about 150 incidents, many of them merely naval "sail bys." It is very plausible that while the U.S. is involved in extended conflict, it will be willing to engage in such relatively "costless" and risk-free political uses of force, but at the same time be increasingly reluctant to deploy major force components. Also, note should be made of the difference in operationalization. Blechman and Kaplan, as well as Stoll (1984), employ a dichotomous dummy variable to indicate U.S. war activity on an annual basis. Our measure is sensitive to the duration and the increased cost and commitment of U.S. combat action as the war progresses.

The effects of the domestic contextual factors are very prominent in our results. The first domestic variable, D_{1t}, reflects, on a quarterly basis, whether the public is concerned over the level of tension between the superpowers. Based upon the estimated coefficient of -2.12, during those quarters when the public is concerned about high-risk issues in foreign affairs, the probability of the political use of force is substantially dampened. Since the coefficient of D_{1t} represents the change in the coefficient of international tension, the impact of I_{1t} during times when the focus is on high-risk foreign policy issues is $-.83$ (i.e., $1.288 - 2.120$). Thus, in those quarters in which high-risk foreign issues are dominant, the positive impact of international tension is offset by

public concern with war; in fact, during such periods the net effect is that tension is negatively related to the probability of a political use of force.

The second domestic variable, D_{2t}, relates the public's concern over foreign affairs to the level of the U.S.-U.S.S.R. strategic balance. Based upon an estimated coefficient of +1.374 for D_{1t}, I_{2t} has no impact $(-1.301 + 1.374)$ during quarters when foreign policy issues represent an important American public concern. The relationship between strategic balance and the use of force disappears—that is, major political uses of force are not related to the strategic balance.

It is interesting to note the significance of the change in effects of the variables between I_{2t} and I_{1t} when the two variables are modified to reflect public attention and concern, yielding the variables D_{1t} and D_{2t}. The interactive effect of public concern completely changes the nature of the relationships found at the "international" level with regard to tension and the strategic balance. This provides one more piece of evidence to underscore the contention that the political use of force is a decision undertaken with reference to domestic as well as international contextual factors.

The third domestic variable, D_{3t}, indicates that immediate postwar periods are marked by substantially reduced propensities to use force. The similarity in the magnitude of the coefficients for I_{3t} and D_{3t} suggests that the termination of a war does not have an abrupt impact on the political use of force; instead, a significant inhibiting effect of the war experience lingers on for a considerable period of time. It also suggests that the inhibiting effects of past wars decline with the passage of time.

The final domestic variable, D_{4t}, economic misery, also proves important. The estimated coefficient of .18, which is statistically significant, indicates that the cumulative normal function increases by

one standard deviation for every five-point increase in the weighted misery index. When evaluated in terms of the impact of a standard deviation change, it is clear that a one standard deviation change (3.23 on the weighted misery index) leads to substantial changes ($\pm.20$) in the probability of using force. The magnitude and importance of this coefficient imply that the president is more prone to use force in times of economic stress.

Finally, turning to the effects of political leadership factors upon presidential decisions, the coefficient for P_{1t} suggests that the higher the level of presidential approval, the more likely the president will be concerned with the possibility that the use of force, if unsuccessful, could reduce his personal resources. The value of .09 indicates that the cumulative normal function will increase nine-tenths of a standard deviation for every 10 rating points in the polls. Note that a president's approval rating is the most important variable in the model from a statistical point of view.[15] Holding all else equal, a one standard deviation change in approval (13 rating points) can lower or raise the probability of the use of force by .35 and .41 respectively. Since changes of 13 points or more in approval do occur frequently, a good deal of the impetus for the large swings in the propensity to use force can be traced to the presidential approval rating.

The estimated coefficient for overall presidential success, P_{2t}, indicates that each 10-point decline during a president's tenure in office increases the cumulative normal function by six-tenths of a standard deviation. It demonstrates, however, that the probability of use does not decline in the face of falling approval as rapidly as the coefficient of P_{1t} suggests. That is, the more negative the president's overall record in office (as represented by declining popular support), the more likely he is to act in the absence of a popular-

ity buffer. For example, taking the constant term and coefficients of approval and overall success from Table 1, we find that, *ceteris paribus*, $Pr(Y_t = 1) < .50$ when $P_{1t} < 43$, assuming that 70 is the high point of P_{1t} for the term and all other variables equal zero. If we take approval and overall success together while holding all other variables at zero, three "zones" relating to use are suggested: (1) when $P_{1t} > 58$, the probability of the use of force is greater than .67—hence the president has a buffer of popular support that will enable him to act; (2) when $P_{1t} < 43$, the probability of the use of force is less than .50, indicating that in the absence of other factors the president is unlikely to use force at all; and (3) when $58 > P_{1t} > 43$, the president may use force in anticipation of being able subsequently to regain some of his lost approval. All in all, the president's absolute and relative level of approval has a startling, very interesting, and significant impact on probability that he will use force in a political fashion.

The final variable in the model, P_{3t}, was designed to detect an electoral rhythm in the political use of force. Although the coefficient for this variable fails to achieve statistical significance, it is of substantive interest. According to the estimated version of our model, the cumulative normal score increases by .49 during each quarter prior to a national election, indicating a positive electoral cycle impact upon decisions involving the political use of major force.

As indicated earlier, it is difficult to compare our enterprise with Stoll's (1984) study. He focuses solely upon presidential reelection campaigns, finding some support for his hypothesis that during those reelection campaign periods occurring while the U.S. is also fighting a major war abroad there would be an increase in the certain uses of force for political purposes. Our model, on the other hand, is broader in scope, not only in its inclusion of a wider range of international and

domestic factors, but also in its inclusion of all congressional election periods, and has quite different operationalizations for many key variables. On the whole, however, we would tend to suggest that the impact of electoral concerns would be quite subsidiary to the president's other, more influential, pressures and considerations.

Overall Explanation

Recall that the specification of the president's decision rule was based on locating environmental configurations conducive to the use of force. By implication, we expect a cybernetic decision maker to reach the same decision whenever the composite environmental evaluation remains below (or above) the threshold. This, in turn, leads us to expect extended periods, or eras, in which similar decisions persist.

Figure 1 presents the predicted values of

**Figure 1. Propensity to Use
Major Force**
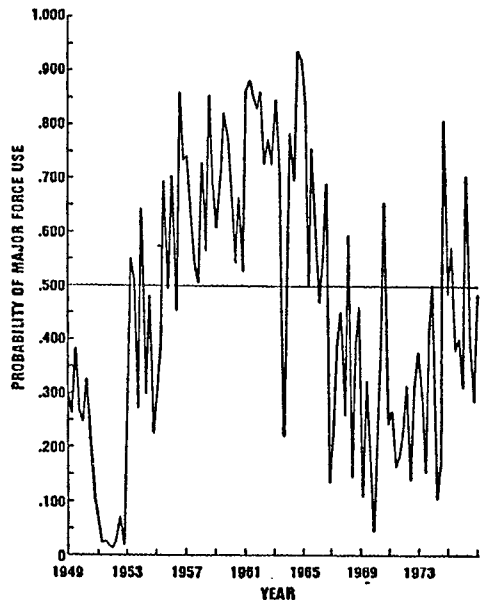
$Pr(Y_t = 1)$ over the 1949–1976 period. Turning to a consideration of the ebb and flow of presidential decisions to use force, as reflected in the changing probabilities, we find there are apparently three distinct eras in U.S. decisions to use major force for political purposes. The first period runs from 1949 through mid–1953, and is marked by values of $Pr(Y_t = 1)$ far below .50. The dominance of the decision not to use force is due to low values of presidential approval, the Korean War, and the fact that the American public identified high-risk foreign policy issues as the most important problem facing the country during these years. The second period, which runs from mid–1953 through 1965, is dominated by values of $Pr(Y_t = 1)$ well above .50. Our explanation for the relative frequency with which force was predicted and used during this period is based on high presidential approval ratings and the absence of war, creating an environment in which the U.S. president could operate in a relatively unrestricted fashion in the foreign policy arena. The third period runs from 1966 to 1976 and is marked by very low values of $Pr(Y_t = 1)$. These predictions result from low values of approval, reduction in international tension, and the ongoing and residual effects of the Vietnam War. Thus, the cybernetic model provides a clear explanation for the extended periods over which presidential decisions with respect to the major use of force did not change.

The rather wide fluctuations in the predicted probability of using force in each quarter during the 1949–1976 period provide ample indication of the tremendous impact of the international, domestic, and political arenas on foreign policy decision making. In spite of the wide fluctuations, the observed behavior is predicted to remain quite stable. These results, when interpreted from a cybernetic perspective, provide support for the proposition that the president is predisposed to use force or not use force based upon the current state of the environment. While the present analysis sheds no light on decision making in specific instances, it does provide a clear indication of the importance of contextual environmental factors on the likelihood that a president will use force each quarter.

Conclusions

The model presented in this paper produces a general, comprehensive explanation in which the political use of force by the U.S. is viewed as a presidential decision determined by a limited number of international, domestic, and political/personal factors. The cybernetic decision-making perspective and the model developed on this basis have credibility and deserve further consideration. Certainly, there is support for the proposition that the use of force is a presidential decision that resides in a decidedly political context. First, the decision is influenced by all three of the environments within which the president is assumed to operate. Second, the international variables are not the single most important contextual determinant of decisions on the use of force. Third, the effect of the international variables, when modified to account for domestic public perceptions, was dramatically altered. Fourth, political leadership factors appear to play a very prominent role in establishing the propensity to use force. In fact, the absolute and relative levels of popular support turn out to be the most important influence on the political use of major force.

Therefore, our cybernetic model of presidential decision making provides a substantively-based explanation for decisions to use force during the entire 28-year period spanning six presidents. If the time series displayed in Figure 1 is divided according to presidential terms, one can calculate the mean predicted probability value for the quarterly political use of force by each president. Doing so yields

Table 2. Analysis of Model Predictions According to Presidential Term

Presidential Term	Predict=1 Actual=0	Predict=0 Actual=0	Predict=1 Actual=1	Predict=0 Actual=1	% Correct
Truman	0	14	0	2	88
Eisenhower	6	6	17	3	72
Kennedy	3	1	7	1	67
Johnson	3	7	8	2	75
Nixon	0	15	2	5	77
Ford	1	5	2	2	70
Total	13	48	36	15	75

Note: Percentage of nonuses predicted correctly = 79%; percentage of uses predicted correctly = 71%.

quarterly predicted propensities of .15 for Truman, .58 for Eisenhower, .73 for Kennedy, .54 for Johnson, .26 for Nixon, and .48 for Ford. There are thus substantial variations among presidents. Kennedy, for instance, was seen to be likely to use major force for political purposes in three of four quarters; that is, Kennedy was five times as likely to make such decisions as Truman.

Table 2 provides information on the number of correct and incorrect predictions on a term-by-term basis for the presidents. The percentage predicted correctly across all presidencies is remarkably stable: about 75%. Two patterns in these predictions are worth noting. On one hand, the model appears to err by predicting a use of force when there was none more often in those quarters prior to 1964 than in those after 1964. On the other hand, the error of predicting no use of force when there actually was one occurs most frequently for those quarters after 1964. It should be emphasized again, however, that our model assumes common decision-making behavior for all presidents.

There are a number of features of the prediction errors made by our cybernetic model that merit special attention. Table 3 divides these incorrect predictions into two groups based upon the type of prediction error made by the model. The left-hand column lists those quarters in which

a use of force was predicted when there was no such use; this type of error occurred more frequently prior to 1964 and most often during the Eisenhower presidency. An in-depth analysis of presidential decision making during these quarters would provide some insight into the genesis of the decision against the use of force. There are at least two possible explanations for these mistakes. First, on the surface, it would appear that although tensions ran high and the U.S. maintained a superior strategic position throughout the Cold War of the 1950's, presidents were somewhat adverse to risk, and were not always willing to capitalize on these circumstances by using the military for political purposes. Second, it could be the case that there were no opportunities to use force in a political fashion.

The right hand column, in Table 3, lists the actual uses of force not predicted by the model. The events represented by these errors share three obvious characteristics. First, a majority were initiated by other international actors: The problems surrounding the assassination of Diem, the 1967 Arab-Israeli War, the Czechoslovakian invasion, the EC-121 being shot down, the Mayaguez incident, and the North Korean attack in 1976 were all unanticipated by the U.S. Second, a number of the missed predictions involve events surrounding the Korean and Vietnam wars. While in subsequent analyses

Table 3. Listing of the Model's Incorrect Predictions, 1949–1976

Use of force predicted when none occurred			Actual use of force not predicted		
Quarter	Year	President	Quarter	Year	Event Number
			3	1950	30
			1	1951	31
1	1953	Eisenhower			
			2	1954	41
1	1956	Eisenhower			
			3	1954	42
4	1958	Eisenhower			
			2	1956	51
			4	1963	133
1	1960	Eisenhower			
2	1960	Eisenhower			
3	1960	Eisenhower			
			2	1967	174
4	1961	Kennedy			
1	1962	Kennedy			
			3	1968	179
			2	1969	182
3	1962	Kennedy			
			1	1971	192
4	1965	Johnson			
			2	1972	198
2	1966	Johnson			
			4	1972	199
3	1966	Johnson			
			1	1973	200, 201
1	1976	Ford			
			2	1975	218
			2	1976	225

most of these uses may be eliminated as components of the larger U.S. South Asian war, for this initial venture we performed a straightforward secondary analysis of the Blechman and Kaplan data set of nuclear-capable or major-level force incidents. Third, several "missed" predictions were events that became extremely important and very visible because of wide publicity and public attention. Consequently, whether or not the president "wished" to use force, based on his assessment of contextual factors as set out in the model, immediate short-term pressures may have exerted overriding influences toward the use of force.

This raises two final points that must await examination in further research. One omission from the present analysis is a consideration of the "opportunity to use force." We chose to focus instead on the general context in which use of force decisions were made. However, having shown that the context is an important determinant of presidential decision making, in subsequent research we turn to the development of the concept of *opportunity* and an operational procedure for

the identification of such incidents. In conceptual terms, an *opportunity* is a set of circumstances in which the president considered using force of some kind to achieve U.S. interests. While we cannot know actual presidential considerations, we can assemble a set of events about which we can reasonably assume that the use of force was a considered option. Previous research suggests that factors such as a threat to U.S. security, endangerment of U.S. personnel and civilians abroad, a threat to a state with U.S. security commitments, a threat to a state in which the U.S. has interests, a threat to a state that receives U.S. security and/or economic assistance, a threat to U.S. economic interests, a threat posed by "communist" elements, or any one of a set of moves by a major opponent could be representative features of the class of opportunities to use force. In this regard, it will also be important to focus on the region in which the opportunity takes place. Construction and collection of an opportunity set will necessitate extensive research in presidential writings, govern-

ment documents, and in data archives. However, such efforts are necessary, because a decision-making model cannot be said to be applied satisfactorily if its only referents or applications are those incidents in which a positive decision was made to employ force. The research reported on in this paper provides a necessary first step towards this larger goal.

Second, the Blechman and Kaplan data set ends in 1976. Arguably the 1977–1984 period—which saw, among other incidents, the hostage rescue attempt in Iran, the Marines in Lebanon, and the invasion of Grenada—is a very interesting one. It is imperative that we obtain the data necessary to identify all of the major or nuclear-capable uses of force for this period. Once this data is available, it will be possible to test the predictive capacities of our model, as well as to determine whether the recent upsurge in uses of force in the Reagan administration is due to the peculiar nature of the president, or whether this propensity to use force is consistent with the ebb and flow of the post–World War II era.

Appendix: Nuclear-Capable or Major Uses of Force, 1949–1976

Event Number[a]	Force Level[b]	Quarter[c]	Year[c]	Description[d]
29	1	3	1950	Korean War: Security of Europe
30	3	3	1950	Political developments in Lebanon
31	3	1	1951	Security of Yugoslavia
38	2	3	1953	End of war in Korea
39	1	3	1953	Security of Japan/Korea
40	3	1	1954	France–Viet Minh War: Dienbienphu
41	1	2	1954	Guatemala accepts U.S.S.R. aid
42	3	3	1954	France–Viet Minh War: Dienbienphu
43	3	3	1954	British airliner shot down by China
44	1	3	1954	China-Taiwan: Tachen Islands
46	3	4	1954	Accord on Trieste
48	3	3	1955	Austrian State Treaty
51	3	2	1956	British General Glubb ousted in Jordan
52	3	3	1956	Egypt nationalizes Suez Canal
53	1	4	1956	Suez crisis
56	3	1	1957	Political-Military crisis: Indonesia
57	2	1	1957	Political-Military crisis: Jordan

Appendix (continued)

Event Number[a]	Force Level[b]	Quarter[c]	Year[c]	Description[d]
61	3	3	1957	China-Taiwan conflict
62	2	3	1957	Political developments: Syria
63	3	4	1957	Indonesia-Netherlands crisis
65	3	1	1958	Political-Military crisis: Indonesia
66	2	2	1958	Political crisis: Lebanon
69	1	3	1958	Political crisis: Lebanon
70	1	3	1958	Political crisis: Jordan
71	1	3	1958	China-Taiwan: Quemoy-Matsu
75	2	1	1959	Security of Berlin
78	1	2	1959	Security of Berlin
79	3	3	1959	China-Taiwan conflict
80	3	3	1959	Civil war: Laos
82	3	4	1959	Political developments: Cuba
91	3	4	1960	Cuba supports insurgents: Guatemala and Nicaragua
96	2	1	1961	Civil war: Laos
99	2	2	1961	Trujillo assassinated
102	1	2	1961	Security of Berlin
103	3	3	1961	Security of Kuwait
110	3	2	1962	Civil war: Laos
114	1	3	1962	Cuban Missile Crisis
119	3	2	1963	Civil war: Yemen
121	3	2	1963	Withdraw missiles: Turkey
122	3	2	1963	Political crisis: Jordan
123	3	2	1963	Civil war: Laos
125	3	2	1963	Buddhist crisis in South Vietnam
133	3	4	1963	Assassination of Diem
136	3	1	1964	Security of Panama Canal
138	2	1	1964	Cyprus-Greece-Turkey crisis
139	3	1	1964	Coup in South Vietnam
143	2	2	1964	Civil war: Laos
149	3	3	1964	Cyprus-Greece-Turkey crisis
151	2	3	1964	North Vietnam fires on U.S. ship in Tonkin Bay
155	3	4	1964	Viet Cong attack Bien Hoa barracks
157	3	1	1965	Viet Cong attack Pleiku
158	3	1	1965	Viet Cong attack Qui Nhon
159	2	2	1965	Civil war: Dominican Republic
163	3	3	1965	War in Vietnam: Withdraw troops from Europe
164	3	3	1965	Political developments: Cyprus
166	3	3	1967	Civil war: Dominican Republic
174	3	2	1967	Arab-Israeli War
178	1	1	1968	Pueblo seized by North Korea
179	2	3	1968	Invasion of Czechoslovakia
182	2	2	1969	EC-121 shot down by North Korea
189	2	2	1970	Civil war: Jordan
192	3	1	1971	Withdraw troops from South Korea
198	2	2	1972	North Vietnamese offensive in South Vietnam
199	3	4	1972	Break down of peace talks: North Vietnam
200	3	1	1973	Civil war: Laos
201	3	1	1973	Civil war: Cambodia
205	1	4	1973	Arab-Israeli War
210	3	3	1974	Cyprus-Greece-Turkey crisis
216	2	3	1975	Collapse of regime in South Vietnam

Appendix (continued)

Event Number[a]	Force Level[b]	Quarter[c]	Year[c]	Description[d]
218[e]	2	2	1975	Cambodia seizes Mayaguez
225[e]	1	2	1976	North Koreans attack demilitarized zone

[a]Taken from Blechman and Kaplan (1978).

[b]Taken from Blechman and Kaplan (1978).

[c]Refers to the quarter and year in which the U.S. became involved.

[d]Taken from Blechman and Kaplan (1978).

[e]These numbers are taken from the ICPSR code book and are different from those reported in Blechman and Kaplan (1978).

Notes

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1. The already noted Blechman and Kaplan (1978) study is the first to catalog, categorize and study U.S. uses of force in a systematic fashion. Several authors, while employing the phrase "use of force" and constructing theoretical explanations that could apply more broadly, have focused their empirical efforts exclusively upon U.S. postwar direct military interventions (e.g., Pearson, 1974; Tillema, 1973; Tillema and van Wingen, 1982; Weede, 1978). George, in his work on "coercive diplomacy" with Hall and Simons (1971), in his work on deterrence with Smoke (1974), and in his own extensive work on presidential decision making (1980a and 1980b), has illuminated various questions and cases of relevance to this subject. Much has been written on crises (e.g., Holsti, 1972; Lewis, 1981; Snyder and Diesing, 1977, and on "noncrisis" decision making (e.g., Allison, 1971; Halperin, 1974; Steinbruner, 1974, but decisions to use force "fall between the cracks" of these studies. Krasner (1978) briefly considers the use of force by the U.S. government to advance commercial interests, but finds no empirical examples.

2. Bleckman and Kaplan (1978, pp. 49–50) identify five levels of force. The three highest entail the use of a strategic nuclear unit and/or a major force component. A *major force component* consists of (a) two or more aircraft carrier task groups, (b) more than one ground batallion, or (c) one or more combat wings.

3. We have chosen to restrict our attention to post-1948 uses of force (a) to focus on complete presidential terms, and (b) to avoid any contamination caused by immediate post–World War II foreign policy activities. In spite of the fact that many interesting events have taken place since 1976, our reliance on the Blechman and Kaplan data limits our analysis to pre-1977 uses of force.

4. Most certainly, cognitive processes and individual personality will have an impact on presidential decision making. Rather than assert that these factors are unimportant, we simply have chosen to look to the environmental connection first.

5. Insofar as the absolute level of support is concerned, the higher the president's popularity, the more likely it is he will have a popularity buffer that might increase his propensity to accept the risk of failure. With respect to overall success, it is our contention that declining *relative* success may lead the president to take some type of military action. Consequently, the negative impact of declining political success.

6. Note should be made of a recent article by Stoll (1984, p. 234) hypothesizing that if the U.S. is involved in or "close to" a war at the time of a reelection campaign, there will be an increased likelihood of "visible uses of military force." Our argument, therefore, runs counter to Stoll's.

7. We assume that this scale is continuous and ranges from $-\infty$ to $+\infty$.

8. We realize that questions can be raised about the exclusion of "nonmajor" uses of force. For example, the use of the Sixth Fleet in Cyprus in July 1974 is included, whereas the August 1967 display has been omitted. Whereas the former was coded as a "three," the latter was coded a "four." Rather than raise questions about the restrictions, we have opted for a straightforward secondary analysis using the original Blechman and Kaplan codes.

9. The measure is constructed as follows. We sum U.S.→U.S.S.R. and U.S.S.R.→U.S. directed conflict. From that we subtract U.S.→U.S.S.R. and U.S.S.R.→U.S. directed cooperation. The difference is divided by the sum of directed conflict and cooperation, creating an index which ranges from −1 to +1.

10. For the years prior to 1955, it is assumed that the U.S.S.R., with its limited airforce capabilities, posed no direct strategic threat to the U.S. (e.g., Kilmarx, 1962; Lee, 1961).

11. In statistical terms, the coefficients for D_{1t} and D_{2t} represent the change of the impact of tension and balance when the public is concerned about high-risk foreign policy issues. By including these interactive variables, the relationship between international tension and strategic balance on one hand and the probability of using force on the other is subject to change. The impetus for the change is public opinion.

12. There is a theoretical and methodological issue that deserves special attention before we proceed: the possibility of a simultaneous relationship between the $Pr(Y_t=1)$ and P_{1t}. There are three reasons that lead us to reject this possibility and hence to estimate equation (3) separately, without reference to an approval equation. First, it is our contention that the relationship between $Pr(Y_t=1)$ and P_{1t} is recursive; that is,

$$P_{1t} \rightarrow Pr(Y_t=1) \rightarrow P_{1t+1}.$$

Second, the impact of the relationship $Pr(Y_t=1) \rightarrow P_{1t+1}$ is mediated by other considerations. Previous research (Ostrom and Simon, 1985) suggests that the impact of dramatic international events is proportional to the extent of the media coverage given to the event. Thus, on an a priori basis, it seems clear that there will be no direct relationship between $Pr(Y_t=1)$ and P_{1t+1}. Finally, the time gradient is too coarse to allow us to discern a simultaneous relationship. It is not possible to tell empirically whether force leads approval or vice versa. At this juncture it seems safe to proceed with the estimation of the single equation.

13. To create the instruments required the following computation:

$$I_{iv} = 1.228*I_{1t} - 1.301*I_{2t} - .198*I_{3t}$$

$$D_{iv} = -2.120*D_{1t} + 1.374*D_{2t} - .202*D_{3t}$$
$$+ .180*D_{4t}$$

$$P_{iv} = .087*P_{1t} + .058*P_{2t} + .491*P_{3t}.$$

When the $Pr(Y_t=1)$ is estimated using the three instruments, the maximum likelihood estimate (MLE) for each instrument is equal to 1.000. The standard deviation of the underlying scale (Y^*_t) and of each instrument were used to compute the estimated beta weights (McKelvey and Zavoina, 1975, p. 115).

14. Using the estimated coefficients and the mean values for each of the independent variables, we determined that the probability of using major force is .44. While holding all variables at their mean value, we calculated the change in the probability of use that results from each variable evidencing both a plus and minus one standard deviation change from its mean. The two columns in Table 1 represent the probability enhancement and decrement brought on by these changes.

15. This finding is confirmed by Blechman and Kaplan's (1978, p. 27) result that, in bivariate terms, approval was most highly correlated with the use of force.

References

Aldrich, John, and Forrest Nelson. 1984. *Linear Probability, Logit, and Probit Models.* Beverly Hills: Sage.

Allison, Graham. 1971. *Essence of Decision.* Boston: Little, Brown.

Azar, Edward W. 1982. *Conflict and Peace Data Bank (COPDAB), 1948-1978: Daily Events Record.* Ann Arbor: Inter-University Consortium for Political and Social Research.

Barber, James. 1977. *The Presidential Character.* Englewood Cliffs, NJ: Prentice-Hall.

Blechman, Barry, and Stephen Kaplan, with David Hall and others. 1978. *Force Without War.* Washington, D.C.: Brookings.

Gallhofer, I., and W. Saris. 1979. Strategy Choices and Foreign Policy Decision Makers. *Journal of Conflict Resolution,* 23:425-45.

Gelb, Leslie, and Richard Betts. 1979. *The Irony of Vietnam: The System Worked.* Washington, D.C.: Brookings.

George, Alexander. 1980a. Domestic Constraints on Regime Change in US Foreign Policy. In Ole Holsti, Randolph Siverson, and Alexander George, eds., *Changes in the International System.* Denver: Westview Press.

George, Alexander. 1980b. *Presidential Decision Making in Foreign Policy.* Denver: Westview Press.

George, Alexander, and Richard Smoke. 1974. *Deterrence in American Foreign Policy.* New York: Columbia University Press.

George, Alexander, David Hall, and William Simons. 1971. *The Limits of Coercive Diplomacy.* Boston: Little, Brown.

Halperin, Morton. 1974. *Bureaucratic Politics and Foreign Policy.* Washington, D.C.: Brookings.

Holsti, Ole. 1972. *Crisis, Escalation, and War.* Montreal: McGill University Press.

Holsti, Ole, and James Rosenau. 1984. *American Leadership in World Affairs.* Boston: Allen & Unwin.

Kegley, Charles W., Jr., and Eugene R. Wittkopf.

1982. *American Foreign Policy: Patterns and Process*, 2d ed. New York: St. Martin's Press.

Kilmarx, Robert. 1962. *A History of Soviet Air Power*. New York: Praeger Publishers.

Krasner, Stephen. 1978. *Defending the National Interest*. Princeton: Princeton University Press.

Lebow, Richard. 1981. *Between Peace and War*. Baltimore: Johns Hopkins University Press.

Lee, Asher. 1961. *The Soviet Air Force*. London: G. Duckworth.

McKelvey, Richard, and William Zavoina. 1975. A Statistical Model for the Analysis of Ordinal Level Dependent Variables. *Journal of Mathematical Sociology*, 4:103–20.

Mahoney, Robert. 1976. American Political-Military Operations and the Structure of the International System. Presented at the annual meeting of the International Studies Association.

Maoz, Zeev. 1981. The Decision to Raid Entebbe. *Journal of Conflict Resolution*, 25:677–708.

Mueller, John. 1973. *War, Presidents, and Public Opinion*. New York: Wiley.

Neustadt, Richard. 1980. *Presidential Power*. New York: Wiley.

Ostrom, Charles. 1978. A Reactive Linkage Model of the US Defense Expenditure Policy-Making Process. *American Political Science Review*, 72: 941–57.

Ostrom, Charles, and Dennis Simon. 1985. Promise and Performance: A Dynamic Model of Presidential Popularity. *American Political Science Review*, 79:334–58.

Pearson, Frederic. 1974. Geographic Proximity and Foreign Military Intervention. *Journal of Conflict Resolution*, 18:432–60.

Prados, John. 1982. *The Soviet Estimate*. New York: Dial Press.

Schell, Jonathan. 1976. *Time of Illusion*. New York: Vintage Books.

Simon, Herbert. 1959. Theories of Decision Making in Economics. *American Economic Review*, 49: 253–83.

Simon, Herbert. 1969. *Sciences of the Artificial*. Cambridge: MIT Press.

Simon, Herbert. 1979. *Models of Thought*. New Haven: Yale University Press.

Snyder, Glenn, and Paul Diesing. 1977. *Conflict Among Nations*. Princeton: Princeton University Press.

Squires, Michael L. 1982. Modeling the U.S.-U.S.S.R. Strategic Arms Race. Ph.D. diss., Indiana University.

Steinbruner, John. 1974. *The Cybernetic Theory of Decision*. Princeton: Princeton University Press.

Stoll, Richard. 1984. The Guns of November. *Journal of Conflict Resolution*, 28:231–46.

Tillema, Herbert. 1973. *Appeal to Force*. New York: Crowell.

Tillema, Herbert, and John Van Wingen. 1982. Law and Power in Military Intervention. *International Studies Quarterly*, 26:220–50.

Tufte, Edward. 1978. *Political Control of the Economy*. Princeton: Princeton University Press.

Weede, Erich. 1978. US Support for Foreign Governments on Domestic Disorder and Imperial Intervention 1958–1965. *Comparative Political Studies*, 10:497–527.

Wills, Garry. 1982. *The Kennedy Imprisonment*. Boston: Little, Brown.

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