INTERNATIONAL BEHAVIOR ANALYSIS: THE OPERATIONALIZATION TASK

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OPERATIONALIZATION TASK

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The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the Advanced Research Projects Agency or the U.S. Government.
The objective of the International Behavior Analysis (IBA) Project is to construct and implement an analytical framework capable of providing insight into the actions and interactions of certain states in certain situations. The Project's emphasis is comparative and in this connection will involve the construction and implementation of a typology of nations and a typology of international events.
A comprehensive, social scientific framework for analyzing foreign policy behavior has been constructed and refined. Interrelationships between certain factors (variables) have been indicated within the contexts of international source and decision-making behavior and, moreover, within the contexts of different situations and nations. The task of operationalizing the entire framework has been initiated.

Each factor is being transformed into an actual variable. Data will be assembled for the five major sets of factors which are important for both source analysis and process analysis: (1) psychological; (2) political; (3) societal; (4) interstate; and (5) global. Nations have been classified on the basis of three dimensions: (1) economic; (2) governmental; and (3) capability. Data have already been assembled for each of the dimensions, generating 27 variables for 56 nations. Events are classified on the basis of six dimensions: (1) spatial; (2) relational; (3) temporal; (4) situational; (5) substantial; and (6) behavioral. The ARPA-supported World Event Interaction Survey comprises the events data set of the IBA Project.

The remainder of Year Two of the IBA Project will continue the process of assembling data and operationalizing the framework (for 56 nations over a five year period). Year Three will concentrate upon analysis. While the IBA Project will complete the construction, refinement, and analysis of the overarching framework, other researchers can employ the framework for basic research (e.g., theoretical inquiry) and policy-relevant research (e.g., crisis analysis).
This report covers the period August 1, 1975 through January 31, 1976.

This report constitutes the first technical report of year two of the International Behavior Analysis (IBA) Project, which is designed to produce comparative and empirical generalizations about how, when, and why nations are likely to act, react, and (therefore) interact within the international system. The analysis of three distinct kinds of behavior is within the scope of the IBA Project. First, the project is interested in discovering the sources of national action. When nations decide to act externally, they do so in response to certain domestic and/or foreign stimuli. Accordingly, it is possible to identify three domestic (or internal) and two foreign (or external) stimuli: (1) psychological; (2) political; (3) societal; (4) interstate; and (5) global systemic. These stimuli represent collections—or components—of factors which may lead a nation to take a specific external action.

The second kind of behavior which falls within the purview of the IBA Project concerns the processes surrounding initiative decision-making. After a set of conditions gives rise to a decision occasion, a nation must decide how to respond to the stimuli. Who is involved? What agencies and institutions are to assume important decision-making roles? How are interstate and global systemic conditions perceived by the decision-makers? Such questions represent but a sampling of those relevant to the conduct of initiative process analysis.

When a nation decides to initiate an action it responds to a set of stimuli essentially unrelated to the direct actions of other states. Behavior of a different nature is thus associated with the processes of responsive decision-making which occur when a nation is acted upon, that is, when nation A directs an action at nation B. The decision-making processes which occur within nation B illustrate the third kind of behavior with which the IBA Project is concerned.

In addition to explaining and predicting the sources and processes of international-foreign policy behavior, the project hopes to specify the conditions under which certain nations might initiate or respond to certain events. Consequently, it has been necessary for the Project to provide the means by which nations and events may be classified. Two classificatory schemes have thus been developed.
All of the above has been incorporated into a single analytical framework. The framework, which was constructed and refined during year one of research, is a device with potentially diverse functions. The possible uses of the framework range from directing basic social scientific inquiry to ordering policy-relevant research on international crises.

But a framework per se is insufficient. The intervening—and vital—task of operationalization must be accomplished prior to case study and cross-national analyses. Year two is devoted to this effort. When the conceptual variables have been converted into operational phenomena and the data collection and assembly operation is complete, IEA Project researchers will be in a position to test and further refine various aspects of the framework. The following sections will describe the overarching framework and provide an excursion into the realm of operationalization.
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A. INTRODUCTION

Foreign policy—the study of state actions, reactions, and interactions—has elicited the attention of social scientists and policy-makers. While the subfield of foreign policy was once subsumed under the amorphous rubric of "international relations," it has traditionally been recognized that there is a discernible difference between the two realms of investigation (Tanter, 1972; Sondermann, 1961). More recently, scientific foreign policy analysis—often referred to as the "comparative-study-of foreign-policy" movement—has emerged as an autonomous and burgeoning area of inquiry.

As is typical in a nascent subfield, the early history of the comparative study of foreign policy revolved around the acquisition of data and the scrutiny of scattered hypotheses. Research remained disparate and few variable domains were analyzed in a systematic or comprehensive fashion (see Jones and Singer, 1972; McGowan and Shapiro, 1973; Vasquez, 1975). "Islands" of knowledge were never integrated.

The inevitable palliative was the generation of overarching frameworks for analysis (e.g., Rosenau, 1965; Brecher et al., 1969). While foreign policy analysts have produced a number of such potential frameworks, few have been operationalized. Many of the existing frameworks are crude and incomplete. Unfortunately, empirical research has continued to accrue despite the absence of a comprehensive framework (see Powell et al., 1974; Hormann and Salmore, 1975).

The field of scientific foreign policy analysis nevertheless remains fertile (see Kegley et al., 1975; Rosenau, 1974). However, the strategy of framework-construction represents the optimal means to the end of
describing, explaining, and predicting foreign policy behavior. A new framework (see Andriole et al., 1975a, 1975b) is designed to remedy the defects of earlier analytical frameworks. But framework-construction is sterile if the end-product is never subjected to testing. The crucial operationalization task, which intervenes between framework-building and framework-testing, will be the focus of this paper.

B. A PRODUCTIVE CONCEPTUAL FRAMEWORK
FOR FOREIGN POLICY ANALYSIS

The paucity of reliable foreign policy knowledge can be attributed—at least in part—to the failure to delineate a precise scope of inquiry. The parameters of any field of inquiry must be mapped out in a precise and explicit fashion. One vantage point which ultimately fulfills this crucial boundary-delineation function concerns the levels of analysis issue. These levels refer to the general areas from which certain behaviors normally occur. Five causal and effectual levels have been identified. They are, in ascending order, the individual, group, state, inter-and/or multi-state, and global or systemic levels of analysis. Figure 1 illustrates comprehensive foreign policy analysis.

As the figure on page 3 indicates, foreign policy behavior occurs on the state and interstate levels of analysis. This is the typical dependent variable in the subfield of foreign policy research. In this scheme, the five causal levels are conceptualized as sources of foreign policy behavior (or behavior at the state and interstate levels of analysis).

After a state decides to respond to a set of stimuli, the decision-making machinery is activated. Decision-making or process analysis can thus be distinguished from source analysis. Initiative and responsive decision-
**FIGURE 1**

DUAL SOCIAL SCIENTIFIC LEVELS OF ANALYSIS

<table>
<thead>
<tr>
<th>Causal Levels</th>
<th>Effectual Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual</td>
<td>Individual</td>
</tr>
<tr>
<td>2. Group</td>
<td>Group</td>
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<tr>
<td>3. Composite Group (State)</td>
<td>Composite Group (State)</td>
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<tr>
<td>4. Inter- and/or Multistate</td>
<td>Inter- and/or Multistate</td>
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<td>5. Global Systemic</td>
<td>Global Systemic</td>
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</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
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</table>
making can both be studied. Responsive decision-making, it should be noted, views foreign policy behavior (perceived outputs from another sovereign entity) as an independent variable. The scope of foreign policy thus includes source analysis, initiative decision-making analysis, and responsive decision-analysis. The latter two forms of analysis are both process analysis. Source and process analyses must be conducted within the context of differences in states and foreign policies.

The delineation of a comprehensive scope of inquiry and the source-process distinction constitute the foundations for the Interstate Behavior Analysis (IBA) framework. The framework itself represents an effort to satisfy four essential framework-construction criteria. An ideal framework is comprehensive and incorporates all salient causal and effectual factors. Foreign policy frameworks should also fulfill the comparative criterion. Differences in states and foreign policies must be explicitly considered. The third criterion is operationalizability. A framework should not be an abstract exercise in abstraction; the accumulation of reliable knowledge is precluded if the conceptual framework cannot be converted into a set of measurable phenomena. Public policy-making relevance is the fourth and final criterion. An ideal framework will be both scientifically sound and relevant to the concerns and problems of policy-makers.

1. Source Variable Components

Since antiquity scholars have recognized that foreign policy actions and reactions are attributable to a variety of factors and conditions. The emphasis on decision-maker and systemic characteristics in Thucydides's study of the Peloponnesian wars provides a very early example of this recognition of "multicausality" in the sphere of foreign policy.
The five causal levels of analysis (see Figure 1) yield five clusters or components of factors. These are listed below in Figure 2. Components are an exhaustive collection of variable areas for foreign policy analysis. Within each component are factors which are similar in nature. Specifically, the five social scientific levels of analysis give rise to five components, which have been labelled psychological, political, societal, interstate, and global.

The psychological component, which arises from the individual level of analysis, is based on the recognition that individual decision-makers can impact upon foreign policy behavior. This proposition applies with special force to occupants of elite positions, who face the fewest role constraints. The psychological component can be subdivided into psychodynamic, personality trait, and belief system-perception domains.

The political component contains an array of governmental factors. Bureaucratic factors and public opinion are both housed within this variable realm.

Included within the societal component are various economic trend indicators and internal conflict phenomena. These are non-political domestic factors which may be expected to exert at least some impact upon foreign policy behavior.

The interstate component consists of interactive phenomena. The stimulus-response analogy suggests that policy inputs (acts received) may explain policy outputs (acts sent). While this plausible model does not explain all foreign policy behavior, it does account for an appreciable portion of the explainable variance (Phillips, 1973, 1971; Wilkenfeld, 1975b).

Systemic variables appear in the global component. The emphasis on balance of power mechanisms and the debate on the relative virtues of bipolarity
FIGURE 2
SOURCE VARIABLE COMPONENTS

Levels of Analysis

Causal Levels                                      Effectual Levels

1. Individual                                      Individual 1.
2. Group                                           Group 2.
3. Composite Group (State)                         Composite Group (State) 3.
4. Inter- and/or Multistate                        Inter- and/or Multistate 4.
5. Global Systemic                                 Global Systemic 5.
                                                     Independent Variables  Dependent Variables

Foreign Policy Source Analytical Components

Psychological Component
- Psychodynamics
- Personality Traits
- Belief System
- Perceptions

Political Component
- Formal Institutional Factors
- Informal Institutional Factors
- Domestic Pressures
- Aggregate Descriptor Variables

Societal Component
- National Culture
- Social Structure
- Domestic Conflict
- Aggregate Descriptor Variables

Inter-State Component
- Alliance Ties
- Bloc Memberships
- Trade Agreements
- Policy Inputs

Global Component
- Systemic Attributes
- Status-Rank
- Subsystemic Phenomena
- Textural Phenomena
vis-a-vis multipolarity are two recurring issues which arise within the systemic
domain. The global power distribution is probably a key determinant of state
behavior. Systemic turbulence and subsystemic phenomena are also contained
within the global component.

The components and variables discussed above virtually exhaust the range
of potential determinants or sources of foreign policy behavior. Flexibility
is ensured because variables may be added or deleted according to the purposes
of research. For case study analysis, a greater range of variables could be
considered than for cross-national research. For policy-relevant or applied
inquiry, certain factors—those which are not amenable to short-term manipu-
lation—would be excluded or downgraded.

2. Classificatory Scheme of States

If states are not classified, it would be impossible to formulate reli-
able and useful generalizations. Classification permits us to determine which
states act in which ways and why. Furthermore, the concern here is with
classification for foreign policy analysis. Therefore, the goal is not to
classify states on all attributes; only dimensions which presumably influence
foreign policy behavior will be considered.

Confusion has arisen because scholars have generally viewed state attri-
butes as independent variables (see, e.g., East, 1975, 1973; Salmore and Her-
mann, 1969). This strategy seems to be inappropriate; from an analytical
perspective, static state characteristics such as size and wealth do not "cause"
foreign policy behavior in the same sense that domestic conflict or policy
inputs are determinants of foreign policy behavior. States should be clustered
into types on the basis of static, aggregate attributes. Type of state, then,
constitutes an intervening variable cluster in foreign policy analysis.
State attributes may be divided into three distinct dimensions (see Wilkenfeld, 1975a). The first dimension subsumes those factors related to the economic structure of a state. Political structure comprises the second classificatory basis. State capabilities (size, military power, and resource base) constitute the third dimension. The state type scheme is depicted in Figure 3 on the next page.

3. Classificatory Scheme of Events

Foreign policy research has concentrated on processes (institutions and their interactions) and neglected outputs, according to Cohen and Harris (1975: 382). The output variables must be properly conceptualized and measured. Foreign policy outputs may be viewed as discrete events (Hermann, 1971; Andricle, 1975b).

Events data analysis has been one of the major preoccupations of quantitative international politics (see Burgess and Lawton, 1972). For almost a decade researchers have been amassing and analyzing events data. Interest in this type of data has not subsided (see Kegley et al., 1975).

The Interstate Behavior Analysis Project approach is derived from the working assumption that a foreign policy event must be conceptualized properly prior to the acquisition and analysis of data. An event is an empirical phenomenon which consists of six separate and isolable analytical dimensions. The various dimensions and their dimensional attributes appear in Figure 4 on page 16.

4. Process Variable Components

The components which are listed in Figure 2 may also be conceived as process variable components. Decision-maker characteristics, public opinion,
FIGURE 3

CLASSIFICATORY SCHEME OF STATES

Structural (Economic) Dimensions

Structural (Governmental) Dimension

Power (Capability) Dimensions
FIGURE h

CLASSIFICATORY SCHEME OF EVENTS

Spatial Dimension

Temporal Dimension

Relational Dimension

Situational Dimension

Substantial Dimension

Behavioral Dimension
bureaucratic competition, and other variables from the various components continue to be relevant during decision-making or process analysis. However, the components are now viewed as dependent, whereas the same variable clusters functioned as independent variables for foreign policy source analysis.

The purest illustrative case is responsive decision-making, when the action of another state requires a reaction. This action is the independent variable. The perceived event may affect factors from the components, such as public opinion, decision-maker perceptions, and even more remote phenomena such as domestic conflict or economic trends. Paige's (1968) case study of the decision to participate in the Korean War illustrates responsive decision-making analysis.

5. The Overarching Conceptual Framework

The concepts of components, component variables, state classificatory scheme, event classificatory scheme, source analysis, initiative process analysis, and responsive process analysis have now been introduced and explicated. These concepts are the building blocks for the framework, which is presented in Figure 5 on the next page.

Source analysis can be conducted by conceptualizing the components as independent variable clusters. Foreign policy events are the dependent variables. Type of state is an intervening variable cluster.

In the case of responsive process analysis, the event is independent. Components become dependent variable clusters while type of state continues to function as the intervening variable cluster.

The framework is comprehensive. All potentially relevant variables are represented. Specific factors—and even entire variables areas—can be added or deleted with ease. Furthermore, source analysis, initiative process analysis,
FIGURE 5
AN OVERARCHING FRAMEWORK FOR THE COMPARATIVE ANALYSIS
OF FOREIGN POLICY SOURCE AND RESPONSIVE
DECISION-MAKING PROCESSES BEHAVIOR

SOURCE/PROCESS COMPONENTS

1. Psychological Component
   - Psycho-dynamics
   - Personality Traits
   - Belief System
   - Attitudes

2. Political Component
   - Social Institutional Factors
   - Political Institutional Factors
   - Economic Factors
   - Contextual Descriptive Variables

3. Socio-Economic Component
   - Social and Cultural
   - Inequality and Power
   - Economic Interdependence
   - Structural Descriptive Variables

4. International Component
   - International Relations
   - Power Dynamics
   - Strategic Interactions
   - Contextual Descriptive Variables

CLASSIFICATION OF EVENTS

Spatial Dimension
Temporal Dimension
Relational Dimension
Situational Dimension
Substantial Dimension
Behavioral Dimension

CLASSIFICATION OF STATES

Structural (Economic) Dimensions
Structural (Governmental) Dimensions
Power (Capability) Dimensions

Source Behavior and Analysis
Responsive Decision-Making Behavior and Analysis

Independent Variables
Dependent Variables
Dependent Variables
Independent Variables
and responsive process analysis exhaust the scope of foreign policy behavior.  

The classificatory schemes of states and events fulfill the comparative criterion and enhance the broader goal of conceptual flexibility. A concern with "states in general" or with "foreign policy in general" leads only to vague and abstract generalizations. Classification facilitates the formulation of more reliable and useful propositions.

Operationalization is an elusive challenge. Yet, the failure to convert the framework from an abstract skeleton to a data-based phenomenon would simply continue the prevailing trend of framework-proliferation without providing real evidence to judge the merits of any device. Operationalization has been an explicit objective from the outset and will be discussed in detail below.

The policy-relevance criterion is a more recent concern. The satisfaction of the informational needs of decision-makers is one vital aspect of policy-relevant inquiry. This may be accomplished by constructing and operationalizing a comprehensive framework for analysis. One payoff of a successful framework is that policy-makers would have access to knowledge about how, when, and why varying types of states would be likely to act.

C. OPERATIONALIZATION

As noted at the outset, dozens of specific hypotheses have been subjected to empirical scrutiny. However, scholars have not been systematic in their selection of propositions, states, and time periods. Cross-national, longitudinal, and quantitative studies are disappointingly rare. Even comparative case studies have been infrequent. The gap between theory and data in the scientific study of foreign policy is regrettably obvious (see Hopple, 1975b).
Theoretical progress in foreign policy—and in the study of interstate politics generally—originates with the pioneering decision-making framework devised by Snyder and his colleagues (1962). The framework, which was constructed in the 1950s, constitutes a comprehensive checklist of potentially relevant factors rather than an elaborate specification of expected variable interrelationships. The Snyder framework is so detailed that operationalization has been inhibited. In fact, data have been amassed for only one case—the then-USSR decision to enter the Korean War (see Paige, 1968).

Given the complexity and the stringent data requirements of the Snyder framework, it was improbable that many cases would be studied with this set of analytical categories. The Korean War case was an exception in the sense that it was a salient crisis foreign policy event for which extensive data existed. The availability of certain kinds of necessary data—such as memoirs—also permitted an application of the Snyder scheme to this event. Obviously, this characteristic does not typify many events.

While the Snyder formulation was a laudable effort to infuse rigor into the study of the foreign policy process, it neglected the entire array of external stimuli and variables. Furthermore, the framework developed by Snyder and his colleagues pertains only to decision-making or process analysis. The Interstate Behavior Analysis framework, in contrast, applies to both source and process analyses.

The Rosenau (1966) framework was explicitly sketchy and pretheoretical. Rosenau anticipated and confronted many of the crucial conceptual and theoretical issues which have animated subsequent inquiry on foreign policy. Unfortunately, however, the framework itself was abandoned. While the framework was applied in a preliminary fashion to the case of Soviet foreign policy
behavior (see Paul, 1971), foreign policy analysts did not attempt to operationalize the entire scheme in cross-national research. The Rosenau framework did provide the inspiration for the Inter-University Comparative Foreign Policy project, a forerunner of subsequent efforts (Rosenau et al., 1973).

In retrospect, it can be seen that there were many deficiencies in the Rosenau "pre-theory." The importance of classifying states and foreign policies was clearly recognized. However, the state typing scheme involved the frequently employed—and incomplete—trilogy of size, development, and accountability. The foreign policy classification was limited to "issue areas."

More egregious was the conceptualization of variable realms (see Andriole et al., 1975a). Rosenau delineated five variable clusters (the idiosyncratic or individual, role, governmental, societal, and systemic). The boundaries of the realms were vague and there was some overlap. The systemic cluster created a catchall category for the external environment, whereas interstate phenomena (exchanges and interactions of various types) are clearly different from global patterns and other system-level phenomena.

Unfortunately, the popularization of the Rosenau pre-theory did not stimulate researchers to initiate the arduous task of mapping the boundaries and topographies of variable clusters. Framework builders continued to generate "grand designs," but none of them attempted to specify variable areas in a comprehensive fashion. As a result, specific variables were not identified. Instead, foreign policy frameworks have tended to feature ad hoc lists of factors which are not exhaustive and may not even be representative. Since the process has been so haphazard, some factors—such as domestic conflict—have elicited a disproportionate share of research attention while an array of other determinants has been literally ignored (see McGowan and Shapiro, 1973).
The framework constructed by Brecher and his colleagues (1969) focuses on inputs, processes, and outputs. While the Brecher framework satisfied the comprehensive criterion, the external variables could have been specified with more clarity. Furthermore, type of state was not incorporated as a clearly defined variable cluster. The developed-developing distinction was the only state type attribute in the scheme.

The Brecher framework appears to be most applicable to single case study research. The framework has in fact been operationalized for the case of Israel (1972, 1973, 1974a, 1974b). The framework could be used for a series of single and comparative case studies, which would be a useful contribution to the foreign policy research literature. However, such an approach would also be tedious and time-consuming. The ideal is a framework for analysis which can be employed for both case study and cross-national research.

The Comparative Research on Events of Nations (CREON) Project has attempted to engage in empirical foreign policy research (see Hermann et al., 1973). However, the CREON researchers have failed to proceed from the delineation of levels of analysis to the identification or variable clusters of components. Instead, various "theoretical perspectives" have been singled out (Hermann, and Salmore, 1975: 1; Brady, 1975; East, 1975; M. Hermann, 1975; Salmore and Salmore, 1975). This approach violates the criterion of comprehensiveness.

Furthermore, no explicitly delineated state type scheme appears in the CREON "Framework". In fact, static attributes and dynamic variables are both viewed as "independent variables." National attributes such as size are consequently treated in the same fashion as variables such as bureaucratic phenomena. In contrast, type of state factors can be posited to be intervening variables.
The operationalization phase of the CREON research effort is also susceptible to criticism. Since the specification of variables and variable realms was incomplete, the operationalization of foreign policy "source variables" is also inadequate. Even more unfortunate is the foreign policy data set. Events were coded for only three months per year for the period from 1959 to 1968. This clearly precludes longitudinal analysis since three-fourths of each year is excluded from the data set. Trends and patterns cannot be isolated. Events data were collected for only 35 countries. The state "sample" was developed on the basis of the interests of the various researchers and is therefore neither random nor representative.

While foreign policy frameworks can be critiqued from abstract and theoretical vantage points (see Andriole et al., 1975a; Welch and Triska, 1971), this brief review of prior operationalization efforts reveals that the record is even more negative here. As Hopple (1975b: 1) asserts:

Conceptual progress and theoretical innovation are stimulating pursuits which constitute the foundation for subsequent progress in any field of research and analysis. But a more pedestrian--and equally vital--endeavor has concurrently been neglected during the past several years. Specifically, the data gap problem has surfaced. Unlike the missile gap which was such a prominent issue in the American presidential campaign in 1960, the data gap is not a false issue. The crux of the dilemma is that frameworks are becoming more sophisticated and comprehensive while the available data data are becoming less and less adequate.
Comprehensiveness is important. Simultaneously, it must be recognized that comprehensiveness can become a straitjacket. A framework may be so inclusive that operationalization is inhibited. Not every influence can be identified and measured. To attempt to do so would generate lengthy lists of potential factors which would consume reams of paper and years of effort. It is therefore vital that the scientific criterion of parsimony be highlighted. Framework builders who seek to avoid the aridity of framework construction as an end in itself must consciously strike a balance between comprehensiveness and parsimony.

1. Spatio-Temporal Parameters

Comparative analysts inevitably confront the task of selecting a particular research strategy (Przeworski and Teune, 1970; Meckstroth, 1975). The distinction between "most similar systems" and "most different systems" designs presents the fundamental choice that a comparativist of any type must make.

The "most similar systems" design is based on the premise that cross-system variations should be minimized. Country experts and traditional area specialists exemplify the purest version of this strategy. Scholars who focus on a set of similar polities, such as Scandinavian states, the Anglo-American democracies, or Eastern Europe, are also subsumed within this research tradition. Perhaps the most prominent modern example is Almond and Verba (1963).

The "most different systems" design is the precise opposite of the preceding strategy. This strategy "takes as the starting point the variation of the observed behavior at a level lower than that of systems" (Przeworski and Teune, 1970: 34). All individuals are initially treated as members of a homogeneous population; if differences appear on the basis of varying systems, then system names must be introduced. Examples of this research strategy include
those instances when the researcher employs all states as the sample of cases and attempts to identify similar influences regardless of system (such as uniform effects of education).

The comparative study of foreign policy has not generally employed a most similar systems design. Instead, all or most states have been included. However, national systems (i.e., states) have been the focus of analysis since it is assumed that states are the key actors in foreign policy and interstate politics.19

In a sense, the IBA Project has selected a most similar systems design. The sample consists of 56 states. This number includes those states which initiated 40 or more foreign policy "actions" (events) during the period from 1966 to 1969. The sample thus consists of "major" foreign policy actors. While initiation of events may be a crude indicator of actor salience, it is a very reliable criterion. The sample includes all great powers and other significant actors. The state sample appears below in Table 1. The state number codes are "standardized" and the state letter codes are those of the World Event International Survey (WEIS).

The similarity criterion is actor importance in the system. Very minor powers are thus excluded. On the other hand, about one-half of the states are incorporated. The sample exhibits diversity on such standard attributes as capability, development, and regime characteristics. All geographical regions are represented.

The characteristic of actor significance was selected for several reasons. The policy-relevance criterion implies that minor powers can be disregarded without serious damage. The foreign policy of Nepal is both less threatening and less salient than the foreign policies of superpowers.
### TABLE 1

**IBA STATE SAMPLE**

<table>
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<tr>
<th>State</th>
<th># Code</th>
<th>Letter Code</th>
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Data availability considerations also influenced the decision. Generally, data are more reliable and more accessible for actors which participate more and tend to be more important. Less is known about the foreign policy behavior of very minor states.

The entire EIA Project data set will span five years, from 1966 to 1970. While plans are being formulated to assemble more recent data for certain factors, the 1966 to 1970 period will be the basic time frame. This is the most recent span for which data are completely accessible. The choice was thus dictated by practical considerations. But the temporal sample is recent enough that the findings can be expected to be relevant. Moreover, five years is a period which is long enough to yield patterns and trends.

2. Source Variable Components

The EIA Project has proceeded in a two-step fashion. The first year of research entailed the construction and refinement of the overarching framework (Andriole, 1975a; Andriole et al., 1975a, 1975b). Variable areas were identified and concrete variables were specified (Hopple, 1975a). After this preliminary mapping operation, the first half of the second year of research has involved the initiation of the process of converting conceptual variables into data.

While a vast amount of conceptual, theoretical, and even empirical research has accrued on the subject of psychology and foreign policy (see Hopple, 1974b), the PSYCHOLOGICAL component is clearly the variable realm which poses the most serious obstacles to operationalization. Prior research has considered three major types of psychological variables: Psychodynamics; personality traits; and belief systems.
Psychodynamics involves the phenomenology, dynamics, and genesis of personality patterns (Greenstein, 1969). Phenomenology concerns the identification of observed behavior patterns. Dynamics refers to hypotheses about processes which account for the pattern or syndrome (such as the isolation of operative ego-defense mechanisms). Genetic analysis entails the identification of causal antecedents of a personality syndrome or pattern, as in research on childhood experiences which produce authoritarianism.

Psychodynamic (or "depth-psychological") research is often Freudian or neo-Freudian in nature. The relatively extensive literature on leadership, psychopathology, and aberrational elite behavior exemplifies this approach to the study of psychology and foreign policy behavior. The best known and most impressive example is the monumental study of Woodrow Wilson (George and George, 1964).

While critics have charged that psychodynamic research is superfluous for explaining elite foreign policy behavior, a more serious criticism concerns the availability and quality of data. In the case of the Wilson study, the researchers had access to a number of useful data sources. But data on elite decision-makers are often non-existent, inaccessible, ambiguous, or contradictory. Leaders cannot be psychoanalyzed for research purposes. The case study literature includes a number of interesting psychobiographical portraits, but appropriate data for many occupants of elite positions are insufficient or unreliable. The psychodynamic perspective is consequently inapplicable to cross-national research.

The psychodynamic or depth-psychological frame of reference pervaded research prior to 1950. Since then, investigators have shifted to other perspectives. Personality traits or dispositions--the analysis of the impact of unitary and isolable personality characteristics--constitute a major research
domain in the study of psychological sources of foreign policy behavior.

One problem with the personality traits approach is definitional. Some researchers focus on precisely delineated traits such as belligerence (Gladstone and Taylor, 1958). Traits have also been conceptualized as broader categories, such as decision-making style (Hermann et al., 1974). On an even more general level, efforts have been made to identify basic personality clusters or dimensions (D'Amato, 1967). The universe of relevant traits and the appropriate level of generality have never been determined.

More serious is the data access problem, an inescapable obstacle when quantitative cross-national research is undertaken. The existing research on personality traits involves case studies or simulations. The available sources for cross-national inquiry are public documents which are not appropriate for inferring the personality traits of elites. M. Hermann (1974, 1975) employs content analysis of the U.S. Foreign Broadcast Information Service (FBIS) Daily Report to measure personal characteristics of heads of state. This procedure assumes erroneously that data gleaned from press conferences or interviews can be used to identify personality traits of the respondents. The utilization of public sources for this purpose is acceptable only if the researcher provides independent evidence for the validity of the measurements.²⁰

Research on belief systems is voluminous, although case studies are the norm and most available work focuses on U.S. decision-makers.²¹ The problems with belief systems and content analysis research are numerous (see Mueller, 1969; Hopple, 1975c). However, content analysis is a tool that can be employed—albeit cautiously—for comparative research on foreign policy elites.

Ambiguities pervade the efforts to formulate a definition of belief system. Researchers have employed such competing concepts as world view, elite image, operational code, cognitive map, and definition of the situation. A
belief system is simply a set of interrelated concepts. Bonham and his colleagues (1976: 6) refer to affective concepts (policy objectives), cognitive concepts (beliefs about events which occur in the international system), policy concepts (possible alternatives or options for policy recommendations), and value concepts (abstract values such as national security). Rokeach (1968, 1973) presents a more parsimonious formulation; a belief system consists of beliefs, attitudes, and values.

A decision-maker's belief system consists of thousands of elements, ranging from simple beliefs and attitudes (affective, cognitive, and policy concepts) to several dozen (or fewer) enduring values. The entire belief system cannot be measured. A researcher must select a sample of elements. Appropriate sources can then be identified.

Prior research has involved the measurement of various beliefs and attitudes. An example is the Stanford group's emphasis on eight cognitive and affective perceptual variables (see Holsti, 1972). Similarly, Singer (1964) content analyzed Soviet and U.S. elite articulations for perceptions and evaluations of the international system, the distribution of power, one's own foreign policy code, and the other's foreign policy code.

The focus here will be on decision-maker values. A value is a specific type of belief:

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach, 1973: 5).

Basic values—such as equality and freedom—form the core of a belief system and structure less basic orientations.
Rokeach's research on values has been very productive. Value rankings have differentiated subgroups within a variety of mass and elite samples and have predicted to various forms of political behavior (Rokeach, 1973). In addition to individual values, institutional values can be measured (Rokeach, 1975). Value analysis was even successful in determining authorship of the twelve disputed Federalist papers (Rokeach et al., 1970).

Value analysis in research on foreign policy elites and belief systems has been rare (see Eckhardt and White, 1957; White, 1949). But Rokeach's theoretical and empirical research suggests that an application of value analysis to foreign policy decision-makers would yield significant results. Specifically, it would be predicted that differences in value rankings would be associated with (i.e., would "predict to") differences in foreign policy behavior.

An appropriate data source must be selected. For variables from the other components, data are generally available or can be generated without too much difficulty. But in the realm of values and other psychological variables, research has been sporadic and case-specific. Another problem is that a source which contains data for all or most of the 56 states in the IPA sample must be discovered.

The U.S. Foreign Broadcast Information Service (FBIS) Daily Report will be used as the basic data source. The Daily Report contains verbatim transcripts of material obtained from U.S. monitoring of foreign broadcasts. While such a document would be inappropriate for depth-psychological or personality trait research, it can be used to derive decision-maker value data. The emphasis will be on a state's officially articulated foreign policy. Official, public elite value articulations may not reflect the decision-maker's private values. But these foreign policy statements are the ones which other states hear and which elicit their reactions. As Brodin (1972: 105) notes, such
public statements can severely circumscribe a state's future freedom of action in two ways. The enunciations contribute to internal and external expectations and influence the basis on which other states formulate foreign policy decisions.

The existing literature on foreign policy and POLITICAL component phenomena is regrettably incomplete. Disproportionate attention has been accorded to the United States and other advanced politics. It should also be apparent that many factors which are generally viewed as political variables are housed within the state classificatory scheme. As noted, static, aggregate factors are incorporated into the type of state cluster. Examples include the degree of political competitiveness and the type of government.

The bureaucratic politics perspective suggests that the behavior of decision-makers is explicable in terms of differing bureaucratic positions. Even national security issues are often assessed in the context of organizational needs and interests (Halperin, 1974: 20). Although the literature on bureaucratic politics has proliferated, research has been limited to case studies of specific decisions such as the Cuban missile crisis and the ABM deployment decision.

For quantitative, cross-national research, the bureaucratic politics perspective can be operationalized by recoding the World Event Interaction Survey (WEIS) data set for decision unit participation. There have been preliminary efforts to relate bureaucratic politics to quantitative research (Hermann, 1973). Foreign policy events data can be coded on the basis of the identity of the specific decision unit. Legislative, executive, military, and national security institutions are among the potential units. Hermann and his colleagues (1973: 95-97) furnish a comprehensive list.
In addition to the constellation of policy-making structures which is officially responsible for the promulgation and implementation of foreign policies, public opinion may also influence foreign policy behavior. Some empirical data on public opinion and foreign policy have been amassed (Merritt, 1972). As Cohen (1973) charges, however, most of the studies have asked the wrong questions or have simply assumed a one-to-one correspondence between opinion inputs and policy outputs. The simple descriptive literature on the public and foreign policy is voluminous; quantity, however, does not translate into theoretical rigor or quality.

The absence of comparable cross-national public opinion data sets precludes the operationalization of the public opinion variable. However, a review of existing research reveals that public opinion is rarely a significant determinative variable (Hopple, 1976a, 1975d). In fact, public opinion is often a dependent variable. Opinion "inputs" are often determined by foreign policy events (e.g., rallying to the leader when a crisis erupts) and by elite cues and actions.

Some empirical research has accumulated on SOCIETAL variables, a realm which refers to phenomena from the state or social systemic level of analysis. Population, economic, and conflict variables emerge as crucial societal component variables.

Various attributes of a state's population may be expected to exert some impact on foreign policy behavior. Total population is a relatively stable characteristic which is housed within the type of state scheme. Rate of population increase can be subsumed under the societal component rubric. This population trend indicator may account for at least some foreign policy behavior; rate of population growth has been isolated as a variable of significance in prior research (see Choucri and North, 1975).
Economic trend indicators include percentage of unemployed, average annual rate of growth of the Gross Domestic Product (at constant prices), total annual governmental expenditure, balance of payments, and inflation. It is obvious that specific factors would influence specific forms of foreign policy behavior. Balance of payments fluctuations, for example, might affect a state's economic foreign policy behavior. General economic trends may also impact upon foreign policy. Does economic stress (high unemployment, a stagnating growth rate, high inflation, etc.) provoke erratic or conflictual foreign policy behavior? Do economic trends covary with such foreign policy patterns as the total amount of foreign policy behavior (participation in the interstate system)?

Prior research has attempted to illuminate the nexus between domestic and foreign conflict behavior. A recent study tries to explain conflict exchanges in the Middle East by examining the impact of prior foreign conflict, domestic conflict, and bureaucratic inertia (McCauley and Wilkenfeld, 1975). Domestic turbulence or strife may display a relationship with foreign conflict and other forms of foreign policy behavior.

Data have been assembled for the population, economic, and conflict subsets of the societal domain. Conflict data were obtained from the Banks (1971) data set. The other data were assembled from various sources. Details on the operationalization of the societal component are provided in Hopple (1976b).

The psychological, political, and societal components are internal in nature. The external environment of foreign policy behavior can be subdivided into two variable realms. The two external components arise from the interstate and global levels of analysis (See Figure 1).
Various INTERSTATE component factors can be identified. Semi-static factors include alliance and bloc memberships. Dynamic interactive factors include levels of interstate trade and ad hoc alliances or pacts. Data for semi-static and dynamic factors should be readily available.

Policy inputs are the most important interstate variables. Many analysts maintain that the actions of other states constitute the primary source of a state's behavior in the domain of foreign policy. While this stimulus-response analogy is both plausible and parsimonious, we would be reluctant to embrace the proposition on an a priori basis. However, empirical analysis should reveal the potency of policy inputs as explanations of policy outputs.

Scholars have also attempted to assess the impact of GLOBAL or SYSTEMIC factors (McGowan and Shapiro, 1973: 161-179; Jones and Singer, 1972: 27-88). These variables include the aggregate socio-political and physical realities which constitute the global milieu. The factors may be organized into four general clusters (Andriole, 1975e).

Subsystemic phenomena can be operationalized easily. Brecher (1968) emphasizes the different "levels" which foreign policy-makers perceive. The tripartite global/subordinate/bilateral classification enables researchers to determine if a decision-maker's attention is allocated in a biased fashion. For example, India's Krishna Menon was indifferent to the regional subsystem (Brecher, 1968: 314).

Other systemic phenomena have been operationalized in several major studies (Haas, 1974; Singer and Small, 1972). However, it should be noted that global factors are decidedly perceptual in nature. "Objective reality" is filtered through the perceptual lenses of the individuals who conduct foreign policy. It may be necessary to assemble data on decision-maker perceptions of the international system.
3. Classificatory Scheme of States

The classificatory scheme of states should feature those attributes which are most directly relevant to a state’s foreign policy behavior. Based on a review of prior work, three distinct dimensions were selected for classification purposes (Wilkenfeld, 1975a). The first dimension refers to economic structure; the second dimension consists of governmental factors; the third dimension includes capability variables of various types.

Each dimension consists of a number of distinct variables. While prior classificatory schemes have employed single indicators for the standard dimensions of size, wealth, and politics, a multiple indicator approach is preferable. Furthermore, dichotomization will be avoided in favor of a strategy of positioning states along continua representing the three dimensions.

The state attributes have been converted into measurable variables and the data have been assembled (Andricle, 1975d; McCauley, 1975). The data set consists of 27 variables for five years (1966 to 1970) and 56 states. The dimensions and variables are listed on the next page in Table 2.

4. Classificatory Scheme of Events

Figure 4 presents our conceptualization of the dimensions of a foreign policy event. The first dimension is **spatial** and refers to the geographical area in which the event occurs. The **temporal** dimension refers to the actual time when the event occurs. The **relational** dimension includes variables relating to participants. Attributes consist of the number of parties involved and their hierarchical order. Geographical proximity and the number of actors involved (monads, dyads, etc.) are both important aspects of the relational dimension. **Situational** attributes concern the operational context within which a decision must be formulated. The event attributes of threat, time,
TABLE 2

STATE DIMENSIONS AND VARIABLES

I. ECONOMIC DIMENSION

(1) GNP per capita;
(2) Gross domestic fixed capital formation as a % of GNP;
(3) % of Gross Domestic Product (GDP) originating in agriculture;
(4) % of GDP originating in industry;
(5) Energy consumption per capita;
(6) % of total economically active male population engaged in agricultural occupations;
(7) % of total economically active male population engaged in professional and technical occupations;

II. CAPABILITY DIMENSION

Size

(8) Total area;
(9) Total population;
(10) GNP;

Military Power

(11) Total military manpower;
(12) # of nuclear weapons;
(13) Total defense expenditure;
(14) Defense expenditure per capita;

Resource Base

(15) % of total food supply domestically produced;
(16) % of energy consumed domestically produced;

III. GOVERNMENTAL DIMENSION

Political Development

(17) # of political parties;
(18) # of government units;
(19) Horizontal power distribution;
(20) Local government autonomy;

Structure

(21) Selection of effective executive;
(22) Legislative effectiveness;
(23) Legislative selection;
(24) # of coups d'état;
(25) # of major constitutional changes;
(26) # of major cabinet changes;
(27) # of changes in effective executive.
and awareness (see Harrmann, 1969) are housed here. The substantive dimension refers to the specific issue area (economic, political, diplomatic, military-security). The final dimension, the behavioral, may be conceptualized in terms of a conflict-cooperation continuum.

Fortunately, operationalization of the event portion of the framework will not be difficult. In fact, it has already been decided to use another ARPA-supported data collection, the WEIS or World Event Interaction Survey events data set.

The foreign policy or events segment of the framework may be utilized for a variety of theoretical and policy-relevant pursuits. To cite one specific example, the situational dimension could be singled out for intensive analysis. Events of high threat, low time for response, and high awareness (i.e., crises) may be posited to be independent variables which affect factors in the component realm of the framework. The framework could thus be employed for research into the dynamics of international security crises.

D. CONCLUSION

The overarching framework has now been constructed and the operationalization task has been initiated. Operationalization will continue to occupy the second year of research; analysis will be conducted during the third year of research.

The strategy of constructing a comprehensive, comparative, operationalizable, and policy-relevant framework for analysis has been productive. The framework has already served the important function of organizing a mass of disparate research. The explicit, painstaking conceptualization of type of state and type of event factors has yielded two classificatory schemes which represent a distinct improvement over earlier formulations.
Operationalization is both a challenge and a prelude. The task is challenging because preceding work has been so haphazard and undisciplined. But the conversion of conceptual phenomena into actual variables is crucial for the impending analytical phase of research. Unlike most earlier efforts, this framework will be subjected to the two crucial tests—operationalization and analysis. The failure to conduct these tests would simply reinforce the pervasive lack of progress in the scientific study of foreign policy. The implementation of a comprehensive framework offers the hope that foreign policy research can become both intellectually stimulating and practically useful.
FOOTNOTES

While the operationalization phase of the Interstate Behavior Analysis Project is still in its early stages, a number of individuals have already been of invaluable assistance. Arthur Banks of the Center for Comparative Political Research at the State University of New York at Binghamton has graciously responded with alacrity to several requests for substantial amounts of data. Joyce Kaufman of the Inter-University Consortium for Political Research has also been an excellent source of advice and assistance. IBA Project personnel—including Dorette Feit, Robert McCauley, and Patricia Waldron—have cheerfully and competently initiated the arduous processes of data collection, assembly, and analysis. Appreciation is also extended to Kitty Arbor for typing the manuscript and assuming a vast number of crucial administrative duties.

Stephen J. Andriole, a Principal Investigator and Co-Director of the IBA Project, was and continues to be a source of inspiration and advice.

1 The major frameworks are described and assessed in Andriole et al. (1975a).

2 One exception is the Brecher framework, which has been operationalized for the case of Israel (see Brecher, 1972). While the Rosenau framework has continued to attract attention and has served as a stimulus for subsequent inquiry, no effort has been made to operationalize and test the framework per se.

3 This point is discussed in detail in Andriole (1975a).

4 The distinction between the two forms of analysis is explicated in detail in Hopple (1975f).

5 Relevance and framework-construction are discussed in Andriole (1975a, 1975g).

6 On components, see Hopple (1975a). Each component is discussed in detail in various IBA research reports; see Hopple (1975d, 1975e, 1974a, 1974b) and Andriole (1975e, 1975f).
Each component could be analyzed intensively. In-depth scrutiny would entail the exhaustive specification of each variable area within a component. For analysis of the entire framework, this strategy would be time-consuming and unproductive. Since belief systems can be measured more easily than psychodynamic and personality trait variables, the focus will be on decision-maker belief systems. This choice is justified in Hopple (1975c).

The classificatory scheme of events is discussed in detail in Andriole (1975b, 1975c).

Ironically, most foreign policy analysts have failed to define their key analytical unit, as Kegley (1973: 8) notes in a lucid passage on the problem. Varying definitions are presented in Hermann (1972), Kegley (1973), and Salmore and Munton (1974).

Figure 5 illustrates source and responsive process analysis. Initiative process analysis is illustrated in Figure 15-A of Andriole (1975a); in this form of foreign policy analysis, the components are sources of decision stimuli (the independent variables) as well as dependent variables which may be affected by the foreign policy process.
Obviously, the delineation of the proper scope of a field of inquiry is crucial. It should be noted that effectuation or implementation and feedback may both be incorporated into process analyses.

Other forms of policy-relevant inquiry can also be gleaned from the framework. Case studies, which are generally of more immediate value to policy-makers who are confronting a specific adversary in a specific situation, can be conducted by using the framework as an organizational device for case study data. Ultimately, the accumulation of comparative case study data would be of immeasurable value.

Furthermore, the various quantitative data sets are not comparable. For example, a domestic conflict data set may exist for one sample of countries and time periods while an alliance data set exists for a different set of national systems and time periods.

The case study literature is summarized in Haas (1974).

Elements of the framework are applied to India's foreign policy behavior; see Brecher (1963).

As noted, this criticism has been directed at the mammoth framework of Snyder et al. (1962).

As noted, case studies can be profitably conducted as an adjunct to quantitative research. From a policy-relevance perspective, case studies are more realistic and address the concerns of decision-makers in a more direct fashion. Comparative case study data on crises (involving different issues and actors) would be of immense value to the policy community. From a theoretical or scientific vantage point, case studies can be used to prune down the list of factors. For example, prior case studies suggest that interest groups rarely play a determinative role in the foreign policy process and exert an impact only in a few issue areas (see Cohen, 1957, 1959; Hopple, 1974a; Milbrath, 1967).
19 This assumption certainly does not preclude the consideration of other actors. Both subnational units (such as accessionist movements and interest groups) and supranational units (such as multinational corporations and various intergovernmental organizations) can impact upon foreign policy behavior. In fact, non-state actors may initiate and receive foreign policy behaviors. The focus of the IR research, however, is on "sovereign states."

20 Such independent validity evidence would be derived from other source material (biographies, memoirs, speeches to different audiences, etc.) for each member of the foreign policy elite sample. Obviously, this task would be too time-consuming and expensive in comparative research involving many systems.

21 The literature is reviewed in Hopple (1975c). The major comparative research includes the Stanford content analytic studies of the 1914 crisis and the Cuban missile crisis (see Holsti, 1972).

22 When the data are amassed, it would be possible to measure values (and compare rankings) within populations and across systems at mass and elite levels. Internal mass-elite discrepancies may predict to instability in foreign policy goals and behavior. Differences in value rankings across systems may be associated with differences in foreign policy behavior and may predict to conflict between states. Across time, value ranking differences may be expected to fluctuate; such trends would both shape foreign policy behavior and reflect prior changes in systemic characteristics. The probable value homogeneity of European foreign policy elites in 1815 and the expected value heterogeneity of the same elite group in 1939 furnishes an illustration.

23 The previously specified distinction between type of state (static national attributes) and component variables should be reemphasized. As noted, the type of state variable cluster is posited to be intervening in nature whereas compo-
nents generate independent variables (in the case of source analysis). Generally, factors that can be conceptualized as rates and trends (such as rate of population increase) are assigned to the components.
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II. PAPERS

A. RESEARCH REPORTS


IEA Research Report #3: Gerald W. Hopple, "Internal Political Variables and the Comparative Study of Foreign Policy: A Framework for Research and Analysis."

IEA Research Report #4: Gerald W. Hopple, "The Societal Component and the Comparative Study of Foreign Policy."

IEA Research Report #5: Stephen J. Andriole, "Interstate Realities and the Conduct of Foreign Policy."

IEA Research Report #6: Stephen J. Andriole, "Global Systemic Variables and the Comparative Study of Foreign Policy."


IEA Research Report #10: Gerald W. Hopple, "Public Opinion and the Comparative Study of Foreign Policy."


IBA Research Report #14: Stephen J. Andriole, "General Coding Instructions: Typology of States."


IBA Research Report #16: Gerald W. Hopple, "Psychological Sources of Foreign Policy Behavior: The Belief Systems Approach and Content Analysis."


B. Working Papers


IBA Working Paper #2: Gerald W. Hopple, "The Psychological Component and the Comparative Study of Foreign Policy: The 'Relative Irrelevance' of Two Types of Sources."


III. REPORT SUMMARY

A. Technical Problems

The International Behavior Analysis (IBA) Project has been conceived as a long range research project designed to provide explanatory and predictive insight into the actions and interactions of nations. More specifically, the project has been designed to explain and predict how, when, and why certain nations are likely to act in response to certain sets of internal (domestic) and external (foreign) stimuli.

Since a whole host of analysts have attempted to explain and predict international behavior with little or no real success, it was decided early in the conceptual stages of the IBA Project to construct an overarching analytical framework. Such construction was posited as necessary to the organization and integration of the seemingly endless number of factors to be considered in the analysis of international behavior. Additionally, framework construction was posited as a device for the organization of research activities.

The crucial task of operationalization has been initiated during the first half of the second contract year. Specifically, data are being assembled for the three major areas of the previously constructed framework—component variables, type of state, and type of foreign policy.

B. General Methodology

The overarching framework was constructed with operationalization as an explicit eventual goal. The methodological orientation of the IBA Project is intentionally eclectic. The arbitrary selection of a specific methodology imposes constraints on any research endeavor. Specific methodologies during the operationalization phase include content analysis and events data. Since existing data collections are employed whenever possible, the acquisition, assembly, and refinement of available data sets have been important tasks during this contract period. Some new data (primarily psychological in nature) will also be generated. When the various elements of the framework have been converted from conceptual to operational phenomena, analysis can be undertaken.

C. Technical Results

The first year of research involved the construction and refinement of the overarching framework for analysis. During this process, five source-process components and two classificatory schemes (nations and international actions) were identified and specified (see PART I, section I-B). In addition, the distinction between source analysis and process analysis was developed (see PART I, sections I-B-1 and I-B-4).

The first half of the second contract year has involved the initiation of the operationalization and data assembly tasks (see PART I, section I-C). Spatio-temporal parameters (36 nations, 1966 to 1970) were selected (see PART I, section I-C-1). In addition, it was decided to accord more emphasis to a special subset of ten significant nations. The research will thus be explicitly comparative but will also focus on "major" actors. This will enhance the policy-relevance potential of the final research product.
Each element of the framework has now been specified, refined, and defined operationally. Actual data assembly has also been initiated. The source variable components are being transformed into measured phenomena (see PART I, section I-C-2). The data for the classificatory schemes of nations and international actions have already been amassed (see PART I, sections I-C-3 and I-C-4). The operationalization task is being realized.

D. Implications for Future Research

The IEA Project has already constructed an analytical framework which represents a superior vehicle when it is compared with competing frameworks. Furthermore, the framework has been designed to be more than an abstract conceptual exercise. Unlike most frameworks, then, the source-process component framework will be operationalized and tested. Operationalization and data assembly are the primary tasks of the second year. These tasks consist of the following specific endeavors.

(1) Operationalized definitions will be assigned to variable components, the typology of nations, and the typology of events. Each component has already been delineated exhaustively and specific variables have been identified. During the second year, each of these variables will be defined operationally. The initial phase of the second year of research will also entail a "clean-up" operation to ensure that all potentially relevant specific variables have been identified and defined operationally. The two typologies will also be converted from conceptual to measurable phenomena.

(2) Previously collected data will be assembled. Most of this phase will concentrate on the WEIS data set.

(3) Data assembly operations will also be completed. Some new data, primarily psychological in nature, will be generated.

(4) The final task of the second year is the designing and testing of data handling computer programs. This is an obvious precondition for the hypothesis testing which will be the focus of the third year of research activity.

The framework has proved to be conceptually stimulating and empirically productive. A key implication for future research is the versatility of the framework. The framework can be employed for a diverse array of scientific and policy-relevant purposes. Among these are the functions of directing inquiry, organizing previous research, and suggesting future research. The framework can also be adapted for research with direct relevance to the policy community. An example is the potential applicability to research on various crisis situations.

Analysis is the final goal of the IEA Project. Strategies are already being devised for the implementation of this task. The specific objectives of the third year are listed below.
Primary and subsidiary tasks of year 3: Analysis

(1) Cross-national hypothesis testing.
(2) Case-study hypothesis testing.
(3) Dissemination of results.