

DO NATION-TYPES ACCOUNT FOR FOREIGN POLICY BEHAVIOR?

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Attributes of nations have long been considered as factors useful in explaining foreign policy behavior. The literature abounds with references to such attributes as political stability, population, levels of industrialization, military capabilities, and so on. Recently, some scholars have focused on three particular national attributes in their attempts to account for foreign policy behavior. These are extent of physical size, level of economic development, and degree of political accountability.

AUTHORS' NOTE: *This research was supported by grants from the National Science Foundation (GS-3117), the Mershon Center at Ohio State University, and the Ohio State University Instructional and Research Computer Center. The authors wish to express their appreciation to their colleagues in the CREON Project for their help and especially to Stephen Salmore who shares with the authors a major interest in the topic under investigation and who provided valuable assistance in the analysis. It should be noted that the order of the authors is completely arbitrary. An earlier version of this paper was presented at the 1972 Annual Meeting of the American Political Science Assn., Washington, D.C., September 5-9.*

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Among those scholars who consider the importance of these three attributes as explanatory factors, a fundamental difference emerges concerning the manner in which these properties are conceptualized and related to foreign policy. Briefly, one approach regards the three variables as separate and independent factors whose effects on foreign policy behavior are additive. The other approach conceives of these variables as interactive, i.e., in combination these three variables form unique classes of nations—nation-types—which are used to account for variations in foreign policy behavior.

This paper presents a series of hypotheses relating each of the three separate national attributes to various measures of foreign policy. The hypotheses are based on the assumption that the effect of each attribute on foreign policy is additive and that each one has an impact on foreign policy behavior which is independent of the other two properties. Using the same measures of foreign policy, we will also consider the impact of the interaction of all three attributes combined so as to form eight nation-types. Thus, the question we ask is: Do three widely discussed national attributes each have a separate influence on foreign policy or does their effect depend upon their combination into unique nation-types? We also must consider two other possibilities. It is possible that the three attributes may have no relationship—either separately or in combination—with our specific measures of foreign policy behavior. Alternatively, different relationships may exist between the measures of foreign policy behavior and the attributes, depending on whether the latter are treated separately or in combination.

EMERGENCE OF TWO APPROACHES IN PREVIOUS RESEARCH

The three variables of physical size, economic development, and political accountability play a central role in the theoretical concerns of Rosenau, and in the empirical studies by Rummel and others of foreign and domestic political behavior. Rummel (1969a/b) reports that the first three factors emerging from a factor analysis of the 236 variables collected for the Dimensionality of Nations (DON) Project represent “size,” “economic development,” and “political orientation.” Sawyer (1967) in further discussion of this factor analysis notes that these three factors account for 40% of the total variance in the data set. Moreover, Sawyer reviews several other empirical analyses which also establish the salience of size, development, and accountability as factors accounting for large proportions of the between-nation variations in behavior. The studies he cites were conducted by social scientists in the various disciplines using diverse data bases.¹ In the factor analyses reported by Rummel and Sawyer, the statistical technique establishes size, development, and accountability as separate and independent from one another. In other words, the analysis involves an

orthogonal rotation of factors between the factors is zero. Because as independent dimensions whose added to determine their total excellent example of the additive

This additive perspective is empirical research as well as empirical research are multivariate three national attribute variables effects of the three separate variables and Hermann, 1969). In the test approach primarily in the form of one of the national attributes (1961: 161) states “industrialization increases the power of persuasion (1967) claim that “lacking an adequate physical size], a state can rarely international affairs.” Such relationships variables are additive; they lack interaction effects among the attributes

Rosenau’s (1966) pre-theory of example of the use of national attributes, emphasizing the importance of the three patterns in foreign policy, he goes dimensions for classifying nations, nature by dividing each variable into developed; open, closed) and then three dichotomized attributes. The nations—the eight nation-types—wh

large, developed, open
large, developed closed
large, less developed, open
large, less developed, closed

In Rosenau’s framework, the effect of each nation-type will be relatively different nation-types. It is the interactive importance here. For example, not the effects of development to determine foreign policy behavior. As a result the effect of size on behavior will be developed or less developed; that

orthogonal rotation of factors which means that the statistical correlations between the factors is zero. Because the three attributes emerge in these studies as independent dimensions whose effects can be measured individually and then added to determine their total impact on foreign policy, they serve as an excellent example of the additive approach.

This additive perspective is by far the most frequently encountered in empirical research as well as in the general literature. Illustrative of other empirical research are multivariate analyses in which the combined effect of the three national attribute variables is considered to be the sum of the individual effects of the three separate variables (for example, Moore, 1971, 1974; Salmore and Hermann, 1969). In the textbook literature one finds examples of the approach primarily in the form of hypothesized bivariate relationships between one of the national attributes and some aspect of foreign policy. Organski (1961: 161) states "industrialization [for example, economic development] increases the power of persuasion of a nation." Padelford and Lincoln (1962: 67) claim that "lacking an adequate supply of natural resources [for example, physical size], a state can rarely hope to achieve . . . a strong posture in international affairs." Such relationships assume that the national attribute variables are additive; they lack any explicit concern about the possibilities of interaction effects among the attribute variables.

Rosenau's (1966) pre-theory of foreign policy essay is the most well-known example of the use of national attributes as interactive variables. While recognizing the importance of the three national attributes as variables accounting for patterns in foreign policy, he goes a step further. Using the three attributes as dimensions for classifying nations, Rosenau highlights their essential interactive nature by dividing each variable into two levels (large, small; developed, less developed; open, closed) and then constructing all possible combinations of the three dichotomized attributes. The combinations define various classes of nations—the eight nation-types—which are as follows:

large, developed, open	small, developed, open
large, developed closed	small, developed, closed
large, less developed, open	small, less developed, open
large, less developed, closed	small, less developed, closed

In Rosenau's framework, the foreign policy behavior patterns of countries in each nation-type will be relatively similar while differing from those in other nation-types. It is the interactive nature of the attributes that is of central importance here. For example, no longer can we simply add the effects of size to the effects of development to determine the total effect of the two variables on foreign policy behavior. As a result of the interaction between the two attributes, the effect of size on behavior will be determined by whether the nation is developed or less developed; that is, size may have a different effect on the

importance of these three attributes emerges concerning the manner and related to foreign policy. As separate and independent or are additive. The other ap- i.e., in combination these three n-types—which are used to ac-

ating each of the three separate n policy. The hypotheses are n attribute on foreign policy is n foreign policy behavior which is the same measures of foreign interaction of all three attributes us, the question we ask is: Do have a separate influence on their combination into unique possibilities. It is possible that either separately or in combina- cy behavior. Alternatively, dif- feres of foreign policy behavior tter are treated separately or in

PREVIOUS RESEARCH

omic development, and political cal concerns of Rosenau, and in f foreign and domestic political st three factors emerging from a the Dimensionality of Nations elopment," and "political orien- f this factor analysis notes that total variance in the data set. cal analyses which also establish ability as factors accounting for ons in behavior. The studies he various disciplines using diverse by Rummel and Sawyer, the t, and accountability as separate words, the analysis involves an

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behavior of developed nations than it does on less developed nations. In this manner the impact of one attribute depends upon the value of the other attribute.

Several implications flow from Rosenau's interactive conceptualization of size, development, and accountability. If substantiated empirically, he will have provided an important theoretical key for determining an ordering and patterning to foreign policy behavior. The concept of nation-type makes it unnecessary to examine individual nations in considering the certain types of foreign policy activity. To this extent, we can move away from analysis of discrete objects and concentrate on classes of objects and the different patterns of foreign policy associated with each. Moreover, the eight nation-types provide a manageable number of classes with which to work in contrast to the unwieldy set of more than 130 nations that comprise the present international system. It is important to establish the validity of the eight nation-types inasmuch as a substantial number of studies employing the classification scheme have been undertaken since the nation-type typology was introduced.² We should note that refutation of the interactive nature of the three national attribute variables would not mean that these variables are unimportant. It would, however, indicate that research should be directed to a mapping of the effects of the three attributes as independent additive factors influencing foreign policy and that the dichotomization of these attributes should be replaced with the most complete scaling of values which the variables permit.

With respect to the additive, as contrasted with the interactive, approach to nation-types, two previous studies represent important precedents for the present analysis. One, by Salmore and Hermann, recognizes that distinctive patterns of foreign policy behavior should be associated with each nation-type. They state (1969: 15):

Rosenau contends that states who are members of the same genotype in his classification are more likely to follow similar kinds of foreign policy behaviors than are states which belong to different genotypes. We propose to provide an initial test of this hypothesis.

These authors tested the explanatory power of the three national attribute variables, both independently and jointly, using the additive approach. They did not, however, test for the interaction effects among the three attributes.

A second study by Salmore provides a direct test of the interactive effects of the three variables. He outlines the problem as follows (1972: 187-189):

By arranging the eight genotypes . . . and performing a three-way analysis of variance the separate effects attributable to size, development, and accountability can be assessed as well as the three effects due to the interaction of two of these variables (size and development, size and

accountability, and development to the interaction of all three) that the genotypes are unique interaction term should be significant interaction terms as well.

Of twenty-eight possible interaction two-way interaction terms were actions. One would expect that a tests would be significant by chance findings is that the three national effects can be combined in an additive. In addition to testing a number formed in this paper replicates Salmore essential, given the importance of however, differs from that of Salmore somewhat different set of nation from a different period of time. Findings that differ from those used by selection.³

HYPOTHESES RELATING SIZE, ACCOUNTABILITY INDIVIDUAL

Although we will test the additive let us assume for the moment that the additive effects of these three foreign policy measures operation begin to search systematically for and each of those attributes which can contribute substantially to the might begin with the simple bivariate kind of behavior. In fact, that is what regard as plausible arguments indicate separate attributes might be on different. These relationships, stated in the below, together with our reasoning:

The Effects of Physical Size

Governments of physically large nations, will initiate

accountability, and development and accountability) and the effects due to the interaction of all three variables. If Rosenau is correct in speculating that the genotypes are unique classes of nations, then the three-way interaction term should be significant and probably some of the two-way interaction terms as well.

Of twenty-eight possible interaction effects studied by Salmore, two of the two-way interaction terms were significant and none of the three-way interactions. One would expect that approximately two out of twenty-eight possible tests would be significant by chance alone. The clear inference of Salmore's findings is that the three national attribute variables do not interact and that the effects can be combined in an additive manner.

In addition to testing a number of bivariate hypotheses, the analyses performed in this paper replicates Salmore's findings. We regard the replication as essential, given the importance of these initial conclusions. The present study, however, differs from that of Salmore in several ways. First, we use a smaller but somewhat different set of nations. Second, we use a different data set drawn from a different period of time. Finally, we use a set of foreign policy behaviors that differ from those used by Salmore both in substance and method of selection.³

HYPOTHESES RELATING SIZE, DEVELOPMENT, AND ACCOUNTABILITY INDIVIDUALLY TO FOREIGN POLICY

Although we will test the additive versus the interactive conceptualizations, let us assume for the moment that Salmore's (1972) initial findings concerning the additive effects of these three variables can be confirmed for a variety of foreign policy measures operationalized with different data. Then we should begin to search systematically for linkages between specific foreign behaviors and each of those attributes which the Rummel-Sawyer factor analyses indicate can contribute substantially to the explanations of foreign policy activity. We might begin with the simple bivariate relationship between one attribute and one kind of behavior. In fact, that is what we have done. We have developed what we regard as plausible arguments indicating what the effect of each of the three separate attributes might be on different measures of foreign policy behavior. These relationships, stated in the form of bivariate hypotheses, are presented below, together with our reasoning for projecting the nature of each proposition.

The Effects of Physical Size

Governments of physically large nations, as contrasted with those of small nations, will initiate

- (1) a larger number of foreign events,
- (2) a higher percentage of foreign events involving their bureaucratic organizations,
- (3) a higher percentage of foreign events involving their head of state,
- (4) a higher percentage of foreign verbal events,
- (5) a higher percentage of foreign events involving diplomatic skills and resources,
- (6) a lower percentage of foreign events involving economic, scientific, and technical skills and resources,
- (7) a lower percentage of foreign events involving military skills and resources,
- (8) a higher percentage of foreign conflict events,
- (9) a lower percentage of foreign cooperative events.

What are the assumed attributes of large and small states that lead us to these expectations about their foreign policy behavior?⁴ Large physical size means not only a more extensive geographical area but also larger populations and greater absolute quantities of human and natural resources (whether developed or not). Usually, large physical size results in longer international boundaries and frontiers. It often means a population with greater heterogeneity of domestic interest groups, each having sufficient numbers to become a factor in the politics of the society. Greater size introduces the possibility of economies of scale, but also presents problems of internal logistics and communication. The reverse of these characteristics apply to smaller countries.

These properties associated with physical size influence our conclusions about the nature of a government's foreign policy. Thus, a large nation will have a greater concern with—and ability to participate in—foreign affairs because of its (a) longer international borders, (b) greater internal diversity of population with differing needs and aspirations, and (c) more economies of scale which result in bigger governmental agencies attentive to a broader array of foreign activity. In short, the government of a large country, as opposed to a small one, will initiate more foreign policy events (Hypothesis 1).

Because large nations see their national interests as entangled in a great variety of world affairs and consequently follow numerous international issues, and because they have large governments, it becomes impossible for an individual or a small group to conduct most of a country's external affairs. The vast majority of routine activity—and much that is by no means routine—involves the bureaucratic organizations that constitute the large government's foreign policy machinery. Bureaucratic involvement, therefore, will be greater in the foreign affairs of large, as compared to small, nations (Hypothesis 2).

The involvement of the head of state in foreign policy is not necessarily the logical opposite of participation by bureaucratic organizations. Many times, for

example, the head of state may advocate alternative actions. As well as more, in thinking about the participation of the head of state, that nation's commitment to the contrast to small ones, have a greater on a wide range of issues, government more strong commitments in foreign commitments will be reflected in the head of state in the foreign affairs.

Many of the activities in international the use of physical resources. The diplomatic overhead necessary to system operating. Extensive verbal deeds also occurs in the early stages can less well afford to contribute international system. Furthermore, for scanning international occurrences—enter a dispute at a later stage required to establish credibility. strictly verbal activity a higher nations as contrasted with small ones.

As previously noted, the large foreign policy issues and its capacity international contacts explains why initiate a higher percentage of events resources (Hypothesis 5).

By contrast, a higher proportion compared to large states, will be technical skills and resources (Hypothesis have the diversified internal capacity self-sufficiency enjoyed by larger assistance as well as the exchange more critical for the well-being of a

The government of a large nation nationality, race, subculture, or in a vast array of external issues. The cases which the government of a large nation the instances of conflict or differences governments of small nations (Hypothesis be tempted to intervene in fewer instances

example, the head of state may have to intervene when different bureaucracies advocate alternative actions. As a consequence, we will find some events in which both the head of state and bureaucratic agencies are participants. Furthermore, in thinking about the difference between large and small states, the participation of the head of state in either case may be viewed as an indicator of that nation's commitment to the action involved. Because large nations, in contrast to small ones, have a greater felt need to influence international affairs on a wide range of issues, governments of large states will make proportionately more strong commitments in foreign affairs. This greater number of foreign commitments will be reflected in the greater frequency of involvement of the head of state in the foreign affairs events of large nations (Hypothesis 3).

Many of the activities in international affairs are confined to words without the use of physical resources. This verbal activity especially characterizes the diplomatic overhead necessary to maintain contacts and keep the international system operating. Extensive verbal activity without the introduction of physical deeds also occurs in the early stages of disputes between nations. Small states can less well afford to contribute to diplomatic overhead to maintain the international system. Furthermore, as a result of their more limited capabilities for scanning international occurrences, small states—more often than large states—enter a dispute at a later stage when physical deeds are more likely to be required to establish credibility. One effect of these characteristics is to make strictly verbal activity a higher percentage of the external behavior of large nations as contrasted with small ones (Hypothesis 4).

As previously noted, the large nation's greater concern with a broad range of foreign policy issues and its capability to participate actively in maintaining international contacts explains why large states, as compared to small ones, will initiate a higher percentage of events involving the use of diplomatic skills and resources (Hypothesis 5).

By contrast, a higher proportion of foreign events initiated by small states, as compared to large states, will be concerned with economic, scientific, and technical skills and resources (Hypothesis 6) because the former are less likely to have the diversified internal capabilities required to achieve the degree of self-sufficiency enjoyed by larger states. Consequently, international trade and assistance as well as the exchange of scientific and technical knowledge will be more critical for the well-being of a small nation.

The government of a large nation will perceive its well-being or that of some nationality, race, subculture, or interest group within its nation as affected by a vast array of external issues. The diversity of substantive international issues in which the government of a large nation feels compelled to take a position makes the instances of conflict or difference with foreign groups more frequent than for governments of small nations (Hypothesis 8). On the other hand, small nations will be tempted to intervene in fewer international issues and because of their fewer

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resources will find it necessary to collaborate with others to affect a more modest set of foreign concerns. This proportionately higher rate of multilateral initiatives by small states, together with conciliatory gestures toward nations possessing more resources than they have, results in smaller states initiating a higher percentage of cooperative events than large states (Hypothesis 9).⁵

At first glance the expectation that the government of a large nation will have a smaller percentage of its total foreign policy events involving military skills and resources than the government of a small nation (Hypothesis 7) appears to contradict our earlier proposition that large nations will engage in more foreign conflict events. The discrepancy, however, fades when one recalls that conflict behavior involves any expression of hostility toward a foreign entity including a wide variety of verbal activities—for example, charges, threats, warnings, diplomatic protest, and so on. In contrast, the introduction of military resources and skills almost always involves some physical activity beyond verbal statements. Whereas governments of large nations are predicted to engage in more conflict behavior of all kinds, a higher percentage of all small states' foreign events will involve military capabilities. As stated earlier, the reason for the latter prediction is that by the time a small state perceives the signals from a developing situation and considers it important enough to act, the situation will more likely have reached a stage where some definite demonstration of military resources is required. Furthermore, governments of small nations have fewer nonmilitary alternatives than large states to consider as a means of expressing displeasure. Military capability will be available to even the smallest state given the nature of the present international system. Therefore, it is one kind of resource any government can utilize.

The Effects of Economic Development

Governments of economically developed nations, as contrasted with those of less developed nations, will initiate

- (10) a larger number of foreign events,
- (11) a higher percentage of foreign events involving their bureaucratic organizations,
- (12) a lower percentage of foreign events involving the head of state,
- (13) a lower percentage of foreign verbal events,
- (14) a higher percentage of foreign events involving diplomatic skills and resources,
- (15) a lower percentage of foreign events involving economic, scientific, and technical skills and resources,
- (16) a higher percentage of foreign events involving military skills and resources,

(17) a higher percentage of fo

(18) a lower percentage of fo

Let us review the characteristics of developed nations which we anticipate in the contemporary world. We assume that the contemporary world is one that has advanced science and technology. In such a country science and technology are trusted with their condition in less developed nations. A substantial portion of the population of developed nations enjoys a wide variety of consumer products as a result of the distribution. The public enjoys a high degree of specialization and a high degree of protection and expansion of its material resources. The integration of these specialized resources in this society is complex with a high degree of specialization. Of the greatest importance, the concept of both production and consumption of human resources. Despite the extensive resources, there exists a potential for goods which can be allocated to various uses.

The government of a developed nation has more foreign policy needs than its counterparts. Therefore, more, it will seek to protect the national interest in the advantageous international economy. It is a result of international interdependence. In any revolutionary society that there is a need to reorder the international system. The government of such a nation will be more active than the government of a less developed nation (Hypothesis 10).

We have already contended that the government of a developed nation will give more attention to foreign affairs and follows a varied pattern. A considerable use of bureaucratic organizations and formal organizations will appear all through the world. For these reasons, we anticipate that bureaucratic involvement will be greater in developed than in less developed nations.

The greater attention given foreign affairs by a developed nation, as contrasted to that of a less developed nation, will result in the developed nation to take initiatives in so many matters.

- (17) a higher percentage of foreign conflict events,
- (18) a lower percentage of foreign cooperative events.

Let us review the characteristics that differentiate developed and less developed nations which we anticipate will result in differences in their foreign policy events. We assume that a more economically developed nation in the contemporary world is one that has achieved a high degree of industrialization. In such a country science and technology appear quite advanced when contrasted with their condition in less developed societies. Relative to other nations a substantial portion of the population in developed countries has access to a variety of consumer products as a result of techniques for mass production and distribution. The public enjoys a higher standard of living than its counterparts in less developed countries and attaches considerable importance to the protection and expansion of its material wealth. The society is characterized by a high degree of specialization and the extensive use of formal organizations for the integration of these specialized tasks. As a result, the domestic structure of this society is complex with a high degree of interdependence. Perhaps of greatest importance, the concept of an economically developed nation includes both production and consumption of vast quantities of human skills and non-human resources. Despite the extensive consumption of human and nonhuman resources, there exists a potential surplus in capital, skilled talent, and finished goods which can be allocated to various internal or external objectives.

The government of a developed nation will have more resources to commit to its foreign policy needs than its counterpart in a less developed society. Furthermore, it will seek to protect the nation's standard of living by supporting an advantageous international economic system which fosters a considerable degree of international interdependence. It also will be vigilant against the emergence of any revolutionary society that threatens to disrupt its domestic living standard by reordering the international political or economic system. In brief, the government of such a nation will be more active in foreign affairs than the government of a less developed nation and will initiate more foreign events (Hypothesis 10).

We have already contended that any government that engages extensively in foreign affairs and follows a variety of issues will necessarily have to make considerable use of bureaucratic organizations. The disposition toward bureaucratic involvement will appear all the more probable for a nation requiring large, formal organizations for the operation of other aspects of the society. For these reasons, we anticipate that bureaucratic involvement in foreign policy will be greater in developed than in less developed nations (Hypothesis 11).

The greater attention given foreign affairs by the government of a developed nation, as contrasted to that of a less developed country, means that it is likely to take initiatives in so many matters of a routine nature that those important

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issues involving the head of state will represent only a small fraction of the total. In other words, the government of a developed nation is more likely to be active in international issues of secondary importance to the entire country at a given point in time. Furthermore, because the participation by the head of state is a means of signaling the significance his government attaches to an issue, a less developed country—with fewer alternative means of conveying such a commitment—may resort to head of state involvement more often (Hypothesis 12).

In a fashion similar to the physically large nation, the economically developed one has a strong incentive to promote regular foreign contacts and maintain the existing international system—an incentive which leads to extensive verbal activity in foreign relations. But when one compares developed nations with less developed ones, the resources of the former for participation in international relations would appear to be much greater than the latter's. Therefore, despite extensive verbal activity by developed nations, its greater resources for physical deeds result in its verbal behaviors being a lower percentage of its total foreign events than for the less developed nation (Hypothesis 13).

Because the government of a developed nation has a greater incentive than its counterpart in a less developed nation to maintain numerous contacts and promote the international political system that is conducive to its material wealth, a developed nation's government will have a higher percentage of all its external behavior classified as diplomatic (Hypothesis 14). By contrast, the government of a less developed country, more than its opposite, will focus its foreign activity on issues that will aid in its development such as acquisition of financial aid, loans, favorable trade arrangements, and technical and scientific assistance (Hypothesis 15). This hypothesis should not be construed as suggesting that the developed nation will engage in few foreign events involving economic, scientific, or technical skills and resources. On the contrary, its need for a favorable international economic environment will promote considerable activity in this area, but the hypothesis contends that its relative concentration on such issues will not be as great as for a less developed nation.

One reason that the government of an economically developed nation will concentrate less attention solely in the area of economic-scientific skills and resources is that the government will also be active in the use of military skills and resources. In fact, it will take relatively more initiatives involving such capability than its counterpart in a less developed nation (Hypothesis 16). A nation enjoying a relatively high standard of living under existing conditions will foster a government quick to draw upon its military resources—separately or in collaboration with others—to defend itself against those whom the elites within the society feel might plunder its wealth. In the contemporary world, governments of such nations are not only concerned with the invasion of their territory, but also fear disruption of a variety of conditions throughout the world that they have come to perceive as relevant to their own security. As a

result, a substantial proportion of the development of military capabilities involves events involving military skills and resources.

Developed nations, as contrasted with less developed nations, have relatively more military skills and resources and also engage in more foreign conflicts. In brief, the argument is that developed nations are more active in international issues in which a government believes there are more conflicts of interest, which are more likely to be resolved between the government of a developed nation and a less developed, as compared to less developed nations. This behavior is more likely to be initiated by their counterparts. These behaviors are more likely to be cooperative, conflictful, or neutral. However, developed nations will initiate less likely to be initiated by developed countries (Hypothesis 17). This behavior, as does the need to collaborate with other nations, poses the dangers to their interests posed

The Effects of Political Account

Governments of politically open nations, will initiate

- (19) a larger number of foreign events involving military skills and resources,
- (20) a lower percentage of foreign events involving military skills and resources,
- (21) a lower percentage of foreign events involving military skills and resources,
- (22) a higher percentage of foreign events involving military skills and resources,
- (23) a higher percentage of foreign events involving military skills and resources,
- (24) a higher percentage of foreign events involving military skills and resources,
- (25) a lower percentage of foreign events involving military skills and resources,
- (26) a lower percentage of foreign events involving military skills and resources,
- (27) a higher percentage of foreign events involving military skills and resources.

The labels "open" and "closed" are symbols designed to invoke strong

only a small fraction of the total. nation is more likely to be active to the entire country at a given participation by the head of state is a ment attaches to an issue, a less ans of conveying such a commit- more often (Hypothesis 12).

tion, the economically developed foreign contacts and maintain the which leads to extensive verbal pares developed nations with less for participation in international n the latter's. Therefore, despite its greater resources for physical er percentage of its total foreign thesis 13).

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onomically developed nation will of economic-scientific skills and ctive in the use of military skills more initiatives involving such oped nation (Hypothesis 16). A ring under existing conditions will ilitary resources—separately or in nst those whom the elites within the contemporary world, govern- ned with the invasion of their ty of conditions throughout the evant to their own security. As a

result, a substantial proportion of the resources of the society are allocated to the development of military capability—a capability which gives rise to frequent events involving military skills and resources.

Developed nations, as contrasted with less developed nations, not only use relatively more military skills and resources in their foreign policy events; they also engage in more foreign conflict behavior of all kinds (Hypothesis 17). In brief, the argument is that development increases the number of international issues in which a government believes its nation has a stake. As a consequence, more conflicts of interest, which in turn lead to foreign conflict behavior, arise between the government of a developed nation and various external entities. For developed, as compared to less developed nations, a higher ratio of conflict behavior to the total of all foreign behavior does not automatically require that governments of developed nations have less foreign cooperative behavior than initiated by their counterparts. This is possible because behavior can be cooperative, conflictful, or neutral. However, we anticipate that governments ruling developed nations will initiate less cooperative behavior than those in less developed countries (Hypothesis 18). Developing countries are looking for foreign capital and other assistance which increases the tendency for cooperative behavior, as does the need to collarboate with other actors to somewhat offset the dangers to their interests posed by more wealthy countries.

The Effects of Political Accountability

Governments of politically open nations, as contrasted with those of closed nations, will initiate

- (19) a larger number of foreign events,
- (20) a lower percentage of foreign events involving their bureaucratic organizations,
- (21) a lower percentage of foreign events involving the head of state,
- (22) a higher percentage of foreign verbal events,
- (23) a higher percentage of foreign events involving diplomatic skills and resources,
- (24) a higher percentage of foreign events involving economic, scientific, and technical skills and resources,
- (25) a lower percentage of foreign events involving military skills and resources,
- (26) a lower percentage of foreign conflict events,
- (27) a higher percentage of foreign cooperative events.

The labels "open" and "closed" have occasionally been used as political symbols designed to invoke strong affective responses. Therefore, we should

begin by stipulating the non-affective meaning we attach to these terms and then proceed to identify the associated characteristics which we hypothesize as influences on foreign policy. An open political system is one in which the overwhelming majority of adults in the nation regularly have the opportunity to influence those who govern and the government is vulnerable to defeat by this majority. Individuals may not elect to take advantage of that opportunity to exercise influence or may do so only at irregular intervals, but they are not denied the chance to participate. The governing process, therefore, is always open to inputs from virtually all individuals and organizations of individuals who may publicly oppose or support those who govern and their politics (so long as they do not resort to physical violence) without fear of governmental reprisal against their lives, property, livelihood, or liberties. A political system becomes increasingly closed by (a) restricting those who may participate, (b) limiting the available means and times of participation, or (c) failing to insure the right of the opposition to form and obtain public access to advocate support for their positions and election to office without fear of governmentally directed reprisals. As with the two other nation-type variables in this paper, this one is a continuum with nations having more or less of the attribute at a given point in time. The dichotomy of open and closed is arbitrarily imposed upon this continuum.

One characteristic of the open political system is more or less continuous public debate over governmental policies and those who currently make them. Some individuals, organizations, and media constantly advocate alternatives to the present government. Although they may temporarily coalesce, the far more common pattern is pluralism with multiple groups struggling to control the government or to determine its policy in a given area. Governments in open political systems are sensitive to these domestic groupings and are more subject to pressures within the nation to allocate resources in such a way as to gain support from a large number of these groups. The continuation of a government in such a system is threatened by sudden increases in widely distributed demands placed on citizens (for example, increases in taxation, conscription, and so on). Pluralism and the resulting competition for office restricts the government's ability to directly regulate as many aspects of an individual's life—including his transnational dealings—as in a closed system. A closed system with a narrow spectrum of the society active in politics may be able to maintain a greater degree of cohesion and support for a policy than its counterpart in an open system. Finally, the individuals or regimes that govern in an open political system are relatively more constrained by rules and institutions concerning the exercise and transition of political control, which probably will endure beyond their period in office. In contrast, the closed political system is a more personalized one in which the rules and institutions are to a greater degree subject to change by the existing government.

Our hypothesis that government events than those in closed (Hypothesis 1) that the government of a political system on international issues in an attempt to influence a large number of diversified domestic organizations and the present means of finance are controlled by, or at least influenced by, governments of open rather than closed nations. Governments of open nations initiate more of these international arrangements.

Our expectation of greater bureaucratic control in open nations (Hypothesis 20) results from the fact that in open systems directly a greater range of the citizenry is involved in decision-making. Centralized planning and bureaucratic organizations, but it also means that individuals can participate more in foreign affairs and decisions. In a closed system it is even less able to maintain a long-term system, the endurance of government is more upon the approval of the ruler rather than statutory authority; therefore, the government is more responsive to the desires of the highest political authority. The personalized nature of authority in a closed system is a source of resolution without head of state.

We have already noted that governments in open systems are expected to initiate a higher volume of activity in international interest in, and commitment to, international organizations. Most of this activity is in open systems. In closed, systems will be involved in international activity. Moreover, except during times of crisis, open systems have a wider domestic base to which they are more responsive. Open systems will be responsive to causes that govern domestic purposes than will a closed system. Inasmuch as external physical behavior, we would expect government behavior to be more verbal.

More of the behavior of governments in open systems will involve diplomatic capabilities (Hypothesis 19) to maintain and promote the favorable international environment. This will call upon diplomatic skills and resources and place greater demands upon the government to :

Our hypothesis that governments in open nations will initiate more foreign events than those in closed (Hypothesis 19) results in part from the assumption that the government of a politically open nation will be involved in more international issues in an attempt to represent the interests of the greater number of diversified domestic groups to which it is sensitive. In part the prediction also rests on the assumption that most of the existing international organizations and the present mechanisms effecting international trade and finance are controlled by, or at least more compatible with, the interests of governments of open rather than closed political systems. Consequently, governments of open nations initiate more external events to maintain and participate in these international arrangements.

Our expectation of greater bureaucratic involvement in governments of closed nations (Hypothesis 20) results from the ability of such governments to control directly a greater range of the domestic and international activities of their citizens. Centralized planning and control involve more participation by bureaucratic organizations, but it also means the head of state in a closed system must participate more in foreign affairs. The bureaucracy can assemble an issue for decision and serve as an instrument of policy execution, but in a closed political system it is even less able to make decisions than in an open one. In a closed system, the endurance of governmental organizations and their power rests much more upon the approval of the rulers than on any constitutional or continuing statutory authority; therefore, they are somewhat more subordinate to the desires of the highest political authorities than in open systems. Given the more personalized nature of authority in a closed system, more issues will be incapable of resolution without head of state participation (Hypothesis 21).

We have already noted that governments of politically open nations were expected to initiate a higher volume of external events in part because of their interest in, and commitment to, various international political and economic organizations. Most of this activity is verbal, which means that open, rather than closed, systems will be involved in relatively more verbal events (Hypothesis 22). Moreover, except during times of widely shared belief in an external threat, the wider domestic base to which the government of an open political system must be responsive causes that government to allocate more of its resources to domestic purposes than will a government with comparable resources in a closed system. Inasmuch as external physical deeds involve more resources than verbal behavior, we would expect governments in open systems to have a higher ratio of verbal behavior.

More of the behavior of governments in open than in closed nations will involve diplomatic capabilities (Hypothesis 23). The activity required to maintain and promote the favorable international organizational arrangements will call upon diplomatic skills and resources as will the various internally generated demands upon the government to assist private groups and citizens with various

transnational activities in which they are engaged. This representative function for the private sector is almost totally absent from the closed political system.

The private sector of an open political system will be interested in various kinds of international transactions—tourism, financial investment or borrowing, business enterprises of various kinds, the distribution and acquisition of specialized knowledge (particularly scientific and technical information). To support this vigorous movement, the politically sensitive government of the open system—in contrast to its counterpart in a closed system—will be involved in more foreign activity involving economic, scientific, and technical skills and resources (Hypothesis 24).

We make no assumption that governments of open as compared to closed systems are automatically less likely to become involved in military conflict situations or other activities in which force is used in an attempt to alter the behavior of external entities. Furthermore, we should note that the category of military skills and resources includes foreign activity other than the direct use of force to influence others, as in the case of agreements concerning a military alliance or military assistance. Despite these observations we do expect governments of closed political systems to have a higher proportion of events involving military skills and resources (Hypothesis 25). The reason is that governments of open systems will have proportionately more of their foreign activity involved in the alternative diplomatic and economic categories. We also expect governments of open systems, as compared to those of closed systems, to initiate less foreign conflict behavior of all kinds (Hypothesis 26). This expectation rests in part on the previous observation that large elements of the present international system—political and economic—are less compatible with the styles and objectives of closed systems; hence, their governments find themselves in more conflict situations. We also expect leaders of closed nations to be less constrained by diverse and powerful domestic groups that might object to conflict behavior directed at foreign entities in which they have some special interest. These same arguments lead us to anticipate that governments of politically open nations will engage in more cooperative foreign events than will governments in closed systems (Hypothesis 27).

When compared to one another, the three sets of hypotheses we have introduced bring home forcefully the need to examine the combined effect of the three attribute variables on foreign policy. We anticipate that governments of large nations will engage in proportionately more foreign conflict behavior than small states (Hypothesis 8), that developed nations will engage in proportionately more of such conflict than less developed ones (Hypothesis 17), and that closed nations will initiate relatively more foreign conflict behavior than open ones (Hypothesis 26). What if a nation is large (more conflict), less developed (less conflict), and open (less conflict)? Should we expect its conflict behavior to

be a sum of the individual effects? In addition to testing the individual effects, we answer using the data described below.

THE CREON DATA AND THE

The data set used in this paper is from the CREON Project Research on the Events of Military Conflict. The Project data consists of 4,475 foreign policy events during the years 1959-68. One thousand three hundred and thirty events are above ten years, and all foreign policy events are identified, abstracted, and coded. The data is organized into separate items for each foreign policy event as dependent variables in the present analysis.

The independent variables in the analysis are the attribute variables of size, development, and political system function analysis as suggested by Hypotheses 8, 17, and 26. These are operationalized and dichotomized as shown in Table 1.

As stated in the bivariate hypothesis, the independent variables comprise the independent variables representing types of foreign policy activity insure a better test of the hypothesis. If nation-types are to be used for analyzing foreign policy, they must be classified in different ways. The behaviors classified in different ways are operationalized in the CREON data.

Number of Events

The first foreign policy measure is the number of events initiated by the government. This provides an indicator of the extent of foreign affairs. Because each event is a foreign policy event, we summed the number of events across the ten years as shown in Table 1.

The next two classifications of foreign policy events are experimental and non-experimental. This is not because

ged. This representative function from the closed political system. The system will be interested in various financial investment or borrowing, contribution and acquisition of special-technical information). To support the government of the open system—will be involved in more and technical skills and resources

of open as compared to closed systems. Some are involved in military conflict and are used in an attempt to alter the status of the system. One should note that the category of activity other than the direct use of force or agreements concerning a military intervention. In our observations we do expect governments to have a higher proportion of events involving military intervention. The reason is that governments of open systems are more active in their foreign activity involved in military interventions. We also expect governments of open systems, to initiate less foreign military interventions. This expectation rests in part on the nature of the present international system. The nature of the present international system is consistent with the styles and objectives of open systems. Open systems find themselves in more conflict with other nations. Nations are less constrained by international norms and might object to conflict behavior. Nations of some special interest. These nations are of political interest. These nations will be more politically open nations will be more open than will governments in closed

three sets of hypotheses we have to examine the combined effect of these variables. We anticipate that governments of open systems will engage in more foreign conflict behavior than nations will engage in proportioned ones (Hypothesis 17), and that nations of open systems will engage in more foreign conflict behavior than open systems (more conflict), less developed nations will engage in more foreign conflict behavior than we expect its conflict behavior to

be a sum of the individual effects or some more complex interaction? In addition to testing the individual hypotheses, this is the question we hope to answer using the data described below.

THE CREON DATA AND THE METHOD OF ANALYSIS

The data set used in this paper has been generated by the CREON (Comparative Research on the Events of Nations) Project. This version of the CREON Project data consists of 4,475 foreign policy events initiated by 33 states during the years 1959-68. One three-month period was randomly chosen for each of the above ten years, and all foreign policy events initiated by one of the 33 states during that time period as reported in *Deadline Data on World Affairs* were identified, abstracted, and coded. Coders recorded information on more than 50 separate items for each foreign policy event. The measures of foreign policy used as dependent variables in the present analysis are derived from several of these items.

The independent variables in this analysis are the three dichotomized attribute variables of size, development, and accountability. Using discriminant function analysis as suggested by Burgess (1970), these three variables have been operationalized and dichotomized and the states assigned to nation-types as depicted in Table 1.

As stated in the bivariate hypotheses, the three national attributes that comprise the independent variables are related to nine dependent variables representing types of foreign policy behavior. The multiple indicators of foreign policy activity insure a better test of both the individual attributes and the eight nation-types. If nation-types are to be considered theoretically useful categories for analyzing foreign policy, they should be related to an array of foreign policy behaviors classified in different ways. The nine behavior measures as they are operationalized in the CREON data set will be reviewed briefly.

Number of Events

The first foreign policy measure simply records the total number of external events initiated by the government of each nation in the sample. As such it provides an indicator of the extent of involvement or participation by the state in foreign affairs. Because each entry in the CREON data set represents one foreign policy event, we summed the number of events recorded for each nation across the ten years as shown in Table 1.⁶

The next two classifications of foreign policy must be regarded as preliminary and experimental. This is not because they remain unexamined in the foreign

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Table 1. Frequency of Events for 33 Nations Grouped by Nation-Types

Large		Small					
Open	Closed	Open	Closed				
DEVELOPED							
France	339	Spain	56	Belgium	36	Cuba	185
Italy	77	USSR	611	Chile	46	East Germany	135
Japan	124			Iceland	20		
USA	1,036			Israel	105		
West Germany	209			New Zealand	50		
				Norway	43		
				Switzerland	10		
				Uruguay	13		
				Venezuela	51		
Total	1,785	Total	667	Total	374	Total	320
UNDERDEVELOPED							
India	281	China		Costa Rica	24	Ghana	48
Turkey	103	(mainland)	375	Kenya	25	Guinea	56
		Mexico	36	Lebanon	35	Ivory Coast	25
				Philippines	65	Thailand	20
				Tunisia	59	Yugoslavia	140
				Zambia	37		
Total	384	Total	411	Total	245	Total	289
Grand Total = 4,475							

NOTE: The discriminant function analysis used to assign each nation to one of the eight-fold categories was performed by Philip M. Burgess and extended to additional countries by Gary Hoggard. Values after each nation refer to the total number of events currently in the data set for that nation. The following indicator variables for the year 1963 were used to construct the scale by which nations were classified: For economic development—(1) GNP/capita, (2) energy consumption/capita, (3) agricultural workers as percent of total economically active population, (4) newspapers/1000 population, (5) radios/1000 population, (6) urban primacy, (7) ratio of population from age 5-19 enrolled in primary and secondary school; for size—(1) total population, (2) total GNP, (3) total land area, (4) total KWH; for political accountability—(1) freedom of the press (revised), (2) competitiveness in election for head of government, (3) horizontal power distribution, and (4) representative character of regime. In each case the first mentioned indicator was used as the primary variable for establishing alternative points of partition. A slightly different cutting point was used to establish the dichotomy for development than the one recommended by Burgess (1970) because of the nature of our sample of nations. See Salmore (1972) for further explanation of the accountability measure.

policy literature but because both are based on information that one might not expect to find in public data sources, except for those occasional documents that report a single event in detail. Both classifications require that inferences be made from clues found in the data source to more complex aspects of the policy process. To minimize demands on the data source and the problems of coder judgments, both variables are dichotomized as either "present" or "absent."

Bureaucratic Organization Involvement

A number of observers have discussed the role of bureaucratic organizations and those made up of individuals.⁷ In comparison to a bureaucratic organization, a non-bureaucratic organization is more contradictory, less responsive to external pressures, and more active in times of crisis. The second dependent variable in this study is foreign policy behavior.

For each event in the CRE database, a variable was coded pertaining to the internal decision-making process. The source mentioned as having coded for each event included whether the source was governmental representative participation. If the source involved, the identity of those involved was coded as a variable because of its exploratory nature. The variable was coded to have occurred if the source, in reference to governmental ministerial participation, a governmental official participated explicitly to small or informal groups. If the source was coded as non-bureaucratic. If the source was the internal decision unit, the event was coded as characteristic.⁸ The percentage of events coded was calculated on the basis of the total number of events available; that is, events having a source coded as total.

Head of State Participation

By head of state is meant that the head of the government, is recognized to be the primary actor in the course of action. The involvement of the head of state in various things. It can indicate, a leadership style in which government is exercised by an individual. Or, it can reflect the personal involvement of the head of state in matters of foreign affairs—the more the head of state is personally involved, the more he personally participates in the formulation of policy. It may also reveal the extent of the head of state's involvement in matters of foreign policy. In almost every government, the head of state is personally involved in matters of foreign policy. Many heads of government have

Grouped by Nation-Types

Small			
Closed			
	36	Cuba	185
	46	East Germany	135
	20		
	105		
Maland	50		
y	43		
rland	10		
y	13		
ela	51		
	374	Total	320
Rica	24	Ghana	48
	25	Guinea	56
n	35	Ivory Coast	25
ines	65	Thailand	20
	59	Yugoslavia	140
	37		
	245	Total	289

Assign each nation to one of the eight-
 d extended to additional countries by
 total number of events currently in the
 tables for the year 1963 were used to
 For economic development—(1) GNP/
 l workers as percent of total econom-
 tion, (5) radios/1000 population, (6)
 9 enrolled in primary and secondary
 (3) total land area, (4) total KWH; for
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of detail or protocol, which suggests that not every event in which the head of state engages signals an occasion of high national import. But because few actions that carry intense commitment escape his attention, head-of-state involvement provides a reasonable indicator of this variable.

As previously noted, this variable has been dichotomized based on information provided in two different items from the CREON coding scheme. A foreign policy event includes head-of-state participation if the data source declares that he (a) participated directly in the decision or execution of the action, or (b) met with representatives of one or more other national actors and action resulted from that meeting. If neither of these conditions occurs, then the event is scored as not involving the head of state.¹⁰ For each nation, the percentage of events involving the head of state was computed after deleting missing data.

Verbal Behavior vs. Physical Deeds

This variable distinguishes between actions of government that are oral or written communication—including the necessary activities assumed in the transmission of messages—and activities that involve the actual use of resources or the regulation of the use of resources. Any action which does not actually entail the commitment of resources is a verbal statement. Included in this category are a wide variety of activities such as joint communiqués, proposals, press releases, statements of denial, accusations, or warnings. Deeds that involve the actual use of resources include movement of military forces, buying or selling goods, paying an assessment to an international organization, and so on. Examples of deeds that regulate the use of resources are establishing trade quotas or raising or lowering tariffs. Although analysts have infrequently made the distinction between verbal and nonverbal behavior in foreign policy, it taps a dimension of potential significance. For example, it pertains to the discussion of tacit and direct communication and the frequent interpretation of China's foreign policy that suggests its verbal behavior is consistently more hostile and threatening than its physical deeds.¹¹

In the CREON Project, the word-deed distinction appears as part of a Sequential Action Scheme (SAS) in which the coder classifies the behavior through a series of sequenced choices. At each juncture in the scheme he selects one of several alternative attributes to characterize the behavior. The first branching point involves a choice of three types of verbal behavior (evaluative, desire, or intended) and four types of physical deeds (symbolic, significant, nonconflictful military, and conflictful military). For purposes of the present analysis these alternatives have been collapsed into the basic verbal-nonverbal distinction.¹² For each nation, the percentage of verbal behavior to all behavior (words plus deeds) has been computed. In this format, the lower the percentage

of verbal behavior, the higher must be the utility of physical deeds. Therefore, no separate hypotheses need be formulated for the relationship between nation-types on deeds.

Diplomatic, Economic, and Military

Although not labeled as "resources," the independent variable classification is based on the assumption that to employ this scheme characterize foreign policy actions, trade, protocol, and military actions, are distinguished from one another according to the different specialized skills required for the foreign policy action being classified. The international balance of payments, international economics; a program of another country may involve not only individuals knowledgeable in the field but change; the negotiations concerning international countries require diplomats skilled with the traditions, leaders, and maintenance of a strategic nuclear resources that are both too numerous to describe one or more of these skills. As scholars often use such classifications, the present project which classified foreign policy type (see CASP [Procedural Guidelines]).

The CREON Project data set contains three macro categories operationally defined: economic-scientific-technical, cultural, and ideological. Because under the last three headings (only) are included into a single "other" category in the sample, the percentage of events in each category was computed based on the three categories (the "other" category was excluded).

Conflict and Cooperation

Foreign conflict and cooperation are two potential utility as means of concealing

every event in which the head of national import. But because few see his attention, head-of-state is this variable.

dichotomized based on information CREON coding scheme. A foreign nation if the data source declares that execution of the action, or (b) met national actors and action resulted occurs, then the event is scored nation, the percentage of events deleting missing data.

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of verbal behavior, the higher must be the percentage of physical deeds. Therefore, no separate hypotheses need to be introduced about the effect of the nation-types on deeds.

Diplomatic, Economic, and Military Skills and Resources

Although not labeled as "resources and skills" in the literature, this dependent variable classification is one of the most frequently used. Studies that employ this scheme characterize foreign activities as concerned with propaganda, military actions, trade, protocol, and so on. These categories can be differentiated from one another according to the different resources each demands or the different specialized skills required of the personnel involved in the execution of the foreign policy action being classified. Thus, for example, an action involving the international balance of payments requires various kinds of experts in international economics; a program designed to affect the attitudes of nationals of another country may involve not only broadcast facilities (physical resources) but individuals knowledgeable in the techniques necessary for creating attitude change; the negotiations concerning the redefinition of boundaries between two countries require diplomats skilled in the art of bargaining and well acquainted with the traditions, leaders, and political interests of the other country; the maintenance of a strategic nuclear deterrence involves a panoply of skills and resources that are both too numerous and obvious to detail. A vast literature describes one or more of these skill-resource policy arenas.¹³ Diplomats as well as scholars often use such classifications, as evidenced by a recent State Department project which classified foreign policy according to major headings of this type (see CASP [Procedural Guidance], n.d.).

The CREON Project data set contains a skill-resource item consisting of six macro categories operationally defined so as to be mutually exclusive.¹⁴ They include economic-scientific-technical, diplomatic, military, political-legal, cultural, and ideological. Because of the very small number of events falling under the last three headings (only 3.2% of all events), they have been grouped into a single "other" category in the present analysis. For every nation in the sample, the percentage of events classified in each of the remaining three categories was computed based upon the sum of all events in these four categories (the "other" category was included in the total).

Conflict and Cooperation

Foreign conflict and cooperation appear as such recurrent themes in studies of foreign policy and international politics that little need be said about their potential utility as means of conceptualizing foreign policy behavior. One point,

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however, should be stressed. The issues of war and peace rightly occupy a central place in research involving conflict and cooperation, but we need to be reminded that efforts to encourage and assist another nation's course of action (cooperation) or efforts to discourage and obstruct another nation's course of action (conflict) are daily occurrences in international affairs and these seldom serve as issues in determining war or peace. From this perspective it should be clear that not all conflict events involve military resources or the use of physical force; neither are all events that involve military resources occasions of conflict.

The characterization of action as conflictful or cooperative uses the CREON Sequential Action Scheme described previously. One of the choice points in that scheme requires the coder to classify the action according to whether the actor intends his behavior to assist, obstruct, or remain indifferent toward some external entity. A fourth option permits the coder to classify actions which have domestic entities as objects.¹⁵ Because the CREON definition of an event allows one event to have multiple direct targets and indirect objects, the same event can generate several different affect scores.¹⁶ Consider as an example, the following: "The President of the U.S. informed the Secretary-General of the UN that he would grant Israel's request for more fighter aircraft because he wanted to prevent Egypt from turning the military balance in the Middle East to its favor as a result of shipments of aircraft it recently received." Assuming that this sentence constitutes the only information available on the event, we have the cooperative affect of the U.S. toward Israel (provide military assistance), the conflictful affect of the U.S. toward Egypt (obstruct the perceived objective of a favorable military balance), and the neutral affect toward the Secretary-General of the UN (no indication provided in this account of a desire either to help or block activities of the UN). Any behavior which has a domestic target or object has been included in the neutral category, as we are interested only in foreign conflict and cooperation. The percentage of conflictful or cooperative dispositions of the actor are computed on the basis of the total number of entities toward which affect could be displayed by the actor (for example, the sum of cooperative, conflictful, and neutral categories). The inclusion of the neutral category means that the percentage of conflictful behavior is not automatically determined once knowledge of cooperative behavior is achieved—and vice versa.

Statistical Method of Analysis

With respect to each of the nine dependent variables just reviewed, we want to know how much variance is explained by grouping nations according to eight categories created by dichotomizing each of the three national attribute variables.¹⁷ More specifically, we want to establish what variation, if any, in a given measure of foreign policy can be attributed to each separate national attribute (these relationships have been predicted in the 27 bivariate hypotheses), and

what variance, if any, can be attributed to the independent variables proposed by Rosenau. Obviously, the variance in policy behavior initiated by nations is much more than the variance in the dependent variable. This classification will not be very useful.

The classical method for determining the amount of variance explained by the independent variables is analysis of variance. This method would be appropriate if the independent variables are based upon three independent variables. The analysis of variance developed as a technique for determining if an investigator could determine the effect of the independent variables. If a researcher lacks an experimental design, he must use analysis of variance to ensure groups of nations are comparable using analysis of variance. As noted, the independent variables and events that poses such a problem is the variation in the number of nations and the frequency of events for the nations.

Using similar data, Salmore (1968) analyzed the literature that demonstrates the general linear model. The general linear model using multiple regression using dummy variables for three dichotomized national attributes (large, developed, or 0). (In this analysis large, developed, small, less developed, and closed economies of foreign policy is regressed on the independent variables of ability, and four interaction terms for the three attribute variables (size and development and accountability, and size and development) will be displayed as betas or standardized coefficients. The betas will be interpreted in a manner comparable to the simple correlation that a beta is used when multiple regression is used for a single dependent variable. The betas for the independent variable and one of the other independent variables can range from -1.00 to 1.00. As with the simple correlation, the closer the association to zero, the smaller the association. A positive value for the dependent variable. When the association is positive with a positive value indicates that the independent variable has a larger effect than small. For size, if the association is positive with large ones with respect to that variable, the independent variable development alone a positive value indicates that more of the behavior and a negative

and peace rightly occupy a central position, but we need to be reminded of a nation's course of action (cooperation or another nation's course of action) in international affairs and these seldom serve as perspectives. It should be clear that the use of force or the use of physical force; the use of force occasions of conflict.

For cooperative uses the CREON definition. One of the choice points in that definition is according to whether the actor remains indifferent toward some event or to classify actions which have a CREON definition of an event allows for different direct objects, the same event can be considered as an example, the following: Secretary-General of the UN that he sent aircraft because he wanted to increase aid in the Middle East to its favor "has been received." Assuming that this is available on the event, we have the event (provide military assistance), the event structure the perceived objective of a nation's affect toward the Secretary-General is a point of a desire either to help or to harm which has a domestic target or object which we are interested only in foreign policy conflictful or cooperative disposition of the total number of entities of the actor (for example, the sum of entities). The inclusion of the neutral disposition of behavior is not automatically achieved—and vice versa.

variables just reviewed, we want to group nations according to eight of the three national attribute variables. What variation, if any, in a given event for each separate national attribute (see 27 bivariate hypotheses), and

what variance, if any, can be attributed to the combined or interaction effects proposed by Rosenau. Obviously, if the percentage of a certain type of foreign policy behavior initiated by nations within the same nation-type group varies as much or more than the variation between the eight nation-types, then the classification will not be very useful.

The classical method for determining if the between-group variance is greater than the within-group variance is analysis of variance. More exactly, a three-way analysis of variance would be appropriate in this case because the categories of nations are based upon three independent variables. However, analysis of variance developed as a technique for handling experimental data in which the investigator could determine the number of cases in each category. When the researcher lacks an experimental situation and cannot arbitrarily assign cases to categories to ensure groups of near equal size, then problems are encountered in using analysis of variance. As noted in Table 1, we have a distribution of nations and events that poses such a problem for analysis of variance. There is great variation in the number of nations in each nation-type and variation in the frequency of events for the nations.

Using similar data, Salmore (1972) employed multiple regression after reviewing the literature that demonstrates analysis of variance to be a special case of the general linear model. The general linear model can be handled through multiple regression using dummy variables. The dummy variables represent the three dichotomized national attribute variables and assume the value of either 1 or 0. (In this analysis large, developed, and open were assigned the value of 1; small, less developed, and closed were assigned 0.) In our analysis each measure of foreign policy is regressed on seven variables—size, development, accountability, and four interaction terms formed by various combinations of these three attribute variables (size and development, size and accountability, development and accountability, and size, development and accountability). The results will be displayed as betas or standard regression weights which can be interpreted in a manner comparable to the simple correlation coefficient r except that a beta is used when multiple independent variables are associated with a single dependent variable. The beta is a measure of association between the dependent variable and one of the independent variables *with the effects of the other independent variables controlled* and can range in value from 1.00 to -1.00. As with the simple correlation coefficient, the closer the value of beta is to zero, the smaller the association between a given independent variable and the dependent variable. When the analysis involves the single attribute of size, a beta with a positive value indicates that large states have more of the dependent variable than small. For size, if the beta is negative, then small states surpass large ones with respect to that measure of foreign policy. Similarly, with development alone a positive value for beta means that developed nations have more of the behavior and a negative value means that less developed nations have

more. For accountability, the positive value of beta is associated with a greater quantity for open systems, whereas a negative value indicates that closed systems have more of the dependent variable.

The square of the beta indicates the amount of variance accounted for in the dependent variable when the other variables are controlled, and the t provides a means of determining the level of significance. In determining significance levels, a one-tailed test was used when the direction of the relationship had been predicted; that is, a one-tailed test was used with each of the three separate attributes. However, if the beta revealed the association was the reverse of the predicted direction, then a two-tailed test was used. A two-tailed test also was used with all four interaction terms. Tables 2 through 10 will report the beta, the explained variance, and the t together with the overall multiple regression coefficient and the square of the coefficient. The result for each of three separate national attributes will tell us how much variance that particular attribute accounts for when controlling for the other two. The interaction terms will indicate whether the combinations of the attributes produce non-additive results. Of particular importance for the Rosenau set of eight nation-types are the three-way interactions inasmuch as those eight groups occur only when all three attribute variables are combined.

RESULTS

Table 2 presents the results of the multiple regression performed on the number of events. We had hypothesized that governments of large nations would initiate more events than small (Hypothesis 1); that governments of developed nations would produce more than those of less developed countries (Hypothesis

Table 2. Impact of Nation-Type Attributes on Number of Events

	Beta	Amount of Variance	t
Size	.4582	.210	2.615**
Development	.2441	.060	1.319
Accountability	-.0699	.005	-0.399
Size x Development	.1165	.014	0.629
Size x Accountability	.0979	.010	0.533
Development x Accountability	-.0464	.002	-0.350
Size x Development x Accountability	.0792	.006	0.428
Multiple r = .612			
Multiple r ² = .375			

**p ≤ .01.

10); and that governments in op (Hypothesis 19). As indicated in associated with the number of ev With respect to size, a positive val had more events than small nation size variable accounts for about 2 when the effects of all the other positive value for the beta in the nations initiated more events than 10), but the strength of that asso found for size—fails to achieve th (third row of Table 2) shows little association is the reverse of that e negative sign of the beta.

The last four rows of Table 2 three attributes. For example, in ment account only for about 1% separate effects of size, developme interaction terms. None of the c variance as this one between size a able association between the num term (size x development x acco nation-types. To justify the eigh nations, this interaction term shou the variance in foreign policy behav

The impact of the various at bureaucratic involvement appears

Table 3. Impact of Nation-Type At Involvement

Size	
Development	
Accountability	
Size x Development	
Size x Accountability	
Development x Accountability	
Size x Development x Accountability	
Multiple r = .802	
Multiple r ² = .643	

* p ≤ .05.

***p ≤ .001.

beta is associated with a greater value indicates that closed systems

of variance accounted for in the controlled, and the t provides a determining significance levels, of the relationship had been with each of the three separate association was the reverse of the used. A two-tailed test also was through 10 will report the beta, the overall multiple regression. The result for each of three much variance that particular other two. The interaction terms attributes produce non-additive au set of eight nation-types are eight groups occur only when all

le regression performed on the governments of large nations would that governments of developed developed countries (Hypothesis

10); and that governments in open societies would generate more than closed (Hypothesis 19). As indicated in the first row of Table 2, size is rather strongly associated with the number of events (beta = .46) and is statistically significant. With respect to size, a positive value for beta in Table 2 means that large nations had more events than small nations. Thus, Hypothesis 1 is supported. In fact, the size variable accounts for about 21% of the variance in the frequency of events when the effects of all the other independent variables are controlled.¹⁸ The positive value for the beta in the second row of Table 2 means that developed nations initiated more events than less developed (as predicted in Hypothesis 10), but the strength of that association—which is little more than half of that found for size—fails to achieve the prescribed significance level. Accountability (third row of Table 2) shows little relationship with number of events; the slight association is the reverse of that expected in Hypothesis 19 as indicated by the negative sign of the beta.

The last four rows of Table 2 display the results for the interaction of the three attributes. For example, in the fourth row we see that size and development account only for about 1% of the variance when we control for the separate effects of size, development, and accountability and for the three other interaction terms. None of the other interactions account for even as much variance as this one between size and development. The absence of any noticeable association between the number of events and the three-way interaction term (size x development x accountability) is of importance for the Rosenau nation-types. To justify the eight nation-types as a distinctive grouping of nations, this interaction term should be an important element in accounting for the variance in foreign policy behavior. In this instance, it is not.

The impact of the various attributes singularly and in combination on bureaucratic involvement appears in Table 3. When controlling for the other

Table 3. Impact of Nation-Type Attributes on Percentage of Bureaucratic Involvement

Number of Events	Amount of Variance	t
	.210	2.615**
	.060	1.319
	.005	-0.399
	.014	0.629
	.010	0.533
	.002	-0.350
	.006	0.428

	Beta	Amount of Variance	t
Size	-.5323	.283	-4.148***
Development	-.0800	.006	-0.582
Accountability	.3013	.091	2.370*
Size x Development	.2213	.049	1.612
Size x Accountability	-.2159	.047	-1.584
Development x Accountability	.3035	.092	2.476*
Size x Development x Accountability	-.1783	.032	-1.299
Multiple r = .802			
Multiple r ² = .643			

* p ≤ .05.

***p ≤ .001.

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variables, size alone accounts for 28% of the variance in bureaucratic involvement, and accountability contributes another 9%. Both of these relationships are statistically significant (with a two-tailed test), but are the reverse of the predicted results. Contrary to Hypothesis 2, small nations have a greater percentage of events involving bureaucracies than large; and open nations have a greater percentage than closed (reversing the prediction in Hypothesis 20). Development, although showing only a very slight relationship to bureaucratic involvement, also reverses the expectations of Hypothesis 11.

We find the overall pattern startling, even though we can offer some post-hoc speculation to explain why open systems, more than closed, involve bureaucratic organizations. (For example, personal control of the national leader in closed systems minimizes bureaucratic maneuvers.) We are inclined to suspect that the large portion of missing data on this item is systematically skewed rather than being more or less randomly distributed, thus affecting the observed results.¹⁹ All four of the interaction terms are more strongly associated with this dependent variable than any of them were with the number of events. The interaction of development and accountability, which accounts for 9% of the variance and is statistically significant, indicates that developed-open systems involve bureaucratic organizations in a larger proportion of their foreign policy than any of the other three groupings of nations formed from these attributes (for example, developed-closed, less developed-open, or less developed-closed). It is noteworthy that of the four interaction terms, the important three-way interaction produces the next smallest beta (3% of the variance; statistically non-significant).

In Table 4, which reveals the results for head-of-state participation, the only substantial relationship is the interaction of size and accountability when the other variables are controlled (25% of the variance). This interaction indicates that large-open nations involve the head of state in a greater proportion of their

Table 4. Impact of Nation-Type Attributes on Percentage of Head-of-State Participation

	Beta	Amount of Variance	t
Size	-.0096	.000	-0.023
Development	-.0106	.000	-0.054
Accountability	-.0356	.001	-0.220
Size x Development	-.0575	.003	-0.292
Size x Accountability	.4978	.248	2.545*
Development x Accountability	-.2672	.071	-1.447
Size x Development x Accountability	.0507	.003	0.257
Multiple r = .536			
Multiple r ² = .287			

*p < .05.

events than do nations found in the... attributes shows only the slight... participation by the head of state... betas which is less than -.04. It m... the predicted direction. Less de... proportionately more often in fo... thesis 12) and closed states use hi... 21). However, the results run co... large nations would involve the h... (Hypothesis 3). The interaction of... state is moderately strong (beta = -... but the three-way interaction, lik... with this foreign policy measure.

The effects of the attributes up... foreign policy appears in Table 5. ... relationship with this behavior m... fidence level. The strongest asso... (beta = .29, or 9% of the variance)... of large nations engage in propor... small countries. Although only fa... the direction of the relationship... conformed to our expectation—les... activity (Hypothesis 13). Our pre... behavior (Hypothesis 22), however... association (beta = .20), the data r... in relatively more verbal behavior... counterparts in open systems. The... three of the four interaction terms

Table 5. Impact of Nation-Type At

Size	
Development	
Accountability	
Size x Development	
Size x Accountability	
Development x Accountability	
Size x Development x Accountability	
Multiple r = .451	
Multiple r ² = .204	

variance in bureaucratic involvement. Both of these relationships are but are the reverse of the nations have a greater percentage of open nations have a greater (Hypothesis 20). Development, to bureaucratic involvement,

though we can offer some post-hoc an closed, involve bureaucratic the national leader in closed are inclined to suspect that the is typically skewed rather than being he observed results.¹⁹ All four associated with this dependent of events. The interaction of for 9% of the variance and is open systems involve bureau-foreign policy than any of the these attributes (for example, developed-closed). It is note- important three-way interaction ; statistically non-significant). of-state participation, the only and accountability when the ce). This interaction indicates in a greater proportion of their

events than do nations found in the other three groupings. Each of the separate attributes shows only the slightest association with the relative amount of participation by the head of state—accountability has the largest of the three betas which is less than -.04. It may be slight solace that two of the three are in the predicted direction. Less developed countries involve the head of state proportionately more often in foreign events than do developed ones (Hypothesis 12) and closed states use him more often than do open states (Hypothesis 21). However, the results run counter to our expectation that governments of large nations would involve the head of state relatively more often than small (Hypothesis 3). The interaction of development and accountability with head of state is moderately strong (beta = -.27) and approaches the .05 significance level, but the three-way interaction, like the separate attributes, is barely associated with this foreign policy measure.

The effects of the attributes upon the relative amount of verbal behavior in foreign policy appears in Table 5. No single attribute or interaction enters into a relationship with this behavior measure often enough to reach the .05 confidence level. The strongest association is between size and verbal behavior (beta = .29, or 9% of the variance). As predicted in Hypothesis 4, governments of large nations engage in proportionately more verbal behavior than those of small countries. Although only faintly associated with each other (beta = -.04) the direction of the relationship between development and verbal behavior conformed to our expectation—less developed nations engaged in more verbal activity (Hypothesis 13). Our prediction about accountability and verbal behavior (Hypothesis 22), however, was reversed. With a modest strength of association (beta = .20), the data reveal governments of closed nations engaged in relatively more verbal behavior (and relative fewer physical deeds) than their counterparts in open systems. The standardized regression coefficient, beta, for three of the four interaction terms (including the three-way interaction) is slightly

Percentage of Head-of-State

Amount of Variance	t
.000	-0.023
.000	-0.054
.001	-0.220
.003	-0.292
.248	2.545*
.071	-1.447
.003	0.257

Table 5. Impact of Nation-Type Attributes on Percentage of Verbal Events

	Beta	Amount of Variance	t
Size	.2923	.085	1.510
Development	-.0422	.002	-0.203
Accountability	-.1954	.038	-1.019
Size x Development	-.1796	.032	-0.863
Size x Accountability	-.0107	.000	-0.052
Development x Accountability	-.1648	.027	-0.882
Size x Development x Accountability	.1778	.032	0.854

Multiple r = .451
Multiple r² = .204

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less than that for accountability (size x development = .18; development x accountability = .17; size x development x accountability = .18). But when these relationships are converted to variance terms, they appear to have little impact on a nation's distribution of foreign behavior between verbal and physical actions. The fourth interaction term (size x accountability) is barely related to verbal behavior.

In contrast to the minimal impact of all the attributes on verbal behavior, several seem to be reasonably important in explaining when diplomatic skills and resources are employed (Table 6). One attribute alone—size—accounts for 38% of the variance and the direction confirms Hypothesis 5, which stated that governments of large nations engage in proportionately more foreign events involving diplomatic capabilities. Though in the predicted direction, the effect of development on diplomatic behavior is extremely weak (beta = .01). On the other hand, the data clearly indicate that closed states engaged in proportionately more diplomatic behavior than open states in contradiction to Hypothesis 23. The magnitude of the difference in this behavior between open and closed groups of nations is sufficiently great that we would expect its occurrence by chance only 5 times in 100 (two-tailed test). Assuming that much diplomatic activity is verbal, this finding appears consistent with the unexpected tendency noted in Table 5 for closed states to engage in more verbal behavior. One interaction term also is significant at the .05 level and accounts for 7% of the variance. This interaction is not the three-way one involving Rosenau's eight nation-types, but rather that between development and accountability.

Table 6. Impact of Nation-Type Attributes on Percentage of Diplomatic Events

	Beta	Amount of Variance	t
Size	.6139	.377	4.396***
Development	.0725	.005	0.487
Accountability	-.2813	.079	-2.038*
Size x Development	-.1910	.037	-1.282
Size x Accountability	.0495	.003	0.335
Development x Accountability	-.2693	.073	-2.037*
Size x Development x Accountability	.1113	.012	0.747
Multiple r = .764			
Multiple r ² = .583			

*p ≤ .05.

***p ≤ .001.

With respect to economic skills and resources, we had predicted that small nations would use them relatively more than large (Hypothesis 6); that less developed nations would use them more than developed (Hypothesis 15); and that open nations would use them more than closed (Hypothesis 24). The

direction of the data, displayed in these, although one (development variable (beta = .02). The relations are not statistically significant. Size accounts for 38% of the variance. Accountability accounts for almost 11% of the variance. Behavior, the interaction of development and accountability is statistically significant result and explains 7% of the variance. Development and development also enters into a statistically significant relationship with the three-way interaction.

The relative number of military events is small, and therefore the difference between open and closed nations may not be as great as when other situations has been included.²⁰ When the interaction of attributes accounted for 11% of the variance. Military skills and resources and, development is statistically significant. The direction of the relationship (Hypothesis 7—a higher proportion of military events occur in small nations), but the interaction of development and accountability were upset. Contrary to Hypothesis 23, it appears to have used more military events than open states. Hypothesis 25, open systems appear to be used more often than closed (beta = .22).

Turning to all types of conflict, military capability becomes the most important attribute. As predicted in Hypothesis 26, a high proportion of nations involved conflict (beta = .22).

Table 7. Impact of Nation-Type Attributes on Percentage of Diplomatic Events

Size	.6139	.377	4.396***
Development	.0725	.005	0.487
Accountability	-.2813	.079	-2.038*
Size x Development	-.1910	.037	-1.282
Size x Accountability	.0495	.003	0.335
Development x Accountability	-.2693	.073	-2.037*
Size x Development x Accountability	.1113	.012	0.747
Multiple r = .741			
Multiple r ² = .549			

*p ≤ .05

***p ≤ .001.

development = .18; development x accountability = .18). But when these they appear to have little impact (interaction between verbal and physical accountability) is barely related to

the attributes on verbal behavior, explaining when diplomatic skills and size alone—size—accounts for 38% of the variance. Hypothesis 5, which stated that a proportionately more foreign events in the predicted direction, the effect of size is extremely weak (beta = .01). On the other hand, states engaged in proportionately more foreign events in contradiction to Hypothesis 23. The interaction between open and closed groups of nations affects its occurrence by chance only, indicating that much diplomatic activity is in the unexpected tendency noted in the general behavior. One interaction term accounts for 7% of the variance. This is contrary to Rosenau's eight nation-types, but not statistically significant.

Percentage of Diplomatic Events

Amount of Variance	t
.377	4.396***
.005	0.487
.079	-2.038*
.037	-1.282
.003	0.335
.073	-2.037*
.012	0.747

cases, we had predicted that small nations are large (Hypothesis 6); that less developed (Hypothesis 15); and that in closed (Hypothesis 24). The

direction of the data, displayed in Table 7, is consistent with all three hypotheses, although one (development) is barely associated with the dependent variable (beta = .02). The relationships for the other two attributes are statistically significant. Size accounts for nearly 30% of the variance, whereas accountability accounts for almost 11%. As with two previous measures of foreign behavior, the interaction of development and accountability produces a statistically significant result and explains 11% of the variance. The interaction of size and development also enters into a relationship of modest strength (beta = .21) with economic skills and resources. Of the four interaction terms the weakest relationship occurs with the three-way interaction.

The relative number of military events in the present CREON data set is small, and therefore the differentiation between one grouping of nations and another may not be as great as when a more complete record of military conflict situations has been included.²⁰ Whatever the reason, no attribute or combination of attributes accounted for more than 9% of the variance in the use of military skills and resources and, as shown in Table 8, none were statistically significant. The direction of the relationship for size conforms to our expectation (Hypothesis 7—a higher proportion of events involving military capability occur in small nations), but the expectations for both development and for accountability were upset. Contrary to Hypothesis 16, less developed nations appear to have used more military resources (beta = -.12); and contrary to Hypothesis 25, open systems appear to have used military resources relatively more often than closed (beta = .22).

Turning to all types of conflict behavior, we see in Table 9 that accountability becomes the most important attribute when all others are controlled. As predicted in Hypothesis 26, a higher proportion of the foreign events of closed nations involved conflict (beta = .43, which accounts for nearly 19% of the

Table 7. Impact of Nation-Type Attributes on Percentage of Economic Events

	Beta	Amount of Variance	t
Size	-.5058	.256	-3.511***
Development	-.0155	.000	-0.100
Accountability	.3253	.106	2.277*
Size x Development	.2116	.045	1.369
Size x Accountability	-.1193	.014	-0.778
Development x Accountability	.3327	.111	2.384*
Size x Development x Accountability	-.1118	.013	-0.723
Multiple r = .741			
Multiple r ² = .549			

*p ≤ .05
 ***p ≤ .001.

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variance). Even though accountability is the only separate attribute to produce a t of sufficient size to reach the prescribed significance level, both of the other attributes have t -values that approach significance and enter into relationships of modest strength with the percentage of conflict behavior. (The beta for size is almost .20; the beta for development is almost .25). The data for both size and for development are in the direction predicted by Hypotheses 8 and 18 respectively. For the first time with one of the foreign policy measures, two different interaction terms are statistically significant when the other variables are controlled, but neither one is the key three-way interaction. The interaction of size and accountability accounts for 10% of the variance in conflict behavior (beta = -.32) and development and accountability accounts for another 8% of the variance (beta = -.28).

Table 8. Impact of Nation-Type Attributes on Percentage of Military Events

	Beta	Amount of Variance	t
Size	-.3045	.093	-1.569
Development	-.1230	.015	-0.594
Accountability	.2170	.047	1.122
Size x Development	.1250	.016	0.604
Size x Accountability	-.0642	.004	-0.313
Development x Accountability	.1336	.018	0.741
Size x Development x Accountability	-.1451	.021	-0.701
Multiple $r = .464$			
Multiple $r^2 = .216$			

Table 9. Impact of Nation-Type Attributes on Percentage of Conflict Events

	Beta	Amount of Variance	t
Size	.1950	.038	1.154
Development	.2474	.061	1.347
Accountability	-.4328	.187	-2.522**
Size x Development	-.2390	.057	-1.301
Size x Accountability	-.3196	.102	-1.752*
Development x Accountability	-.2820	.080	-1.644*
Size x Development x Accountability	.0643	.004	0.350
Multiple $r = .616$			
Multiple $r^2 = .379$			

* $p \leq .05$.

** $p \leq .01$.

The last table—Table 10—reports on the impact of nation-type attributes on cooperative behavior. We should note that the percentage of cooperative behavior is not 100% minus the percentage of conflict behavior. Therefore, the values in Table 10 are not predicted (Hypothesis 9), a somewhat weaker states involved cooperation, although the variance accounted for = 3%) and development (beta = -.33; variance accounted for = 3%) and accountability (beta = .40; variance accounted for = 3%) are significant. A higher percentage of cooperative behavior of open nations involved in the four interaction terms was significant. The percentage of cooperative behavior of open nations involved in the four interaction terms was more than 4% of the variance, each of which has some strength of association with the dependent variable (range from .17 to .21).

DISCUSSION AND CONCLUSIONS

In this final section we wish to discuss the utility of the attributes in explaining the hypotheses, and four conclusions are drawn from the additive-versus-interactive nature of the

Table 10. Impact on Nation-Type Attributes on Percentage of Cooperative Events

	Beta	Amount of Variance	t
Size	.17	.01	0.8
Development	.21	.01	1.0
Accountability	.33	.03	1.5
Size x Development	.10	.01	0.5
Size x Accountability	.10	.01	0.5
Development x Accountability	.10	.01	0.5
Size x Development x Accountability	.10	.01	0.5
Multiple $r = .546$			
Multiple $r^2 = .298$			

* $p \leq .05$.

Hypotheses

Of the twenty-seven hypotheses advanced in this paper, seven were confirmed at the .05 level of significance or better and each one accounted for between 11 and 38% of the variance in the foreign policy behavior. For eleven more the data were distributed in the predicted direction, but if we limit our attention to those that account for at least 1% of the variance ($\beta \geq .10$) then the number is reduced to 6. Put another way, almost half of the hypotheses (thirteen of twenty-seven) were in the predicted direction and had a strength of association as measured by the standardized regression coefficient of at least .10.

Our success in prediction varied from attribute to attribute. For both size and development, three of the nine predictions proved statistically significant; whereas only 1 of the 9 hypotheses involving accountability achieved that status. The data for seven of the nine hypotheses involving size conformed to the predicted direction and yielded a beta of at least .10. Although data for seven of the nine hypotheses dealing with development also followed in the predicted direction, only three obtained even the modest degree of association represented by a beta value of at least .10. Inasmuch as three predicted relationships between accountability and foreign behavior also obtained betas equal or greater than .10, we can conclude that our success in predicting the effect of development and accountability on the selected measures of foreign behavior were about the same. Furthermore, hypotheses about the effects of size fared substantially better than those concerned with the other two attributes.

Explaining Foreign Policy Events

Regardless of whether we successfully predicted the nature of the relationship between the attributes and the behavior measures, we can examine their overall impact. Each multiple regression involved seven independent variables (the three separate attributes and the four interaction terms). Therefore, we might ask how much variation in the various foreign policy measures could be accounted for by knowledge of all seven of these independent variables. At the bottom of Tables 2 through 10, we have reported the multiple r and the multiple r^2 to provide an answer. The average explained variance (multiple r^2) for the nine foreign policy measures is 39% and the range is from a high of 64% to a low of 20%. The collective effect of the attributes influenced the verbal-physical behavior distinction least of all (multiple $r^2 = .20$) and did little better for the proportion of events involving military skills and resources (multiple $r^2 = .22$). At the other extreme, the attributes collectively accounted for more than half the variance in diplomatic capability (multiple $r^2 = .58$) and economic capability (multiple $r^2 = .55$). The largest amount of variance was explained in the bureaucratic

involvement measure (multiple $r^2 = .64$) and the pattern of missing data as

We move toward the additive-ve of variance explained differed an answer is clearly yes. Of the sev important. It accounted for an ave nine measures of foreign policy an measures regardless of whether the sized. Accountability was second variance and involved in five statist the interaction term of accountabi most important in explaining varian for an average of 6% of the varian achieved or exceeded the .05 sig accountability, and accountability of the variance explained in the fo statistically significant relationshi ranked next to last in the average interaction contributed least to the average of less than 2% of the va entered into a statistically signific foreign policy.

Four Major Conclusions

This further examination of the believe should be highlighted.

- (1) The physical size of a nati three national attributes in finding confirms our own Hermann, 1969) and the 1969a).
- (2) Political accountability als explaining foreign policy more complex than that development.
- (3) We apparently are beginni for the effect of size on f than we have of account success in predicting the where two of the five stro In each case, our hypoth

involvement measure (multiple $r^2 = .64$), but, as noted earlier, we are concerned about the pattern of missing data associated with this variable.

We move toward the additive-versus-interactive issue by asking if the amount of variance explained differed among the seven independent variables. The answer is clearly yes. Of the seven the single attribute of size proved most important. It accounted for an average of 16% of the explained variance in the nine measures of foreign policy and associated significantly ($p \leq .05$) with four measures regardless of whether the relationship had been accurately hypothesized. Accountability was second, accounting for an average of 8% of the variance and involved in five statistically significant relationships. Interestingly, the interaction term of accountability and development proved to be the third most important in explaining variance in the foreign policy measures. It accounted for an average of 6% of the variance and participated in four relationships that achieved or exceeded the .05 significance level. These three variables—size, accountability, and accountability-development—typically accounted for most of the variance explained in the foreign policy measures and all but three of the statistically significant relationships. The separate variable of development ranked next to last in the average amount of variance explained. The three-way interaction contributed least to the explanation of variance. It accounted for an average of less than 2% of the variance (ranging from 4% to .2%) and never entered into a statistically significant relationship with any of the 9 measures of foreign policy.

Four Major Conclusions

This further examination of the results leads us to four conclusions that we believe should be highlighted.

- (1) The physical size of a nation appears to be the most important of the three national attributes in accounting for foreign policy behavior. This finding confirms our own earlier research with other data (Salmore and Hermann, 1969) and the research of others (for example, Rummel, 1969a).
- (2) Political accountability also seems to be of considerable importance in explaining foreign policy, although its effects on behavior may be more complex than that of size, as suggested by its interaction with development.
- (3) We apparently are beginning to have some understanding of the reasons for the effect of size on foreign policy—at least, a better understanding than we have of accountability. This conclusion rests on our better success in predicting the effects of size in contrast to accountability, where two of the five strongest relationships reversed our expectations. In each case, our hypotheses were informally derived from the de-

scriptions of the internal characteristics associated with each of the three national attributes.²¹ It would appear that our comprehension of these linkages needs considerably more refinement in the case of political accountability and should include explicit consideration of its interaction with development.

- (4) The conception of eight distinct nation-types based upon the interaction of the three dichotomized attributes appears unjustified as a means of explaining foreign policy behavior. Admittedly, this conclusion rests upon the examination of only 33 countries and nine classifications of foreign policy behavior. But the findings take on more significance because they confirm the analysis by Salmore (1972) who used a different sample of nations, a different set of foreign policy measures, and a different collection of data.²² Our findings do suggest that further exploration of the interaction effects of development and accountability may be warranted. Certainly, however, much more attention should be directed to the separate effects of the three attributes taking full advantage of the possibilities of using continuous measures for each one. In this manner, their impact on foreign policy behavior may be even greater than revealed in this paper.

NOTES

1. After reviewing seven other cross-national factor analyses, Sawyer (1967: 156) concludes: "Thus, size, wealth, and politics account for substantial proportions of the variance, not only in the present analysis of 236 variables, but also in studies with fewer, and less broadly representative variables. It is particularly remarkable that this agreement results from studies of such varying disciplinary orientation [which presumably influenced the selection of variables to be included]: psychology, geography, demography, economics, and political science."

2. The group that includes the authors of this volume, the Inter-University Comparative Foreign Policy Project, has been particularly influenced by this scheme.

3. Salmore used the World Event Interaction Survey (WEIS) developed by Charles McClelland and his associates at the University of Southern California. The scheme classifies national behavior into 22 inductively constructed categories using *The New York Times* as its source. As used by Salmore, the data set covered 73 nations for three years, 1966-1968. For his foreign policy measures, Salmore performed a factor analysis on the WEIS categories and identified six factors which he labeled cooperative action, participation, diplomatic exchange, verbal conflict, non-military conflict, and military conflict. In contrast to the research reported in this paper, Salmore did not advance hypotheses speculating on the possible effects of the national attributes on his foreign policy measures.

4. For a further treatment of the distinction between large and small states that was influential in formulating the present hypotheses about physical size, see East (1973).

5. Rosenau and Hoggard (1974) form hypotheses regarding the effects of size on conflict and cooperation that are similar to our Hypotheses 8 and 9. Our propositions concerning the effects on conflict and cooperation of economic development (Hypotheses 17 and 18) and political accountability (Hypotheses 26 and 27) parallel theirs as well. Their arguments for expecting the results, however, are not always identical with ours.

6. The reliability in coding the number of foreign policy events is the same as the reliability in identifying and abstracting events from a data source according to the CREON

procedures. The measure of agreement per sample the average measure of agreement for coders was .92. The general procedure is c

7. Representatives of the scholars' organizations on foreign policy are Allison (1972).

8. The average intercoder reliability for Krippendorff's (1971) coefficient of agreement for decisions in which judgments are conditional employ a number of coders and wish to rather than just two. Because of the inter the more usual reliability coefficients are coefficient of agreement that is designed for hierarchical decision trees. The coefficient effect, Krippendorff has generalized the reliability (Scott, 1955) to cover multivariate a value of one when there is complete agreement is merely chance. Everyone weekly coded the material coded in the previous week allowed to accumulate for two months agreement were computed for each item averages for an entire year.

9. Kissinger (1966) describes a "character" individual qualities weigh heavily.

10. The average intercoder reliability .86 for head-of-state participation. See footnote 8.

11. The verbal-nonverbal distinction in coding as discussed by Schelling (1960). Republic's verbal aggression and its physical (1969), and Hinton (1966).

12. The average intercoder reliability .76 for the word-deed distinction in the of the reliability procedures, see the latter

13. Examples of the literature using foreign policy as well as other foreign policy class

14. The average intercoder reliability .84 for the skill/resource categories. For footnote 8.

15. The average intercoder reliability .82 for cooperation-conflict as coded in of reliability procedures appears in footnote

16. In the CREON Project an event has multiple targets, and one or more indirect objects actor's behavior from the perspective of explicit parties that the actor is attempting have multiple direct targets and/or multiple objects can be the same entity or entities expressed by the actor toward different targets

17. The authors gratefully acknowledge developing the applications to events data of

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plume, the Inter-University Compar- nced by this scheme.

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ween large and small states that was physical size, see East (1973).

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gn policy events is the same as the data source according to the CREON

procedures. The measure of agreement proposed by Robinson (1957) was used and in a test sample the average measure of agreement between the principal investigators and three coders was .92. The general procedure is described in Hermann (1971).

7. Representatives of the scholarship that emphasizes the impact of bureaucratic organizations on foreign policy are Allison and Halperin (1970), Davis (1972), and Destler (1972).

8. The average intercoder reliability for internal decision units is .95 using Krippendorff's (1971) coefficient of agreement. Many of the CREON categories involve interrelated decisions in which judgments are conditional on other coding choices. Furthermore, we employ a number of coders and wish to establish the level of agreement among all of them rather than just two. Because of the interrelated decisions and the multiple coders, many of the more usual reliability coefficients are unsuitable. Therefore, we use the Krippendorff coefficient of agreement that is designed for coding nominal categories which form hierarchical decision trees. The coefficient can be computed for more than two coders. In effect, Krippendorff has generalized the more well-known pi coefficient of intercoder reliability (Scott, 1955) to cover multivariate agreement. Krippendorff's coefficient assumes a value of one when there is complete agreement among coders and is zero when agreement is merely chance. Everyone weekly coded two events in common which were drawn from the material coded in the previous week. The events that were coded by all coders were allowed to accumulate for two months (to build sufficient N) and then coefficients of agreement were computed for each item. The coefficients reported in this paper are the averages for an entire year.

9. Kissinger (1966) describes a "charismatic-revolutionary type of leadership" in which individual qualities weigh heavily.

10. The average intercoder reliability using the Krippendorff coefficient of agreement is .86 for head-of-state participation. See footnote 8.

11. The verbal-nonverbal distinction becomes important in the notions of tacit bargaining as discussed by Schelling (1960). The discrepancy between the Chinese People's Republic's verbal aggression and its physical behavior is discussed by Whiting (1960), North (1969), and Hinton (1966).

12. The average intercoder reliability using the Krippendorff coefficient of agreement is .76 for the word-deed distinction in the Sequential Action Scheme. For further discussion of the reliability procedures, see the latter part of footnote 8.

13. Examples of the literature using the skill-resource means of categorizing foreign policy as well as other foreign policy classifications appear in Hermann (1972).

14. The average intercoder reliability using the Krippendorff coefficient of agreement is .84 for the skill/resource categories. For further discussion of the reliability procedures, see footnote 8.

15. The average intercoder reliability using the Krippendorff coefficient of agreement is .82 for cooperation-conflict as coded in the Sequential Action Scheme. Further discussion of reliability procedures appears in footnote 8.

16. In the CREON Project an event consists of one actor, an action, one or more direct targets, and one or more indirect objects. Direct targets are the immediate recipients of the actor's behavior from the perspective of communication theory; indirect objects are the explicit parties that the actor is attempting to influence by his behavior. One event may have multiple direct targets and/or multiple indirect objects. Direct targets and indirect objects can be the same entity or entities or they can be different. Different affect can be expressed by the actor toward different targets and/or objects in the same event.

17. The authors gratefully acknowledge their associate, Stephen A. Salmore, for developing the applications to events data of the procedures described in this section.

18. The effect of each independent variable in the multiple regressions reported in these results is computed while controlling for the effects of all six other independent variables. That the other independent variables are being controlled should be assumed even if not explicitly stated at each point in the analysis.

19. The percentage of missing data varies from one internal decision unit to another, but the average across all of the bureaucratic organizations is about 45%. Although this is an extremely high percentage of missing data for a single category, the authors were delighted that for roughly 55% of the events the data source provided some indication as to organizational involvement. This degree of richness in the data source exceeded the most optimistic expectations of the project team, and gives rise to the hope that with the incorporation of additional sources into the data base a much higher percentage of information can be acquired. The immediate difficulty, of course, arises from the possibility that the rate of missing data is much higher for some types of nations than for others. We are currently checking the distribution by nation, but as of this writing we do not have the results necessary to determine if our suspicions are correct.

20. Excluded from the existing CREON data set are continuous military conflict events, such as Vietnam and the Arab-Israeli Six-Day War of 1967, involving one or more of the actors. We discovered that events involving military force required additional special identification rules to make them comparable to other events in terms of our conceptual definition of an event. Hence, military conflict events for major combat situations are being coded separately and the task has not been completed as of this writing.

21. The paper by one of the authors (East, 1973) represents a partial response and effort to explain the major role of physical size in foreign policy behavior. As such it provided us with a more systematic basis for thinking about the effects of that attribute than we had for the other two at the time the hypotheses for this paper were developed. As a result of the present findings a comparable effort for structuring our thinking about accountability seems in order.

22. Salmore (1972) ran the three-way interaction term with six measures of foreign policy and in no case was it statistically significant at the .05 level. He found one of the six interactions for Size X Development significant at the .10 level and one of the six interactions for Size X Accountability significant at the .05 level. These were the only significant interactions of the 28 in his analysis.

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