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AD-A015 721

CRISIS INVENTORY

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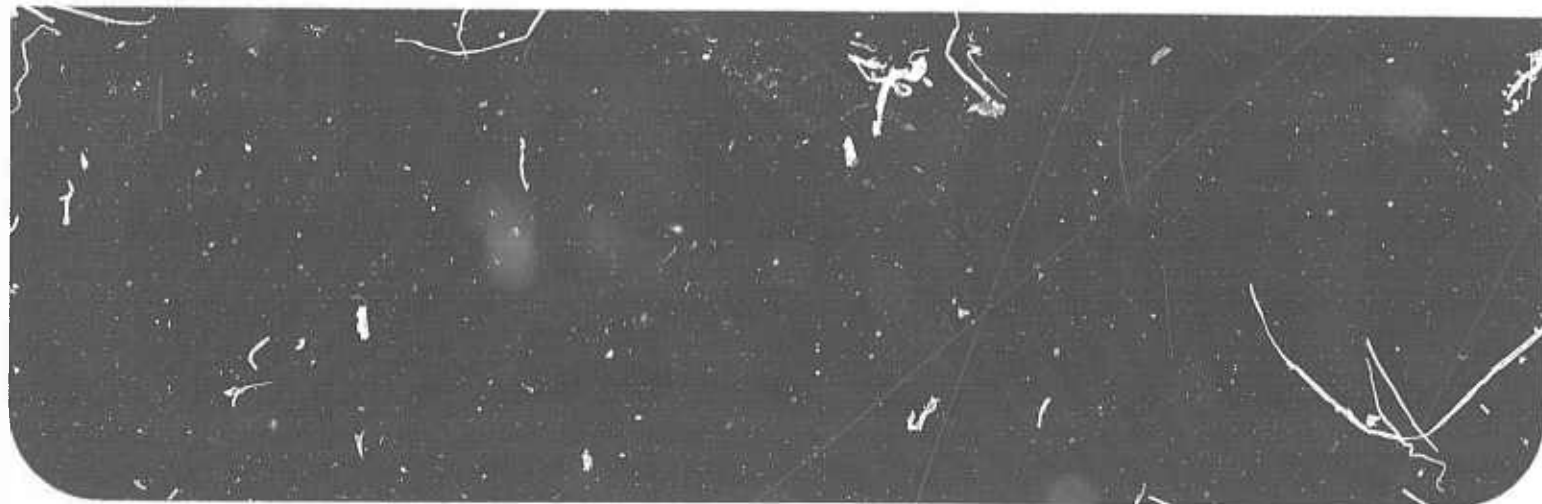
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER DDIA-015-721
4. TITLE (and Subtitle) Crisis Inventory		5. TYPE OF REPORT & PERIOD COVERED Final Report, 1 January 1975-30 June 1975
7. AUTHOR(s) James A. Moore, <u>et al.</u>		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS CACI, Inc.-Federal 1815 North Fort Myer Drive Arlington, Virginia 22209		8. CONTRACT OR GRANT NUMBER(s) N00014-75-C-0627
11. CONTROLLING OFFICE NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 452
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) ARPA		12. REPORT DATE August 1975
		13. NUMBER OF PAGES 122
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) PRICES SUBJECT TO CHANGE		
18. SUPPLEMENTARY NOTES Reproduced by NATIONAL TECHNICAL INFORMATION SERVICE U.S. Department of Commerce Springfield, VA 22151		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) crisis, international crisis, typology, foreign domestic crisis, national security, systemic definition, decision-making definition, violence, country-pair, issue, crisis data file		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The work reported is principally concerned with the development of an international crisis typology whose classes are distinguished by important policy and theoretical differences. The objective of the research is to provide a basis for conducting and organizing research on different classes of crises. The report presents a definition of international crisis, identifies 72 international crises in the post-World War II era and		

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presents extensive data on each. These data include brief narrative summaries as well as quantitative data on 22 variables that are important from a policy and/or theoretical perspective. These variables are reduced to a smaller number and their post-war trends are described. Implications of trends for crisis planning are drawn.

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WASHINGTON, D.C. OFFICES

FINAL REPORT

August 1975

CRISIS INVENTORY

Sponsored by:

Defense Advanced Research Projects Agency

ARPA Order Number	2928
Program Code Number	5W10K52
Contractor	CACI, Inc.-Federal 1815 North Fort Myer Drive Arlington, Virginia 22209
Effective Date of Contract	1 January 1975
Expiration Date of Contract	30 June 1975
Contract Number	N00014-75-C-0627
Principal Investigator	James A. Moore (805) 965-0076

This research was supported by the Defense Advanced Research Projects Agency of the Department of Defense and was monitored by ONR under Contract No. N00014-75-C-0627. 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 Defense Advanced Research Projects Agency or the U.S. Government.

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PREFACE

This report describes research performed for the Defense Advanced Research Projects Agency, Human Resources Research Office, on the development of an international crisis typology for use in conducting and organizing research on crisis prediction and management. The report describes accomplishments for the period 1 January 1975 through 30 June 1975.

The work reported herein is principally concerned with the development of an international crisis typology whose classes are distinguished by important policy and theoretical differences. The objective of the research is to provide a basis for conducting and organizing research on different classes of crises.

The work should be of interest to all agencies concerned with prediction, planning, and management with respect to international crises.

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I. SUMMARY

PROJECT OBJECTIVES

This project reflects ARPA's interest in creating useful knowledge about international crises -- episodes whose outcomes may have important effects on the future of individual nation-states and the direction of the international system. Knowledge about international crises is useful if it assists planners and policy-makers in the difficult task of anticipating and planning for crises, in anticipating the likely behavior of governments should crises arise, and in managing crises.

One of the initial components of a program of research on international crises is the historical record needed to focus research. This involves compiling an inventory of prior cases of international crises, organizing these into classes that can be subjects of future research and describing trends in the occurrence of crises. Accordingly, three objectives of the current study are: to construct an inventory of post-World War II international crises, to typologize the crises on the basis of dimensions useful for organizing research, and to analyze trends in the occurrence of different types of international crises.

Construction of a crisis inventory involves (a) definition of a crisis so that identification of cases is possible, (b) selection of a strategy for identifying crises from the universe of potential data sources, and (c) compilation of relevant events from the historical record. The definition adopted for this study was that "an international crisis occurs when behavior between nations emerges that is unusually threatening of violence and that is carried on in a sustained fashion under conditions of rapid action and response." Given this definition and alternative empirical operationalizations of it, the research team consulted a variety of international yearbooks and other historical sources, from which 72 international crises in the post-World War II period were identified.

The next step involves specification of a typology of crises. To be useful for the purpose of organizing future research, the typology should identify crises sharing important characteristics from a policy perspective and also from a theoretical perspective. The policy criterion requires that the typology identify crisis-types of particular interest to policy-makers and planners, for example, major-power crises and crises involving allies of the United States. With the assistance of the typology, future research can be organized along lines of policy interest. Policy-makers and planners may be assisted by knowledge, for example, of the types of management techniques that are most effective in major-power crises, or they may wish to know the type of behavior to expect in a given type of crisis. Hence, a second criterion is applicable to the selection of dimensions. This second criterion, referred to as the theoretical criterion, requires that the dimensions assist policy-makers and planners in formulating correct predictions or plans for crisis episodes. Thus, dimensions which are theoretically related to crisis behavior patterns also serve as useful bases in organizing research.

The policy and theoretical criteria overlap to a considerable degree. For example, a policy-maker may wish to concentrate attention on major-power crises. There is good theoretical justification for expecting such crises to evolve differently than crises between a major and a minor power. There is also theoretical justification for hypothesizing that other dimensions of less immediate policy interest can affect the course of a crisis or the impact of different crisis management efforts. For example, the extent of economic and organizational integration between two countries may influence their interactions. Thus, these dimensions also should be included in a crisis typology. The inclusion of such dimensions does not detract from the policy relevance of the typology, but potentially enhances the ability of research to provide needed answers to policy questions. For example, future research could determine the likely behavior patterns of nations in major-power crises, and might further discover important differences in major-power crises dependent on the degree of economic and organizational integration between the countries. Research questions can always be put in terms of dimensions relevant

to a particular policy-interest at a particular time. The presence of additional dimensions makes possible some further research probes that may result in additional useful information. The report therefore identifies dimensions of crisis situations that reflect basic discriminations of likely policy import and dimensions having theoretical import as well. Twenty-two such dimensions have been identified, and data on each have been compiled for each crisis identified in the post-war era.

The remainder of this section summarizes the research carried out in this project. Detailed discussion of the work performed and results obtained are organized around the task statements, and are reported in Sections III through VIII.

ASPECTS OF WORK STATEMENT COVERED IN THIS REPORT

The Work Statement of this project calls for the selection of a definition of crisis, the construction of an inventory of post-war international crises, selection of crisis dimensions and construction of a crisis taxonomy, and analysis of the structure and trends in data collection on the selected dimensions. The following tasks were completed:

- Definition of international crisis was formulated and operationalized;
- An inventory of 72 international crises involving 93 selected country-pairs was compiled;
- Data on 22 selected crisis dimensions for each crisis were collected;
- The number of variables was reduced through an analysis of associations among them;
- Trends in the reduced number of variables were described;
- Implications of the research for U.S. crisis management were illustrated, using the crisis trend analysis as a base and focusing on policy relevant issues.

DEFINITION OF INTERNATIONAL CRISIS

Two criteria guided the selection of a definition for international crisis. First, the conditions required for a situation to be identified as a crisis had to be observable in available historical records. Second, the definition had to encompass episodes and situations which ordinarily are regarded as having been international crises.

International crises first were distinguished from other types of national security crises. A national security crisis arises from occurrences anywhere which pose a potential and fairly immediate threat to security. These can include foreign domestic crises, including situations within other nations that threaten U.S. interests abroad; domestic U.S. crises, including major civil disturbances or even power failures which leave the nation unprepared to respond to foreign threats; and international crises, which are threatening situations that develop between countries.

Two types of definitions of international crisis were considered. A "foreign policy" or "decision-making" type of definition is based on the perceptions of decision-makers. It identifies a situation as a crisis if decision-makers perceive a high threat, short decision-time and are surprised at the occurrence of the situation (Hermann, 1969a and 1969b). A "systemic" definition is based on the presence or absence of developments which may alter important systemic conditions, irrespective of whether and in what light those developments are perceived (McClelland, 1972). Both types of definitions were found to satisfy the two criteria imposed on the selection of a definition. Because there are good reasons to believe that most "systemic" crises also are decision-making crises, it was decided to utilize a systemic definition on the assumption that the situations thereby identified as crises would include a large proportion of "decision-making" crises as well.

A systemic definition therefore was formulated. In non-technical terms, the definition is as follows: "An international crisis occurs when behavior between nations emerges that is unusually threatening of violence and that

is carried on in a sustained fashion under conditions of rapid action and response." Operational interpretations of the definition were specified and these led to the identification of several post-war international crises.

CRISES IDENTIFIED

A total of 72 international crises were identified. Brief historical descriptions of these are presented in Section IV. There were two steps in the identification process. First, a large list of 190 possible crises was constructed from extant partial lists of "critical situations," "conflicts," "crises" and so forth, and from a review of relevant yearbooks. Second, each possible crisis was investigated in a daily news source to determine if the definitional criteria were met. If they were met, the crisis was noted along with the countries involved and the date boundaries of the crisis period. In addition, short descriptions of the crises were produced.

Subsequently, the cases were organized into crisis "country-pairs." A given crisis may involve several pairs of opposing countries. For example, Mideast crises have involved Egypt and Israel on opposing sides, as well as other opposing pairs such as Syria and Israel. The advantage of organizing the cases in this fashion is that information on the particular dyadic relationships can be brought to bear in research on crises. For example, the dyadic approach allows identification of the power relationship of various country pairs in crises. This in turn provides a basis for researching the impact of different power comparisons on crisis behavior, management or outcomes. The contextual information that a given crisis country-pair was extracted from a multi-nation crisis was not lost, however. A variable in the crisis dimensions identifies country-pairs according to which multi-nation crisis situations they belong, if any. A total of 93 crisis country-pairs are included in the inventory.

SELECTED CRISIS VARIABLES

Two criteria were applied to the selection of variables as potential dimensions of the crisis typology. Variables were required to be of potential policy interest and/or of potential theoretical import, as discussed above. A large number of variables derived from relevant literature and from consultations with representatives of the funding agency were initially considered. Twenty-two major variable dimensions were selected.

CRISIS DATA FILE AND ANALYSIS

Section VII presents the data compiled for each country-pair on the selected variables. These data were analyzed to reduce the necessary number for an adequate description of past trends; then those trends were described and discussed. Implications of trends for U.S. crisis management are suggested.

II. ASPECTS OF WORK STATEMENT COVERED IN THIS REPORT

The Contract Work Statement contains six tasks:

1. Select alternative definitions of crisis and determine dimensions of crisis situations that are related to the selection of effective crisis prediction and management techniques. Relevant literature shall be reviewed for this purpose.
2. Develop a taxonomy of crises.
3. Survey primary and secondary sources for compiling an inventory of international crises that occurred during the period 1946-1973 and that provides samples for each category of the taxonomy developed.
4. Typologize international crises along dimensions having policy and theoretical import.
5. Draw upon extant data collections for creating a crisis data file containing selected international crises for the period 1946-1973 as cases and the selected crisis dimensions as variables. Variables to be included will be selected in consultation with the COTR.
6. Analyze and describe the structure and trends in the crisis data file. Emphasis will be placed upon the analyses that delineate implications for crisis anticipation and crisis management.

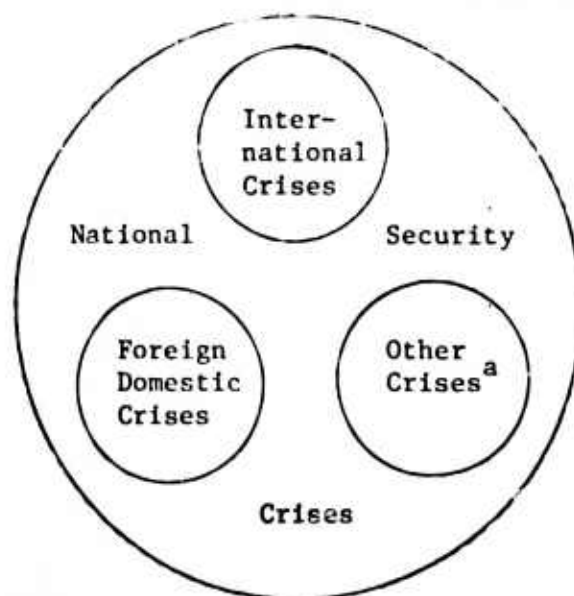
All tasks have been completed and are reported in Sections III through VIII.

III. DEFINITION OF INTERNATIONAL CRISIS

GENERAL CONSIDERATIONS

Individuals whose professional concern is national security will attest that national security crises consist of occurrences anywhere that pose a potential and fairly immediate threat to security. Such occurrences can be of domestic, foreign, or international origin. Domestic occurrences could include, for example, civil disturbances or major power failures that leave the nation insufficiently able to respond to foreign intrusions. Foreign domestic occurrences would include governmental instability or other situations within other nations that threaten U.S. interests abroad. An international crisis is distinguished from domestic and foreign crises primarily by the fact that it involves threatening occurrences between nation-states. For example, the Cuban Missile Crisis was an international crisis in that the escalation of hostility between the two superpowers threatened both.

Figure 1 illustrates a classification of national security crises. The subject of the present study is international crises.



^a These "other" crises include internal crises and -- with foreign domestic crises -- are not included in this study.

Figure 1. National Security Crises

DEFINING INTERNATIONAL CRISIS: CRITERIA OF EMPIRICAL IMPORT, SYSTEMATIC IMPORT, AND EXPLICATION

Carl Hempel (1952) proposes that good scientific concepts should possess two qualities: empirical import and systematic import. A concept has empirical import when observable indicators of the concept are specified; it has systematic, or theoretical, import when it functions in some larger theoretical network of concepts.

Empirical import, in and of itself, is insufficient to ensure that a concept is useful in scientific analysis. Concepts having empirical import can be defined endlessly and in various ways. Consider, for example, the concept "hage" defined as the product of height and age. By definition, its utility in scientific inquiry is dubious, since "even though it would have relatively high precision and uniformity in usage" the concept lacks theoretical import, for "we have no general laws connecting the hage of a person with other characteristics" (Hempel, 1952: 46).

Concepts having systematic import "permit the establishment of explanatory and predictive principles in the form of general laws or theories. Loosely speaking, the systematic import of a set of theoretical terms is determined by the scope, the degree of factual confirmation, and the formal simplicity of the general principles in which they function" (Hempel, 1952: 46).

In selecting a definition of international crisis, these criteria are applied to extant literature on the subject. The aim is to select a definition that exhibits empirical and systematic import. However, an additional constraint is imposed: that is, that the definition be an explication of the general usage of the term "crisis." Explication "is concerned with expressions whose meaning in conversational language or even in scientific discourse is more or less vague," and aims at enhancing "the clarity and precision of their meanings as well as their ability to function in hypotheses and theories with explanatory and predictive force" (Hempel, 1952: 11-12). The explication of a concept "must permit us to formulate...

at least a large part of what is customarily expressed" by the term under consideration (Hempel, 1952: 11).

Thus, in the present study the selected definition of crisis must not only have empirical and systematic import, but also must encompass at least a large part of what ordinarily are considered to be international crises. Two types of definitions meet the criteria in approximately the same degree.

SYSTEMIC AND DECISION-MAKING DEFINITIONS OF INTERNATIONAL CRISIS

The literature on international crisis identifies two types of definitions which may be said to have a degree of theoretical and empirical import and which also cover a large number of situations regarded in ordinary discourse as crises.¹ The two generally are referred to as systemic and decision-making definitions (McClelland, 1972 and Hermann, 1969a and 1969b).

As Charles McClelland noted at the 1967 Princeton symposium on international crisis, the two different definitions stem from fundamentally different conceptions of the subject matter of international affairs (Hermann, 1972a: 7). James Rosenau identifies the two different conceptions in this way:

One group of theorists and researchers are interested in discerning regularities in the behavior of actors, in the common goals that are sought, in the means and processes through which the goal-seeking behavior is sustained, and in the societal sources of the goals and means selected. In other words, the members of this group are concerned with the study of foreign policy, and they tend to regard the condition of the international system at any moment in time as stemming from the foreign policy actions of nation-states. A second group of theorists and researchers are mainly concerned with the patterns that

¹ This project takes as a point of departure the most recent assessments of the concept of crisis. See Hermann (1969a) and Robinson (1972) for recent appraisals that form the basis for this section.

recur in the interactions of states, in the balances and imbalances that develop under varying circumstances, in the formation of coalitions and other factors that precipitate changes in the international system, and in the development of supranational institutions that might regulate one or another aspect of the international system. Stated differently, adherents of this approach are concerned with the study of international politics... (1969: xviii).

Foreign policy theory and research tends to focus on intra-nation phenomena and their linkages to international behavior, while international system theory and research is concerned mainly with inter-nation phenomena (McClelland, 1972: 86). It is not surprising, then, that the two perspectives on the subject matter give rise to different conceptions of what constitutes an international crisis.

McClelland defines crisis from a systemic perspective, emphasizing inter-unit phenomena: "a crisis is, in some way, a 'change of state' in the flow of international political actions" (1968: 160). Oran Young also emphasizes inter-unit phenomena and their potential effects on subsequent activity: "an international crisis...is a set of rapidly unfolding events which raises the impact of destabilizing forces in the general international system or any of its subsystems substantially above 'normal'... and increases the likelihood of violence occurring in the system" (1967: 10).

Charles Hermann, on the other hand, focuses a definition of crisis on intra-nation phenomena, specifically the perceptions of foreign policy decision-makers: "a crisis is a situation that (1) threatens high priority goals of the decision-making unit, (2) restricts the amount of time available for responses before the decision is transformed, and (3) surprises the members of the decision-making unit by its occurrence" (1969b: 414). Hermann's "proposed definition clearly refers to the decision-maker's perceptions of crisis situations" (1969b: 414).²

² See, for crisis definitions from a systemic point of view, Tanter, 1972; Miller, 1963; Triska, 1964; Young, 1967; McClelland, 1968 and 1972; and North, 1963. For definitions from a decision-making point of view, see Turner, 1969; Hermann, 1969a and 1969b; Paige, 1969; and Holsti, 1972.

Both systemic and decision-making definitions meet the criteria stated in the previous section for consideration in this study. With respect to systematic import, crises as defined in both modes are theoretically related to other empirical phenomena. McClelland (1968) suggests that systems under stress will load or strain their subsystems. System change is expected to produce changes of state -- or crises -- in international subsystems. Hermann (1969a) hypothesizes that a crisis, defined from the decision-making perspective, tends to result in a particular type of decision-making process.

Neither definition, then, is mindlessly "operational." Furthermore, both definitions have empirical import. In principle, changes of state in event flow are measurable, as are the perceptions of decision-makers and both types of measures have been taken in prior research (for example, Hermann, 1972b; Holsti, 1972; McClelland, 1968).

Finally, both definitions encompass situations ordinarily referred to as crises. Holsti (1972), following Hermann's definition, identifies the pre-World War I and Cuban missile situations as crises. Hermann, in addition, finds that his definition covers the Korean situation in 1950 from the perspective of U.S. decision-makers (1969b; see also Paige, 1972). McClelland's research using the systemic definition leads him to identify the 1948 and 1961 Berlin situations as crises in addition to several episodes in the Taiwan Straits that ordinarily are considered crises.

THE APPROACH OF THE PRESENT STUDY

If two prominent but different types of definitions of crisis meet or approximate the criterion of a "good" definition, how can a choice between them be made? This problem caused difficulties in the project where the task was to compile an inventory of crisis cases for future general research purposes, that is, for research not necessarily in only one or only the other of the two perspectives of international systems and foreign policy.

If the theoretical focus were constrained to one perspective, the choice clearly would be the type of definition having greater theoretical import in that perspective. However, the present study seeks to remain as general as possible in this respect. Fortunately, there are two good reasons to suspect most situations identified as systemic crises probably also are decision-making crises, so that an inventory of systemic crises would include a large number of crises from the decision-making perspective as well.

First, the prior research of the Stanford Studies in International Conflict and Integration suggests that perceptual phenomena are linked to systemic phenomena. The actions of one nation influence the perceptions of another's decision-makers, and those perceptions are linked to subsequent behavior (Zinnes, 1972). This raises the likelihood of considerable overlap in the situations identified as crises from the two perspectives. According to the Stanford findings, changes in events toward the direction of violent confrontation would tend to be reflected in the perceptions of involved decision-makers.

Second, we know that a systemic definition encompasses situations that are crises in decision-making terms. For example, as noted previously, the decision-making definition identifies the Korean, Cuban, and pre-World War I situations as crises. Each of these situations clearly would be identified by a systemic definition as well, for each involved a change of state in the flow of international actions that appeared to increase the likelihood of violence in the system. This study, then, uses a systemic definition to identify international crises in the expectation that a large proportion of the episodes identified as systemic crises also are decision-making crises for the involved foreign policy actors.³

³ In the process of reviewing the histories of identified systemic crises, an effort was made to estimate the extent to which Hermann's three criteria -- surprise, threat to vital interest, and limited decision time -- were met. Researchers were unable to make confident estimates on the basis of available sources, however, suggesting a limit on the utility of his operational definition.

A SYSTEMIC DEFINITION OF INTERNATIONAL CRISIS

The following questions reveal major elements of systemic definitions of international crisis:

McClelland (1968): "A crisis is, in some way, a 'change of state' in the flow of international political actions."

McClelland (1972): "A crisis refers to both a real prelude to war and an averted approach toward war."

Young (1967): "An international crisis... is a set of rapidly unfolding events which raises the impact of destabilizing forces in the general international system or any of its subsystems substantially above 'normal'... and increases the likelihood of violence occurring in the system."

Triska, et al. (1964): A crisis is "an extraordinary, nonroutine, abnormal situation...result of negative input ...accelerating paces...quickenning responses, disbalancing stabilities, and containing elements of danger of war."

The definitions above specify various systemic characteristics of crisis:

- Changes of state in international political actions
- Approaches toward war
- Rapidly unfolding events
- Increases in the likelihood of war
- Abnormality

This section incorporates these characteristics into a definition having the general theoretical import of systemic approaches and having the additional advantage of being phrased in the terminology of interaction systems. The phrasing allows the various elements in the definition to be formulated in a common theoretical language of international systems. It is also readily translated into non-technical terminology.

In the systemic perspective, crisis is regarded in part as a point in time when international behavior changes to an unusual degree in the direction of violence. For McClelland this behavior is an approach toward but not necessarily into war; for Young, it increases the likelihood of violence; for Triska, it contains elements of the danger of war.

The definitions describe situations in which new occurrences in a system place in doubt whether the system will continue to function without violence or break down into violence. In this respect the systemic conception of crisis is similar to the one in medical science, which defines crisis at a point in time when the outcome of a struggle between some foreign bodies and antibodies "is in grave doubt" (North, et al., 1963: 4).

It can be seen in systemic terms why an unusual movement of a system (for example, between nations in a dyad) toward the violent end of a spectrum of activity causes serious doubt about the outcome of such behavior. Adopting, appropriately, the systemic perspective of two actors in interaction, we can illustrate (following Pruitt, 1969) that an unusual movement raises doubts about outcomes. Figure 2 contains a possible interaction system involving two nations.

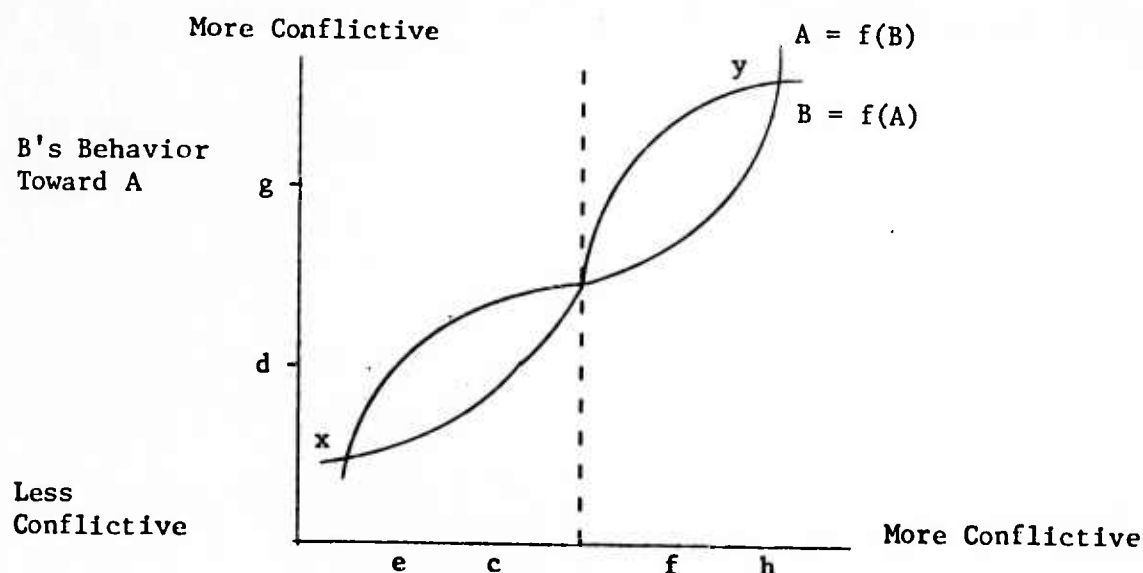


Figure 2. Two Nation Interaction System

The figure shows reaction functions for each of two nations' (A and B) reactions to the behavior of the other nation. For example, the line labeled $A = f(B)$ represents A's reactions to B's behavior. Behavior is on a dimension ranging from less conflictive action (at the origin) to violence (at the end). The points at which the two reaction functions intersect are equilibria.

Assume that the behavior of the two nations is at point X (the lower equilibrium). The point at which the nations are located in this space is called the "joint location." If, due to a "momentary force" acting on one nation, the joint location moves to the right of the lower equilibrium but not beyond the vertical dashed line, the dynamics of the interaction system will carry both actors back to the lower equilibrium. For example, if A's behavior moves to the point designated "c," B's reaction will be at point "d," A's reaction will then be located at point "e," and so forth until both nations come to rest again at the lower equilibrium. The lower equilibrium thus is stable to the left of the vertical boundary.

If, however, due to the momentary force, the behavior of one of the nations moves to the right of the boundary, then the dynamics of the system will carry the nations to the upper equilibrium "Y." For example, if A's behavior moves to the point "f," B's reaction will be at point "g," and A's next behavior will be at point "h." In summary, then, as long as the joint location is to the left of the vertical boundary, the joint location oscillates around the lower equilibrium. But escalative reactions occur to the right of the boundary and move the system toward violence.⁴

One may at this point ask: What if a highly unusual change in joint location occurs? The dynamics of the system in the range of the new joint location will be unknown, or not well-known, simply because there is little experience in that range. This is likely to cause doubt about outcomes of

⁴ This example is adopted from Pruitt (1969) and is simplified for presentation here.

the situation. It is possible that the original equilibrium is stable for all ranges of behavior; possibly in the range of unusual behavior, the reaction structure will carry the system toward and into violence -- that is, a boundary may have been crossed.

It is not surprising, then, that systemic definitions of crisis tend to refer both to unusual, abnormal behavior "approaching" war, and to the danger of war or violence simultaneously. In interaction system terms we can restate these two elements of crisis as follows in a partial definition: An international crisis occurs when the joint location of nations in an interaction system moves toward the violent end of a spectrum of behavior and outside of the range within which the joint location usually is found. This definition is consistent with the conception of crisis as a change of state in the flow of international political actions, as an abnormal situation, and as a situation that is an approach toward war causing doubt about whether the outcome will be peaceful or violent. This definition does not require of crises that they "increase the likelihood of violence" (Young, 1967) in relative frequency terms. The question of whether they do or do not is one that can remain for appropriate empirical research to examine. The literature contains opposing ideas in this regard.⁵

The partial definition is incomplete in several respects. First, it could identify a crisis situation as one in which a single event moves the joint location toward violence and beyond the usual range of behavior. Most analysts of crisis behavior associate crisis with a set of events. The requirement of multiple unusual actions is understandable, since situations may not be regarded as crises when a system moves immediately back to its normal range of operation following the occurrence of just one or a few unusual events. In other words, sustained activity outside the normal range is required for there to be a crisis. The crisis definition, then, is expanded (though still unfinished) to read: An

⁵ See Wright (1972), McClelland (1961) and Waltz (1964) for the opposing opinions.

international crisis occurs when the joint location of nations in an interaction system moves toward the violent end of a spectrum of behavior, outside of the range within which the joint location usually is found, and does not immediately return to the previous normal range.

Another addition to the definition is required, for crisis as it is defined thus far does not fully meet the "explication" criterion imposed earlier. According to the current definition, when two nations, whose relations usually are quite friendly, suddenly engage in mild, but unusual, conflictive behavior that is far from violent or even threatening behavior, the situation would be a crisis. Clearly, such a situation would not be a crisis in the ordinary usage of the term. Ordinary usage would seem to require that crises involve behavior in proximity to violence, such as threats of violence. For example, the Cuban, Berlin, and Korean situations involved behavior in the vicinity of violence. We therefore incorporate into the definition a constraint that produces a better explication of the concept: the constraint that the change in joint location must propel that location into the "vicinity of violence."

The definition, still incomplete, now reads: An international crisis occurs when the joint location of nations in an interaction system moves toward the violent end of a spectrum of behavior and into the vicinity of violence, moving outside of the range within which the joint location usually is found, and not immediately returning to its previous normal range.

In order to enhance further the explication of the concept, we include the variable of time in our definition. "Rapidly unfolding events" (Young, 1967) and "accelerating paces...and quickening responses" (Triska, et al., 1964) all require the existence of restricted reaction time. A series of interactions, increasing in frequency, moving away from the normal arena of behavior toward violence may occur over an extended period of time where the intensity and increasing number of conflictive behaviors lose the characteristics of a crisis and become more routinized. Adding this aspect to the definition, it reads in its completed form: An

international crisis occurs when the joint location of nations in an interaction system moves toward the violent end of a spectrum of behavior and into the vicinity of violence, moving outside of the range within which the joint location usually is found, being sustained outside of that range under conditions of rapid actions and response.

A NON-TECHNICAL DEFINITION

A non-technical version of the definition may be specified as follows: An international crisis occurs when behavior between nations emerges that is unusually threatening of violence and that is carried on in a sustained fashion under conditions of rapid action and response.

OPERATIONALIZING THE CRISIS DEFINITION

The preceding analysis and literature integration has produced a definition containing several conditions which must exist in order for a situation to constitute an international crisis. The four conditions that must exist are:

- Behavior between the two nations is in the vicinity of violence;
- Behavior between the two nations is outside of its normal range;
- Behavior in the vicinity of violence is sustained;
- Responses between the two nations occur rapidly.

The discussion below reviews operational interpretations for each of the four conditions, one at a time.

Behavior Between the Two Nations is in the Vicinity of Violence

Different types of conflictual acts usually contain different amounts, or intensities, of conflict. A common conception is that conflictual acts can be arrayed on a dimension which ranges from low to high

intensities of conflict. Several scales have been constructed. In each of them violent actions are found at the highest ranges of intensity, with other action types more or less proximate to the poles. These scales are helpful in determining which types of acts generally are considered to be in the vicinity of violence in terms of their intensities.

A review of four such scales discussed below reveals that verbal and physical acts indicating serious considerations of the use of military options rank closely to their actual use. The occurrence of such acts as one criterion for determining the existence of a crisis is reasonable in view of the previously discussed fact that an element of crisis for most writers is in the danger of war. That danger would appear to be heightened when such acts occur.

Verbal and physical acts indicating consideration of military options include ultimata, threats and warnings of a military nature, and military mobilization.⁶ We thus would identify a situation as being in the vicinity of violence if any one of the following conditions hold:

- One nation warns another that the nation will engage in military action against the other.
- A nation threatens the other nation with military action.⁷
- A nation mobilizes military forces against the other nation.

⁶ In the Corkeley scale (Hart, 1974), military warning, ultimata, and mobilizations are close to declaration of war; in Zinnes' (1968) scale, ultimata and mobilizations are similarly positioned closely to military attacks; military mobilization and threat of attack are near Corson's (1971) category of attack; threats are close to force acts in Calhoun's scale (in McClelland, *et al.*, 1971).

⁷ The difference between a warning and a threat is that a threat is a conditional (if...then) statement while a warning is not. Ultimata are regarded as threats and thus are included implicitly in the threat category.

Behavior Between the Two Nations is Outside its Normal Range

Crises, as previously noted, represent changes of state and abnormalities in relations among nations. The observation of certain types of acts in those relations -- military warnings, threats, mobilizations -- is alone not adequate to establish that a crisis exists. Those acts must also constitute an unusual change from a more normal state of relations.

Under what circumstances are military threats, warnings, and mobilizations outside the normal range of behavior between two nations? An approximate answer is: when such acts do not occur often between the nations relative to the occurrence of other acts. An operational interpretation of the concept then would denote an act as unusual if in the past its relative frequency (in relation to all other act types) is less than some small percentage, say 5 percent or 1 percent.

This interpretation is often not very useful in practical terms. There is no worldwide international event collection for the period under study which might be used to compute such relative frequencies. Since the unusualness of events cannot be measured directly, an indirect indicator is needed. Following Blalock (1968), the research team asked what noticeable empirical occurrence would obtain if an unusual, threatening event occurred. An event of this nature would not be handled in the routine channels of the foreign policy bureaucracy but instead would be responded to at higher levels (Halperin and Kanter, 1973). As an approximation, then, an unusual, threatening event causes a response to be issued by individuals in the higher levels of the government foreign policy structure. Since crises are regarded as very exceptional circumstances, the research team assumed that responses to the associated threats came from or were directed at or involved the head of state or head of government or persons appointed by these officials for dealing specifically with the situation. Since public records usually report the names of individuals dealing with a crisis, the measures proved useful in reviewing the historical record.

Behavior in the Vicinity of Violence is Sustained

Our purpose in requiring behavior in the vicinity of violence to be sustained is to exclude episodes where aberrant behavior occurs but fails to generate much activity and is not pursued by the actors involved. Operationally, the definition required that any episode initiated by such action continue for at least two days. If this requirement was not met, then the situation was regarded as a brief aberration not qualifying as an international crisis.

Responses Between the Two Nations Occur Rapidly

How rapidly should behavioral responses occur for a situation to be classified as a crisis? While there is not explicit guidance on this point in relevant literature, it is clear that the urgency associated with the concept of crisis would require at least some reaction times to be less than one week in length. Thus we require that some reactions occurring over less than a one-week period be identified in the historical record in order for a situation to be classified as a crisis.

SUMMARY OF OPERATIONALIZATION

An international crisis exists between two nations when

- At least one of the following conditions holds:
 1. A nation warns the other nation that some aspect of a current situation will require it to engage in military action against the other;
 2. A nation threatens the other nation with military action conditional on the other's action or non-action;
 3. A nation mobilizes forces against the other nation; and
- Actions taken by each nation are initiated by, directed by, or involve the head of state or government or agents designated specifically for dealing with the episode; and

- Once in the vicinity of violence, the episode continues for at least two days: and
- Some responses occur over a period of less than one week.

Any situation which meets these operational criteria is an international crisis, whose beginning date is the first date of behavior in the vicinity of violence.

CRISIS TERMINATION

Ending dates of crises are determined according to the following rules.
A crisis terminates when:

- No actions in the vicinity of violence have occurred for a two-week period, signalling a return to more routine relations; or
- Continuing events in the vicinity of violence such as the mobilizations are discontinued; or
- Full-scale war breaks out among the nations, propelling the nations into a qualitatively different type of situation; or
- An effective agreement is made for mediation or resolution of the dispute.

IV. CRISES IDENTIFIED

INTRODUCTION

This section presents the cases of international crises identified, the crisis country-pairs selected for data collection, and a brief description of each crisis. Two decisions about the qualification of cases for inclusion were made. First, a decision was made to exclude crises whose issues were primarily colonial in nature. Especially during the 1950's and early 1960's a number of conflicts arose between colonial territories and the colonizing state, and these conflicts sometimes involved several nations. This type of conflict is largely irrelevant for the future, however, since relatively few colonies remain and few if any colonial conflicts are expected to occur in the 1970's and beyond. Thus a decision was made to include only crises between independent nation-states not involving colonial conflicts. The dates of independence for countries were identified from a publication by J.D. Singer and M. Small (1972: Table 2.2).

Second, a decision was made to exclude certain crisis country-pairs from the selected list. Several crises have involved NATO and Warsaw Pact countries on opposing sides or in conflict with other countries. In such cases, only the alliance leaders (U.S., USSR) are selected as the crisis country-pairs while the subsidiary alliance members are ignored. The reason for this decision is that the subsidiary countries tend to play a relatively less important role in such crises. A related decision was made with respect to the several Taiwan Straits crises and crises involving Cuba. In these cases the relationship of paramount importance is that between the United States and either China or the Soviet Union when these countries are involved. Thus, the crisis country-pairs selected from these crises involve only those countries.

Nearly 200 possible international crises were identified from several extant lists of "conflicts," "critical situations," "crises," and so forth, and from a survey of world affairs yearbooks.⁸ Each candidate case was reviewed to determine whether it satisfied the definitional and other criteria previously established. The determination was made after reviewing the development of the case in one or more news sources (The New York Times, The Times of London, and Hispanic American Report).

This phase of research, a major portion of the work, identified 72 international crises involving 93 crisis country-pairs. These crises and the associated country-pairs are listed below, along with a brief description of each crisis. Where two or more crises between the same nations occurred during the same year, the country-pair is labeled "A" for the first crisis, "B" for the second crisis in that year, and so forth.

CRISES IDENTIFIED

Crisis: Trieste
Dates: 6/4/46-7/15/46
Country Pair: Italy-Yugoslavia

The dispute between Italy and Yugoslavia concerned the Trieste territory located between the two countries. In June 1946, the border dispute intensified. The Italian Government declared a state of emergency, and Yugoslavia's President Tito told his forces to prepare for battle. For more than a month, charges and warnings of a serious nature continued between the two countries. The crisis subsided in July 1946.

⁸ The initial list of 190 conflicts was compiled from the following sources: Bloomfield and Beattie (1971); Bloomfield and Leiss (1967); Ivanoff (1966); Bendix (n.d.); Deitchman (1964); IBM (n.d.); Krass (1966); Raytheon (1963); Phillips and Hainline (1972); SIPRI (1970); Holsti (1966); New York Times; The Times of London; Hispanic American Report; Brittanica Yearbook. Some of these are lists extracted from reports which are not in our possession. Thus, citations in the References are incomplete for some of the above.

Crisis: Kashmir
Dates: 10/26/47-11/1/47
Country Pair: India-Pakistan

Shortly following the independence of India from England, a dispute arose between India and Pakistan over the territory of Kashmir, located between India and West Pakistan. Kashmir's deputy Prime Minister accused Pakistan of invading Kashmir. India at first declined to interfere, but a few days later Kashmir announced it would prefer to accede to India. The Government of Pakistan did not want to accept the accession of Kashmir, and there were military mobilizations on both sides. Fighting occurred between India and Pakistan, but was stopped after the United Nations arranged a cease-fire.

Crisis: China (People's Republic)-Mongolia
Dates: 6/7/47-6/20/47
Country Pair: China-Mongolia

In an ultimatum delivered from Mongolia to the Chinese Government, Mongolia called for the release of Mongolians imprisoned in China. The ultimatum warned that unless the Mongolians were released, Mongolia would retaliate. When China failed to release the prisoners, a series of Mongolian raids into Chinese territory began, leading to serious warnings from China. The raids were discontinued on June 11, and the intensity of the interaction subsided.

Crisis: Berlin Blockade
Dates: 6/24/48-5/12/49
Country Pair: USA-USSR

In June 1948, in response to alleged Western violations of the four-power agreements on Berlin, the Soviet Union stopped all remaining ground

transportation between the West and Berlin. The United States responded by launching an airlift of supplies to Berlin and imposing an economic trade blockade between East and West. Allied transport planes were buzzed by Soviet fighters intermittently until early 1949. The climax of the crisis occurred in December 1948, at which time Berlin was divided into East and West municipalities. An agreement to end the blockade was reached in May 1949.

Crisis: Costa Rica-Nicaragua
Dates: 12/3/48-1/30/49
Country Pair: Costa Rica-Nicaragua

In the midst of domestic political turmoil in Costa Rica, Rafael Calderon -- previously a Presidential candidate in Costa Rica -- led a few hundred partisans into the country from Nicaragua in an effort to spark a pro-Calderon revolution. Costa Rica's Government charged that Nicaragua was aiding Calderon, and both nations raised the possibility of warfare between them. During January and February, relations between the countries were smoothed through the offices of the O.A.S.

Crisis: Korea
Dates: 5/5/50-6/28/50
Country Pair: USA-North Korea

On May 5, 1950, a force of about 500 North Korean soldiers crossed the northeast border of South Korea, resulting in a battle between North and South Korean troops. South Korea appealed to the United States for help in case of further North Korean threats. When war broke out between North and South Korea on June 25, the United States warned that North Korean aggression threatened peace. North Korea continued to send troops to South Korea, ignoring the U.S. warning. In response to North Korea's actions, U.S. President Truman mobilized air and sea units and decided to

give support to South Korean forces. The United States ordered the Sixth Fleet to Formosa and U.S. forces to the Philippines. On June 29, U.S. bombers attacked North Korea, beginning the involvement of the United States in the Korean war.

Crisis: Ecuador-Peru
Dates: 8/12/51-9/30/51
Country Pair: Ecuador-Peru

Early in August 1951, sporadic military incidents broke out between Ecuador and Peru in a disputed border area between the two nations. The military forces of both countries were mobilized. Charges and countercharges occurred between the two sides, and public opinion became hostile in each country. The fighting and the hostility subsided at the end of September.

Crisis: Suez
Dates: 10/8/51-12/15/51
Country Pair: United Kingdom-Egypt

In the midst of a dispute regarding England's right to free passage through the Suez Canal, the Egyptian Prime Minister proposed that Egypt abrogate the Anglo-Egyptian treaty of 1936, under which British troops were stationed in the Suez Canal Zone. In response, England alerted its troops in the canal area and shipped reinforcements to the zone. Charges and countercharges occurred frequently as British troops seized various positions for defense of the canal and several small-scale clashes between British and Egyptians occurred. The crisis abated in mid-December.

Crisis: Yugoslavia-Soviet Bloc
Dates: 1/21/51-4/30/51
Country Pair: Yugoslavia-USSR

In January and February 1951, Yugoslavian leaders reported that Cominform troops were massing around Yugoslavia. Yugoslavian President Tito warned that Yugoslavia would fight any aggression. The Yugoslavian Government fortified its borders. In a note to the Yugoslavian Government, the Soviet Union said that it would continue to attack the Yugoslavian regime. More threats and increased border fortifications continued until the crisis subsided later that year.

Crisis: Kashmir
Dates: 1/21/54-5/1/54
Country Pair: India-Pakistan

In January 1954, Pakistan threatened to move troops into the territory of Kashmir unless the ongoing dispute with India over the border territory was settled. Shortly thereafter, the constituent assembly of the Indian-controlled part of Kashmir decided in favor of accession to India. India then ordered that Kashmir be brought under the Indian constitution. This act was followed by military warnings from Pakistan against India, until the dispute subsided in May.

Crisis: Quemoy
Dates: 8/14/54-9/15/54
Country Pair: USA-China (People's Republic)

In August 1954, Chinese Premier Chou En-lai, charging that Chinese nationalist planes invaded Chinese territory from Formosa, urged liberation of Formosa. On September 3, the Communists commenced heavy bombing of the Quemoy Islands. An invasion from the mainland was anticipated, but none occurred.

Crisis: Goa
Dates: 7/24/55-9/20/55
Country Pair: India-Portugal

In July 1955, several successful attempts by Indian protestors to enter the disputed Portuguese territory of Goa resulted in the collapse of relations between India and Portugal. Several lives were lost as Portuguese troops fired on the protestors. Indian troops mobilized north of Goa, and the Indian Government asked Portugal to close its consulates in India, as well as its legation in New Delhi.

Crisis: Tachens Islands
Dates: 1/21/55-3/18/55
Country Pair: USA-China (People's Republic)

In the heaviest strike ever, China bombarded the Tachens Islands in a campaign to get possession of the Straits. The United States warned China that the United States would intervene militarily if the Chinese attacked Formosa. The U.S. Seventh Fleet and U.S. jets were readied in Formosa. Taiwan abandoned the Tachens Islands, and the crisis abated.

Crisis: Costa Rica-Nicaragua
Dates: 1/9/55-1/25/55
Country Pair: Costa Rica-Nicaragua

Early in the year a group of Costa Rican rebels moved into Costa Rica from Nicaraguan territory. The rebels had the assistance of the Government of Nicaragua. Costa Rica charged Nicaragua with aiding an attempt to overthrow Costa Rica's Government. Claiming it had been provoked by Costa Rica, Nicaragua sent troops across Costa Rica's borders. Nicaraguan troops withdrew after the O.A.S. established a deadline by which the troops were required to withdraw.

Crisis: Suez
Dates: 7/26/56-11/6/56
Country Pairs: United Kingdom-Egypt
France-Egypt
Israel-Egypt

In response to the U.S. withdrawal of aid in the construction of the Aswan Dam, Egypt nationalized the Suez Canal Company. This action brought vigorous reactions from Great Britain and France, frequent users of the canal. Both Great Britain and France took financial measures against Egypt and the two governments began taking military measures -- mobilizations, dispatches of warships to the Middle East. The Israeli invasion of Egypt, followed closely by the British and French invasions, marks the beginning of the Suez War on October 29, 1956 -- a short war ending with a cease-fire on November 6.

Crisis: Hungarian Revolution
Dates: 9/14/56-11/7/56
Country Pair: Hungary-USSR

During 1956, Hungary attempted to establish a more liberal government than had existed in the previous Communist regimes in the country. The attempt at liberalization drew increasingly serious threats from the Soviet Union and other Warsaw Pact countries. Hungarian popular opposition to Soviet domination peaked in October, when the country was nearly completely liberated. However, Soviet troops eventually quelled the rebellion, and the crisis subsided.

Crisis: Burma-China Border Clashes
Dates: 7/31/56-10/3/56
Country Pair: Burma-China (People's Republic)

In July and August 1956, disputed territory along the Chinese-Burmese border was the site of Chinese military activity. The Burmese Government

protested against the Chinese incursions and mobilized its troops against China. The issue subsequently was settled in negotiations between the two countries.

Crisis: France-Tunisia
Dates: 5/22/57-9/9/57
Country Pair: France-Tunisia

In May 1957, the French-Algerian war spilled over into a French-Tunisian crisis. Tunisia was supportive of the Algerian cause, and Algerian rebels often took refuge in Tunisia, where they were pursued by French troops. Tunisia's Government ordered that French troop movements within Tunisia would require Tunisia's permission. The troops of the two countries mobilized against each other, and several clashes occurred.

Crisis: Syria-Turkey
Dates: 9/16/57-10/30/57
Country Pairs: Syria-Turkey
USA-USSR

In September 1957, Syria and the Soviet Union charged that Turkey was concentrating troops on the Syrian border and that there existed a U.S.-Turkish plot to invade Syria. Both Syria and Turkey then mobilized their armed forces. The United States warned the Soviet Union that it would stand by Turkey under the NATO agreement if Turkey were attacked. The crisis died down in the midst of a U.N. General Assembly debate on the problem.

Crisis: Morocco-Spain
Dates: 11/22/57-12/13/57
Country Pair: Morocco-Spain

In late November 1957, border mobilizations and sporadic fighting occurred on the Moroccan-Spanish West African border, prompting Spain to direct important elements of its armed forces to West Africa. The tensions were caused by a disagreement between Morocco and Spain on the fate of Ifni, a Spanish enclave. The Moroccan Government favored the cessation of Spanish occupation of Ifni, where people were in revolt against Spain. The fighting abated in December 1957.

Crisis: Indonesia-Netherlands
Dates: 12/1/57-11/30/57
Country Pair: Indonesia-Netherlands

The dispute between Indonesia and the Netherlands regarding the status of West New Guinea took on new proportions in December 1957. The Indonesian Government ordered a strike against all Dutch enterprises in Indonesia. Dutch enterprises were seized by the workers as the Indonesian Government declared it would secure the return of West New Guinea by its own strength. The crisis abated as the Dutch evacuated nationals from Indonesia and as Indonesian President Sukarno left on a vacation for reasons of health.

Crisis: Nicaragua-Honduras
Dates: 4/26/57-5/5/57
Country Pair: Nicaragua-Honduras

Following the establishment by Honduras of a new political department in a disputed border area between Honduras and Nicaragua, relations with Nicaragua became strained. As both countries sent troops to the disputed area, some armed clashes occurred, but the O.A.S. managed to obtain a cease-fire pact and a pledge from both countries to desist from further troop movements in the area.

Crisis: Lebanon
Dates: 5/14/58-8/3/58
Country Pairs: Lebanon-Egypt
USA-Egypt

In May 1958, an armed rebellion erupted in Beirut, Lebanon, and was linked to Egypt. The Lebanese Government charged Egypt with sponsoring the revolt, and appealed to the United Nations for assistance. When the Lebanese Government asked the United States for aid, the United States sent the Sixth Fleet near Lebanon and airlifted anti-riot equipment to the country. Additionally, the United States warned Egypt that it would use troops to help Lebanon preserve its independence. In response to a request from Lebanon, the United States sent the marines to help defend Lebanese independence. The crisis continued until a new government took power in Lebanon, and the United States withdrew its troops in July 1958.

Crisis: Quemoy-Matsu
Dates: 8/7/58-10/6/58
Country Pair: USA-China (People's Republic)

In August 1958, the Chinese Government again began shelling Formosa and the islands of Quemoy and Matsu off the China coast not long after Formosa had declared a state of emergency due to air and naval clashes early in the month. U.S. President Eisenhower sent help to Formosa and warned that any invasion and attempt to take over the islands would result in full U.S. intervention on behalf of Formosa. The shelling abated in October 1958, when the Chinese announced a cease-fire.

Crisis: Berlin Deadline
Dates: 11/27/58-5/11/59
Country Pair: USA-USSR

Toward the end of November 1958, the Soviet Union delivered formal ultimatums to the United States, France, and Great Britain, announcing a deadline of six months for the Western powers to vacate Berlin and demanding that Berlin become a free city. In the note, the Soviet Union said that unless its demands were met, it would conclude its own peace agreement with East Germany. During the first few months of 1959, there were repeated detentions along the Berlin autobahn and disputes over air corridor rights, accompanied by much diplomatic activity between the United States and the Soviet Union. The crisis atmosphere ended during the Geneva Foreign Minister's conference in May 1959.

Crisis: Egypt-Sudan
Dates: 2/17/58-3/2/58
Country Pair: Egypt-Sudan

In February 1958, the Egyptian Government laid claim to Sudanese territory north of the 22nd parallel and sent troops into Sudan. Both Egypt and Sudan accused each other of sending troops to the area, and expressed fear of armed clashes occurring. When attempts to negotiate failed, Sudan asked for a meeting of the U.N. Security Council, charging huge infiltration of Egyptians occurred in border areas. The United Nations postponed action when both sides promised to negotiate an end to the conflict.

Crisis: Tunisia-France
Dates: 2/8/58-2/20/58
Country Pair: Tunisia-France (A)

The continued presence of armed Algerian rebels in Tunisia led to a French aircraft raid on several Tunisian villages. In retaliation,

Tunisian forces blockaded French military bases in Tunisia. The Tunisian Government mobilized troops and demanded evacuation of all French forces in the country -- including the abandonment by French forces of the Bizerte naval base before peace could be negotiated. Tunisia appealed for U.N. help. In late February, both countries accepted offers by the United Kingdom and the United States to help in settling the dispute. The crisis died down, but the dispute was not resolved.

Crisis: Tunisia-France
Dates: 5/25/58-6/20/58
Country Pair: Tunisia-France (B)

Toward the end of May 1958, the Tunisian Government ordered total mobilization of its armed forces as a result of clashes between French troops based in Tunisia and Tunisian troops. Tunisia blockaded all French military bases in Tunisia, as France began to increase supplies sent to the bases. Charges and countercharges continued, but the tension eased. By the end of June, France agreed to withdraw all forces except those at Bizerte, and a four-month time limit for withdrawal was set.

Crisis: Haiti-Cuba
Dates: 8/15/59-8/19/59
Country Pair: Haiti-Cuba

In August 1959, Haiti alerted its armed forces for an anticipated invasion from Cuba. Following this alert, a small group of Cubans and exiled Haitians invaded Haiti, with the intention of overthrowing the existing Haitian Government. Haiti warned Cuba that the invasion would not be tolerated. The invaders were captured or killed shortly, and the dispute was referred to the O.A.S.

Crisis: Dominican Republic-Cuba
Dates: 6/24/59-7/11/59
Country Pair: Dominican Republic-Cuba

In response to a Cuban-supported invasion of the Dominican Republic, led by several hundred Dominican Republican exiles, the Dominican Republic mobilized its troops against the invaders. Cuba responded by breaking diplomatic ties with the Dominican Republic and charging the government with disregarding and violating international treaties. The Dominican Republic declared its military forces were ready for war with Cuba, but the episode abated shortly thereafter.

Crisis: Panama-Cuba
Dates: 4/16/59-5/11/59
Country Pair: Panama-Cuba

In mid-April 1959, the Panamanian Government warned against a Cuban invasion of Panama and alerted its armed forces against such a threat. A Cuban invasion took place on the Caribbean coast of Panama by a band of invaders intent on overthrowing the Panamanian Government. Cuba denied the invasion was by Cuban forces, but evidence shows that the invaders' point of departure was Cuba. The invaders were captured and subsequently returned to the Cuban Government.

Crisis: China-Nepal
Dates: 6/30/60-8/1/60
Country Pair: China (People's Republic)-Nepal

Toward the end of June 1960, Chinese troops were active in the area of the disputed Chinese-Nepali border. The Nepali Government protested to China, and China acknowledged its troops were near the border area. Nepal mobilized its troops and moved them to the Nepali-Chinese border.

Nepal charged China with border violations and warned the Chinese Government not to move troops. By August 1, China withdrew its troops from the disputed area.

Crisis: Kuwait-Iraq
Dates: 6/26/61-8/3/61
Country Pairs: Kuwait-Iraq
 United Kingdom-Iraq

When, immediately following Kuwait's independence from Britain, the Iraqi Government claimed Kuwait was an integral part of Iraq, Kuwait declared a national emergency. The United Kingdom warned Iraq not to provoke a serious problem. Kuwait formally requested military aid from the United Kingdom, and, in response, the United Kingdom sent warships and troops to the area to counter the Iraqi threats of annexation. The crisis abated when the Arab League refused to admit the Iraqi claim to Kuwait and Iraq's attention turned toward an internal revolt among Kurdish tribesmen.

Crisis: Bay of Pigs
Dates: 4/15/61-4/22/61
Country Pair: USA-USSR (A)

The Bay of Pigs crisis involved the attempt by U.S.-trained refugee groups to establish a foothold in Cuba and overthrow the Castro regime. The Cuban Government reported bombers attacked Cuban air bases, and mobilized its troops, accusing the United States of attacking Cuba. A national alert was declared by the Cuban Government. The Soviet Union warned President Kennedy that the Soviet Union would help Cuba defeat any invaders. President Kennedy in turn warned that the United States would not allow outside military intervention in the Western hemisphere. The invasion was crushed by April 20th, and the crisis abated.

Crisis: Goa
Dates: 11/27/61-12/21/61
Country Pair: India-Portugal

In November 1961, Portugal charged India with planning to attack Goa. India reported a Portuguese buildup of troops in Goa, and tension mounted over the troop buildup. In December, India sealed off its borders and charged Portugal with aggression. Portugal charged India with ordering a military buildup and accused India of threatening peace. By December 18, Indian troops invaded Goa, rejecting all appeals from the United Nations and world community. The United Nations ordered a cease-fire as India reported the capture of Goa was completed. Portugal conceded that resistance to the invasion had ended, and the crisis abated.

Crisis: Berlin Wall
Dates: 8/13/61-9/15-61
Country Pair: USA-USSR (B)

In August 1961, East German troops closed the border between East and West Berlin by erecting a wall. The Soviet Union had divisions guarding the border. The United Kingdom, France, and the United States protested to the Soviet Union against the closing of the Berlin border. The Soviet Union in turn charged the three powers with provocative actions and the abuse of rights of access to Berlin. The Soviet Government warned all Westerners to stay away from the border. The West mobilized troops along the East Berlin border to counter the attempt to control "no-man's land" on the West Berlin side of the border. The Soviet Union charged that the West violated the 1945 accord. President Kennedy rejected the Soviet charge and warned the Soviet Union that interference with allied air access would be considered aggression. By September 15, talks began, and the crisis abated.

Crisis: Cuban Missile Crisis
Dates: 10/22/62-11/3/62
Country Pair: USA-USSR

In October 1962, in response to a Soviet buildup of offensive nuclear missiles on a base in Cuba, the United States imposed a quarantine on all ships carrying offensive weapons and demanded that the missile base be closed down. The Soviet Union charged the United States with piracy and violation of international law. In the days following, several Soviet ships were boarded by the United States and allowed to pass through the blockade when found to contain cargo other than offensive missiles. After a two-week long exchange of letters between U.S. President Kennedy and Soviet leader Khrushchev, the crisis abated when the Soviet Union agreed to dismantle the Cuban bases in exchange for future talks on relations in the Western Hemisphere.

Crisis: India-China (People's Republic)
Dates: 10/20/62-11/20/62
Country Pair: India-China

During October 1962, Chinese troops mobilized and overran many Indian positions on the disputed Himalayan frontier. The Indian Government declared a state of emergency as Chinese troops made gains in the Tadaakh areas. Following this declaration, India requested U.S. military supplies for defense against the Chinese attack. The United States assured India of assistance, as Indian forces retreated from attacking Chinese troops. The crisis abated when China ordered a cease-fire about a month later.

Crisis: Taiwan Straits
Dates: 5/6/62-12/1/62
Country Pair: USA-China (People's Republic)

A new crisis in the Taiwan Straits area began when the Chinese Government accused the United States of intruding into Chinese territorial waters. Chinese forces began to shell Quemoy and Matsu Islands for the first time in over two years. The United States became increasingly concerned as China massed troops in the largest mobilization since 1950. The U.S. Government warned China not to interfere with the islands and Formosa. President Kennedy declared that the United States would not help Formosa attack the Chinese mainland, but would not stand by if China attacked Formosa. The shelling continued until December, when the crisis abated.

Crisis: Haiti-Dominican Republic
Dates: 4/27/63-5/10/63
Country Pair: Haiti-Dominican Republic (A)

During April 1963, Haitian police broke into the Dominican Republic's embassy in Haiti and seized Haitians opposed to Haiti's regime and who had taken refuge there. The Dominican Republic warned Haiti to withdraw police from the embassy grounds or face an invasion. The Government of the Dominican Republic issued an ultimatum to Haiti to release the refugees. After diplomatic ties were broken, Haiti withdrew forces from the Dominican Republic's embassy. The forces of the Dominican Republic massed on Haiti's border, while the Government of the Dominican Republic threatened to invade Haiti unless the promise for safe conduct for the refugees was carried out. The O.A.S. appealed to both countries to refrain from force and settle the dispute peacefully. The invasion threat subsided, and by May 10, the two countries agreed in the U.N. Security Council to let the O.A.S. handle the dispute.

Crisis: Haiti-Dominican Republic
Dates: 8/5/63-9/5/63
Country Pair: Haiti-Dominican Republic (B)

In the beginning of August 1963, a small invasion force of exiles from the Dominican Republic landed in Haiti. In response, Haiti asked for immediate O.A.S. action and accused the Dominican Government of aggression. The Dominican Republic denied the invaders were Dominicans. When new incidents occurred, Haiti mobilized its army and fortified its coastline. Although the O.A.S. drafted a peace plan, incidents and threats continued until the crisis abated in the beginning of September.

Crisis: Kenya-Somalia
Dates: 11/18/63-12/30/63
Country Pair: Kenya-Somalia

In mid-November 1963, Somali Republic massed its troops on its borders with Kenya, warning Kenya to be ready for war. Tension rose as each country accused the other of threatening aggression. On December 12, Somali Republic raided its Kenyan borders and Kenya mobilized its troops. The Kenyan Government declared a state of emergency and sealed off the entire border. At this point, Kenya and Ethiopia ratified a mutual defense pact in view of the Somali Republican threat. The crisis abated at the end of December.

Crisis: Berlin Autobahn
Dates: 10/4/63-11/7/63
Country Pair: USA-USSR

As East German border guards began to delay the Western traffic on the Berlin autobahn, the U.S. Army reinforced its positions in Berlin. The United States protested strongly to the Soviet Union against the Soviet

blocking of a U.S. military convoy. The Soviets continued to halt Western convoys, however. West German Chancellor Adenauer warned the Soviets that the West would use force to defend Berlin access rights. Tensions eased by the beginning of November as the Soviet Union allowed Western convoys to pass to Berlin.

Crisis: Algeria-Morocco
Dates: 9/29/63-10/30/63
Country Pair: Algeria-Morocco

In response to a massing of Moroccan troops on the Algerian border, the Algerian Government mobilized the entire army. Military incidents occurred on the border. With the aid of Ethiopian Emperor Selassie in negotiations, a cease-fire was signed on October 30th between the two countries and a demilitarized zone was created.

Crisis: Malaysia
Dates: 9/18/63-10/15/63
Country Pairs: United Kingdom-Indonesia
 Malaysia-Indonesia

Shortly after the proclamation of Malaysia as a nation, Indonesia declared the new country illegal and expressed its intent to crush it. Trade with Malaysia was broken off as tensions heightened and mobs in each country attacked the other's embassy. The crisis also involved actions against British interests in Indonesia since Britain had supported the formation of Malaysia. The dispute abated in mid-October.

Crisis: Cyprus
Dates: 12/21/63-4/6/64
Country Pairs: Greece-Turkey
Greece-Cyprus
Turkey-Cyprus

Toward the end of December 1963, violent clashes erupted between Greek and Turkish civilian militias on Cyprus. Fighting was aided by Turkish and Greek troops present on the island, and both Greece and Turkey threatened to send more units into the fighting, raising the possibility of a massive war within NATO. The tension decreased in March and April when U.N. troops arrived on the scene and a cease-fire was arranged between Greek and Turkish Cypriots.

Crisis: Yemen
Dates: 1/5/63-4/29/63
Country Pairs: Yemen-Saudi Arabia
Egypt-Saudi Arabia

During 1962, a civil war occurred in Yemen between Nasserists, supported by Egyptian troops, and royalists backed by Saudi Arabia. In January 1963, Egypt accused Saudi Arabia of a massive buildup of armed forces, and refused to withdraw its troops from Yemen. Saudi Arabia claimed it would stop aiding the royalists only after the withdrawal of Egyptian troops, and turned to the United States, urging it to mediate. By the end of April the U.A.R. and Saudi Arabia accepted formal terms of disengagement.

Crisis: Malaysia
Dates: 2/20/64-3/24/64
Country Pairs: Malaysia-Indonesia (A)
United Kingdom-Indonesia (A)

During February 1964, Indonesian incursions into Malaysia along the Northern Borneo border occurred jointly with incursions by Malaysian

guerrillas. Both countries charged each other with aggression as tension rose. The United Kingdom at Malaysia's request sent jets to Malaysia to help meet the threat from Indonesian forces and planes. The Malaysian Government warned Indonesia that it would attack Indonesian bases in Borneo. By March 5, both United Kingdom and Malaysian troops were moving against Indonesia. The crisis continued throughout March until a semi-cease-fire was arranged.

Crisis: Malaysia
Dates: 8/17/64-11/7/64
Country Pairs: United Kingdom-Indonesia (B)
Malaysia-Indonesia (B)

In August 1964, three groups of Indonesian guerrillas made seaborne landings in Malaysia. The Malaysian Government accused Indonesia of aggression and asked for a meeting of the U.N. Security Council. More clashes occurred as Indonesia proclaimed it was on the offensive to wipe out enemy military bases. Malaysia declared a state of emergency and the United Kingdom airlifted a 500-man anti-aircraft regiment from West Germany to help the Malaysian Government, and announced that four warships from its Mediterranean fleet would follow. Border infiltrations continued for several months, culminating in Indonesia's withdrawal from the United Nations. With Britain's military support, Malaysia was able to blunt Indonesia's raids and the crisis abated in November.

Crisis: Ethiopia-Somalia
Dates: 2/8/64-3/30/64
Country Pair: Ethiopia-Somalia

The Ethiopian Government declared a state of emergency as Somalian and Ethiopian troops clashed over the disputed border area of Ogaden. On March 30, Ethiopia and Somalia agreed to a cease-fire but no effective compromise was reached on the frontier quarrel.

Crisis: Tonkin Gulf
Dates: 8/2/64-8/7/64
Country Pair: United States-South Vietnam

The United States claimed that North Vietnamese PT boats fired at a U.S. destroyer in international waters in the Gulf of Tonkin. U.S. President Johnson, in retaliation against North Vietnam, following a second attack on U.S. destroyers in which two North Vietnamese PT boats were sunk, ordered U.S. planes to bomb four North Vietnamese PT boat bases and an oil supply depot. The incident directly preceded the U.S. Senate resolution supporting this action and authorizing the President to take further military action against North Vietnam.

Crisis: China (People's Republic)-India
Dates: 9/8/65-9/21/65
Country Pair: India-China

In September 1965, during the India-Pakistan crisis, the Chinese Government, which supported Pakistan, suddenly threatened India with grave consequences unless India dismantled in three days bases on China's side of the Sikkim border. The Chinese Government extended the ultimatum for three more days. India charged that Chinese forces started firing across the border. The Chinese Government, however, claimed that the crisis was over because India dismantled the bases in question.

Crisis: Kashmir
Dates: 8/9/65-9/22/65
Country Pair: India-Pakistan

In August 1965, India charged that Pakistani troops had invaded Kashmir across the 1949 cease-fire line and clashed with Indian forces. The Indian Government warned Pakistan that it would not negotiate while

Pakistan was causing trouble in the Kashmir territory. Indian troops crossed the cease-fire line in Kashmir in an attempt to halt Pakistani infiltration. Fighting between Indian and Pakistani forces in Kashmir continued until September 22, when both countries agreed to a U.N. proposal for a cease-fire.

Crisis: Jordan-Syria
Dates: 12/1/66-12/23/66
Country Pair: Jordan-Syria

In the beginning of December 1966, Syrian President Attassi urged Jordanians to overthrow Jordan's leader King Hussein, and offered arms to the Jordanian army for this purpose. Jordan warned Syria of the consequences of its agitation. Sporadic fighting occurred in Jordan as Syria agreed with the Palestine Liberation Organization to an attempt to overthrow King Hussein. A new government was formed in Jordan, supporting a hard line against PLO activity, and the crisis abated.

Crisis: Rhodesia Blockade
Dates: 4/5/66-4/28/66
Country Pair: United Kingdom-Rhodesia

During March 1966, an economic embargo against Rhodesia was put into effect. Warships from the United Kingdom intercepted ships from various nations bound for Rhodesia. The U.N. Security Council authorized the United Kingdom to use force to bar tankers from Rhodesia. Rhodesia protested against these acts and warned of grave consequences, and charged the United Kingdom with illegal use of force against Rhodesia. By April 28, both the United Kingdom and Rhodesia agreed to talk and the crisis abated.

Crisis: Sino-Soviet
Dates: 1/11/67-2/14/67
Country Pair: USSR-China (People's Republic)

As tensions increased for the first time in two years, the Soviet Union increased its military forces on Soviet borders with China. Chinese students in the Soviet Union clashed with Soviet police, and the Soviet Union protested the episode. The Chinese Government assailed the Soviet Union, accusing its police of beating Chinese students. Massive demonstrations involving the participation of Chinese armed troops occurred in Peking against the Soviet embassy. The Soviet Union warned China of plans to move 60,000 Soviet troops to the Chinese border. The Chinese troops held Soviet personnel inside the Peking embassy, resulting in a demand from the Soviet Government that the embassy personnel be freed. Soon after, the Chinese Government announced an alert of Chinese border forces in response to the Soviet border mobilization. On February 14, the Chinese lifted the siege of the Soviet embassy. Soviet personnel were permitted to leave China, and the crisis subsided.

Crisis: Arab-Israeli
Dates: 5/14/67-6/11/67
Country Pairs: Israel-Syria
Israel-Jordan
Israel-Lebanon
Israel-Egypt

In May 1967, Syria announced that it was prepared for action against Israel, and accused Israel of building up troops on the Israeli-Syrian border. At the same time, Egypt placed its forces on war footing and requested that the U.N. Emergency Force (UNEF) withdraw from the Israeli-Egyptian armistice line. The Arab League Council declared that an attack against any Arab state would be considered an attack against all Arabs. As the Egyptian Government ordered a blockade of Israeli ships through the Straits of Tiran at the Gulf of Aqaba, both Egypt and Israeli military reserves were mobilized. Israel called the blockade an act of

aggression against Israel. Tensions worsened as Egypt and Jordan signed a mutual defense pact placing Jordanian troops under Egyptian command. War broke out on June 5, and ended with a cease-fire agreement six days later.

Crisis: Cyprus
Dates: 11/15/67-12/3/67
Country Pairs: Greece-Turkey
Greece-Cyprus
Turkey-Cyprus

In mid-November 1967, the commander of the Greek Cypriot National Guard led a large-scale raid on two Turkish villages in Cyprus. Turkish troops began mobilizing as clashes between Greek and Turkish Cypriots threatened to start a war between Turkey and Greece over Cyprus. Turkey threatened to intervene militarily in Cyprus unless certain demands were met by Greece. Tensions increased as Turkish jets began flights over Cyprus and an invasion force began to gather in Turkey's southern ports. When Greece refused the Turkish demand to decrease Greek forces on Cyprus, Turkey announced it would invade Cyprus the next day. At this point, the United States sent a special envoy to negotiate between Turkey and Greece in an attempt to prevent a Turkish invasion of Cyprus. By December, both Greece and Turkey agreed to an internationally mediated agreement resolving the immediate Cyprus issues.

Crisis: Hong Kong
Dates: 6/27/67-12/1/67
Country Pair: United Kingdom-China (People's Republic)

Toward the end of June 1967, the Chinese Government threatened to take control of Hong Kong. Hong Kong police were killed in a clash on the Chinese-Hong Kong border. The United Kingdom accused China of mobilizing on Hong Kong borders, and called up its troops. On August 4, Chinese border troops crossed into Hong Kong and clashed with British troops.

This occurred again August 9. Hong Kong sealed the borders with China. China, however, demanded the reopening of the border. Tense relations continued through October and November, but by December, China reported that the United Kingdom has accepted conditions to ease border tensions, and the crisis abated.

Crisis: Israel-Jordan
Dates: 1/2/68-3/30/68
Country Pair: Israel-Jordan

Early in January 1968, shelling began on the Israeli-Jordanian border. Each country accused the other of provoking the shelling. The Jordanian Government charged Israel with aggression and called on the United Nations to discuss the dispute. Israel accused Jordan of killing Israeli citizens. Soon after, Israeli jets crossed to Jordan in the heaviest duel since the 1967 Mideast war. Israeli forces crossed into Jordan to raid PLO bases. The forces of both nations were engaged in battles over the border. By the end of March, however, the crisis abated.

Crisis: Pueblo Incident
Dates: 1/23/68-2/26/68
Country Pair: USA-North Korea

In January 1968, a U.S. Navy ship, the U.S.S. Pueblo, was seized by North Korean boats near North Korea and accused of spying. U.S. President Johnson ordered 15,000 Air Force and Navy reservists to active duty as concern mounted over the seizure of the ship. The United States appealed to the U.N. Security Council to obtain the return of the Pueblo and its crew. North Korea charged the United States with aggression and refused to return either the ship or its crew. Tensions mounted as North Korea continually rejected U.S. demands to release the prisoners. The U.S. nuclear aircraft carrier Enterprise was sent to Korean waters; however, all demands and appeals by the United States were ignored by North Korea. The crisis eventually quieted, though the ship and its crew were not released for a year.

Crisis: Czechoslovakia
Dates: 7/16/68-10/4/68
Country Pair: USSR-Czechoslovakia

Alarmed at the increased liberalization of the Czechoslovakian regime, Warsaw Pact countries, led by the Soviet Union, warned Czechoslovakia that its liberalization program was unacceptable. Warsaw Pact countries held exercises of military forces but did not withdraw the troops from Czechoslovakian territory. On the Soviet-Czech border, the Soviet Union held large-scale maneuvers of support and supply troops. On August 10, the Soviet Union announced the start of new Warsaw Pact military exercises along the Czechoslovakian border. Despite repeated warnings, the Czechoslovakian Government refused to discard its liberalization program, and on August 20, was invaded by the Soviet Union and Warsaw Pact forces, excluding Rumania. Czechoslovakian leaders were arrested, and consultations were held with Soviet authorities. As Soviet military units began to withdraw from Czechoslovakia, Czech leaders acceded to demands that liberalized policies be ended. The Czechoslovakian Government agreed to indefinite stationing of Soviet troops on Czechoslovakian soil, and the crisis ended.

Crisis: Honduras-El Salvador
Dates: 6/30/69-7/30/69
Country Pair: Honduras-El Salvador

As a result of a dispute over the expulsion of El Salvador settlers from Honduras, El Salvador severed diplomatic relations with Honduras. As troops from both countries massed on their common border, the O.A.S. held an emergency meeting to hear charges from both sides. The Honduran Government accepted a three-nation mediation committee's proposal for peace with El Salvador, but a week later charged that El Salvador's troops had penetrated 40 miles into Honduran territory. On July 16, El Salvador claimed capture of several Honduran towns and called for the surrender of the Honduran army. El Salvador refused to withdraw troops from Honduras unless certain demands were guaranteed by the O.A.S. On July 29, El

Salvador agreed to redeploy its troops from Honduras in the face of a threatened O.A.S. embargo. The crisis ended when the O.A.S. foreign ministers approved a peace agreement between the two countries.

Crisis: Middle East
Dates: 2/24/69-4/23/69
Country Pairs: Egypt-Israel
Syria-Israel

In February 1969, Israeli jets bombed PLO commands in Syria. In response, Egypt declared a state of emergency and warned that war could result if Israel did not cease its aggression. The U.N. Secretary-General U Thant warned that the situation could escalate into war. Egypt announced that it considered void the cease-fire agreement that ended the June 1967 Mideast war. Tensions remained high between the three countries, but eased in April 1969.

Crisis: USSR-China (People's Republic)
Dates: 3/2/69-4/11/69
Country Pair: USSR-China

In early March 1969, Soviet and Chinese border forces engaged in fighting over Chenpau Island, a disputed territory in the Ussuri River. The border clashes continued, and demonstrations took place at both the Soviet embassy in Peking, and the Chinese embassy in Moscow. Clashes continued throughout March, accompanied by mounting accusations of aggression from both sides. By April, the Soviet Union proposed resumption of border negotiations, and the crisis abated.

Crisis: Jordan
Dates: 9/1/70-9/23/70
Country Pairs: USA-USSR
USA-Syria
Israel-Syria
Jordan-Syria

Following an unsuccessful attempt by Palestinians on King Hussein's life, a civil war broke out in Jordan. The war was provoked by the PLO, which was determined to destroy King Hussein's regime in order to obtain permission to use Jordan as a base for PLO incursions into Israel. On September 6, the PLO hijacked three commercial airlines in West Europe and forced them to land in the Jordanian desert. The hijackers held 475 Americans hostage and threatened to kill them unless all PLO prisoners in West Germany, Switzerland, and Israel were released. Jordan's King Hussein asked for help from the United Nations and the United States. The PLO blew up the three planes, but continued to hold the hostages. Syrian tanks mobilized, and the United States received reports that Soviet advisors were moving toward Jordan. U.S. President Nixon said that the United States might have to intervene in Jordan if Syria or Iraq threatened the Jordanian regime. By September 17, Syrian tanks had moved closer to the Jordanian frontier. The United States alerted its troops as 100 Syrian tanks crossed into Jordan, and warned the Soviet Union to restrain Syria. Fighting broke out between Syrian and Jordanian Government troops in Jordan. On September 21, the United States alerted its troops in West Germany, and its Sixth Fleet. At the same time, Israel moved its troops to the northern borders of Syria. By September 22, however, Jordan launched an all-out attack against the commandos and Syrian troops and won. Syria withdrew from Jordan, the Palestinians capitulated, and the crisis abated.

Crisis: Uganda-Tanzania
Dates: 7/9/71-9/15/71
Country Pair: Uganda-Tanzania

Early in 1971, Ugandan President Obote was ousted by General Amin, who took over the Ugandan Government in a military coup. In July 1971, the Tanzanian Government demanded that former President Obote be reinstated in Uganda. General Amin accused Tanzania of encouraging guerrilla movements against his regime and warned that any plane entering Ugandan air space would be shot down. General Amin threatened to attack any Tanzanian ships approaching Uganda and warned that his forces would not hesitate to strike into Tanzania if necessary. The Ugandan Government closed the borders, as tension between the two countries heightened. Uganda accused Tanzania of beginning fighting on its borders, as Tanzania accused Uganda of sending troops and tanks across the border to Tanzania. By October, tensions eased, and the two nations agreed to try to reconcile differences.

Crisis: Bangladesh
Dates: 11/27/71-12/16/71
Country Pair: India-Pakistan

In November 1971, Indian Prime Minister Gandhi threatened war against Pakistan unless the Bengalis in East Pakistan were given the independence which they desired. The Indian army crossed its border into Pakistan, and Pakistan retaliated against India. Bangladesh (East Pakistan) declared the formation of a new government, and the Indian Government recognized it as the formal representative government of East Pakistan. Pakistan broke diplomatic relations with India. On December 16, the conflict ended with Pakistan split into two separate states -- West Pakistan and Bangladesh.

Crisis: Uganda-Tanzania
Dates: 9/17/72-10/5/72
Country Pair: Uganda-Tanzania

In September 1972, Uganda attacked Tanzania in retaliation for Tanzania's alleged support of pro-ex-Ugandan President Obote guerrillas acting against Uganda. Tanzania accused Uganda of bombing its border and denied the Ugandan charges that Tanzanian forces attacked. The Tanzanian Government mobilized its troops on the Ugandan border, and warned that Uganda's bombing raids were a danger to peace. The African Unity Organization met in an effort to mediate the crisis, and a peace agreement was reached October 5.

Crisis: Rhodesia-Zambia
Dates: 1/9/73-2/4/73
Country Pair: Rhodesia-Zambia

Early in January 1973, the Rhodesian Government warned Zambia against giving sanctuary to anti-Rhodesian guerrillas, and warned of retaliation. Border clashes occurred as Zambia accused Rhodesia of aggression. The Rhodesian Government, in response to the accusation, closed its borders with Zambia. By February 4, however, Rhodesia agreed to reopen the Rhodesian-Zambian borders, and the crisis eased.

Crisis: Mideast
Dates: 10/1/73-10/6/73
Country Pairs: Israel-Egypt
Israel-Syria

On October 1, Israeli intelligence reported a buildup on the Syrian and Egyptian borders by Arab troops. On October 2, Syria mobilized its reserves, and Egypt began intense war preparations along the Suez Canal.

Both Syria and Egypt evacuated Soviet dependents from their respective capitals. By October 5, Syria's tanks swung into offensive formation, and Israeli troops mobilized. As Israel urged the United States to use its influence to avoid a war, the United States warned Israel not to attack the Arab states. On October 6, war broke out as Egypt and Syria attacked Israel.

Crisis: Mideast
Dates: 10/7/73-10/26/73
Country Pair: USA-USSR

After the outbreak of war in the Mideast, U.S. Secretary of State Kissinger met with the Soviet Ambassador to the United States, Dobrynin, to discuss the Mideast crisis. Although both parties expressed a desire for peace, on October 10 there was a huge Soviet airlift of arms to Syria and Egypt, and the Soviet Government urged the Arabs to join in the war against Israel. The United States learned that Soviet airborne divisions in Europe were put on alert, and warned of consequences of Soviet interference. As the Soviet Union continued to aid the Arabs, the crisis reached dangerous proportions. The United States placed all forces on nuclear alert. By October 16, the tide of the war had turned in favor of Israel, and the Soviet Union called for a cease-fire. The crisis between the United States and the Soviet Union abated by October 26, although the war in the Mideast continued.

V. SELECTED CRISIS VARIABLES

INTRODUCTION

A task of this project is to typologize international crises along dimensions having policy and theoretical import. The policy importance of a crisis dimension consists of its reflecting a basic discrimination by policy-makers and planners in viewing a crisis. For example, variables such as the power comparison of opposing crisis participants (for example, major-power crises versus minor-power crises) and their alliance connections to the United States and the Soviet Union have high policy import for the defense community.

The theoretical import of a crisis variable is its potential ability to discriminate among crises in terms of likely behavior patterns, outcomes, the effectiveness of different crisis management techniques, and other aspects of crises that are relevant to a program of research in crisis management.

The criteria of policy import and theoretical import often overlap in the selection of crisis variables. This occurs because policy-oriented dimensions often have theoretical import as well. For example, a U.S. policy-maker or planner may have an especially strong interest in major-power crises and crises involving allies of the United States or the Soviet Union. Such variables have policy as well as theoretical import for the power relationships of crisis participants and their alliance connections to the superpowers may have important effects on their behavior tendencies and the crisis management techniques that are most likely to be effective.

Additional variables having theoretical import can usefully be included in a typology even if they are not among those ordinarily used by policy-makers and planners to discriminate among crises. For example, a

policy-oriented question may concern the likely behavior pattern of countries in major-power crises. The crisis typology will identify the relevant crises, and research can focus on the question of behavior patterns. In addition, however, if the typology includes the theoretically important dimension of economic interdependence between crisis participants, research can further investigate whether the extent of interdependence makes any difference in major-power crisis behavior. Thus, the inclusion of theoretically important variables that may not reflect central policy discrimination allows research to enhance answers to policy-oriented questions and, at the same time, does not detract from the presence or usefulness of policy dimensions.

Information on 22 variables was collected for the 72 identified crises. Two of the variables -- crisis participants and dates -- are described in a previous section of this report. The other 20 variables are described below. A separate section on each variable provides a rationale for its selection, describes the coding of the variable, and lists sources from which the data were gathered. As previously noted, the cases are organized into crisis country-pairs. Thus, the coding of each variable is on a country-pair basis.

POWER COMPARISON

This variable distinguished crises according to the comparative power of the opposing countries. The coding is as follows:

<u>Power Comparison</u>	<u>Code</u>
Major-Major	1
Major-Middle	2
Major-Minor	3
Middle-Middle	4
Middle-Minor	5
Minor-Minor	6

Each country in a crisis country-pair is determined to be either a major power, a middle power, or a minor power. The country-pair is coded

according to the power combination of its constituent actors. The power comparison variable reflects a basic discrimination of policy relevance and also possesses a degree of theoretical import. Richardson (1960), for example, argues that the relative power of nations affects their likely behavior toward one another.

Three factors are regarded as major elements or determinants of a country's power: military capability, economic capability, and population size. A country is defined as a major power if it is in the upper one-third of the worldwide range in at least two of these three variables: defense spending, GNP, and population size (data used are for the year of the crisis). A country is defined as a minor power if it is in the lower one-third on at least two of the variables. Otherwise, the country is defined as a middle power. Because a nuclear capability is a major qualitative component of power, if a country possesses such capability it is coded at one level higher than it would be using only the above criteria. A country is regarded as having nuclear capability as of the date of its first successful nuclear weapons test. World ranges of each variable were determined on the basis of the lowest and highest value in the world for each year for each variable. Each range was then divided into thirds. Note that real values, not rank orders, were used for these measures. Hence, many fewer than one-third of the world's states are ranked as major powers even on a single dimension of the three being considered.

Data sources used for the construction of this variable are:

Arthur Banks, Cross-Polity Time-Series Data. M.I.T. Press, 1971.

World Armaments and Disarmament: SIPRI Yearbook.
Humanities Press, New York, various issues 1968-1973.

The Military Balance, The International Institute for
Strategic Studies. London, various issues 1973-1975.

World Military Expenditures and Arms Trade. U.S.A.C.D.A.,
Washington, D.C., various issues 1963-1973.

Gross National Product: Growth Rate and Trend Data.
A.I.D., Washington, D.C., 1968.

GNP COMPARISON, MILITARY BUDGET COMPARISON, AND POPULATION SIZE COMPARISON

The three constituent elements in the power comparison measure are GNP, military budget, and population size. These variables may have importance separately as well as in combination. Thus, one variable comparing the crisis nations on each constituent element is included in the crisis data file.

The variables measure the absolute difference between the nations on GNP (in millions US \$), military budget (in millions US \$), and population size (in millions). Data sources for these variables are listed in the power comparison variable description.

TYPE OF ISSUE

The type of issue about which a crisis revolves is coded as follows:

<u>Type of Issue</u>	<u>Code</u>
Territorial/Hegemonial	1
Domestic Government	2
Treatment of Nationals or Property	3
Access and Use Rights	4

Rosenau (1966) is an advocate of the idea that the type of issue involved in a given situation has a considerable impact on the likely behavior of the involved countries, and this variable may be an important policy dimension as well. He proposes a four-category classification of issues consisting of the following types: territorial, status, human resources, and nonhuman resources. An effort was made to utilize Rosenau's issue categories, but could not be sustained for two reasons. First, classification of cases into Rosenau's categories is problematic due to a degree of non-exclusivity in the categories. For example, any

dispute over territory also involves the human and nonhuman resources present in that territory. Second, there are issues in our crises that do not fit neatly into any of Rosenau's categories. For example, an issue involving the nature of a country's domestic government does not clearly belong in any of Rosenau's categories.

The alternative approach was to derive the issue categories from the crisis descriptions themselves. This procedure led to the identification of the five types coded. A Territorial issue is one in which the crisis involves disputed territory or an attempt by one country to take possession of another's territory. Hegemonial issues (the Cuban Missile Crisis) involve an attempt by one nation to establish a military base in another's area of hegemony. Domestic Government is the issue when the crisis involves one nation's support or alleged support of anti-regime forces in another country. Treatment of Nationals or Property issues are those involving conflict over one nation's treatment of another's nationals, representatives, or economic interests. Access and Use Rights issues involve attempts or alleged attempts of one country to violate the rights of another to utilize or have access to territory, waters, travel corridors, and so forth.

NUCLEAR WEAPONS

Whether or not a crisis involves nations having nuclear weapons is an important factor from the standpoint of their possible behavior patterns and also from the policy perspective of U.S. interest and possible involvement. With regard to the effect of nuclear weapons on behavior, for example, Snyder (1969) argues that nuclear weapons induce a measure of caution in crisis behavior.

Three possible codes are applied to a crisis-pair at the time of the crisis in this regard:

<u>Nuclear Weapons</u>	<u>Code</u>
Neither has nuclear weapons	0
One has nuclear weapons	1
Both have nuclear weapons	2

A country is coded as having nuclear weapons as of the date of its first successful nuclear weapons test. The source of information for the codes given in the crisis data file is:

World Armaments and Disarmament: SIPRI Yearbook.
 Humanities Press, New York, various issues 1968-1973.

REGION

The region within which a crisis is located or the regions which it involves have important implications for whether U.S. military involvement is likely and if so, the type of military capability that may be required to intervene successfully. Region is also a significant policy variable because much military planning occurs with reference to particular global regions.

We utilize the regional breakdown of the United Nations Statistical Yearbooks, in which seven regional categories are included. These categories and the codes used in the crisis data file are:

<u>Region</u>	<u>Code</u>
Africa	1
North America	2
South America	3
Asia	4
Europe	5
Oceania	6
USSR	7

Often the nations in a crisis-pair are from different world regions. In such cases a two-digit code is applied, each digit representing one of the regions involved. In order to be consistent, the smaller digit is always listed first. For example, a crisis country-pair involving North American and Asian nations would receive a region code of 24. In contrast, a crisis involving only African nations would receive a code of 1. The data source used to identify the appropriate regional classification of a nation is the United Nations Statistical Yearbook.

GEOGRAPHICAL DISTANCE

The possible behavior patterns in, and outcomes of, a crisis can be affected by the geographical distance between nations of a crisis-pair. Weede (1970), for example, argues that sheer distance makes war less probable between nations. Thus geographical distance may affect the behavioral tendencies of involved nations, the likelihood of different outcomes, and therefore U.S. military preparedness required in a given crisis.

The crisis data file contains a measure, in units of miles, of the distance between the capitals of the crisis nations during the time of the crisis. These measures were made by applying a mileage meter to a straight line connecting the two capitals on a large gnomonic projection map. Such a map minimizes the possible error involved in this procedure. The residual inaccuracy can be expected in the range of from 5 to 10 percent. While mileage tables exist for distances between some of the countries in the inventory, not all countries are included in these tables. For consistency, all country-pair distances were measured in the manner described above.

CONTIGUITY

A measure of distance between capitals can often be misleading as to the military reachability between pairs of countries. In particular, it can

be misleading when one of the countries has a very large land mass. Parts of the land mass may actually touch the other crisis nation while the distance between the two capitals is quite large. Thus a contiguity measure is also included in the crisis data file.

A pair of nations is coded as contiguous if their land masses touch or are separated only by a river or canal. Countries separated by gulfs or straits are coded as non-contiguous. Crisis-pairs separated by straits are Haiti-Cuba, Spain-Morocco, and US-USSR; Jordan-UAR are separated by a gulf. The coding for the year of the crisis is as follows:

<u>Contiguity</u>	<u>Code</u>
yes	1
no	2

SUPERPOWER DEFENSE PACT

U.S. policy-makers and planners have a special interest in crises that involve the allies of either the United States, the Soviet Union, or both, for the involvement of the superpowers may be more likely under such conditions. Thus, crisis-pairs are coded according to the superpower alliances they have at the time of the crisis. The coding is as follows:

<u>Superpower Defense Pact</u> [*]	<u>Code</u>
Neither country has a superpower defense pact	0
One country has a defense pact with the United States; the other has no superpower defense pact	1
One country has a defense pact with the United States; the other with the Soviet Union	2
One country has a defense pact with the Soviet Union; the other has no superpower defense pact	3
Both countries have a defense pact with the United States	4
Both countries have a defense pact with the Soviet Union	5

^{*} The United States and Soviet Union are not coded as having defense pacts with themselves.

The data sources for these codings are:

1946-1965: Melvin Small and J. David Singer, "Formal Alliances, 1816-1965: An Extension of the Basic Data." Journal of Peace Research, 1969.

1966-1973: United Nations Treaty Series.

SUPERPOWER ALLIANCE

This second variable dealing with superpower alliance measures whether the crisis nations have a superpower arrangement of the neutrality pact, entente or defense type, and thus has broader coverage than the preceding variable in terms of formal major-power linkages to a given crisis. Neutrality pacts and ententes do not obligate nations to intervene militarily on behalf of one another if either is attacked, but do obligate the nations either to consult with one another or to be neutral in the event of attack.

<u>Superpower Alliance</u> [*]	<u>Code</u>
Neither country has a superpower alliance	0
One country has an alliance with the United States; the other has no superpower alliance	1
One country has an alliance with the United States; the other with the Soviet Union	2
One country has an alliance with the Soviet Union; the other has no superpower alliance	3
Both countries have an alliance with the United States	4
Both countries have an alliance with the Soviet Union	5

* The United States and the Soviet Union are not coded as having alliances with themselves.

The data sources for these codings are:

1946-1965: Melvin Small and J. David Singer, "Formal Alliances, 1816-1965: An Extension of the Basic Data." Journal of Peace Research, 1969.

1966-1973: United Nations Treaty Series.

DEFENSE PACT SIMILARITY

Kaplan (1957) argues that if two nations are in the same alliance, it is less likely that they will enter into war against each other. Thus, alliance similarity -- its presence or absence -- may have important effects on the likely behavior of the crisis nations and the likelihood of different outcomes.

This variable codes crisis-pairs according to whether they had membership in the same defense pact -- the strongest type of alliance -- at the time of the crisis. The coding for this variable is as follows:

<u>Defense Pact Similarity</u>	<u>Code</u>
Pair shares membership in at least one defense pact	1
Pair does not share membership in at least one defense pact	0

Sources of information for this variable are:

1946-1965: Melvin Small and J. David Singer, "Formal Alliances, 1816-1965: An Extension of the Basic Data." Journal of Peace Research, 1969.

1966-1973: United Nations Treaty Series.

ALLIANCE SIMILARITY

This second variable dealing with alliance similarity codes the pair according to whether they share membership in any neutrality pact,

entente or defense pact, and thus has broader coverage than the defense pact similarity variable. Coding for this variable is as follows:

<u>Alliance Similarity</u>	<u>Code</u>
Pair shares membership	1
Pair does not share membership	0

The sources of information for this variable are:

1946-1965: Melvin Small and J. David Singer, "Formal Alliances, 1816-1965: An Extension of the Basic Data." Journal of Peace Research, 1969.

1966-1973: United Nations Treaty Series.

NUMBER OF PRIOR CRISES

McClelland (1968) and others have argued that pairs of countries tend to develop routine ways of dealing with crises over a history of such episodes. Thus, it may be anticipated that, other things being equal, a country-pair that is experienced in crises with each other will tend to behave differently from an inexperienced pair. From a policy standpoint, research emphasizing crisis-prone country-pairs may be especially desirable in order to generate knowledge relating to country-pairs that may be more likely to experience crises in the future.

The measure employed in the data file is the simple frequency of post-war crises involving the two countries prior to the time of the crisis in question.

POLITICAL STRUCTURE DIFFERENCE

Several writers, among them Kissinger (1969), suggest that the international behavior involved in any situation is in part a product of whether the countries involved share a similar political structure.

Kissinger regards political structure as indicative of general cultural values which influence countries' perceptions of each others' behavior and influence their willingness to trust each other. In particular, countries having different political systems will have more difficulty solving issues. Thus, political structure difference can be a useful dimension of the typology in that the dimension is theoretically related to behavioral patterns.

The political structure difference measure is nominal in character, indicating similarity or dissimilarity in actual structure, and also indicating the type of similarity or difference in each case. Each nation's effective executive type is used to describe its actual political structure. The effective executive refers to the "individual who exercises primary influence in the shaping of most major decisions affecting the nation's internal and external affairs" (Banks, 1971, p. xvi).

Banks (1971) presents data through 1966 on all nations' effective executive type in the following categories: Monarch, President, Premier (or Prime Minister), Military, Other. The "Other" category refers to situations in which the effective executive (such as the party first secretary in a Communist regime) holds no formal governmental post. The coding describes political structure difference at the time of the crisis. If the data sources showed a change in political structure during the year of the crisis, historical records were consulted to determine whether the change occurred prior to or after the crisis. The coding is as follows:

First digit: 0 if different effective executive type
1 if same effective executive type

Second and
third digits: If same effective executive type, then

- 01 Monarch
- 02 President
- 03 Premier
- 04 Military
- 05 Other

If different executive type, then the codes 1-5 are combined to indicate the particular combination, the smaller number always being given first. For example, a country-pair in which one country's effective executive type is a President and the other's is Military would have a total code of 024; a country-pair in which both are Monarchies would be coded 101.

The data sources for this variable are:

1946-1965: Arthur Banks, Cross-Polity Time-Series Data. M.I.T. Press, 1971.

1966-1973: Europa Yearbook and Statesman's Yearbook.

PRIOR DIPLOMATIC RELATIONS

Pruitt and Snyder (1969a and 1969b) note that pre-existing hostility between two countries prods them toward harsher tactics and words, and may close off conciliatory alternatives. Thus, crises between previously hostile countries may be fundamentally different from those between previously friendly countries in terms of the likelihood of different behavior patterns and outcomes, and these different likelihoods may have different implications for U.S. military involvement and planning.

In the past, hostility has been measured via content analysis of written and verbal expressions of decision-makers. It is not possible to conduct such analyses for the crisis data file. However, a type of data that may be related to hostility is available. Countries that are hostile toward one another often express their hostility by withholding diplomatic relations. Thus, an indicator of hostility is the presence or absence of diplomatic relations between the country-pair.

The presence or absence of diplomatic relations at the outbreak of each crisis is measured by whether embassies or legations of each country

are located in the other at the outbreak of the crisis. Codes for this variable are:

<u>Diplomatic Relations</u>	<u>Code</u>
Neither has representatives in the other	0
Only one country has representatives in the other	1
Each has representatives in the other	2

The sources of data for this variable are:

The Europa Yearbook. Europe Publications, London, various issues 1960-1974.

The Statesman's Yearbook. Oxford University Press, London, various issues 1947-1974.

ECONOMIC INTERDEPENDENCE

Pruitt (1969) points out that escalation into violent conflict between pairs of nations may be less likely when the nations are highly interdependent economically. Thus, economic interdependence may affect the likelihood of different behavior patterns and outcomes in crisis, and these implications in turn may affect considerations of military preparedness and policy choice.

Economic dependence has in the past been measured by a nation's trade with another as a percentage of the nation's total wealth (Russett, 1968). Economic interdependence is measured in the crisis data file by the value of total trade (in U.S. dollars) between the crisis-pair as a percentage of the summed wealth (GNP in dollars) of the two nations. This percentage is multiplied by 100. This measure reflects the importance of trade between the two countries relative to their total wealth.

The sources of data for these calculations are:

International Monetary Fund, Direction of International Trade, various issues 1945-1973.

United Nations, Yearbook of International Trade, various issues 1954-1971.

World Military Expenditures and Arms Trade. U.S.A.C.D.A., Washington, D.C., various issues 1963-1973.

Gross National Product: Growth Rate and Trend Data. A.I.D., Washington, D.C., 1968.

ORGANIZATIONAL INTEGRATION

Smoker (1967), among others, suggests that organizational integration between countries may enhance the likelihood that violence can be avoided. Country-pairs having membership in several International Governmental Organizations (IGO's) are characterized by a history of cooperation and mutual learning. To the extent that a tradition of cooperation and a history of understanding allow a country-pair to resolve a crisis between them more easily, the crisis behavior patterns and the likelihood of different outcomes will be affected.

Organizational integration at the governmental level is measured by the number of IGO's in which the pair of crisis nations shares membership at the time of the crisis.

The data source is:

United Nations, Yearbook of International Organizations, various issues 1949-1973.

POPULATION PRESSURE COMPARISON

Haas (1965) suggests that conflicts between countries when one of the countries is suffering high population density may be especially explosive.

This is suggested because such a country may find in a crisis situation an opportunity for needed territorial expansion, especially if the other country involved is contiguous and has a lower population density. Thus, the comparative population densities of crisis countries may have a significant effect on the course of the crisis and therefore possibly on U.S. concern or involvement.

The measure utilized in the crisis data file is the absolute difference between the population densities of the two countries.

Data on population densities were gathered from the following sources:

Arthur Banks, Cross-Polity Time-Series Data. M.I.T. Press, 1971.

World Military Expenditures and Arms Trade. U.S.A.C.D.A., Washington, D.C., various issues 1963-1973.

MULTINATION CRISES

As noted above, several comparative elements of a crisis -- for example, comparative power, comparative political systems -- and several other dyadic elements such as prior crises, may have significant implications for the likely behavior of the crisis participants, required U.S. military capability should such involvement become necessary, and the likely effectiveness of different means of crisis management. Thus, such factors can usefully serve as dimensions of a crisis typology that will be meaningful for U.S. planners and policy-makers.

A problem arises in applying such dimensions to multination crises, defined as crises in which at least one "side" of the issue involves more than one nation. For example, the Suez crisis of 1956 involved the United Kingdom and France on one side, and various Berlin crises have involved NATO and Warsaw Pact countries in opposition. How, for instance, does one go about comparing the political systems of different sides when there may be differences within one side, or establishing

the number of prior crises between the sides when some pairs have had prior crises and others have not?

Our resolution of this problem follows from an assumption about the perspective of U.S. policy-makers and planners on multination crises. U.S. policy must and does take into consideration the peculiarities of individual dyadic relationships in addition to the implications of multination alliances and alignment. For example, while policy-makers have been conceived with the U.S. position in the general Arab-Israeli conflict, they have not failed to consider and exploit differences among the various Arab states in attempting to achieve policy goals in the Middle East. Thus, policy-makers and planners are concerned with possibilities for managing a crisis as it affects specific pairs of nations in a multination crisis.

Since the specific dyadic components of multination crises are of likely interest to these potential users of crisis research, their interests will be served by investigating the implications of different types of dyad-specific characteristics for crisis management. Therefore, a decision was made, as noted earlier, to disaggregate the opposing sides of multination crises into their specific dyadic components. For example, the 1956 Suez crisis contains three such components: UK-Egypt, Israel-Egypt, and France-Egypt. These pairs may be categorized according to the same dimensions utilized for two-nation crises. However, the fact that such pairs are components of multination crises is important contextual information that should be retained and integrated into the crisis typology. Therefore, an additional variable in the crisis data file signifies whether or not a crisis country-pair is one of more than one represented in the data file from a particular crisis. Country-pairs extracted from the same crisis are coded the same on this variable. The coding is as follows:

<u>Multination Crises</u>	<u>Code</u>
Country-pair is extracted from a multination crisis	1...n
Country-pair is not extracted from a multination crisis	0

where n is the total number of multination crises. For example, three country-pairs involved in the same multination crisis have the same code given in this variable; two country-pairs from a second multination crisis share a common code in this variable, and the code differs from that used for the first multination crisis.

CRISIS DATA FILE

Data for the variables specified in Section V were compiled for each crisis country-pair and are presented in the matrix on the following pages. A few missing data are coded "-9" in the matrix. The variables are described in Section V; the cases in Section IV.

Crisis Country-pair	Year Crisis Began	Power Contention	GDP	Comparison	Military Budget	Population	Type of Contention	Nuclear Issue	Region	Geographical Distance	Country	Supporter	Distance	Strategic Importance	Number of Casualties	Number of Refugees	Relative Economic Impact	Relative Political Impact	Relative Military Impact	
India-China	1955	5	36268	4624	240	1	1	1	4	2764	1	0	0	0	1	035	2	.00	0	195
Kashmir	1955	6	41633	1328	392	1	0	0	4	562	1	0	0	0	2	023	2	.07	40	103
Jordan-Syria	1966	6	574	13	3	2	0	0	4	102	1	0	0	0	0	015	2	.74	17	23
United King.-Rhodesia	1966	5	105373	5996	50	2	1	1	15	5000	0	1	0	0	0	103	2	.21	6	-9
USSR-China	1967	2	300000	44500	544	3	2	2	47	5625	1	0	0	0	0	105	2	.22	4	162
Israel-Syria	1967	5	600	8	3	2	0	0	4	138	1	0	0	0	0	035	0	.20	21	250
Israel-Jordan	1967	6	60	19	1	1	0	0	4	45	1	0	0	0	0	013	0	.20	22	286
Israel-Lebanon	1967	6	800	26	0	1	0	0	4	161	1	0	0	0	0	023	0	.20	28	297
Israel-Egypt	1967	6	3115	288	28	1	0	0	14	304	1	0	0	0	1	023	0	.00	32	260
Greece-Turkey	1967	6	6705	304	8	1	0	0	45	630	1	4	1	1	1	034	2	.02	45	23
Greece-Cyprus	1967	6	6697	352	31	1	0	0	45	525	0	1	0	0	1	024	2	.29	24	8
Turkey-Cyprus	1967	6	6697	352	31	1	0	0	45	525	0	1	0	0	1	024	2	.29	24	8
United Kingdom-China	1967	4	14393	1237	725	1	2	45	7922	0	1	0	0	0	0	015	2	.08	0	400
Israel-Jordan	1968	6	3455	602	1	1	0	0	4	45	1	0	0	0	0	013	0	.00	20	304
USA-North Korea	1968	3	860700	80122	188	4	1	24	12000	0	3	3	0	0	1	023	0	.00	0	230
USSR-Czechoslovakia	1968	3	148000	50061	224	2	1	57	1525	1	3	2	1	1	0	025	2	.12	31	265
Honduras-Salvador	1969	6	286	15	0	3	0	0	2	139	1	4	1	1	1	022	2	1.19	43	362
Egypt-Israel	1969	6	1910	348	29	1	0	0	14	304	1	0	0	0	2	023	0	.20	34	210
Syria-Israel	1969	6	3247	818	3	1	0	0	4	138	1	0	0	0	1	035	0	.00	23	240
USSR-China	1969	2	356000	53500	576	1	2	47	5625	1	0	0	0	0	1	155	2	.00	2	172
USA-USSR	1970	1	445100	8954	38	2	2	27	7637	0	0	0	0	0	7	025	2	.02	25	26
USA-Syria	1970	3	975510	77634	199	2	1	24	7000	0	0	0	0	0	0	025	0	.00	20	18
Israel-Syria	1970	6	3743	1162	3	2	0	0	4	138	1	0	0	0	2	035	0	.00	22	240
Jordan-Syria	1970	6	967	116	4	2	0	0	4	250	1	0	0	0	2	035	0	.00	22	240
Uganda-Tanzania	1971	6	105	8	4	2	0	0	1	491	1	0	0	1	1	015	0	.63	22	25
India-Pakistan	1971	6	43597	1475	443	1	0	0	4	562	1	0	0	0	1	024	0	.27	38	27
Uganda-Tanzania	1972	6	337	44	3	2	0	0	1	491	1	0	0	0	3	023	2	.00	50	103
Rhodesia-Zambia	1973	6	510	36	1	2	0	0	1	232	1	0	0	0	1	024	0	.08	26	73
Israel-Egypt	1973	6	88	2629	32	1	0	0	14	304	1	0	0	0	0	023	0	.17	4	-9
Israel-Syria	1973	6	6176	3679	4	1	0	0	4	138	1	0	0	0	0	023	0	.00	32	210
USA-USSR	1973	2	597900	7538	39	1	2	27	7637	0	0	0	0	0	0	023	0	.00	26	240
																	.07	26	20	

ASSOCIATIONS AMONG THE VARIABLES

Associations among the variables in the crisis data file are examined in this section. In the next section, trends in several of the crisis variables are described. The purpose of examining associations among the variables is to see whether in some cases one variable can index two or more variables so that the required number of trend descriptions can be reduced.

Table 1 presents measures of association among the variables. The measure r^2 (squared product-moment correlation) is used between interval level variables. The measure ϕ^2 (phi coefficient) or V^2 (Cramer's V^2) is used between nominal level variables. The ϕ^2 measure is appropriate and is used when the two nominal variables have an equal number of categories. The V^2 measure is appropriate and is used when the number of categories in the two nominal variables differ. The measure η^2 is used between nominal and interval level variables. This measure is the ratio of between-group sum of squares to total sum of squares derived from analysis of variance. Only associations of .75 and above will be considered in determining whether one variable can be used to index more than one variable. Table 1 contains four cases of association at .75 or above:

- The r^2 between military budget comparison and GNP comparison is .76. This r^2 is derived from a positive correlation of +.87 and reflects a tendency for wealthier nations to spend more on defense.
- The V^2 between nuclear weapons and power comparison is .91. This association reflects that major powers tend to have nuclear weapons while lesser powers tend not to have such weapons.
- The ϕ^2 between superpower alliance and superpower defense pact is .94. This reflects overlap in the coding of the two variables. A country is coded as having a superpower alliance if it has a superpower neutrality pact, entente or defense pact. In very few cases did a country have a neutrality pact or entente and not a defense pact.

TABLE 1
Measures of Association Among the Variables

	Power Comparison	GDP Comparison	Military Budget Compar.	Population Comparison	Type of Issue	Nuclear Weapons	Region	Geographical Distance	Contiguity	Superpower Defense Pact	Superpower Alliance	Defense Pact Similarity	Alliance Similarity	Number of Prior Crises	Political Structure Diff.	Prior Diplo. Relations	Economic Interdependence	Organizational Integration	Pop. Pressure Comparison	Multination Crises
Power Comparison																				
GDP Comparison	.58**																			
Military Budget Compar.	.38**	.76*																		
Population Comparison	.06**	.09*	.17*																	
Type of Issue	.05***	.06**	.04**	.02**																
Nuclear Weapons	.91***	.34**	.26**	.06**	.03***															
Region	.36***	.32**	.15**	.06**	.24***	.51***														
Geographical Distance	.15**	.13*	.36*	.12*	.14**	.53**	.10**													
Contiguity	.23***	.20**	.07**	.05**	.20***	.25***	.61***	.11**												
Superpower Defense Pact	.17***	.09**	.00**	.00**	.09***	.05***	.22***	.01**	.27***											
Superpower Alliance	.16***	.09**	.00**	.01**	.09***	.05***	.21***	.01**	.16***	.91***										
Defense Pact Similarity	.09***	.07**	.03**	.09**	.24***	.11***	.16***	.15**	.26***	.38***	.19***									
Alliance Similarity	.11***	.09**	.01**	.10**	.29***	.10***	.19***	.18**	.16***	.25***	.25***	.84***								
Number of Prior Crises	.26**	.13*	.03*	.09*	.02**	.25***	.02**	.10*	.01**	.06**	.06**	.07**	.07**							
Political Structure Diff.	.14***	.03**	.06**	.07**	.18***	.15***	.19***	.01**	.04***	.06***	.09***	.12***	.01***	.02**						
Prior Diplo. Relations	.01***	.00**	.00**	.01**	.02***	.01***	.01***	.01**	.02***	.07***	.17***	.07***	.07***	.01**	.07***					
Economic Interdependence	.02**	.01*	.05*	.02*	.01**	.01**	.02**	.05*	.02**	.01**	.01**	.01**	.01**	.01**	.03*	.01**				
Organizational Integration	.06**	.08*	.07*	.16*	.01**	.06**	.01**	.12*	.03**	.02**	.03**	.07**	.10**	.04*	.01**	.06**	.03*			
Pop. Pressure Comparison	.01**	.02*	.05*	.02*	.03**	.00**	.11*	.03*	.02**	.00**	.01**	.02**	.04**	.02*	.00**	.01**	.00*	.02*		
Multination Crises	.02**	.05*	.01*	.09*	.09**	.00**	.09*	.04*	.01**	.07*	.00**	.01**	.02**	.10*	.09**	.00**	.00*	.12*	.02*	

$$+ = r^2$$

$$++ = \eta^2$$

$$+++ = \zeta^2 \text{ or } V^2$$

- The ϕ^2 between alliance similarity and defense pact similarity is .84. This association reflects overlap in the coding of the two variables. A country-pair is coded as sharing an alliance if it shares a neutrality agreement, entente, or defense pact. In relatively few cases did a pair share a neutrality pact or entente and not a defense pact.

The implications of these associations are:

- GNP comparison can be used to index the monetary aspects of power which include both wealth and defense spending.
- A power comparison measure can be used to index the nuclear weapons aspects of power.
- Superpower defense pacts can be used to index superpower alliances in general.
- Defense pact similarities can be used to index alliance similarities in general.

VIII. CRISIS TRENDS AND IMPLICATIONS FOR CRISIS MANAGEMENT

This section describes trends in international crises, and considers the implications of these trends for U.S. crisis management. To the extent that crisis trends observed in the post-World War II era suggest future changes in types of crises, they also will suggest new circumstances to which U.S. crisis management may have to adjust. Whether such adjustments actually are required depends, of course, significantly on whether the future U.S. posture in world affairs is aggressive, restrained or near-isolationist. This report does not assume one or the other posture, but instead offers a set of potential implications of crisis trends. (Trends in crisis variables are described in graph form, and are noted in the discussion of the graphs.)

The data are aggregated into four seven-year units for the purpose of trend description. The aggregation facilitates viewing general trends while eliminating short-term (for example, yearly) fluctuations that are of little interest. The four time units are represented in the graphs by the symbols I, II, III, and IV. The years referred to by each symbol are shown in Table 2.

TABLE 2
Four Periods Used in Trend Description

<u>Period</u>	<u>Years Included</u>
I	1946-1952
II	1953-1959
III	1960-1966
IV	1967-1973

TRENDS

Number of International Crises

Figure 3 displays the trend in frequencies of post-war international crises. Numbers of crises in the immediate post-war period were relatively low, but increased considerably in the next two periods. The most recent trend, however, is toward fewer crises.

Regional Crisis Involvement

Each crisis involves one or more regions. A crisis involves a region if a country in that region is a party to the crisis, that is, if a country in that region is in at least one of the crisis country-pairs shown in Section IV to be involved in the crisis.

Figure 4 shows that crises involving countries in the European and North/Central American regions have been declining since Period II. Crises involving Asian countries reach a high peak in Period III but then decline. While the total number of crises is declining as shown in Figure 3, the frequency of Soviet and African involvement in crises generally is increasing. The Soviet trend is steadily increasing throughout the entire post-war period. The South American and Oceanic regions have experienced few crises and there is no indication of change in those areas.

Power Comparison

Figure 5 shows trends in the power comparison of country-pairs involved in crises. The most outstanding aspect of this figure is the rise to great prominence of minor-minor power crises during the post-war era. Strong trends in other types are not apparent, with the exception of middle-minor crises which recently declined considerably.

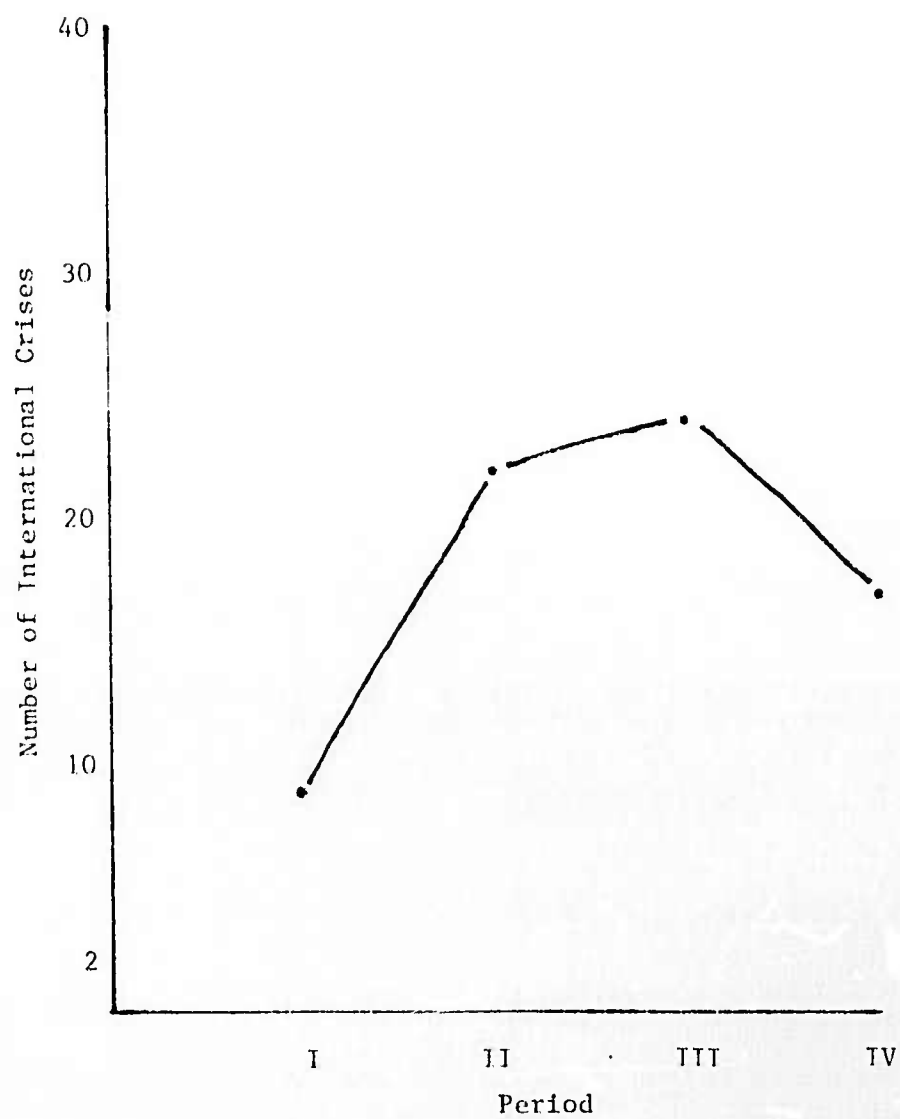


Figure 3. Number of International Crises

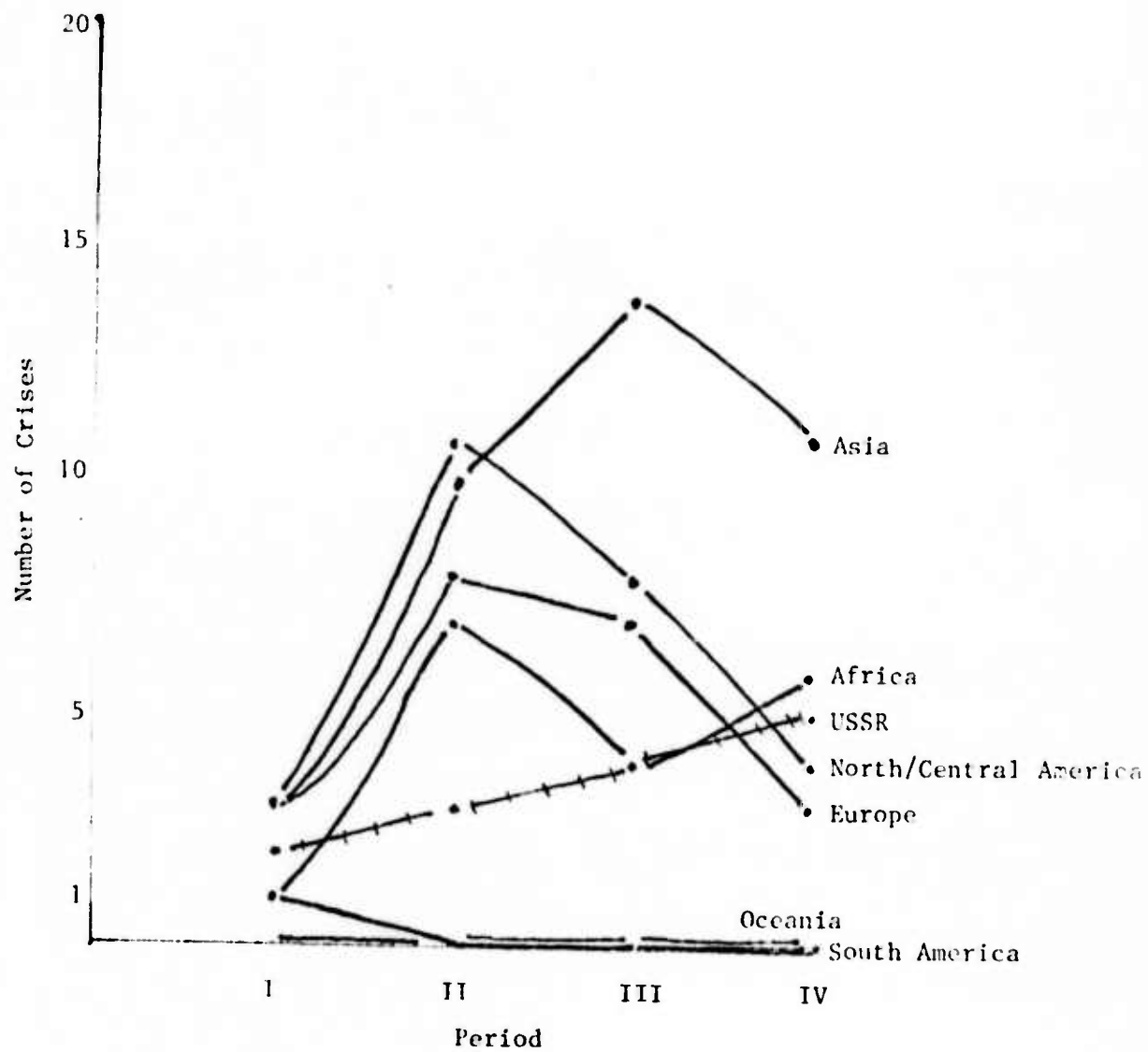


Figure 4. Crises by Region Involvement

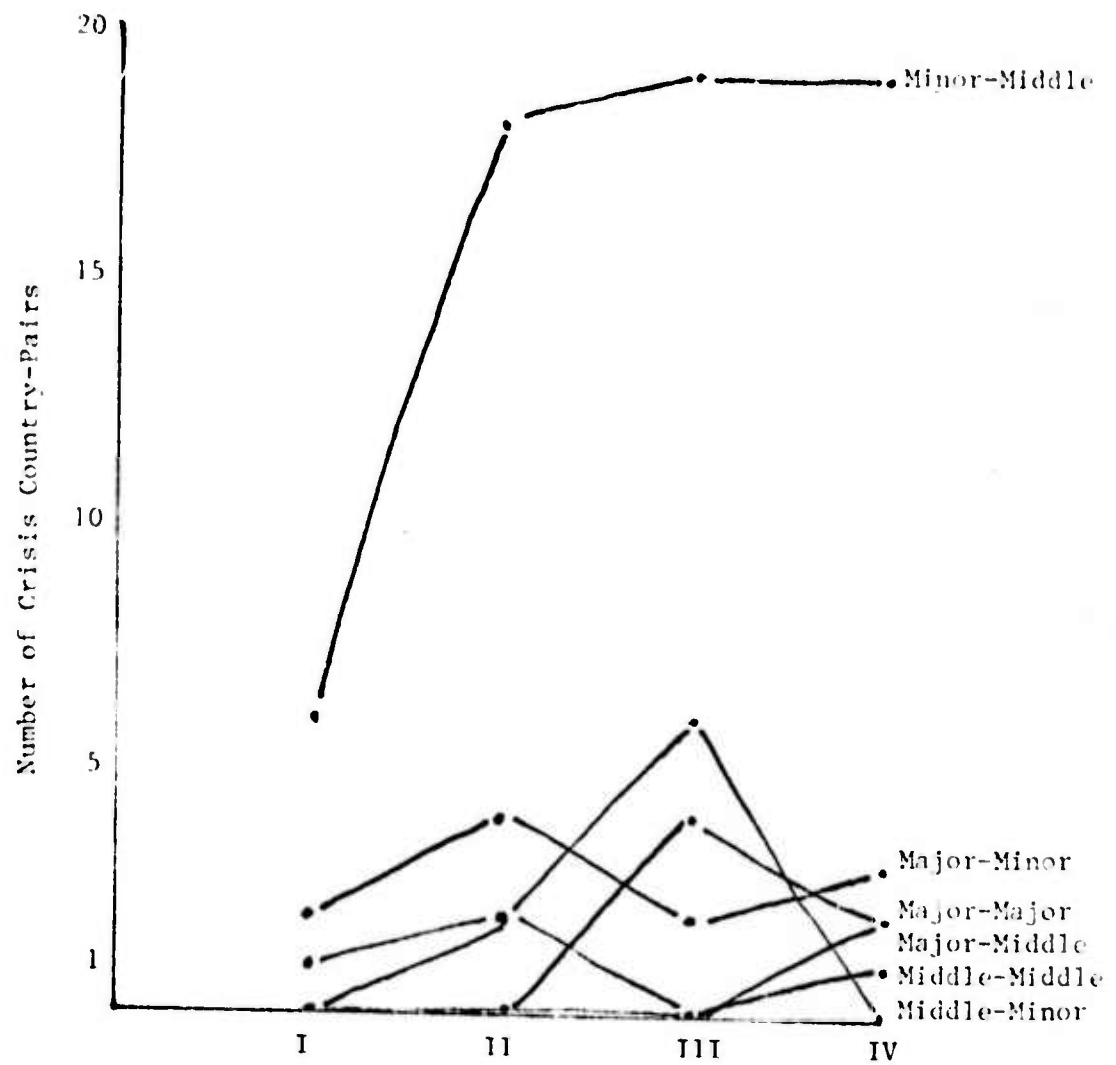


Figure 5. Power Comparison

GNP Comparison

Figure 6 shows that the wealth difference between crisis antagonists has been generally increasing. This variable indexes defense spending differences (see Section VII). Thus, crisis country-pairs are becoming generally less similar in defense spending as well as in overall wealth.

Population Comparison

Figure 7 illustrates a general decline in population size differences among crisis actors. Recently, however, these differences appear to be increasing.

Type of Issue

Figure 8 provides information on the trends in types of issues in crises. Recently, crises over territorial and access/use rights issues are declining after achieving prominence earlier in the post-war era. Crises involving issues of domestic government or the treatment of nationals and property are holding steady or increasing.

Geographical Distance

Figure 9 shows a recent strong trend toward greater proximity of crisis country-pairs. The average distance between the capitals of country-pairs has recently dropped from approximately 3,500 miles (Period III) to 2,400 miles (Period IV).

Contiguity

The trend toward increasing geographical proximity between crisis country-pairs is reflected in Figure 10. This figure describes the frequency with which crisis country-pairs are contiguous and non-contiguous. Trends since 1953 (the beginning of Period II) clearly show an increasing number of crises involving contiguous country-pairs and a decreasing number involving non-contiguous pairs.

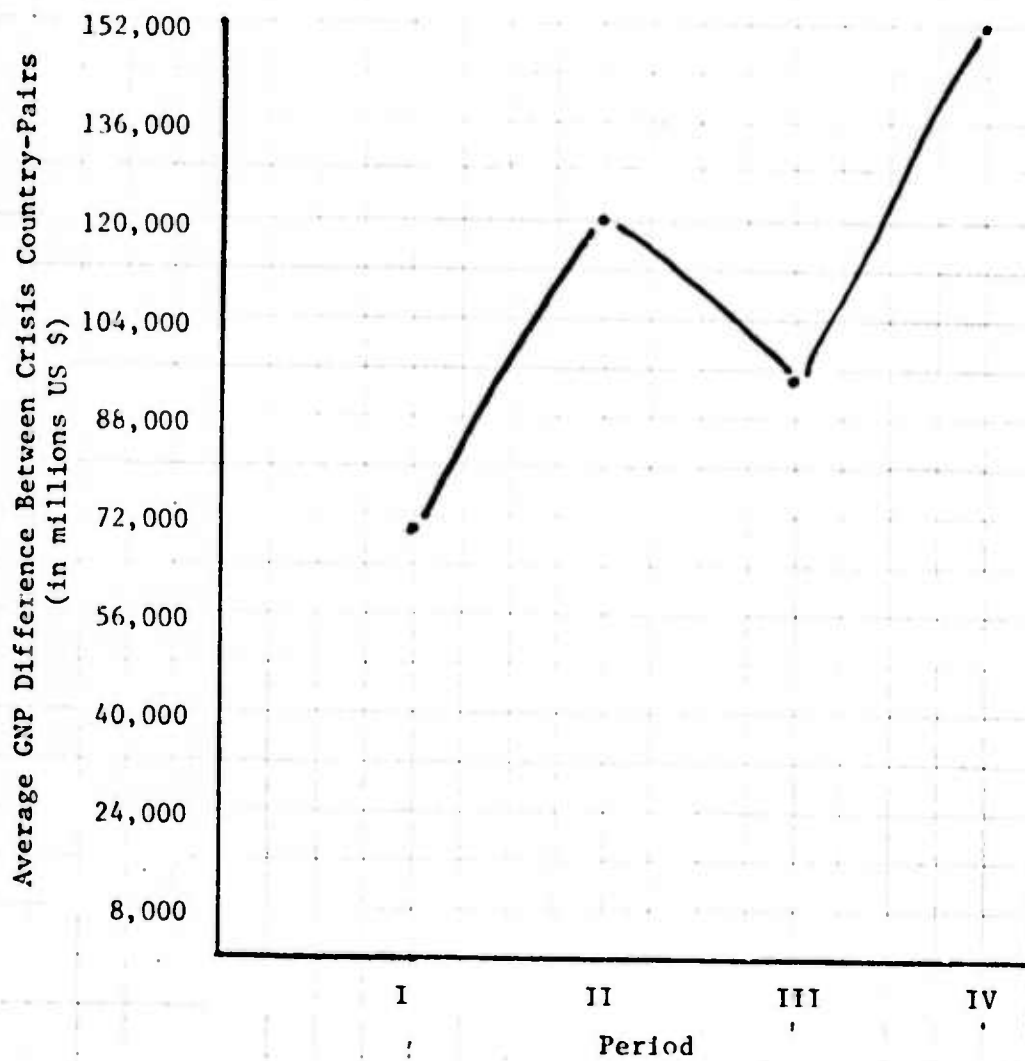


Figure 6. GNP Comparison

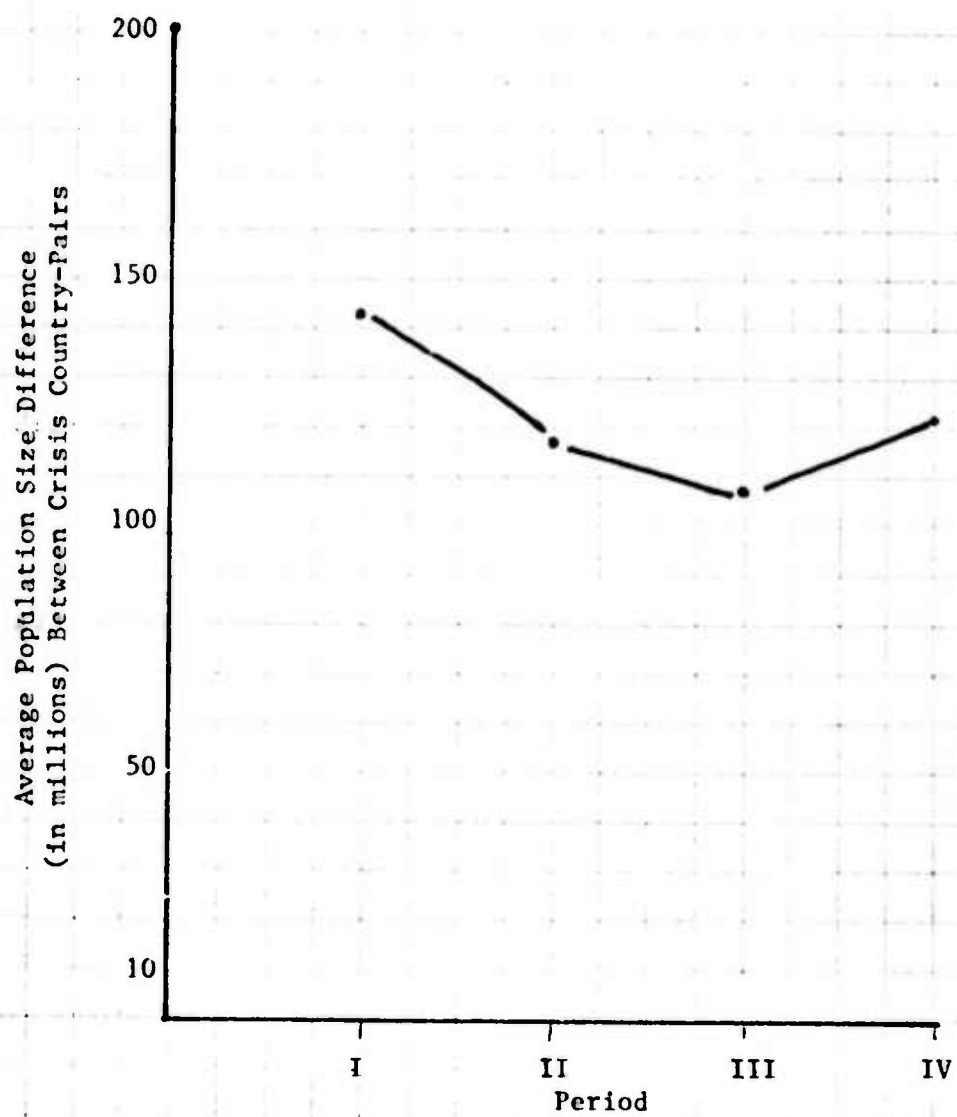


Figure 7. Population Comparison

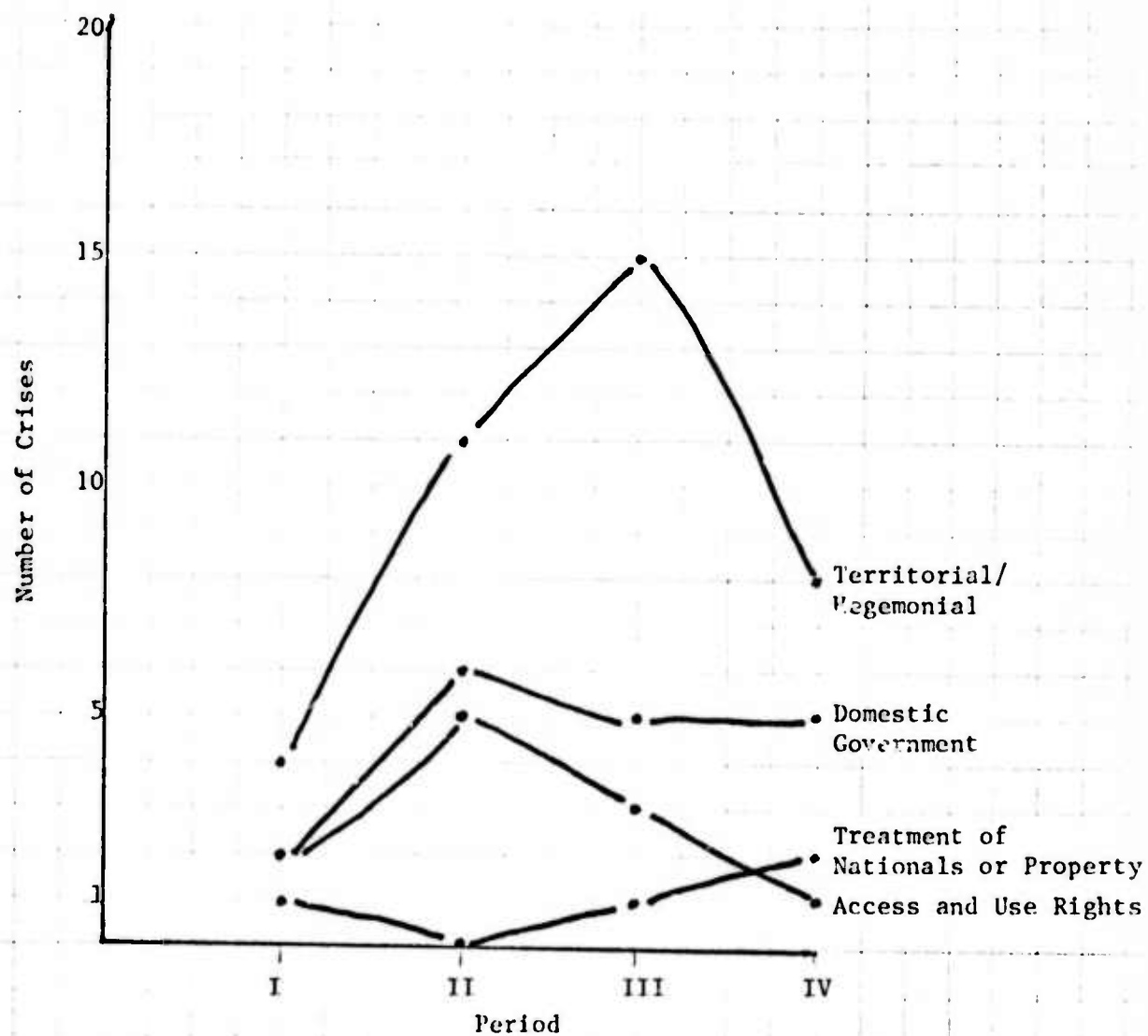


Figure 8. Type of Issue

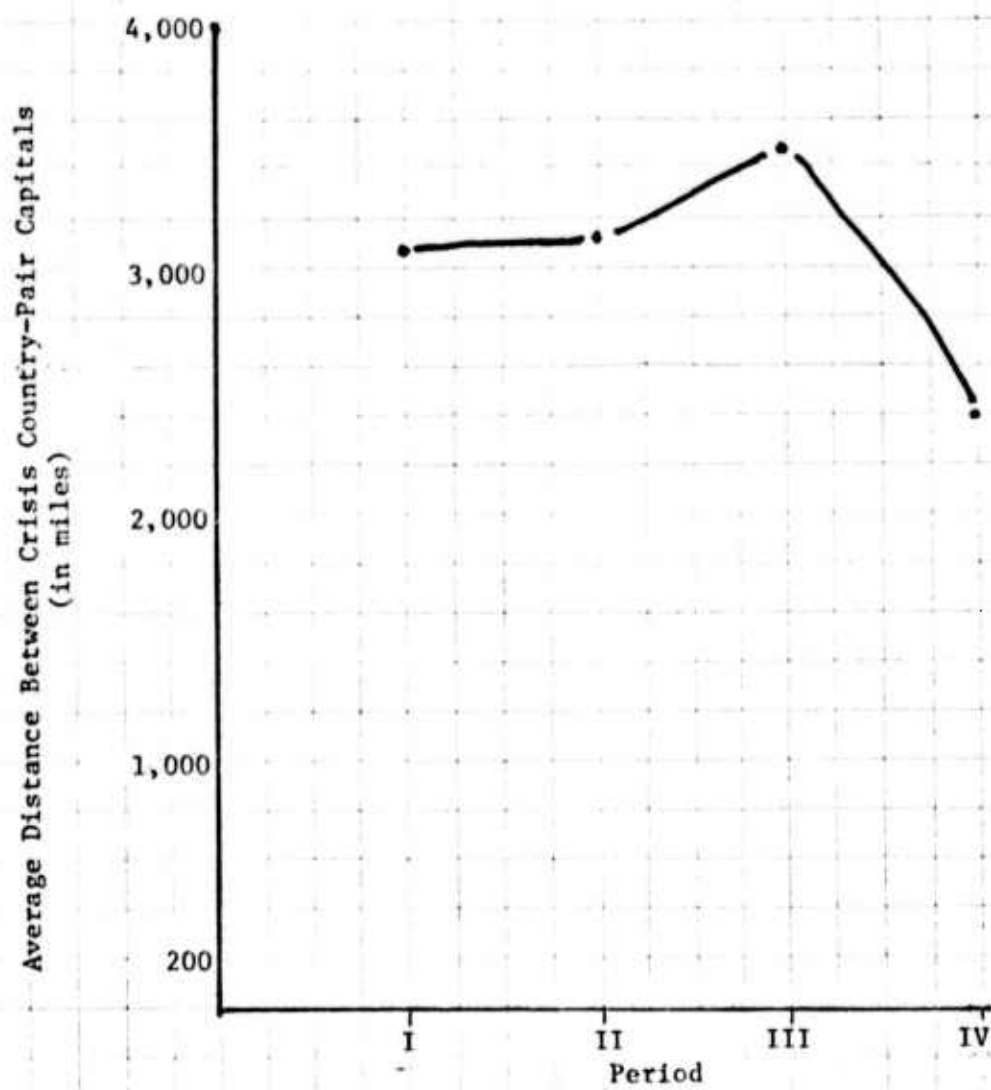


Figure 9. Geographical Distance

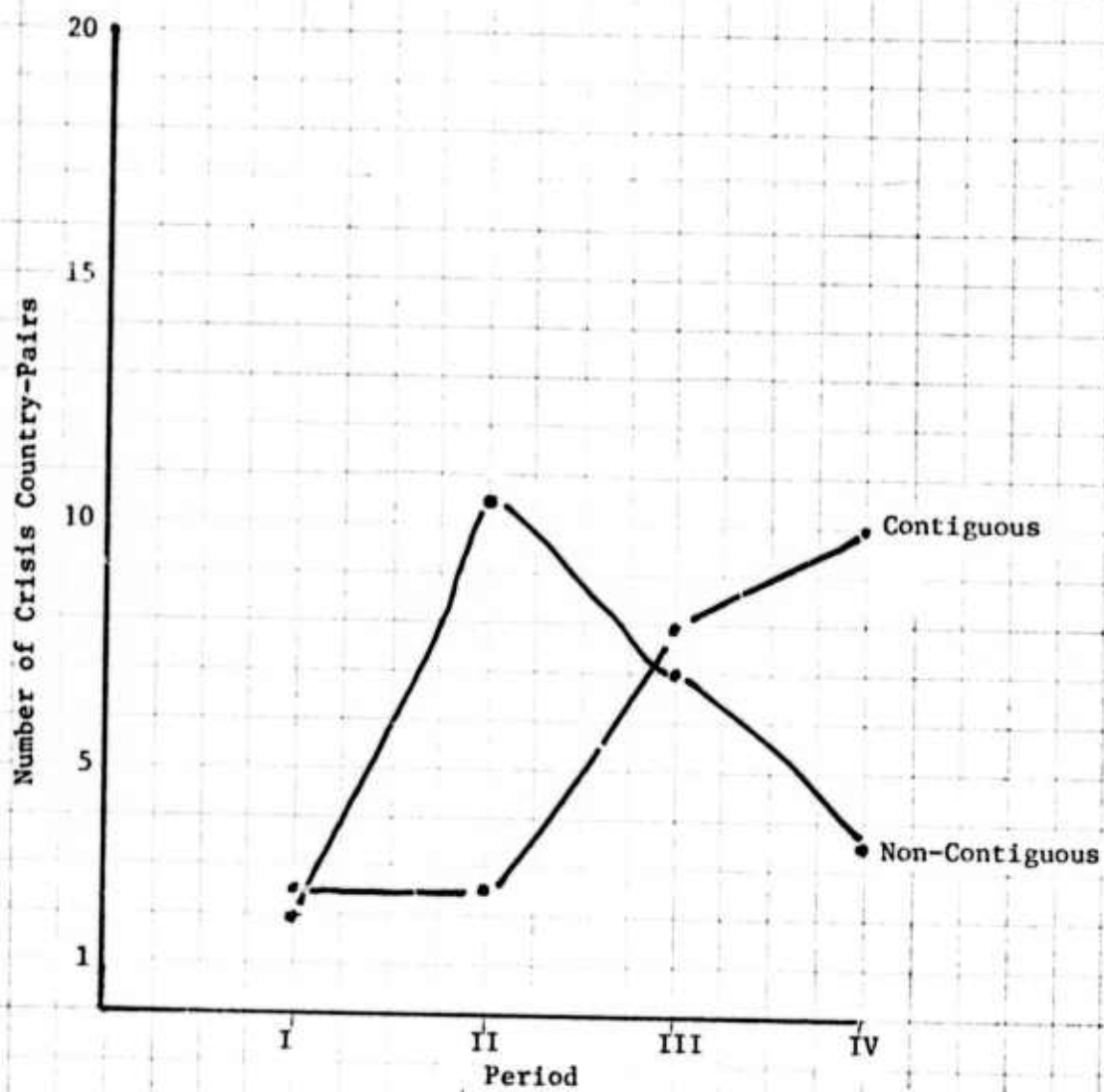


Figure 10. Contiguity

Superpower Defense Pact

Figure 11 shows that crises of country-pairs having no superpower defense pact have been increasing throughout the post-War era. On the other hand, crises involving countries with U.S. defense pacts and/or Soviet defense pacts have been generally decreasing over the last three periods. Cases involving no superpower defense pact are now far more numerous relative to other cases. This variable also indexes superpower alliances, as noted in Section VII.

Defense Pact Similarity

Figure 12 demonstrates that over the post-war era, there has been a steady increase in the number of crisis country-pairs not sharing membership in a defense pact until this number far exceeds the cases in which pairs do share such a pact. Frequencies of the latter recently are decreasing.

Prior Diplomatic Relations

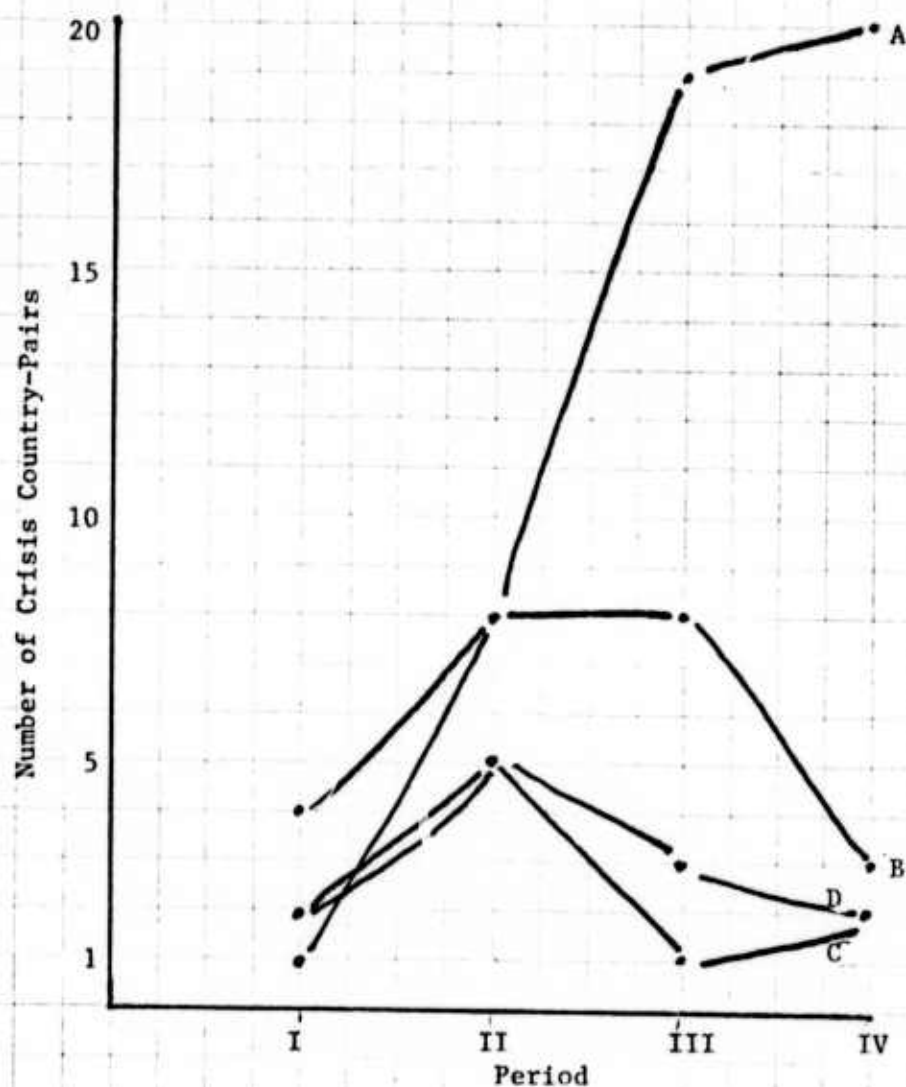
According to Figure 13, the number of crisis country-pairs where neither country has representatives in the other is increasing throughout the post-war period, while cases in which countries have one-way or mutual relations are recently decreasing.

Economic Interdependence

On the average, according to Figure 14, the economic interdependence between crisis country-pairs has been decreasing in the post-war era.

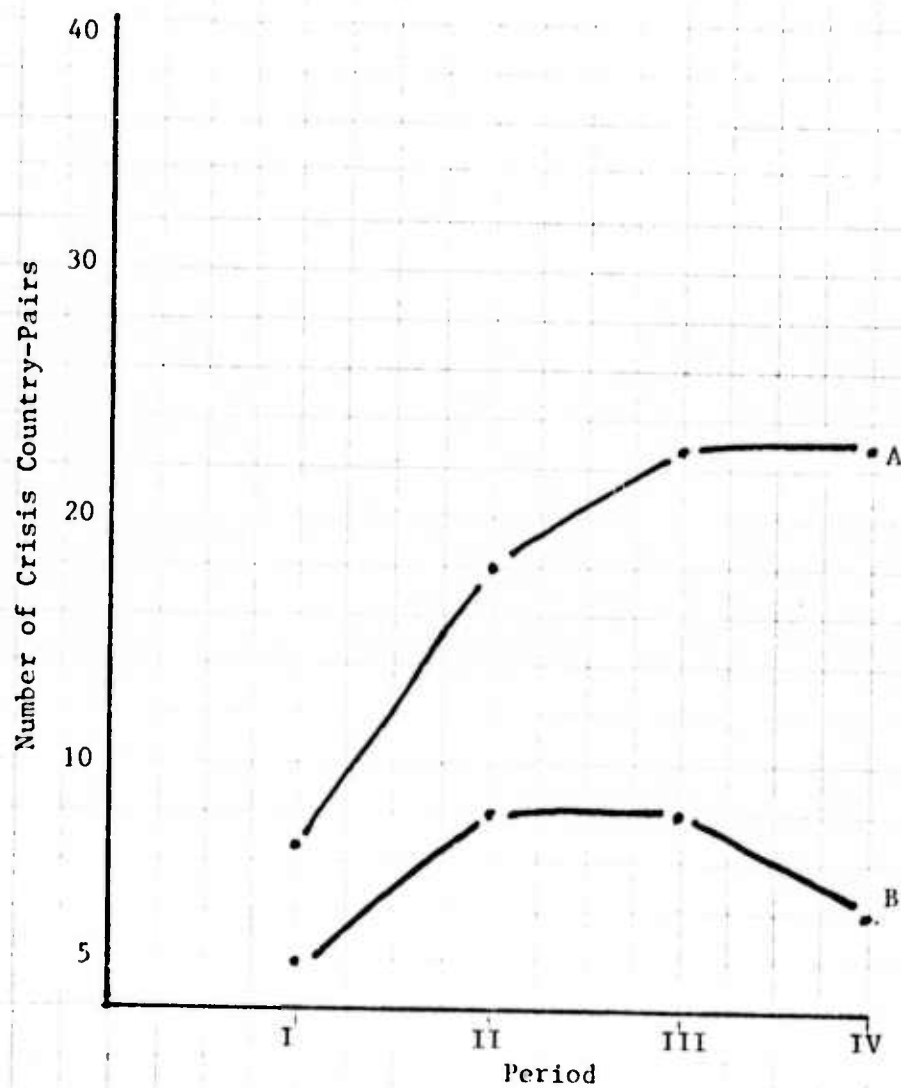
Organizational Integration

While the average level of economic interdependence between crisis country-pairs has been decreasing, organizational integration has been increasing.



- A - Neither country has a superpower defense pact
- B - One country has a defense pact with the United States, the other has no superpower defense pact
- C - One country has a defense pact with the Soviet Union, the other has no superpower defense pact
- D - Both countries have a defense pact with the United States

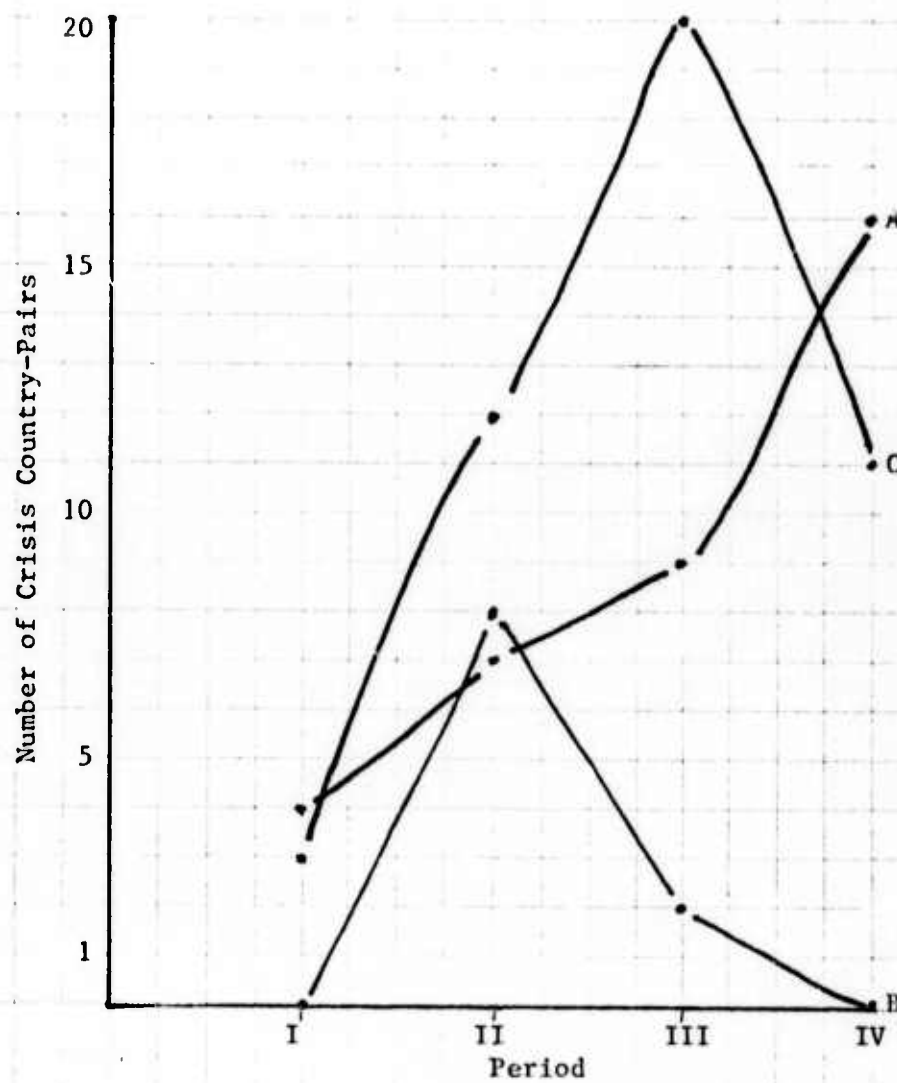
Figure 11. Superpower Defense Pact



A - Pair shares membership in at least one defense pact

B - Pair does not share membership in at least one defense pact

Figure 12. Defense Pact Similarity



- A - Neither has representatives in the other
- B - Only one country has representatives in the other
- C - Each has representatives in the other

Figure 13. Prior Diplomatic Relations.

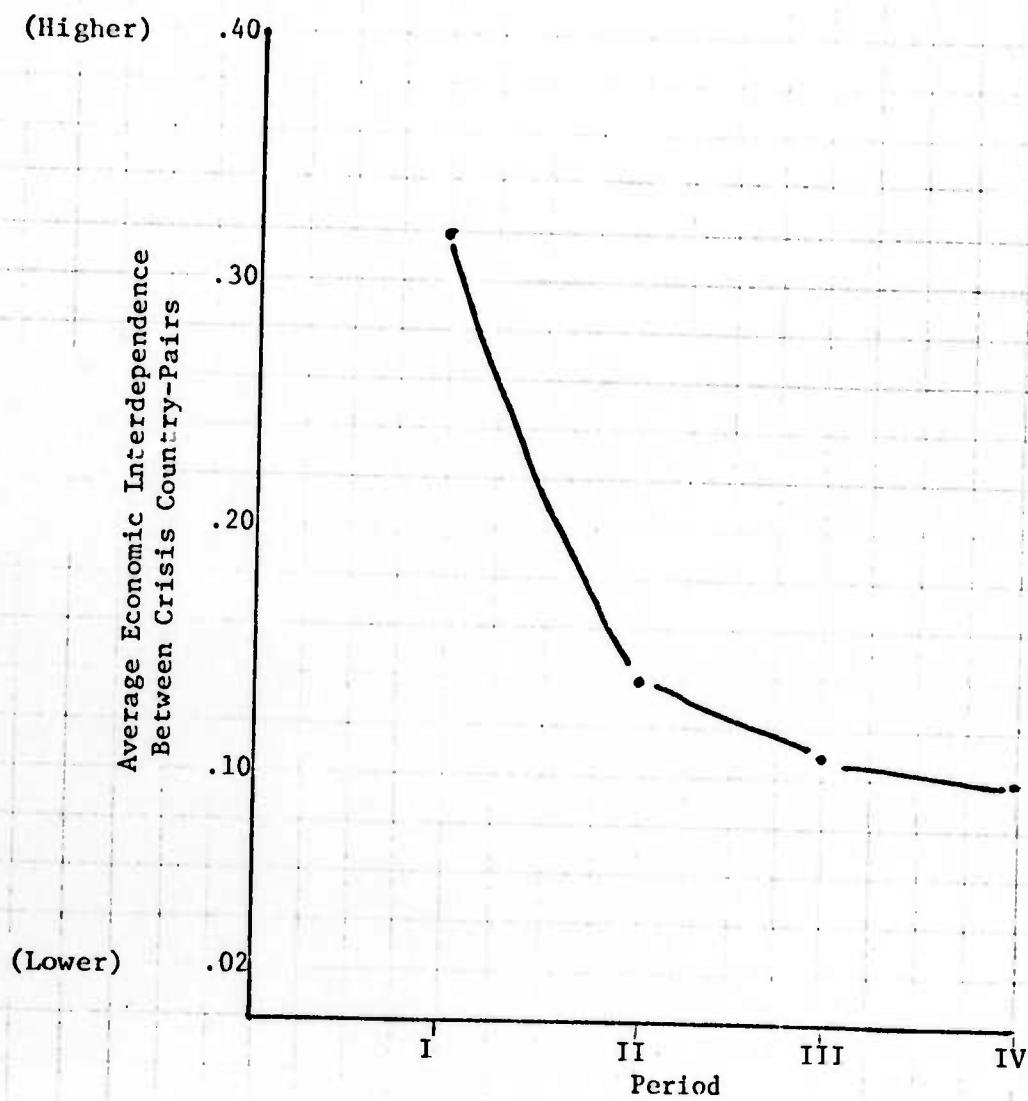


Figure 14. Economic Interdependence

Figure 15 shows that the average number of memberships in IGO's shared by crisis country-pairs has been increasing over the post-war era.

Population Pressure

Figure 16 identifies a steadily increasing trend in population density differences between crisis country-pairs.

Political Structure Difference

Figure 17 shows that the number of crisis country-pairs having different political structures relative to the number of cases involving the same structures has increased dramatically over the post-war era.

Multination Crises

A multination crisis involves more than two countries as principal antagonists. Such crises, according to Figure 18, have been generally increasing in frequency over the post-war period. Recently a small decline in the frequency of such crises has occurred.

SUMMARY AND FUTURE IMPLICATIONS OF TRENDS

Assuming that trends observed in the post-World War II era will continue, several implications for U.S. crisis management can be drawn from the preceding section. These implications must be considered cautiously because changing international conditions may alter currently observed trends. Indeed, there are several cases of trend reversals in the post-War era, including a reversal in the frequency of international crises. These frequencies were increasing in earlier periods and decreasing in later periods (Figure 3). Nevertheless, consideration of the implications, if observed trends should continue, can be a useful planning tool. In this section, aspects of observed trends are summarized, and then implications for U.S. crisis management are considered.

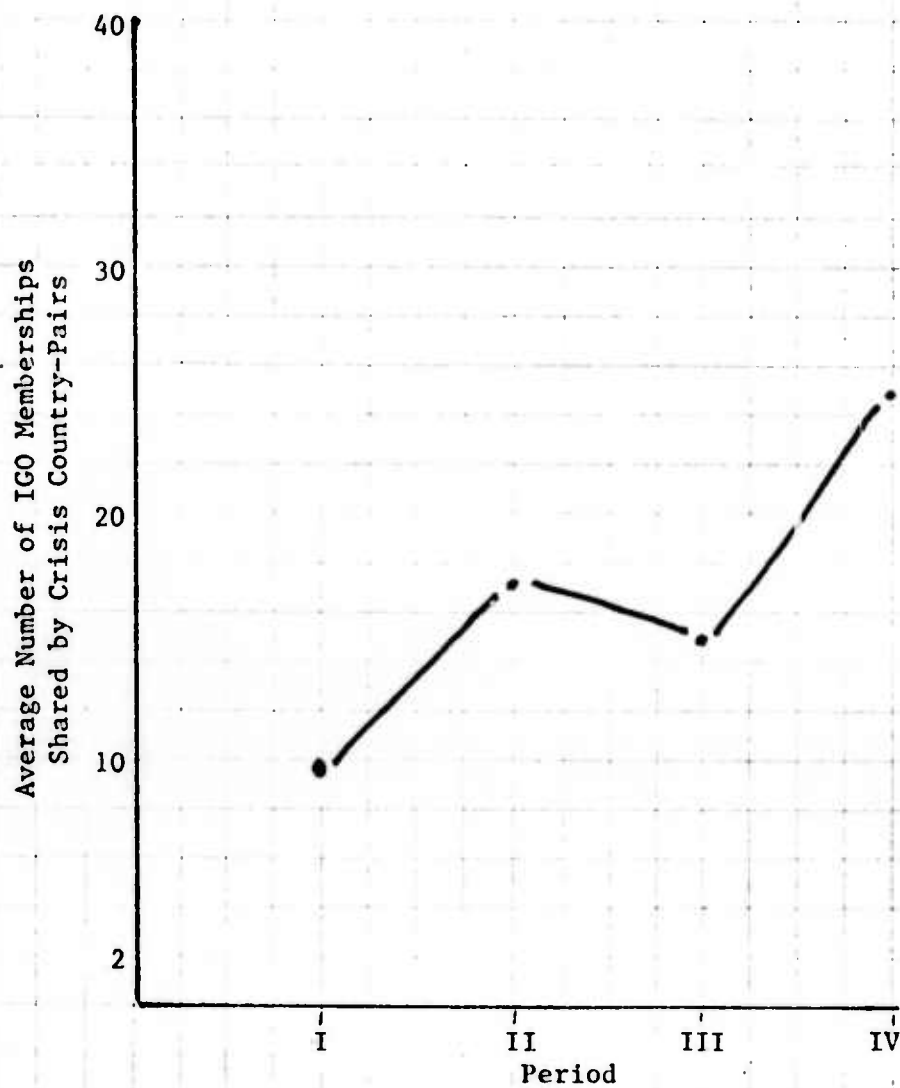


Figure 15. Organizational Integration

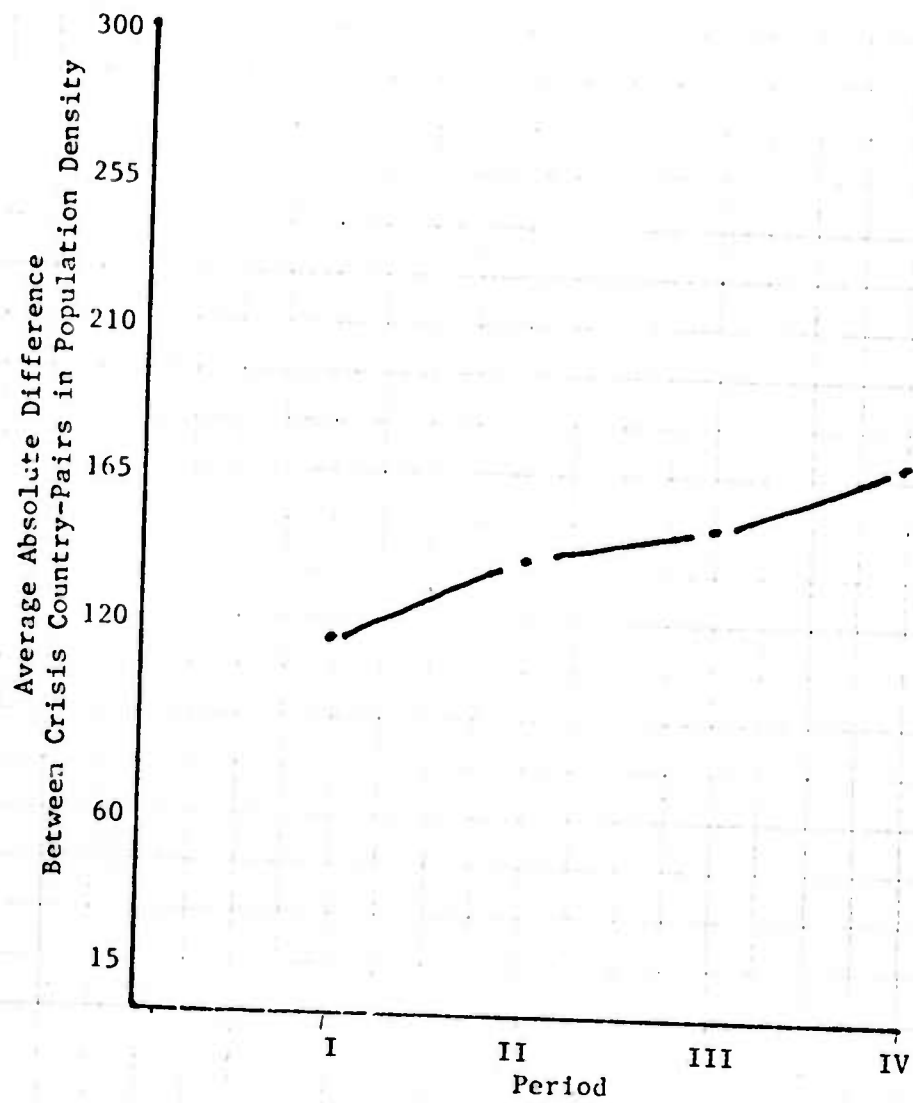


Figure 16. Population Pressure

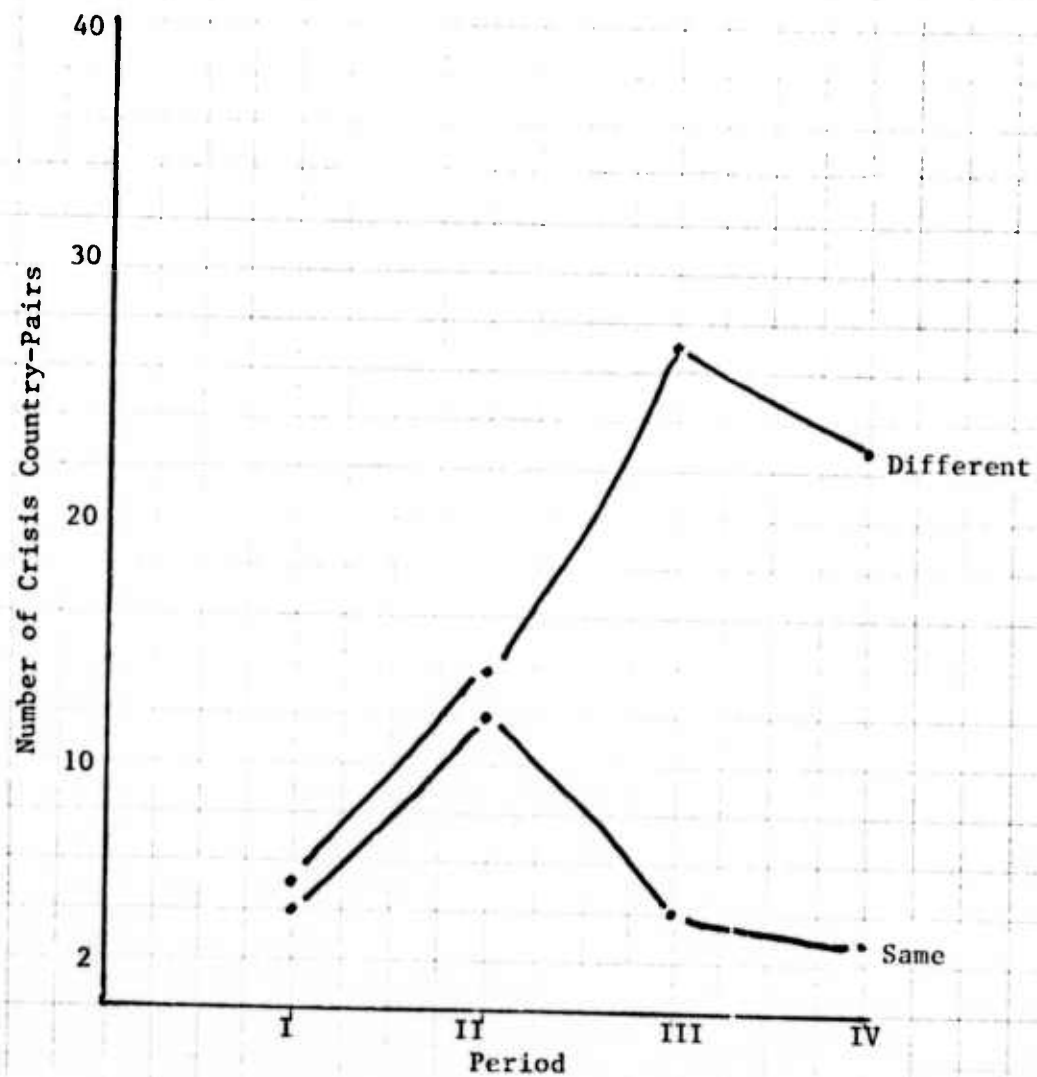


Figure 17. Political Structure Difference

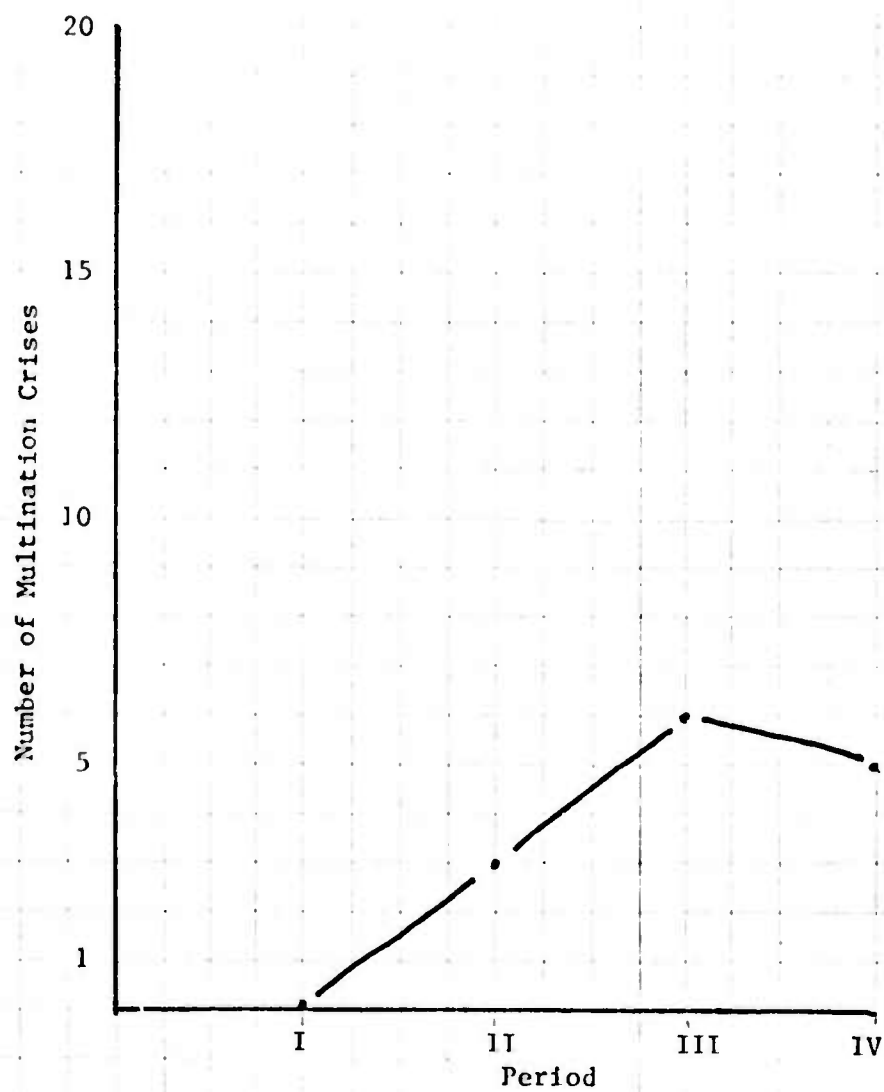


Figure 18. Multination Crises

Summary of Trends

Observed trends point to a different constellation of international crises than existed in the post-war era.⁹ If observed trends continue, the overall frequency of crises will decline (Figure 3)¹⁰ and their character will change.

The involvement of countries from different regions in crises is changing. If observed trends continue, Soviet and African involvement will increase while the involvement of other regions will decrease or remain steady (Figure 4). Countries involved in future crises are less likely to be allied to a superpower and especially to the United States by a formal defense pact than has been the case in the past (Figure 11). A variety of types of issues will continue to be the subject of these crises, but territorial issues will become less frequent while issues about domestic government and the treatment of nationals or property gain in relative prominence (Figure 8).

The adversaries in crises will be closer geographically (Figures 9 and 10) but more removed from one another in their levels of wealth, defense spending, and economic interdependence (Figures 6 and 14; Figure 6 indexes military spending differences). Their population densities will be increasingly different (Figure 16), and their political structures more likely will be different than similar to each other (Figure 17). These adversaries very frequently will be minor powers (Figure 5). They are increasingly unlikely to share a defensive arrangement with one another (Figure 12) or to have mutual diplomatic relations (Figure 13), while they are increasingly sharing membership in IGO's (Figure 15).

⁹ As noted above, the implications of trends are conditional on their continuation.

¹⁰ In cases such as Figure 3 where trends have been reversed in the course of the post-war era, we shall consider the later trend to be the one having future implications.

In summary, the future implications, conditional on the continuation of relevant trends as they are identified, are:

- Fewer international crises;
- Increased Soviet and African involvement in crises;
- Fewer crises involving countries having superpower defense pacts; increasing frequency of crises among countries having no superpower defense pact;
- Fewer crises over territorial issues, while issues involving domestic government and treatment of nationals and proper become relatively more prominent;
- Increasing geographical proximity of crisis adversaries;
- Greater differences between adversaries in wealth, defense spending, and population density;
- Declining economic interdependence between crisis adversaries;
- Crises between countries whose political systems differ;
- Crisis adversaries that are minor powers;
- Crisis adversaries that are increasingly unlikely to share membership in defensive pacts;
- Crisis adversaries that are increasingly unlikely to have mutual diplomatic relations;
- Crisis adversaries that will share increasing memberships in IGO's.

SOME IMPLICATIONS FOR U.S. CRISIS MANAGEMENT

Trends in international crises have possible implications for U.S. crisis management. Implications could be drawn at various levels of crisis management requirements, for example, at the level of general force structures, their location, or the specific weapons required. This section illustrates how implications are drawn from the trends projected above, but does not attempt to derive all possible implications at every level of crisis management requirements.

The implications are "possible" in the sense that trends may have implications for U.S. crisis management depending on the nature of U.S. involvement in future world affairs. At one extreme, all implications are relevant if the United States wishes to follow a global and aggressive involvement. At the other extreme, implications are irrelevant if the United States chooses not to involve itself in foreign affairs. This study merely describes implications that would be relevant in some policy contexts. These possible and illustrative implications are discussed below.

If, as observed trends suggest, the frequency of international crises declines, there may be in the future less need for a capability to respond to simultaneous multiple international crises. An implication of this trend is that less redundancy in international crisis management capabilities may be acceptable in the future. This study, however, does not include foreign domestic and other types of crises. Crisis management capabilities that are not unique to international crises therefore are not included in this implication.

Crises very frequently will involve minor powers, but an increasing tendency toward Soviet involvement also has been noted and middle-power crises will occur as well. Thus, it appears that in some postures the United States would require abilities for pursuing its objectives vis-a-vis the entire range of capabilities of foreign powers in crises. Because of the projected increase in crises in the African area, the United States may want to ensure its long-range crisis management capabilities for dealing with crises in that region.

The projected decrease in the number of crises among countries having a superpower defense pact and the increase in the number where such pacts are not involved has implications for the United States. First, the United States is less likely to be required to intervene in crises by virtue of formal obligations. Second, because no formal obligations exist, the United States may be less likely to have forces and communications systems within or near the crisis area. This suggests that enhanced mobility and flexibility of forces may be desirable in the future.

The types of issues involved in crises are changing, and these changes have implications for crisis management. Territorial issues are declining in frequency, and in the future issues involving domestic government and the treatment of nationals and property will gain in relative prominence. The types of forces used to protect domestic government or to protect property or nationals can be quite different from those used to protect territorial boundary areas. The relative use of these different types of forces in crisis management is likely to change in response to such changes in conditions.

The increasing tendency for crisis adversaries to be more proximate to each other geographically suggests an implication for U.S. crisis management. The movement of forces between crisis adversaries may occur more quickly across shorter distances, and therefore there may be a shorter warning time in the progression of a crisis into actual and sustained hostilities. This suggests that U.S. forces may require a capability for faster reaction time more frequently in the future than in the past in order to prevent developing hostilities or achieve a separation of adversary forces early in hostilities.

Several trends suggest that the capacity for crises to evolve into actual hostilities may be heightened in the future. This is suggested by the fact that several moderating influences between crisis adversaries are on the decline. Equality of defense spending -- and therefore of mutual deterrent capability -- is declining; the moderating influence or similarity in political systems will not be present in most cases; common membership in defense pacts -- which could moderate crises because of a mutual desire to protect common alliances -- are declining; economic interdependence between adversaries is declining, and this perhaps reduces the cost to one country or harms the economy of the other; adversaries are increasingly unlikely to have mutual diplomatic relations -- a development that may indicate considerable latent hostility between the countries. The only indication of increasing linkages between adversaries is an increase in common IGO memberships. Because of the decline in moderating

influences, the United States may wish to be increasingly prepared to respond to actual hostilities arising from crises.

It is important to reiterate that these and other implications that might be drawn from observed trends are conditional on the continuation of observed trends as they are identified. While trends are one basis for speculating about possible futures, they can be used more fruitfully in conjunction with other types of analysis. In particular, analysis designed to uncover the forces behind trends can be useful, as can be a related consideration of the future state of such forces.

It is also important to restate that crisis management implications at more specific levels -- for example, regional communications, types and combinations of forces -- can be derived from analysis along the lines of the above. In order to do so, however, more specific information is needed on the historical, specific characteristics of crisis management in different types of crisis situations. This information, coupled with forecasts of likely or possible future crisis types, could be used to derive more specific crisis management requirements.

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