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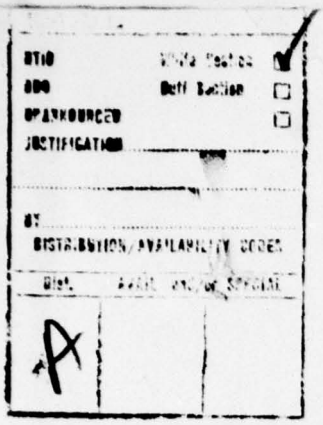
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TR&A Technical Report #39

International Relations Research Institute
School of International Relations
University of Southern California
September 1976

THREAT, CONFLICT, AND COMMITMENT

~~FINAL REPORT 1976~~

THREAT RECOGNITION & ANALYSIS PROJECT

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REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER: TR&A Technical Report #39 ✓	2. GOVT ACCESSION NO. (9) Final rept. 1 Jul 75-30 Sep 76
4. TITLE (and Subtitle): THREAT, CONFLICT, AND COMMITMENT: FINAL REPORT OF THE THREAT RECOGNITION AND ANALYSIS PROJECT	5. TYPE OF REPORT & PERIOD COVERED: 7-1-75 to 9-30-76
	6. PERFORMING ORG. REPORT NUMBER: #39 (14) TR/A-TR-39
7. AUTHOR(s): Charles A. McClelland, Patrick J. McGowan, and Wayne R. Martin	8. CONTRACT OR GRANT NUMBER(s): ARPA #2518 N00014-76-C-0137 (15) ARPA Order-2518
9. PERFORMING ORGANIZATION NAME AND ADDRESS: University of Southern California, Department of International Relations, University Park, Los Angeles, CA. 90007	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: NR 170/773
11. CONTROLLING OFFICE NAME AND ADDRESS: Organizational Effectiveness Research, Office of Naval Research (Code 452), 800 No. Quincy St., Arlington, VA. 22217	12. REPORT DATE: September 1976 (11)
	13. NUMBER OF PAGES: 249 (12) 250 p.
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office): Office of Naval Research Branch Office, 1030 East Green Street, Pasadena, California 91106	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)

"Approved for public release; distribution unlimited."

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Threat recognition, threat analysis, early warning, military commitment, crisis, conflict, international subsystems, monitoring, charting, methodology, international theory, threat assessment.

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Three new methodologies for analyzing world political relations are presented. The technique of charting the varying "threat burdens" of the countries is demonstrated with data from "dangers files." A subsystem analysis of threat conditions and developments in Southern Africa is shown. The recent commitments of the major world powers is demonstrated with multiple indicators.

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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INTRODUCTORY STATEMENT AND SUMMARY

INTRODUCTORY STATEMENT AND SUMMARY

Three new methodologies, directed to the analysis of foreign and defense affairs, with special reference to threat, are presented in this writing. They are described and demonstrated with the conviction that these computer-environed procedures are valuable and useful in both academic and applied settings. Due attention has been given to developing the organizing concepts behind the methods and to demonstrating the applications with data. The conceptual and methodological frameworks are not left empty; they have in all cases been fleshed out with data.

Only open sources have been consulted in amassing the data that have been used to develop and prove out the methodologies. These materials exist in electronic form on magnetic tapes and within computer systems. It is inefficient and uneconomical to reproduce the data on paper but, if they were printed and included with this report, they would fill several thick volumes. Because the factual material has been taken from open public sources, some critics already have discounted the contribution we have been attempting to make on the ground our work lacks "credibility." This means, presumably, that the available public information either is incorrect, is incomplete to the extent that the results of analyses based upon it are in serious error, or both. We do not wish to argue this case beyond making two observations (1) the methodologies should not be judged according to the quality or accuracy of the factual information passed through the procedures by way of test and demonstration--the mill is not the same as the grist it processes-- and (2) we would have every reason to view with great alarm the situation of thoroughgoing deception in the presentation of the facts on the public historical record of current affairs, if it were true that classified data have no substantial overlap with open data. We do not believe that such a situation does exist. Instead, we have assumed that current intelligence data run 90 to 95 percent to open sources and, without arguing in either direction on the worth of the other 5 to 10 percent, we assume further that the demonstration data, particularly that of events in the global survey and the sub system study, are substantially like the classified material. In both the global survey and the sub system analysis, we have illustrated the improvements that can be made in efficiency by cutting away data and by searching for the smallest possible effective data set.

In the matter of the theoretical undergirding of the methodologies, there are some international relations

theorists in the academic community whose standards are so exacting that they will be forced to discard the conceptualizing we have provided to explain and orient the procedures and analyses. We regret this condition of theoretical insufficiency but our problem has been that after three years of trying, we still do not understand fully the varieties and dynamics of threat circumstances. We discovered very early that the theory of threat is an underdeveloped and unassembled body of insights and also that it has been a neglected subject compared, for instance, with the concept of conflict. Nevertheless, the conceptualizations of the relationships and the linkages among several phenomena-- threat, warning, crisis, conflict, sanctions, capabilities, and commitment--have developed enough so that we feel justified in contending that we have given adequate attention to the theoretical footing upon which the methodologies have been constructed. The added observation is that the further pursuit of theories of threat processes and threat effects remains a promising enterprise.

Part I of this report is devoted to the description and demonstration of a monitoring technique aimed at the global indexing of the "threat burdens" of all the countries. The idea is that the details of the inflowing reports of conditions developing abroad can be inspected rapidly and evaluated daily by judges who then assess four qualities in situations they see in the reports as containing important dangers. In particular, they keep accounts of the severity of the reported danger, whether it is worsening, whether it is developing rapidly, and whether it is spreading. The result is that quantifiable outcomes are obtained through scaled information contained in "dangers files." The analyses that follow of the dangers files materials lead to the constructing of some indicators and to the charting of the rise and the fall, the movement, and the locations of national threat conditions in all the countries of the world. The concept, the approach, the data, and the problems of analysis of dangers files are entirely different from the "international event analysis" approach. In the first series of studies summarized in the report, the event charting and the threat burden charting are compared for the first four months of 1976. The results are encouraging and indicate that the prototype dangers files and the DDV analytic techniques constitute a viable procedure.

The sub system analysis of threat conditions was included at the outset in the overall research project design out of consideration of the fact that different problems arise and new opportunities are presented in the

shift of the focus of inquiry from a global perspective to a regional perspective. At the time of this writing, Southern Africa has become a major world conflict arena and as fertile a field for the investigation of situational threat as anyone could want. When the proposal of the Threat Recognition and Analysis project was written some three and a half years ago, that was not yet the situation. In fact, it was argued then that Southern Africa was a good choice for the investigation of threat phenomena at a regional level because it was not yet a fully active conflict site but was likely to become one at some time. The Southern Africa Sub System (SASS) study is an important demonstration of a methodology for monitoring and charting international behavior for the purposes of threat analysis on any specific conflict site.

During the 1960's as the intensity of the Cold War abated and as multipolarity came to increasingly characterize the relations within the heretofore competing alliance systems, scholars began to argue that something they frequently called regional subsystems were both an important fact of global politics and a potentially fruitful analytical concept. The SASS part of our project took these arguments as its working hypothesis and attempted to determine whether or not the study of one such subsystem, Southern Africa, might provide concepts and policy relevant insights into international threat phenomena.

Our methodological strategy was to create an event data file recording the behavior of subsystem members towards each other with respect to specific issues over which they cooperate and conflict. What is original in this effort is not the use of events to monitor behavior but rather the conceptualization and measurement of issue specific behavior and the application of these already well-established techniques to the study of a regional subsystem. While our data are prototypical and drawn from a public source, the regionally specialized news chronology, AFRICA RESEARCH BULLETIN, we assumed that just such procedures could be applied to the "real" data available from embassies and intelligence sources.

Part II of this report, then, describes our methods and findings. We are there able to demonstrate that a regional subsystem can be rigorously defined and be made into an operationally useful analytical construct. The Southern African subsystem is shown to involve many more members than the geographically proximate states of the region. We show the differencce between "threats" and "opportunities," the nature of the region's "threat agenda," and the principal

processes of "threat episodes" and "chronic" and "acute threats." We provide detailed analyses of one threat episode and two acute threat processes and discuss the different problems of forecasting and analyzing each type of threat phenomenon. We conclude by showing how what we have accomplished could, at little cost, become a routinized feature of national security policy planning and evaluation.

In Part III, an approach for identifying and monitoring international military commitments is described. The military commitment is one type of international relationship which can act as a threat spreading network which brings foreign dangers and conflicts to nations. The early recognition of the status and changing status of "who stands with whom" can provide defense analysts with information on likely channels of international influence and vulnerability.

In the international military commitment study, data have been collected on the commitment activity of seven major actor nations--the United States, United Kingdom, West Germany, France, Soviet Union, China, and Japan--toward 134 target nations for the years 1968 through 1974. An indicator for measuring the relative amount of military commitment between each actor and the target nations has been developed, and empirical descriptions of these relationships have been produced. Analysis of these results show, for example, that the military support activities of the major nations can be described, that these patterns held generally over the seven years but that certain changes in some relationships did occur.

The title of the report, given as "Threat, Conflict, and Commitment," holds together in the sense that the three methodologies described below dovetail into a single procedure of monitoring the changing status of world affairs on a current-time basis. The global surveying is believed to serve a general alerting purpose and to develop a relative and comparative basis for the net assessment of foreign dangers and threats. The methodology for the subsystem illustrates something akin to increasing the power of a microscope. The field is narrower, the picture is different from a "rich field" view, and the added detail serves specialized purposes. The commitment study is an illustration of just one kind of integrating procedure. The concept of the international system is general and it sometimes is of little practical use but invoking that concept is important as a reminder that the "system" of international politics is interactive and responsive. The parts relate to each other and to the whole. Threat

recognition and threat analysis require that a synthesis be attained from a complex of special and individual research operations. This report is intended to provide an opening for the further development of a synthesis.

Many individuals worked on the development and the testing of the data that were used in the exercising of the methodologies. The principal investigators wish to thank everyone who helped. The global studies which include the event data collections, the dangers files, and the country threat files were expedited by the efforts of Fred Rothe, Diane Casteel, Nancy Fahy, Marcy Agmon, Trysha Glazer, Richard Beal, Barry Zuckerman, Gary Guilbert, Sue Curran, Basel Khatib, Steve Kling, James Lebovic, Jeff Simon, Stella Morabito, Rathel Johnston, David McDonald, Lois van Beers, Atila Eralp, and Lorron Snell.

While Patrick McGowan is responsible for the SASS effort, the contributions of the individuals named below aided his task greatly. Robert Dennis, Helen Purkitt, David Tatkin, and Carolyn Williams, graduate students in the School of International Relations at USC, were hardworking and reliable assistants and a frequent source of useful questions and insights. Fred Rothe was always willing and often helpful in solving computer and data management problems.

Data collection assistance for the commitment study was rendered by Edward Lapotsky and Kris Dievendorff and their help is gratefully acknowledged.

PART I

DANGERS FILES: A METHODOLOGY FOR WORLDWIDE THREAT MONITORING

DANGERS FILES: A METHODOLOGY FOR WORLDWIDE THREAT MONITORING

The main purpose of this report is to make a first comparison of an old and a new method of monitoring and charting the reports of world affairs. The old method follows the approach of "international event analysis," a fairly well-known procedure under development for about a decade past (Burgess and Lawton,1972 and Peterson, 1975). The particular formulation of event analysis being compared is an indexing system that specifies periodically--72 hours, a week, a half-month, and a month at a time--the shifting levels of "tension" in international relations (McClelland, 1976). The research done for this report utilized weekly observation figures. Two indicators are computed in this version of international event analysis, one for the "system as a whole" called EFI (Event Flow Indicator) and the other for particular countries called ROZ (ROw percent and column Z-score). It is the ROZ scores that will be used most extensively in making the comparisons of findings from the old and the new procedures.

The new method is directed to the periodic evaluation of public threat situations in the world. Threat comes from the sensing and anticipating of danger and it generates stress (Beal, 1976). Thus, international "tension" registered in event flow phenomena is to be compared against "stress" generated by changing circumstances of threat situations. In the new procedure, analyses and numerical calculations are made on the basis of "dangers files." Like international event data, these files are built up from daily public reports of the world news. Reports are taken from the public news flow--three newspapers in this study--according to their reflection of a possible danger existing or arising somewhere in the environment. A short paragraph is composed to condense each report. These paragraphs are then evaluated one by one by several judges. Items often describe events or summarize current happenings but the judges have their attention directed steadily and wholly to the status of conditions behind such events and happenings. In other words, "dangers files" are not variants of "event files" but something entirely different.

Four properties relating to the presence of danger are evaluated for each data item. Numerical readings along a nine point scale are recorded by each judge for each of the four properties. A compound observation for each piece of data is created thereby, taking form parallel to that of a weather report where temperature, humidity, barometric

pressure, and wind velocity are viewed together as reflecting the state of the weather at a moment of observation. The four elements of the danger vector will be discussed more fully below. We note at this point only the names and a simple identification of each property: (1) "degree" is an estimate by the judge of how "bad" or severe the danger factor is, (2) "tilt" is a reading of whether the danger is on the rise and is intensifying or, to the contrary, is in decline and "winding down." (3) "speed" refers to the movement characteristic of a danger situation and answers the question of whether the danger aspect is slow-moving or is perceived to be a swift development, and (4) "spread" is an observation on the widening or extending of the situation with respect to the prospect of the involvement of more parties in the danger.

It should be apparent immediately that the taking of readings of the four properties of danger for each data item on a situation needs to be accomplished in "real time." The making of the data of evaluation involves both the interpretation of the present state of affairs and an insight into movement and change in the short term future. Retrospective evaluations have no place in the dangers file collection procedure. If we really knew how an affair would turn out, the day to day danger scaling of degree, tilt, speed, and spread could be made quite accurate but it would also be quite insignificant. The interest lies in the record of estimating the factor of danger under the actual conditions of knowing something about what has come before, up to the present moment, but of not yet really knowing what is to come next. Studies of the resulting data can be made after the fact, of course, but data acquisition and initial processing must be made currently and before outcomes are known as the "facts of history."

The conceptual foundation of the dangers files and the related approach to analysis have been established in a half-dozen previously circulated papers (McClelland, 1974, 1975a, & 1976). An extensive treatment of the underlying conceptualization will not be attempted here. Some minimal attention to theory is necessary, however, in order to explain why it has been considered necessary to devise a dangers files approach. Brief discussions of two topics--the question of a major transformation in the structure of action of the international system and the role of latent and activated threats in international behavior--should be sufficient to outline the rationale behind the research.

Machiavelli is said to have introduced the modern concept of "the state" and the principle of state interest

or "raison d'Etat" (Watkins, 1968:151). The traditional theory of international relations has for some centuries maintained the notion that all significant concerns of large scope find their outlet, expression, and resolution through the channels of diplomacy and warfare. Diplomatic history has always concentrated on the presentation of facts and of interpretations that illuminate two matters: what was done, including what was said, in foreign affairs, and what the purposes and motives of the various state-actors were as they participated in historical events. Personality factors, intra-governmental circumstances, and domestic influences have been included in the accounts of diplomatic history only insofar as they have contributed to the understanding of the main action unfolding on diplomatic and military fronts. When foreign news reporting began to mature in the nineteenth century, the basic format of diplomatic history was adopted. When foreign news evolved into the world news in the second and third decades of the twentieth century, with newspapers, newsmagazines, and radio broadcasts attempting to encompass all significant activity on the planet, the assumptions about the central importance of state action and response were accepted without question.

After World War II when U.S.-Soviet rivalry developed into an entrenched world conflict marked by frequent confrontations and crises, world news reporting simply continued in the traditional manner, changing the content to Cold War terms but maintaining the old forms. International event analysis is a modern method of tracking and interpreting the major currents of world action in the terms of reference and according to the priorities of the raison d'Etat principle. Significant public affairs are political; the affairs that are of prime importance are international and they assume importance because they concern the security of nations. National societies maintain governmental organizations to guard the interest in survival and to defend against threats and dangers.

During the twentieth century but especially during the decade just passed, forecasts and analyses have been offered frequently to announce the collapse of "the system of sovereign states." The idea of an historical succession or of a movement to a new form of world order has become popular. So many indications of a transformation have been brought forward and so many signs of new forces at work breaking apart the traditional structure of relations have become apparent that the question of the rapid approach of the demise of the almost five hundred year old international system has to be taken seriously. The discussion of this theme proceeds in a great many different directions. The

view pertinent to the present inquiry is that the meaning of national security may require a reformulation. It is said that national defense is no longer limited to military activity and that it should no longer be managed by military organizations. Perhaps it is already the case that national societies are endangered in many new additional ways and that the information and action relating to such "new threats from new quarters" do not all flow through the expected official governmental channels, diplomatic, military, or otherwise. It could be that many dawning threats to national security will avoid the diplomatic and military environments and will escape the conversion to international situations and problems.

The dangers files approach to monitoring and charting of the reports of world affairs is a conscious adjustment to the potentials outlined above. It is a possibility that the assumptions about a basic transition to a different structure of world action are part of a correct forecast. Hence, the fundamental rule for scanning across information sources is to recognize and retain the current reports that contain signs or indications of danger, whatever the kind or type, that could have impact on global public affairs. The task is to provide accounting for the appearance and movement of situations that are domestic and international, that are political, military, social, economic, technological, or ecological, and that are detected to contain significant levels of threat content.

The purpose in scanning reports by means of both old and new methods and then in comparing results is, in part, to begin a systematic investigation of the question of the international system change phenomena.

The circumstances of a possible unfolding of a world transformation and the more concrete and limited manifestation of the opening of a post-Cold War era of history have heightened the interest in gaining a better understanding of international behavior. During the Cold War period, as in many preceding times, the basic configuration of international politics was both strong and simple. Two great Powers confronted each other, attracted other Powers to their respective camps, and dominated the history of the period without resorting to major warfare and, therefore, without forcing a catastrophic system reorganization. The prime foreign and defense policy considerations were to maintain the system of opposition, to mobilize sufficient strength and will to offset the opposing side and to meet its challenges, and to acquire information and evaluations about opponent capabilities and opponent intentions. There

existed little need to scan the environment for danger signs; the threat from the opposing camp was apparent and paramount. Further, there was little interest in how and why various countries acted in international affairs as they did. The Cold War structure accounted for behavior in the main; lesser considerations concerning national operational codes, sensitivities, alignment tendencies, and propensities toward action did not require much attention.

The coming of the post-Cold War era has left many of the old problems and tasks unchanged but it has brought to the fore new factors and novel requirements. Among the latter is a reconsideration of the need to exert influence and to nurture relations with many countries. The simple dimensions of the Cold War have been replaced by complex and multidimensional lines of relations. Dozens of issues and conflicts, many of them unrelated, have come on the contemporary scene; it is as if the old structure fell to the ground and shattered into many pieces. We appear to be in a time when local properties dominate international system processes. The result is that it has become important in forward-looking foreign policy operations to pay heed to the international behavior of many other countries. Knowledge of favored patterns of action and response, of the interests and sensitivities of regimes, and of the particular points of leverage when influence is to be wielded have achieved an important stature. Modern data management techniques make possible the development of ever-improving files of information on the "track records" of performance and the behavior characteristics of every society and government.

The sensitivity and responsiveness to threat held by national regimes are critical driving forces behind international behavior. National images and national agendas give the identification and shape to threat phenomena (McClelland, 1975). National publics of modernized countries are habituated to respond to reports of threat situations in certain ways. Latent threats persist and become activated from time to time through symbolic triggering. Crisis conditions and emergency responses break in on routine activities according to the status of threat situations, both within the countries of the world and in the relations between countries. Dangers files are conceived to be instruments of threat recognition. They can be employed to feed current data into country threat files which, in turn, can become analytical tools supporting foreign policy formation and execution.

While international event analyses may be focused on

the tracing of international conflicts or on the detection of the onset of major confrontations, clashes, and crises of nations, they may well miss many of the manifestations of threat that bear importantly on the understanding of the international behavior tendencies of the various countries. Thus, a question of interest is whether or not dangers files can produce better data and support more effective analysis.

WEIS: THE EVENT DATA ANALYSIS

Held to account by their readers and advertisers on one side and by critical and suspicious government agencies on the other side, some major newspapers of the world have developed unusual proficiency in presenting the news of events, developments, and conditions in international affairs. They apparently resort to unwritten and conventional principles of shrewd choice and anticipation for recognizing which affairs of war and diplomacy deserve attention. The reporting of detail varies in amount with the judged significance of sets of happenings. In addition, a vocabulary that is specialized, if not completely standardized, is used in reporting international news stories. Thus, three factors--the outcome of an institutionalized skill at early recognition of affairs rising to importance, the variation in the amount of detail offered in reports according to the relative significance of happenings, and the consistent employment of a specialized language--make possible the quantification and indexing of the flow of reports of world news.

The NEW YORK TIMES has been proven to be one of the proficient newspapers whose news reports can be used successfully for monitoring the flow of public international action. This newspaper, like other current affairs publications, is a biased source, giving extra attention to U.S. policy and to foreign actions impinging on U.S. interests, printing only a small and variable portion of all the news that would constitute an "ideal objective" record, and presenting no more than one version--approximate and inexact--of the reality. It is the selecting and discriminating that produce the valued results; a full and objective recording of what has been happening in world politics would be quite useless because it would be vast and undifferentiated. The world might well benefit from the creation of better current information services on the public political affairs of the nations but nobody has yet provided such improvements. It is possible, of course, to make progress by checking and calibrating the content of one newspaper (or wire service or government publication) against that of another. International event analysis

eventually may concentrate on that kind of investigation. The work is slow, costly, and difficult, however.

Several categorizing schemes have been devised for reprocessing the serial records of newspapers and other kinds of sources such as collections of documents. One of the simplest and also the oldest is that of the World Event Interaction Survey or WEIS. All that one has to do to add a day's worth of information to the WEIS data file is to (1) read a copy of today's NEW YORK TIMES, marking every passage where a report is given on an action taken by one national government and directed to one or more other governments, (2) go over each marked passage to check for consistent language usage and meaning according to a standard list of "WEIS event codes," (3) rewrite the information in the passages in the form of "who did or said what to whom about what," first as an English sentence or short paragraph and second as a "coded sentence" for "actor" (who initiated the event), "event" (what type of action taken), and "target" (who was the recipient of the event), and (4) transcribe all the rewritten information for all of the events in today's paper to a computerized chronology file. The computer operation is to secure the single advantage of facilitating the selecting and tallying of combinations and groups of information.

The code names for WEIS actors, targets, and events appear on lists included at the end of this report. The WEIS data file for the NEW YORK TIMES extends, at the time of this writing, over a ten and a half year period between 1966 and 1976. Written out on paper, it fills 16 thick volumes and at the moment contains 83,473 event records.

Dozens of different kinds of quantitative investigations can be made using no other data than that recorded on the WEIS computerized chronology. For the purpose of a first comparison of WEIS findings against the dangers files findings, the "world tension" indicator values called EFI and ROZ have been calculated for the period of the first four months of 1976. The EFI-ROZ procedure has been discussed elsewhere at some length (McClelland, 1976). All that needs to be said here is that EFI's take readings of the whole "volume and variety" of reported international action by everybody a week at a time. The indicator values are adjusted so that the number 500 can be regarded as a "warning level" when the indicator's fluctuations are being interpreted. EFI works like a barometer or like the DJ industrial averages: a descending series of numbers spells out "bad news"--in EFI's case, increasing strife activity, stress, and tension--while upward movement is "good" or

indicating improvement in conditions or relaxation of activity and tension.

ROZ is an index for tracing the relative positions of individual countries with respect to their involvement in international clashes, confrontations, and emergency situations. There are about 180 "international actors." The file contains information on the amount of reported international action passing through the NEW YORK TIMES filter and flowing by each week. Basically, ROZ calculates the "share" or the part of the whole flow of action initiated by each country. For example, the "row percent" figures for the seven days ending April 3, 1976 show that the U.S. initiated 21.9% of the whole action, the Soviet Union did 15.1%, Cuba did 4.5%, Egypt did 6.06%, Britain did 4.5%, Japan did .76%, Greece did 1.52%, and so on.

The percentages are modified, however, in consideration of the question of how much event initiation is usual for a given country. In other words, it is important to consider the individual "output" record of a country over a period of time. If, in a given week, its output is less than usual, that fact needs to be reflected in the indicator along with the "share" of the total action. ROZ is a compound of these two factors. The ten year output record of each country has been calculated and expressed in standard or "z-scores." The standard scores vary on either side of zero, producing plus and minus values. For instance, if the United Arab Republic initiates 10 acts in a week that is equivalent to a standard score of .64 or a little above the mean for that country on the ten year record of its performance. ROZ is simply the product of the percent figure multiplied by the z-score with a constant of 30 added. The constant is included to provide an easy to remember threshold (50). The rule for reading ROZ indicator values, then, is that any number of 50 or larger is to be interpreted as indicating a significant "stress and tension load" being borne by the country. Something worth looking into probably has been going on, usually some important involvement in conflict, violence, or severe controversy. A reading of 70 is used only for the warning level figure for the United States. This corrects by about the right amount for U.S. predominance in the reported event flow.

The foregoing discussion should provide enough information to permit the reader to scan and interpret the results shown by the charting of EFI and ROZ for the January-April period of 1976. This four month period was the time during which the dangers files scaling information was compiled under the right research circumstances and at the

end of a long preceding period of methodological experimentation and development.

As Figure 1 illustrates, the first four months of 1976 included the peaking of a year-long trend in the amount of reported international activity. The data given in Figure 1 are the total numbers of all acts of all kinds initiated by all countries week by week from 1974 to early June 1976.

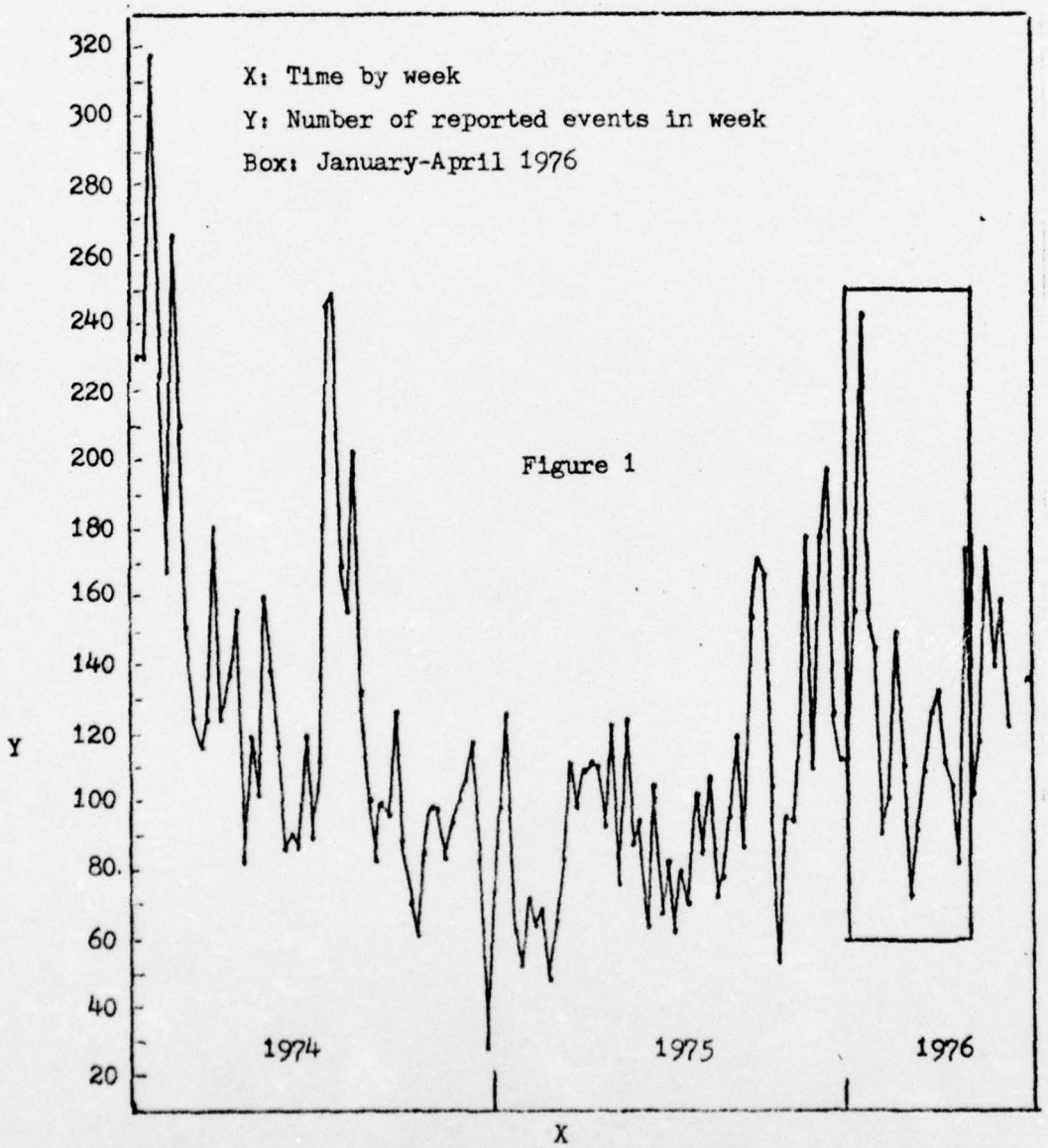


Figure 1

INTERNATIONAL EVENT FLOW
NEW YORK TIMES WEIS FILE

Except for the flurry of activity associated with the Cyprus embroilment in July and August, 1974 was a year of lessening international activity. In contrast, the trend all through 1975 was a freshening and an increase of action with the high point of the trend reached in the second week of January 1976. The following period witnessed a decline in the level of activity. In late March, another reversal of direction appeared. Later reporting will reveal whether or not the upward movement held in 1976.

EFI scores are thought to register the approximate condition of overall world "tension." Table 1 shows the EFI numbers for the weeks beginning with the low point of the event flow late in 1975 and continuing through early June 1976.

TOTAL NUMBERS OF OCCURRENCES AND EFI SCORES
BY WEEK: OCTOBER 1975-JUNE 1976
New York Times WEIS File

WEEK ENDING	#OCC	EFI	WEEK ENDING	#OCC	EFI
10/18/75	53	727.6	2/21/76	149	553.0
10/25/75	95	672.0	2/28/76	110	635.8
11/01/75	94	641.8	3/6/76	72	627.9
11/08/75	119	621.4	3/13/76	91	614.5
11/15/75	177	554.0	3/20/76	109	568.3
11/22/75	109	670.0	3/27/76	126	562.3
11/29/75	177	529.1	4/3/76	132	578.4
12/06/75	197	496.4	4/10/76	111	624.6
12/13/75	126	568.8	4/17/76	105	627.0
12/20/75	112	579.3	4/24/76	82	657.7
12/27/75	112	616.6	5/1/76	174	520.8
1/10/76	156	531.3	5/8/76	92	598.4
1/17/76	243	446.1	5/15/76	117	578.4
1/24/76	156	536.5	5/22/76	174	519.3
1/31/76	145	545.5	5/29/76	139	530.7
2/7/76	90	662.7	6/5/76	159	529.8
2/14/76	101	582.6			

TABLE 1

There were only two high tension weeks in the recent period. One developed during the week of December 2-8, 1975 and the other during the week January 11-17, 1976. The ROZ data make possible a search for the forces that generated the tension. ROZ tables are much too large to display in a paper; they have to be used as a series of computer printouts since they include scores for every country for every week. By scanning the tables, we found all the scores of "50 and above" in the two weeks, noted the countries involved, and prepared a table of ROZ scores for the time connecting the two high tension weeks. On Table 2 it is shown that Israel and South Korea were the main contributors to the EFI value of 496 in the December week, with the U.S. not reaching its 70 level but contributing significantly to the world tension score, nevertheless. The sources of the EFI reading of 446 in January 1976 stand out strongly: there was a convergence of effects from two conflict arenas where very intense activity occurred.

In the Middle East, the inter-Arab conflict in Lebanon reached a new height after months of severe civil strife so that a "spilling-out" on the international scene of Lebanese and Palestine Liberation Organization action is reflected in the ROZ scores of 57 and 97. It is interesting that the reported international event initiation by Syria did not reach the threshold level before early April 1976. Concurrently, the appearance of Cuba and Angola on the list of high tension countries points to the Southern African conflict arena where the Angolan power transition was continuing on its violent course. The very high ROZ scores for Angola reflect the recency of the Angolan situation, where international political attention is concerned.

Nothing else in the four month record of international event reporting attracts particular notice. The EFI values tell us simply that nothing went on after the second week of January that was "important" enough to displace the overall event flow from its usual range of normal fluctuation.

"HIGH TENSION" COUNTRIES IN THE PERIOD BETWEEN NOVEMBER 30, 1975 AND JANUARY 17, 1976: THE ROZ SCORES
New York Times WEIS File

WEEK ENDING	USA	CUB	LEB	ISR	PLO	ANG	KOS	JAP
12/6/75	52.1	30.9	32.6	57.1	36.5	30.0	57.2	30.0
12/13/75	49.7	31.3	30.0	28.4	30.0	30.0	29.9	30.0
12/20/75	25.9	34.1	30.7	28.9	29.9	64.0	30.0	30.0
12/27/75	22.0	49.5	41.4	28.7	32.5	49.1	31.0	30.0
1/10/76	30.5	30.1	45.2	31.8	38.2	214.1	30.0	33.3
1/17/76	25.5	56.3	57.3	36.4	97.0	514.1	30.0	54.4

TABLE 2

When we have considered some findings from the analysis of the dangers files materials, some additional ROZ data will be worth scanning. The next topics are an introduction to the dangers files approach and a description of DDV findings in the January-April 1976 data.

THE DANGERS FILES CODEBOOK AND USERS' GUIDE

There are four stages in the preparation and use of dangers files data:

* Selecting and recording data items

** Coding and scaling selected data items

*** Creating and updating computer files

**** Retrieving and analyzing records for threat recognition and analysis studies.

*Selecting and Recording Data Items. Information source requirements vary and can be directed to single or combined publications but they should include these essentials: (1) The source(s) must be daily serial productions, with the content identifiable by month, day, and year of happening or

publishing, (2) The source(s) must attempt worldwide coverage. Topical specialization is a conceivable emphasis but the coverage of the topic (i.e., environmental conditions and events) should still aspire to the worldwide scope requirement. (3) The source materials must be available for processing for dangers files purposes as close to the date of happening and/or reporting as possible and no more than a week or so after the fact.

For development and first presentation purposes, the Threat Recognition and Analysis project made daily scannings of three newspapers, THE LOS ANGELES TIMES, THE NEW YORK TIMES, and THE TIMES of London in "real time" from March 1, 1975 through April 30, 1976. Items were taken first from THE LOS ANGELES TIMES, usually on the day of publication, then items not found in the first source were added from the second source (usually THE TIMES), finally, items not found in the first two sources were added from the third.

Item selection from the sources proceeds on the assumption that persons of literate status, interested and accustomed to "following" the news of the world, of good intelligence and normal insight have the ability to recognize items of information in the flow of news reporting that relate to dangerous situations. Explicit content of reports and "stories," the format and style of information presentation, and the generalized context provided from knowledge of previous developments are thought to contribute to the ability to locate threat content in source data items. Such cognitive appraising is theorized to divide evaluations into latent threat and activated threat categories. Latent threat recognition calls for mere awareness--for a mental grasp that a possible condition of danger exists but that it is still in the background of affairs. Activated threat is a cognitive-existential phenomenon brought to the foreground with situational immediacy (Beal, 1976).

The instruction to workers who scan the source(s) and select items is to retain both latent and activated threat material. Some over-collection at the data acquisition stage is recommended. Data-gathering should be governed by associations occurring in the scaler's head, constructing an image of danger in a situation in the background as well as by the direct alarm message of "danger, clear and present." Potential users of the dangers files approach should consult the TR&A current threats collection of selected items to gain insight into the range of information retained for the coding and scaling stage of operations. Domestic, international, and transnational affairs are included.

Political, military, social, environmental, economic, technological, and organizational classes of phenomena are encompassed. The key question the data-gatherer has to answer is, does this report of an event, or of a condition, or of a development contain a possible message about a threat circumstance, about approaching danger, or about danger already present? If the answer is affirmative, the passage in the source should be turned into a data item by rewriting it to a general form that can be best understood through reading TR&A examples, particularly in the collection for the period from October 1975 through April 1976. By the later months of the effort, the recording criteria were becoming clarified and stabilized although it is extremely difficult to provide a more explicit description than that given above.

Data item recording includes the date of the publication of the item, a brief descriptive title and a paragraph of essential details, not so brief that the "flavor" of the message is obscured. An example is: September 15, 1975 Spain Terrorism: Suspected leftist guerrillas kill a policeman in Barcelona in a new outbreak of political violence. He is the 10th policeman killed in Spain this year and the first since the government enacted a law making the death penalty mandatory in the murder of a policeman.(LAT);

This item was found in the LOS ANGELES TIMES for September 15, 1975, as indicated. It reports an event but the intended reference is to the situation in Spain and to the presence of danger in that situation. It is to be noted that, for both data item selection and coding and scaling, the criterion simply is the presence of a danger-laden situation; the consideration is that it exists and not whether it bears on the analyst, his own country, U.S. interests, etc.

**Coding and Scaling data items. Once a batch of selected data items is in hand, the second step of coding and scaling may be accomplished. In the TR&A trial of the methodology, four coders were employed to add a line of codes, each, for each recorded data item. In the format are twelve fields of numeric codes, all but the date being three characters wide. The coding scheme is called "DDV," an acronym for "danger, disaster, violence." Thus, DDV coding can be said to be one technique applied to dangers files data. The twelve fields are listed by keyword name and described next:

Field 1: DATE. (TIME becomes the keyword in the retrieval procedure). The form is YYMMDD, or year, month,

day. Thus, September 15, 1975 is entered as 750915. The field is 6 characters (columns on a card) wide. Column 7 should have a zero entered for an add item or a 1 if an item on the permanent file is to be deleted. This is not a field but an updating computer instruction.

Field 2: CODER. Any three digit number is usable. 015 is an example. Coder numbers are important; they can be used on retrieval to isolate one coder's output or to merge it with others' codings.

Field 3: SOURCE. This also is an important code when multiple sources are used. A three digit code for each source of items permits the isolating or merging of portions of the data collection. In the TR&A work 001 is THE NEW YORK TIMES code, 002 is THE TIMES code, and 003 is THE LOS ANGELES TIMES code.

Field 4: PARTY1. A WEIS actor/target code number (see the list at the end of this report) is used to specify the national identification of "who is in the threat or danger situation." Spain has the WEIS code 230. For the example data item cited above, 230 would be entered.

Field 5: PARTY2. If the coder perceives a second party is in the threat environment, another country code may be written. There is also a short list of "DDV Region Codes." One of these may be entered if the coder thinks a whole region is in the threat environment. 300 refers to West Europe as a region. Thus, 300 could be listed in the PARTY2 field in the example. The order, whether in PARTY1 or PARTY2 does not matter since retrieval can merge all the fields.

Field 6: PARTY3. A third actor/target or region code designation can be used. Enter zeros in the PARTY fields not used.

Field 7: TYPE. The type of danger site is judged by the coder. There are four choices: 001 002 003 and 004:

001: Nation-state/society location; "domestic." The danger or threat situation is being contained within the nation entity.

002: Nation-state/society location but the danger situation is "spilling out" to involve external/foreign parties.

003: An international locus: two or more nation-states in a DDV relationship (Iceland and

Britain in the Cod War, for example) is perceived.

004: No geographical or specific relational location applies except the "global." A general or universal threat.

Field 8: CATEGORY. Three digit numeric codes are supplied here to further define and classify the kind of danger. Users can build their own system of category codes. The external look-up table is modified easily to accommodate changes and additions of codes. If the TR&A CATEGORY codes are sufficient, the compiled, readily available program and the existing table may be used without changes. The TR&A CATEGORY list is shown at the end of this report.

Field 9: DEGREE. DEGREE is the first of four nine point scales for judging the danger situation. It refers to the seriousness or gravity of the danger situation. The question for the coder is, how severe do you see this situation to be for the parties involved? The scale values of 1, 2, 3, and 4 are judgment points below the "medium severity" of the 5 position. 6, 7, 8, and 9 are for the above medium to the extremely severe evaluations. The scaler is directed to focus on the situation as it appears at the time of scaling, using, of course, whatever knowledge and insight he has about the situation prior to the moment.

Field 10: TILT. This keyword is furnished to help describe the winding-up, winding-down aspect of the danger situation. The scaler is requested to compare past, present, and future and then say whether the danger situation is intensifying (positions 6, 7, 8, and 9), is staying steady in this respect (position 5), or is in the process of relaxing or lessening (positions 4, 3, 2, and 1). For instance, a 1 would indicate the anticipation of a very sudden relaxation in the short term future. The extent of the short term future is not specified exactly but most judges appear to think in terms of the next few weeks.

Field 11: SPEED. This scale is for evaluating another developmental aspect of a danger situation. Is the situation one of those fast-moving, explosive, short-fused phenomena? If so, the points between 6 and 9 are for specifying this quality of development. The 1-4 locations are for the slow-moving situations.

Field 12: SPREAD. Are more people, more groups, more nations, more money, and/or more weapons progressively being drawn into, involved in, or affected in some immediate way by the danger situation? The high end of the scale is to

express the stronger tendencies toward involvement. Position 1 means the danger has not spread and very probably won't, 5 means the danger has been spreading and probably will some more, and 9 means the situation looks like July 1914 or the day of Pearl Harbor.

There are several ways to handle the paper work of coding and scaling. Copies of the text paragraphs can be made on the computer or by other means and the code lines can be written next to the items. Cards can be used, with one description and one code line on each card. The TR&A procedure has been to enter the coding-scaling information done by one coder on a full written copy of the text and to repeat only the item title for identification purposes for the coding and scaling of the other three evaluators. The decision on how best to organize depends partly on how the computer data entering stage of the work is to be done. If punch cards are used to make the information machine-readable, the one card, one description, one code line approach is to be recommended. Experience shows that when one uses the punch card method it is very important to provide sequential numbers for identification on every card. If time-sharing terminal data entering can be used, the need to date and number every line can be eliminated.

***Creating and updating computer files. An integrated program set called UNICRON has been constructed to control the operations with the computer. The program coding is in the PLI language and is applicable on the large IBM 360 and 370 machines with the TSO (Time Sharing Option) system. A compiled program package of UNISUM fitted to the DDV requirements is available to users at the cost of copying and mailing the material. This package contains (1) a validation routine that checks all legal code numbers and rejects bad records of data entering, (2) an interactive data entering system that prompts the user to enter the code line items and text in the correct order and performs "housekeeping" such as repeating a date and adding a serial identification number, (3) an editing feature that permits the correcting of typing errors and other mistakes found on proofreading before update, (4) an updating procedure that adds batches of new and edited material from "work files" to a permanent cumulating record file, (5) a text retrieval program for selecting and listing wanted text passages, and (6) a cross-tabulation, summing, and table-making routine (called DDVSUM) for expediting quantitative studies. A full description of how to set up and use the UNISUM package has been written and may be obtained on request. Because the DDVSUM (and also the DDVSCAN, or text reading routine) can be used in the batch mode with punch cards, the details on

the organization of the permanent file record is included here. Users can follow the form exactly or adopt another format that later can be shuffled into this order:

```
760110009700200033953962000030110050060060005xx
ICELAND SEIZURE OF NATO COMMUNICATION POSTbbbbbbbbbbbbbbbbbbb

Cols 1-6   760110 DATE year month day January 10, 1976
Cols 7-10   0097  this is a serial or id number; sequence
                  at least within the date
Col  11     0     update symbol for "add;" 1 is "delete"
Cols 12-14 020    CODER number
Cols 15-17 003    SOURCE number
Cols 18-20 395    PARTY1 code; 395 is Iceland
Cols 21-23 396    PARTY2 code; 396 is NATO
Cols 24-26 200    PARTY3 code; 200 is Great Britain
Cols 27-29 003    TYPE code; 003 is an international situation
Cols 30-32 011    CATEGORY code; 011 means "international
                  tension, episodic friction"
Cols 33-35 005    DEGREE code; 005 is the scale position
Cols 36-38 006    TILT code; 006 is the scale position
Cols 39-41 006    SPEED code; 006 is the scale position
Cols 42-44 005    SPREAD code; 005 is the scale position
Cols 45-46 xx     xx is a binary number, in this example 01,
                  indicating the number of lines of 62
                  character width to follow. The keypunch
                  machine is unable to do binary numbers;
                  enter the number of text lines and convert
                  later with a PLI program.
```

End the code line card here. Begin a new card on Col 1 for the first text line: ICELAND SEIZURE OF NATO COMMUNICATION POST. Write text lines between cols 1 and 62. Up to 15 text lines may be entered.

Using some simple programming, write the accumulated code and text cards to a tape file. Convert from the card image to a variable length record (VB) with the logical record length of 980, and appropriate blocking (such as 14704). The compiled DDVSUM and DDVSCAN programs then will operate on the data organized as indicated above. The optimizing compiler was used in making the package; whether or not the F compiler will run on the coding as it now stands has not been determined. Usually a few changes are necessary.

****Retrieving and Analyzing Records. The two retrieval programs, DDVSUM and DDVSCAN, can be used in either a batch mode or an interactive terminal mode. Both the DDVSUM and DDVSCAN programs must be on the computer as members in a step library partitioned data set. A look-up table of legal

codes for the fields must also be on line. The dangers files data can be stored on tape and used directly but the USC practice is to move the data files to disk data sets also. The USC computer center namings and conventions are shown in the following description of how to use DDVSUM and DDVSCAN. The illustrations all pertain to the batch mode with jobs submitted on cards or by RJE (Remote Job Entry via terminal).

When the IBM Job Control Language (JCL) instructions have been reduced to the minimum from the user's standpoint, the following cards (lines) are required at the USC computing center for DDVSUM;

```
//* UCC CORE=160K
//  EXEC DDVSUM$,DSN='TSOUxxx.xxx.TEXT',REGION=160K
//SYSIN DD *
```

After the JCL (which may vary slightly from one computer installation to another) come the program control instructions (which will be the same everywhere). Three keyword commands are used in a job. They are:

```
FIELD
COMPOUND
SUM
```

FIELD refers to the keyword names described earlier in the codebook, except for DATE: CODER, SOURCE, PARTY1, PARTY2, PARTY3, TYPE, CATEGORY, DEGREE, TILT, SPEED, and SPREAD. How FIELD's are used depends on the purposes of the user. The first FIELD specifications to be thought about are those that will be used to organize the table of data. What is visualized to belong on rows and columns of a table? The procedure is seen most easily in a concrete example. Let us make the choice of putting ten countries from the PARTY1 field on table rows and the scale for TILT on columns. Thus, we might want to see data on Canada, Cuba, Mexico, Venezuela, Argentina, Chile, Brazil, Peru, the United States, Spain, and Portugal. To make this choice and to instruct the program, we punch a card as follows:

```
FIELD PARTY SELECT 050 070 101 160 155 120 135 002 230 235;
```

Every command line ends with a semicolon. For the columns, we write:

```
FIELD TILT ALL;
```

If we wanted only the 5 through 9 scale positions on the

table we could submit either a card showing:

```
FIELD TILT SELECT 5 6 7 8 9;
```

or

```
FIELD TILT DELETE 1 2 3 4;
```

The outcome is the same, either way.
To this point, we have the command lines:

```
FIELD PARTY1 SELECT 040 070 101 160 155 140 135 002 230 235;
FIELD TILT ALL;
```

If there are more than about 10 codes being selected, start new lines for each batch of 10. Let us say we now remember that there are several coders who have put information in the data set. All we want to see printed is the work of coder 10. To achieve this we write:

```
FIELD CODER SELECT 010;
```

Next, it is necessary to tell the program that these choices are to be taken all together. This is done with a command line:

```
COMPOUND PARTY1 & TILT & CODER;
```

Use the "and" symbol, ampersand.

Finally we order the machine to do the calculations with the command SUM. If we want to include all the items in the collection we say nothing about time. If we want to control the summing of the data within a time period, we specify a date range. Say we are interested only in February and March 1976 data. The sum command then is written:

```
SUM 760201 760331 ROWS(PARTY1) COLS(TILT);
```

Note that this is where we set up the table organization by saying what is to appear on rows and columns. We also "control" other aspects in the background through the FIELD choices. The whole procedure for the example is:

```
//* UCC CORE=160K
//  EXEC DDVSUM$,DSN='TSOUxxx.xxx.TEXT',REGION=160K
//SYSIN  DD  *
FIELD PARTY1 SELECT 040 070 101 160 155
 140 135 002 230 235;
FIELD TILT ALL;
FIELD CODER SELECT 10;
```

```
COMPOUND PARTY1 & TILT & CODER;
SUM 760201 760331 ROWS(PARTY1) COLS(TILT);
```

This job is submitted at the computer center as a deck of cards or by RJE.

The foregoing is a basic example. Here is a more complicated case showing more control features. This time we want rows to show all the data five days at a time summed together for all coders and for three European countries taken together (Britain 200, France 220, and West Germany 255), two Asian countries taken together (Japan 740 and China 710), and the U.S. (002), the Soviet Union (365) and the UN (399) taken separately according to the PARTY1 list. We want included only the items with positions 6 7 8 or 9 on the DEGREE scale and the information between low and high dates of January 1 and April 30, 1976. Finally, we want to see a row percentage table in addition to the frequency table and we want to save the row percent data as a disk data set on the machine with the name GROUP1. The whole calling program for this job is:

```
//* UCC CORE=160K
//  EXEC DDVSUM$,DSN='TSOU001.DDX.TEXT,'REGION=160K
//SYSPC  DD  TSOU001.GROUP1.DATA,DISP=(NEW,CATLG,DELETE),
//  DCB=(RECFM=FB,LRECL=80,BLKSIZE=1680),UNIT=SYSTEMP,
//  SPACE=(TRK,(10,2),RLSE)
//SYSIN  DD  *
FIELD PARTY1 SELECT (200 220 255) (740 710)
  002 365 399;
FIELD DEGREE SELECT 6 7 8 9;
COMPOUND PARTY1 & DEGREE;
SUM 760101 760430 DAYS(5) ROWS(TIME) COLS(PARTY1) ROWPC PUNCHRPC;
```

Note in particular, how the row entries are controlled by the DAYS(5) instruction and by the use of the TIME keyword for the ROWS specification. Since all coders are to be included, nothing has to be said about controlling for that. PUNCHRPC calls for saving the row percent table and it couples with the JCL sentence beginning //SYSPC shown toward the top of the calling program. Alternatively to the DAYS option, one can call for MONTHS followed by the wanted grouping (i.e. MONTHS(3)).

Yet another example demonstrates a complex use of compounds. The problem is not described; the reader can figure out what is being called out from the command statements:

```
FIELD PARTY1 ALL;
```

```
FIELD PARTY2 ALL;
FIELD PARTY3 ALL;
FIELD SOURCE DELETE 1 2;
FIELD TYPE SELECT 3;
FIELD SPEED SELECT 004 005 006 007;
COMPOUND PARTY1 & TYPE & SPEED & SOURCE;
COMPOUND PARTY2 & TYPE & SPEED & SOURCE;
COMPOUND PARTY3 & TYPE & SPEED & SOURCE;
SUM 760101 760331 MONTHS(1) ROWS(TIME) COLS(SPEED) ROWPC;
```

The options associated with FIELD are ALL SELECT and DELETE. The options associated with SUM are PUNCH (write the frequency table to tape, disk, or cards)

```
PUNCHRPC (write the row percent table to
          tape, disk, or cards)
PUNCHCPC (write the column percent table to
          tape, disk, or cards)
COLPC    (include a column percent table in
          the printout
ROWPC    (include a row percent table in the
          printout)
ROWZD    (remove all all-zero rows before
          computation and printout)
COLZD    (remove all all-zero columns before
          computation and printout)
DAYS(x)  use only when TIME has been chosen
          for row or column in table building
MONTHS(x)use only when TIME has been chosen
         for row or col in table building.
         Alternative choice to DAYS.
```

The DDVSCAN program has approximately the same search strategy as DDVSUM but its calling program is different. By selecting field codes and combinations of fields, the user is able to get selected lists of text passages. One example is shown. The job calls for all items whose evaluations are associated with Israel and where the DEGREE scale was 7 or higher:

```
//* UCC CORE=150K,LINES=10
//  EXEC DDVSCAN$,DSN='TSOU001.DDX.TEXT',REGION=150K
//SYSIN DD *
PARTY1 666
PARTY2 666
PARTY3 666
DEGREE 007 008 009
COMPOUND PARTY1 & DEGREE
COMPOUND PARTY2 & DEGREE
COMPOUND PARTY3 & DEGREE
```

SCAN

Notice that FIELD is not used in the first commands; only the field name and the country code are specified (Israel is 666). No semicolons are used in DDVSCAN. Low and high dates can be included to limit the range of the search but no other specifications are used in the SCAN line. Compounding is the same as in DDVSUM.

DDV FINDINGS AND SOME COMPARISONS AGAINST ROZ

A reading of the codebook instructions for the use of the four scales of DEGREE, TILT, SPEED, and SPREAD should have made apparent that the content of dangers files could vary greatly from that of international event files. Domestic or intra-national material is included in the dangers files and is specifically excluded from the events files. Very little evaluation is required in event coding since the only task is to recognize the report of the event. The newspaper reporters, writers, and editors have already done the selecting and weighing of significance of the data items. In the preparation of the dangers files, on the other hand, evaluation is emphasized by the requirement to mark positions on scales. Although four months of data and the first effort at stabilized file-making are not going to be decisive in judging the question, the fundamental point of interest is to what extent the international event approach is missing national security information about threat from abroad. The concept is that the transitions in the international system may be creating troublesome situations in world politics outside the traditional domains of diplomacy and defense. The dangers files approach using newspaper sources may not provide the wanted answers because the newspapers may be ignoring situations and circumstances of world order transformations. Nevertheless, the news sources are at least the starting point for testing and comparing the two schemes of observation.

Three of the four sets of dangers codings of the January-April 1976 period were studied separately and then together for several countries in weekly observations. Two coders produced results that were closely similar while the third varied somewhat in overall evaluations from the other two. For the present study, it was decided to merge the three sets of codes into a single set. Thus, each data item was coded and scaled three times and the sums of the three were counted in each DDVSUM run. The total number of evaluations stands at 5,119. The event records for the January 1 - April 28, 1976 period sum to 2,094. A first comparison is directed to the amount of attention focused on

the various countries in each of the two approaches.

Table 3 contains three sets of figures. On the left side are the numbers of acts and the "share" of the whole action in percentages by each country included on the table. This is the event data of the WEIS type. Under the heading of "DDV ALL" are the total number of mentions by all three coders of countries in the three fields of PARTY1, PARTY2, and PARTY3. The most prominently mentioned and reported countries are included on the table. Especially if one checks from one percent to the other, it will be noticed that many of the proportions are about alike or very similar in WEIS and DDV ALL. There are also some large differences: Britain gets a much larger share in DDV; so also do Argentina, Spain, and India. The immediate interpretation is that DDV reflects stress that is being generated internally in these places and that is not registering strong effects internationally. It appears also that countries in the conflict arenas of the Middle East and Southern Africa are mentioned in larger proportion in DDV than in WEIS.

TABLE 3

WEIS		DDV ALL			DDV 6789			
	#	#				#	R	C
17.9%	375	1038	20.2%	USA(002)	10.5%	137	5	-
1.9%	40	134	2.6%	CUB(040)	2.7%	36		0
0%	1	177	3.4%	ARG(160)	3.5%	46	12	+
2.9%	60	516	10.1%	UNK(200)	15.3%	199	3	+
6.4%	133	483	9.4%	USR(365)	5.1%	67	9	-
1.0%	20	105	2.0%	ICE(395)	1.9%	25		0
1.3%	28	51	.9%	ZAM(551)	1.3%	17		+
6.5%	49	335	6.5%	RHO(552)	14.5%	189	4	++
1.6%	33	58	1.1%	ZIM(554)	2.2%	29		+
.4%	9	89	1.7%	FRE(555)	3.4%	44	13	+
2.2%	47	166	3.2%	SAF(560)	4.1%	53	11	+
3.8%	79	405	7.9%	ANG(561)	18.3%	239	2	++
1.5%	25	79	1.5%	MOR(600)	2.9%	38		+
1.1%	22	80	1.5%	ALG(615)	2.6%	34		+
4.4%	93	182	3.5%	UAR(651)	2.1%	28		-
2.8%	58	190	3.7%	SYR(652)	9.4%	123	6	++
4.9%	102	420	8.2%	LEB(660)	24.1%	314	1	++
4.2%	88	455	8.8%	ISR(666)	5.7%	75	8	-
3.8%	79	126	2.4%	PLO(697)	4.6%	60	10	+
1.2%	26	190	3.7%	CHN(710)	1.1%	14		-
.8%	17	290	5.6%	SPN(230)	8.9%	116	7	+
1.6%	33	217	4.2%	POR(235)	.7%	10		-
.5%	10	202	3.9%	ITA(325)	1.6%	21		-
.7%	15	129	2.5%	IND(750)	.4%	6		-

USA: United States, CUB: Cuba, ARG: Argentina, UNK: Britain, USR: Soviet Union, ICE: Iceland, ZAM: Zambia, RHO: Rhodesia, ZIM: Zimbabwe (Rhodesian nationalist organizations), FRE: Mozambique, SAF: South Africa, ANG: Angola, MOR: Morocco, ALG: Algeria, UAR: Egypt SYR: Syria, LEB: Lebanon, ISR: Israel, PLO: Palestine Liberation Organizations, CHN: China, SPN: Spain, POR: Portugal, ITA: Italy, IND: India

R: Rank "high stress countries"

C: Change in direction from "DDV ALL" mentions to "DDV 6 and higher scaling"

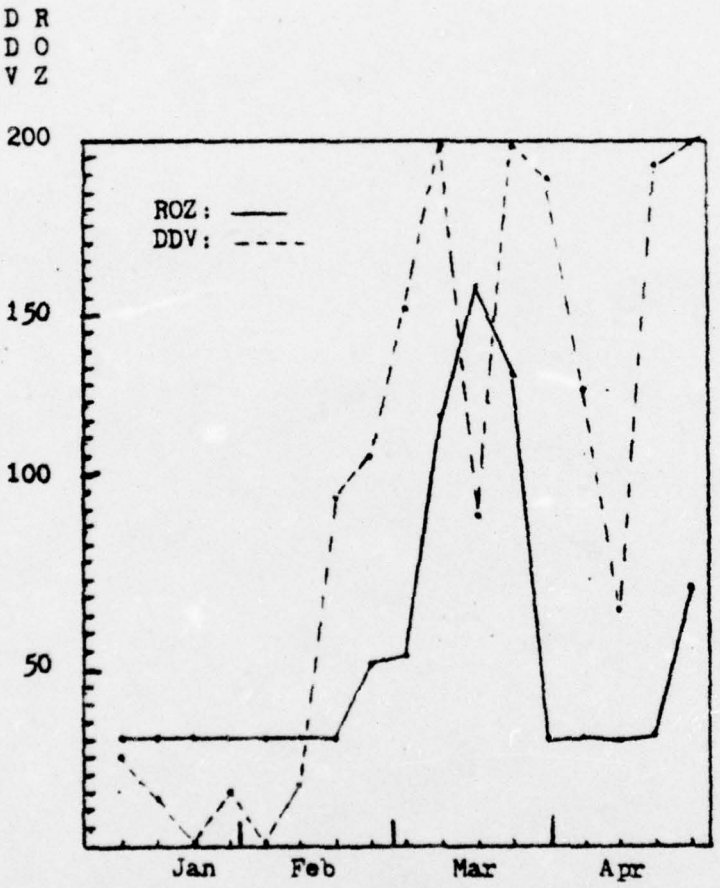
STRESS & TENSION INDICATORS
JANUARY-APRIL 1976

The third set of numbers on the right side in Table 3 are the frequency and percentage of "mentions" over the four month period in PARTY1, PARTY2, and PARTY3 fields combined when only the scale positions above 5 for DEGREE (severity of danger) are taken into account. These numbers point to countries that the coders collectively judged to be under more than the average amount of stress. For example, consider the U.S. case where the total proportion of danger mention is 20% (compare against the 19% event participation share) but where the "more severe" danger mention falls to 10%. Studying the differences between the two DDV observations caused us to arrive at the tentative interpretation that the DDV system looks very good in identifying the four main trouble spots in the world in quantitative terms in early 1976. The double plus symbol marks these cases of "more severe trouble" on the table. It fits with one's general impression that, indeed, Rhodesia, Angola, Syria, and Lebanon were the high stress locations in the four month time period. It appears also that the event approach may underplay the extent of threat in gross quantitative terms. Israel, on the other hand, may be getting more play in the international event approach than is warranted, if the coders' collective judgment under DDV is right. The next logical step is to look into the ROZ scores and the DDV DEGREE ratings for five parties: Rhodesia, Angola, Syria, Lebanon, and Israel.

The calculation of ROZ scores for individual countries was discussed earlier. The values that are used for DDV observations on the five plots shown below are the DEGREE or severity of threat ratings. The simplest possible calculations were made: the numbers of evaluations by the three scalers were counted and summed for each position of the nine point scale for DEGREE week by week. The resulting scores were then multiplied by the number of the scale position (i.e., if there were 12 choices made at the 4 position of the scale, the amount 48 was used). The sum of the products was used for an indicator of the degree of stress and trouble experienced by each country week to week in the first four months of 1976. On the plots the broken line traces the DDV values and the solid line the ROZ scores.

Both approaches indicate a sharp increase in threat in Rhodesia beginning in February 1976. Figure 2 suggests a spill-out of domestic turmoil on the international scene in March. The ROZ values go above the warning level of 50 for six of the ten weeks after February 18. Rhodesia was the source of 10.4% of the reported international action during

the week ending March 17. During the five year period of 1971-1975, Rhodesia initiated only .2% of the total action. Crisis conditions prevailed, relatively, in Rhodesia according to both ROZ and DDV readings. The dangers files appear in this case to catch the trend earlier than the event data. The suggestion of a continuation of the stress is stronger in DDV than in ROZ.

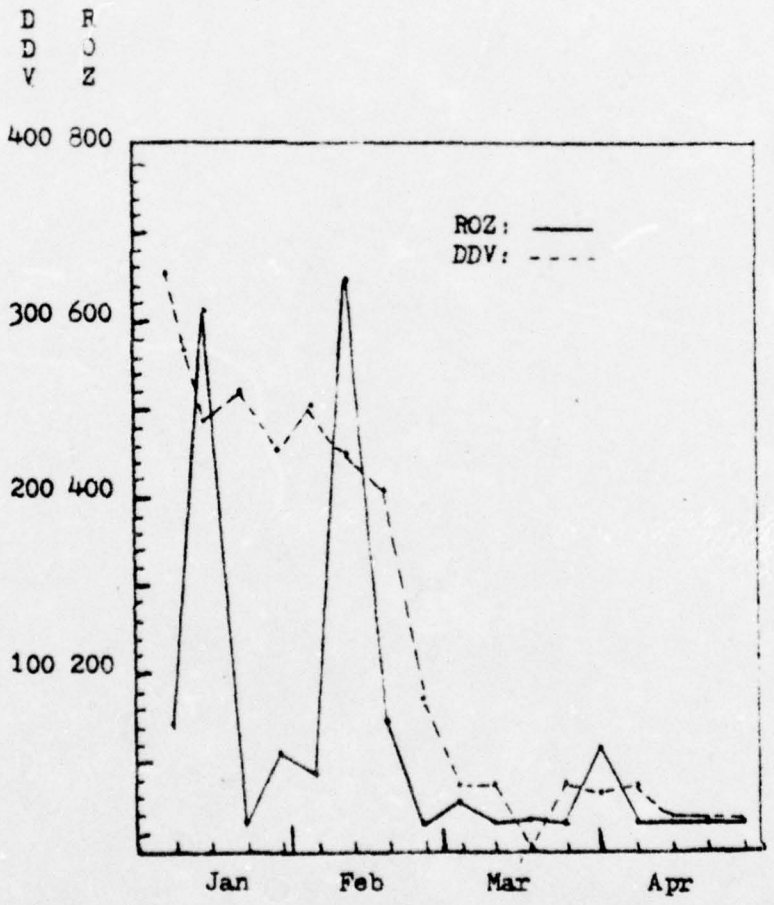


RHODESIA: ROZ AND DDV WEEKLY COMPARISONS
JANUARY-APRIL 1976

Figure 2

The plot of Figure 3 shows off to good advantage the collective coder judgment that the civil strife in Angola was creating great stress at the beginning of the year but that it decreased in a steady downward trend with a sharp break late in February. ROZ indicates high tension international responses, once in January and once in

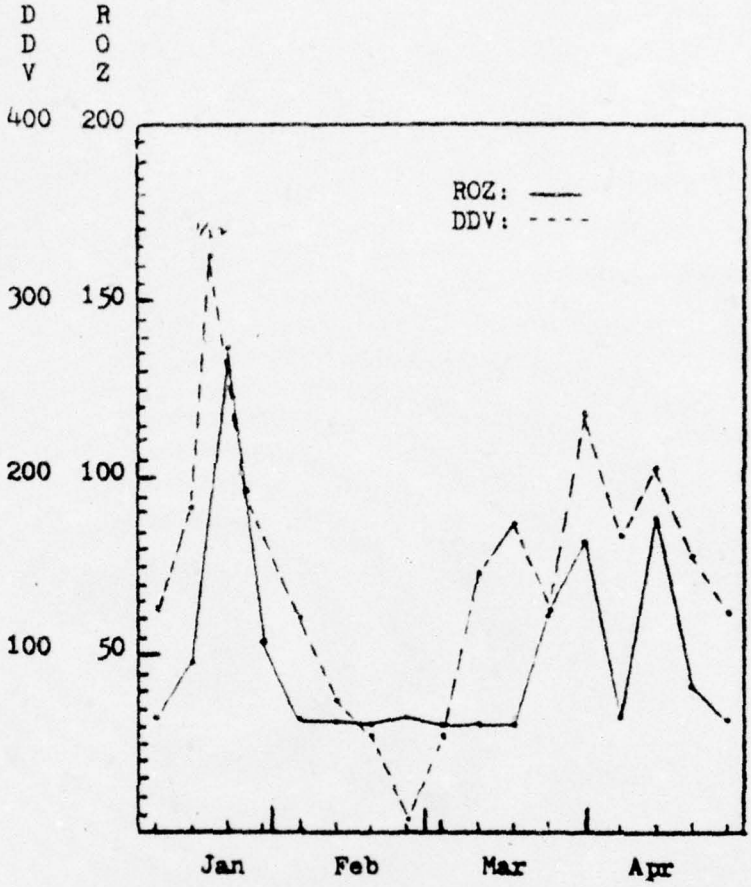
February. The February data for ROZ and DDV can be interpreted as complementary. The MPLA victory in February was followed by the sharp downtrend indicated in the DDV line but the February victory also stimulated a high level of international participation as shown by ROZ. Angola is a new international actor and had only a sparse performance record on the WEIS files in the ten year period of 1966-75. Only .2% of the action is attributed to Angola in the ten years. In the week ending February 11, Angola initiated 16.0% of the reported events. Eight of seventeen of the Angolan ROZ scores were in the crisis range. ROZ scores were extremely high, simply because any entrance of Angola on the world scene was very unusual by the preceding decade's standards.



ANGOLA: ROZ AND DDV WEEKLY COMPARISONS
JANUARY-APRIL 1976

Figure 3

Anyone who read the newspaper front page early in 1976 could report that Lebanon was in the spotlight of world attention at that time. It is frequently said that event quantification simply tells us what we already know from paying attention to the news. This comment misses the mark in two ways: (1) of course, it is the case that event analysis deals with reports of current public affairs that we know about in daily experience, but it provides further information about the amount, proportion, and other attributes of the action by calculation and explicit recording and (2) it furnishes comparative evaluations over time that also derive from calculation and that do not depend on memory of past events and impressionistic comparisons. If a WEIS file existed for 1958, we could compare the data reflected in Figure 5 against that for the last large-scale Lebanese crisis in 1958. Without the comparative data for 1958 and 1976, we can still check the proportions of total action for earlier times and report that the international circumstances of Lebanon were very unusual in 1976. In the five year period 1966-70, Lebanon initiated .7% of the reported international event flow, and in the next five year period, 1971-75 (which includes the beginning months of the civil war), Lebanon's share rose to .9%. In the week ending January 21, Lebanon initiated 12.4% of the reported international action and in the week ending April 14, 11.6%. Figure 4 traces out the concurrence of ROZ and DDV that tension and stress peaked twice in the four month period, once in January, contributing very strongly to the EFI crisis "low" of 446, and again in late March and April. As on several plots not shown here, DDV recordings appear to reflect changes and trends a week ahead of ROZ. This may be accounted for by the possibility that international action should be expected to take effect a step or two behind domestic action when the latter is the prime locus of the stress.

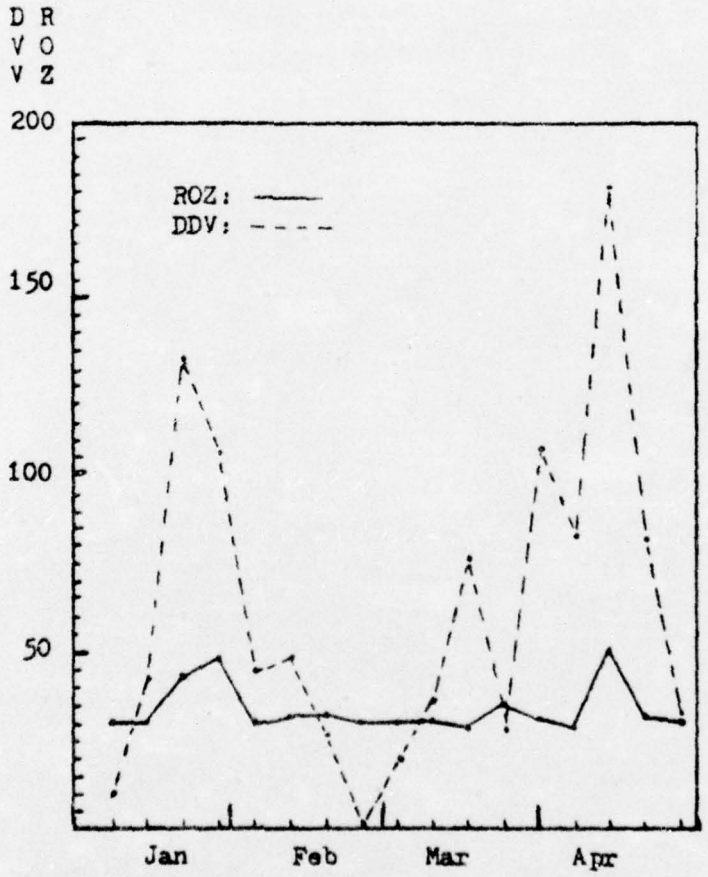


LEBANON: ROZ AND DDV WEEKLY COMPARISONS
JANUARY-APRIL 1976

Figure 4

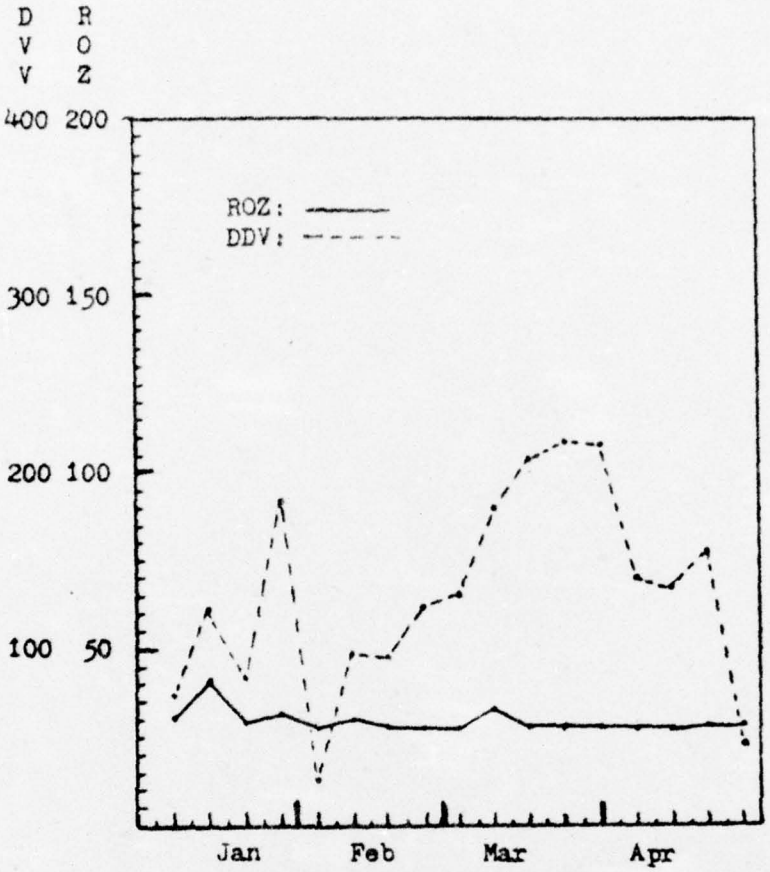
Figures 4, 5, and 6 should be studied together. Obviously Lebanon, Syria, and Israel are in the same general world conflict arena. The plots in Figures 5 and 6 are particularly interesting because they seem to show off the DDV approach to advantage. The shapes of the DDV lines look significant with Syria following the general pattern for Lebanon and with Israel doing the same to a lesser degree and with less tension. Further, we note a rising trend for Syria later in the four month period. As the Syrian involvement increases, Israel's appears to decline. At the beginning of the year, the observer of international politics would have been inclined to think that Syrian military intervention in Lebanon would so endanger Israeli security on the northern front that a military countermove with high Israeli stress expressed would be all but

inevitable. Instead, the plots give some small support to the notion that Israel gains in security at least in the short run from inter-Arab conflict. The flat, low-profile ROZ scores for both Syria and Israel need an explanation. It is very simple: ROZ is founded on past performance records. For both countries, the amount of international participation in the affairs of 1976 was considerably below peak times of earlier years. Syria and Israel literally have been through the wars in the decade past. It takes quite vigorous action by these two to push the ROZ readings into the danger zone. Syria reached a 50.6 value in the week ending April 14. Israel's highest ROZ was 40.33 during the second week of January.



SYRIA: ROZ AND DDV WEEKLY COMPARISONS
JANUARY-APRIL 1976

Figure 5



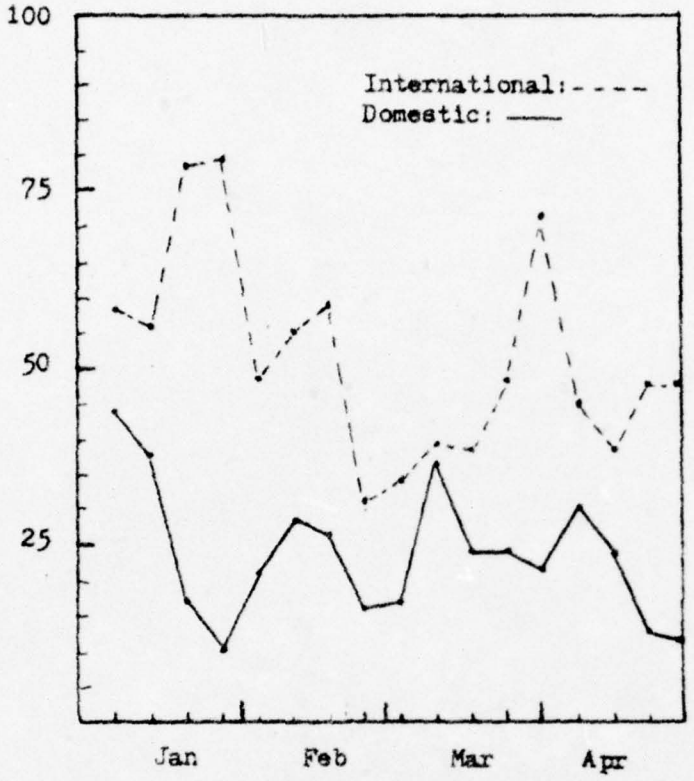
ISRAEL: ROZ AND DDV WEEKLY COMPARISONS
JANUARY-APRIL 1976

Figure 6

DDV data can be used to explore the relationship between international and domestic threats. By utilizing the categories of type of threat and degree of threat, we can analyze the variation in the level of threat for international and domestic situations over time. From the four codes for type of threat (1: domestic, 2: domestic with spillover, 3: international, and 4: global) we can separate the exclusively domestic situations from the international situations by comparing type 1 threats with type 2, 3 and 4 threats. We include type 2 situations in the international and global categories since it is by definition a situation that has spilled into the international arena through the involvement of external actors.

Our first analysis is a comparison of the number of

serious domestic and international threats over time. We define serious as degree level 6 and above. Since we combine all coders' scores, we do not obtain the number of different situations in a given degree level, but rather the number of times domestic and international situations are classified in a certain threat degree level. As can be seen in Figure 7, there is basically an inverse relationship between the number of serious domestic and international threats over weekly intervals. As the number of serious international threat situations increases, the number of serious domestic threat situations decreases. As the number of serious international threat situations decreases, the number of serious domestic threat situations increases. After a slight decline in both the international and domestic threat numbers between weeks 1 and 2, the number of international threats sharply increases between weeks 2 and 3 from 56 to 78, while the domestic threat number sharply decreases from 38 to 18. The international threat number continues to increase slightly to 79 in week 4, while the domestic arena continues its downswing to 10 serious situations. Then as the international threat number decreases from 79 to 49 between weeks 4 and 5, the number of serious domestic threats increases from 10 to 21. Between weeks 5 and 10 the domestic and international arenas appear to flow together, with an increase-decrease-increase fluctuation. Then, between weeks 10 and 13, the international threat number increases (after a slight decrease in week 11) while the domestic number decreases. The international threat number then decreases between weeks 13 and 14 while the domestic threat number increases. Both arenas experience a slight decrease between weeks 14 and 15. The end of the time interval (weeks 15 to 17) is characterized by an increase in the international threat number and a decrease in the domestic threat number.

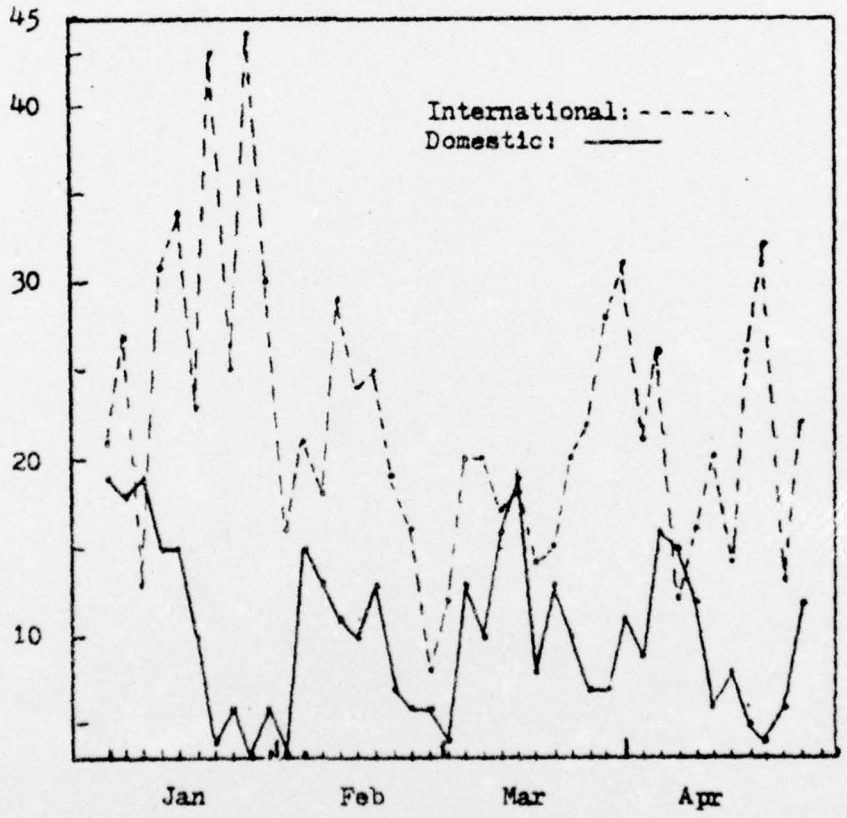


NUMBER OF CITATIONS OF SERIOUS DOMESTIC
AND INTERNATIONAL THREATS
DDV SEWEN DAY COMPARISONS
JANUARY-APRIL 1976

Figure 7

The above thus indicates that for most of the weeks the number of serious international and domestic threat situations were inversely related. Since it is possible that weekly time intervals might obscure patterns that exist in shorter time intervals, we analyzed the data for three day periods. As can be seen in Figure 8, with a few exceptions, the basic inverse relationship between the domestic and international arenas holds. Between time intervals 1 and 9, the number of serious international threats experience sharp increases and decreases, resulting in a gradual increase from 21 threats at time interval 1 to 44 at time interval 9. The number of serious domestic threats decreases in this time interval, from 19 to 3. There is a sharp decrease in the international threat number between time interval 9 and 11, while the domestic threat number, after a slight

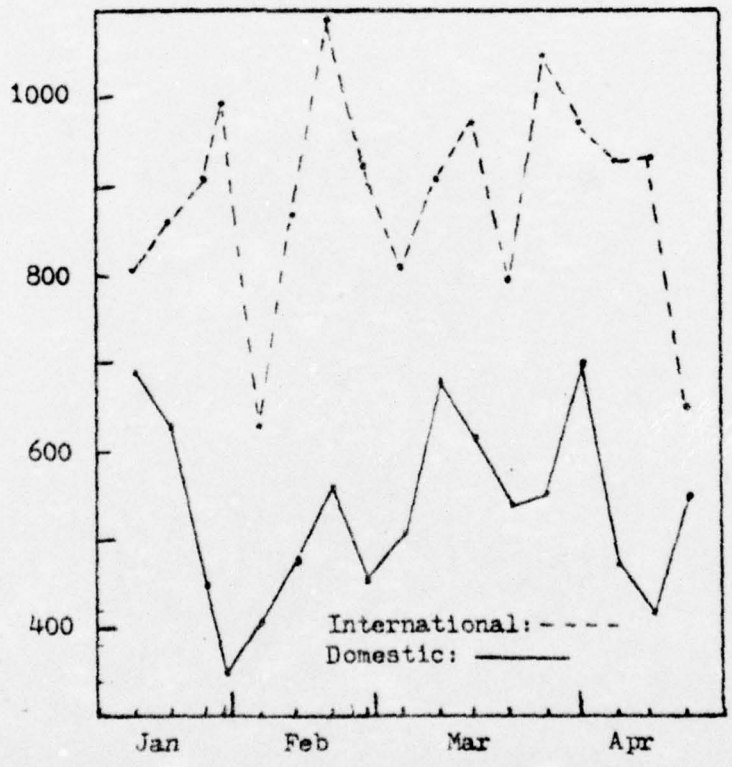
fluctuation, sharply increases between time intervals 11 and 12. We then find an increase in the international arena between intervals 13 and 14, while the domestic arena experiences a steady decline through interval 15. Both the international and domestic arena seem to flow together between time intervals 15 and 26. After converging at interval 26, the international threat number increases while the domestic threat number decreases. This is followed by an increase in the domestic arena and a decrease in the international arena, resulting in another convergence at interval 33. The basic pattern repeats itself as the international threat number increases while the domestic decreases. The last three-day period is characterized by increases in both arenas.



NUMBER OF CITATIONS OF SERIOUS DOMESTIC
AND INTERNATIONAL THREATS
DDV THREE DAY COMPARISONS
JANUARY-APRIL 1976

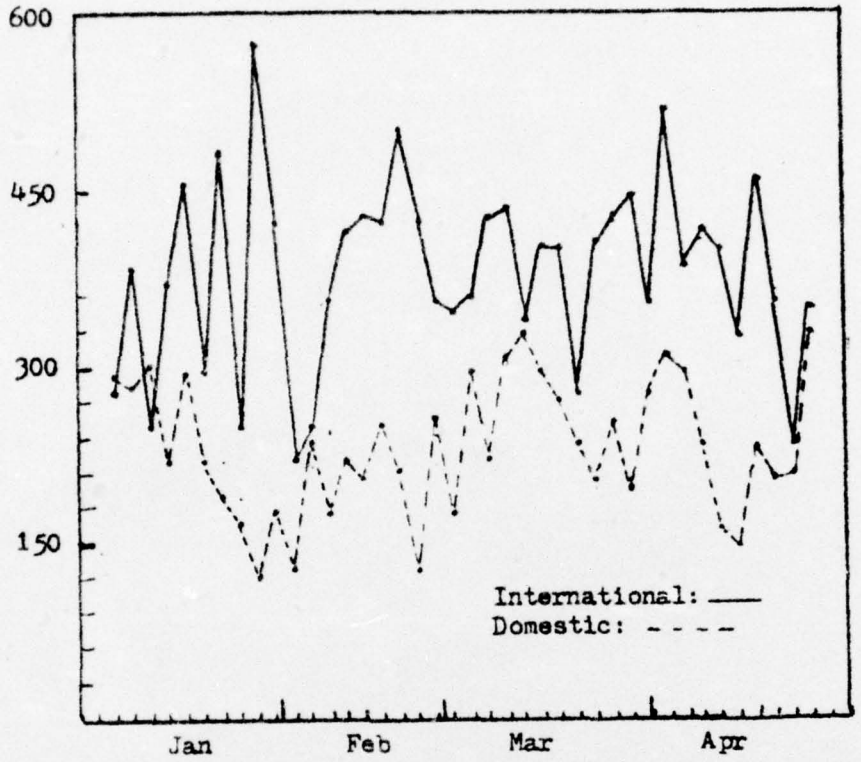
Figure 8

When we analyze the actual threat degree number (through multiplication of degree level by frequency as indicated above) we find that the general pattern holds for the first few weeks, as indicated in Figure 9. The domestic and international threat arenas are generally inversely related. Thus between weeks 1 and 4 as the international threat degree level increases from 803 to 990, the domestic level decreases from 697 to 344. The domestic degree then increases between weeks 4 and 5 while the international degree decreases. However, between weeks 5 and 16 the international and domestic threat levels appear to flow together. Then for the last week of the time period the international threat level sharply decreases while the domestic threat degree increases. Thus while the beginning and end of the time period was characterized by the inverse relationship between international and domestic threat levels, the middle time period did not experience such patterns.



DOMESTIC AND INTERNATIONAL THREAT LEVELS
DDV SEVEN DAY COMPARISONS
JANUARY-APRIL 1976

Figure 9



DOMESTIC AND INTERNATIONAL THREAT LEVELS
DDV THREE DAY COMPARISONS
JANUARY-APRIL 1976

Figure 10

When the data are divided into three day periods, we find that the inverse relationship generally holds. Thus as can be seen in Figure 10, the domestic and international begin at approximately the same level (295 for the domestic and 281 for the international). However, by time interval 9, the domestic has decreased to 114 while the international, after experiencing sharp fluctuations, reaches a level of 574 in time interval 9. The international level then increases through time interval 17, while the domestic, after experiencing fluctuations, decreases between intervals 16 and 18. The domestic level then goes through sharp increases and decreases which result in a general increase between time intervals 18 and 24. The international threat level also experienced sharp fluctuations between intervals 17 and 24, resulting in a general decrease in the

international threat level. After converging at interval 24, the domestic experiences a down swing while the international increases (except for one sharp decrease at interval 27). Between intervals 30 and 31 the international threat level decreases while the domestic level increases. For the remainder of the time period the two arenas flow together.

The data analysis thus appears to indicate that there is a general inverse relationship between domestic and international threat levels. While for some time periods the domestic and international threat levels increased or decreased together, for the most part they went in opposite directions. We have not established the direction of the relationship, since we do not know at this point if it is the international threat level that affects the domestic threat level, or vice versa. However, we feel that the basis for separating for analytical purposes the domestic threat system from the international threat system has been established.

A CONCLUDING REMARK

This report has introduced the concept, the procedure, and the analytic scope of the *dangers files* approach. It has summarized the outcome of three years of development of the methodology. It also has presented the first preliminary comparisons of event files and dangers files and of findings derived from the data. Only the surface has been scratched in the case of the DDV data and evaluation. We have not considered three of the four scalings, having built a simple indicator only from the data of DEGREE or threat intensity. Other studies of the four month data obviously are needed. The important question is, however, whether or not the new approach and methodology promise genuine gains in the monitoring and charting of world affairs, particularly in their security aspect. Behind this question is the issue of the international system transformation and the alternative implications for information-gathering and data analysis. As the developer of the dangers files prototype, we might be expected to give uncritical praise to the approach and to recommend its adoption and development. The reminder is in order, however, that we also developed the competing WEIS approach with its concept of "international political primacy." In the revival of the realist versus idealist debate on the question of the prospect of a movement into an era of a new kind of international system, we come down on the realist side and view with much skepticism the claims about the incipient international system transformation. Despite the claims and the substantial value of rhetoric on

the idealist side, we find few observable signs that the members of the international system are doing anything other than the same business at the same stand. The agenda of world affairs clearly is changing; the structure and process of the system may not be.

We conclude, nevertheless, that the dangers files data and the DDV procedure have worked much better in the first trial even than we expected. The approach appears to show details and aspects that the events approach cannot produce. On the neutral ground that good multiple indicators are better than good single indicators, we are recommending that dangers data and DDV analyses are worth a further investment.

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CODES FOR THE CATEGORY FIELD
IN THE DDV PROCEDURE

1 : Domestic/national political stress; reports reflecting anticipated danger, disorder, upheavals; apprehension over national future; signs and concerns over apparent approaching "crisis"; leadership succession worries

2 : Domestic/national turmoil, agitation or crisis; protests, demonstrations, political disorders, big strikes, important interferences with normal societal routines; governmental paralysis or major internal regime strife; no more than nominal physical destruction-injury

3 : Sporadic domestic/national violence; terrorist episodes, failed coups, assassination, kidnapping, hijacking, scattered assaults on persons or property, riot, mass actions, more than nominal violence but less than sustained, organized violence

4 : Sustained domestic/national mass violence; insurrection, civil war, organized civil violence; violence in wake of successful coup

5 : Acute domestic/national "life support" stress; economic/material deprivation, threat to life circumstances, recession, depression, breakdown of services, unemployment; severe displacements or dislocations

11 : International tension; episodic friction, brief encounters and confrontations, single incidents; seizures, terrorist acts, expulsions, espionage revelations, unusual hostile policy declarations and posture, intra-alliance friction

12 : International conflict mobilization; sustained inter-nation expression of hostilities, pre-confrontation activities, reports reflecting defense preparations or warnings of approaching international disturbance

13 : International political aggression/retaliation; non-violent measures of directed conflict toward adversaries or enemies; economic sanctions, military supply or support to clients in local conflict/violence situations, mobilizations, displays, actions affecting military balance

14 : Low level physical international hostilities; raids, border incidents, seizures, guerrilla episodes, physical military confrontations, blockades; code 11 agove categorizes these items also but in the context of minor affairs, irritants, passing frictions, etc., while code 14 requires a context of previous, ongoing, or sustained inter-nation hostility

15 : Sustained military international hostilities; limited war, cross-national guerrilla war; active, overt supply/participation in support of client combatants

21 : Natural disaster stress; bio-social catastrophe, endangering situations; epidemics, floods, earthquakes, famines, fire, ecological disaster

DDV REGION CODES

025 North America

030 Caribbean

096 Central America

190 South America

300 West Europe (includes Scandinavia)

370 East Europe

400 Africa

565 Black Africa

610 North Africa

650 Middle East

795 Asia

855 Scutheast Asia

950 Pacific

NUMERICAL LIST OF COUNTRY CODES

002	USA	United States
020	CAN	Canada
040	CUB	Cuba
041	HAI	Haiti
042	DOM	Dominican Republic
051	JAM	Jamaica
052	TRI	Trinidad-Tobago
053	BAR	Barbados
070	MEX	Mexico
090	GUA	Guatemala
091	HON	Honduras
092	ELS	El Salvador
093	NIC	Nicaragua
094	COS	Costa Rica
095	PAN	Panama
100	COL	Columbia
101	VEN	Venezuela
105	SUR	Surinam
110	GUY	Guyana
130	ECU	Ecuador
135	PER	Peru
140	BRA	Brazil
145	BOL	Bolivia
150	PAR	Paraguay
155	CHL	Chile
160	ARG	Argentina
165	URU	Uruguay
198	AFP	Alliance for Progress
199	OAS	Organization of American States
200	UNK	United Kingdom
205	IRE	Ireland
210	NTH	Netherlands
211	BEL	Belgium
212	LUX	Luxembourg
220	FRN	France
221	MOC	Monaco
223	LIC	Liechtenstein
225	SWZ	Switzerland
230	SPN	Spain
232	AND	Andorra
235	POR	Portugal
255	GMW	Germany/Fed. Rep.
265	GME	Germany/Dem. Rep.
266	EBE	Berlin/East
267	WBE	Berlin/West
290	POL	Poland
305	AUS	Austria
310	HUN	Hungary
315	CZE	Czechoslovakia
325	ITA	Italy
328	VAT	Vatican
331	SAN	San Marino
338	MLT	Malta
339	ALB	Albania
345	YUG	Yugoslavia
350	GRC	Greece
352	CYP	Cyprus/Greek
353	CYT	Cyprus/Turkish
355	BUL	Bulgaria
360	RUM	Rumania
365	USR	USSR
375	FIN	Finland
380	SWD	Sweden
385	NOR	Norway
390	DEN	Denmark
394	WAR	Warsaw Pact
395	ICE	Iceland
396	NAT	NATO
397	EEC	EEC
398	EFT	EFTA
399	UNO	United Nations
420	GAM	Gambia
431	CPV	Cape Verde
432	MLI	Mali
433	SEN	Senegal
434	DAH	Dahomey
435	MAU	Mauritania
436	NIR	Niger
437	IVO	Ivory Coast
438	GUI	Guinea
439	UPP	Upper Volta
440	GUE	Equitorial Guinea
441	GBI	Guinea-Bissau
450	LBR	Liberia
451	SIE	Sierra Leone
452	GHA	Ghana
461	TOG	Togo
471	CAO	Cameroun
475	NIG	Nigeria
476	BIA	Biafra
481	GAB	Gabon
482	CEN	Central Aftican Rep.
483	CHA	Chad
484	CON	Congo (Brazzaville)
485	STP	Principee & Sao Tomee
490	COP	Zaire (Kinshasa)
495	COM	Comoro Islands
500	UGA	Uganda
501	KEN	Kenya
510	TAZ	Tanzania
516	BUI	Burundi
517	RWA	Rwanda
520	SOM	Somalia
530	ETH	Ethiopia
531	ELF	Eritrean Liberation Front
551	ZAM	Zambia
552	RHO	Rhodesia
553	MAW	Malawi
554	ZIM	Zimbabwe-Rhodesian liberation org.
555	FRE	Frelimo-Mozambique liberation org.
560	SAF	South Africa
561	ANG	Angola
562	NMB	Namibia (former South-West Africa)
570	LES	Lesotho
571	BOT	Botswana
572	SWA	Swaziland
580	MAG	Malagasy
590	MAR	Mauritius
599	OAU	OAU
600	MOR	Morocco
615	ALG	Algeria
616	TUN	Tunisia
620	LBY	Libya
625	LUD	Sudan
630	IRN	Iran
640	TUR	Turkey
641	KUR	Kurdistan
645	IRQ	Iraq
651	UAR	UAR (Egypt)
652	SYR	Syria
660	LEB	Lebanon
663	JOR	Jordan
666	ISR	Israel
670	SAU	Saudi Arabia
675	UAE	United Arab Emirates
678	YEM	Yemen
681	SYE	South Yemen
690	KUW	Kuwait
692	OAP	Organization of Arab Petroleum Exporting Countries
693	OPC	Organization of Petroleum Exporting Countries
695	BAH	Bahrain
696	QAT	Qatar
697	PLO	Palestinian Liberation Organization
698	MOM	Muscat and Oman
699	ARL	Arab League
700	AFG	Afghanistan
710	CHN	China, Peoples Rep.
712	MON	Mongolia
713	CHT	China, Republic of
720	HOK	Hong Kong
721	MAC	Macao
731	KON	Korea, North
732	KOS	Korea, South
740	JAP	Japan
750	IND	India
760	BHU	Bhutan
765	BGD	Bangladesh
770	PAK	Pakistan
775	BUR	Burma
780	CEY	Sri Lanka (Ceylon)
781	MAD	Maldive
782	MAD	Maldive (duplicate)
790	NEP	Nepal
800	TAI	Thailand
811	CAM	Cambodia
812	LAO	Laos
813	LAP	Pathet Lao
816	VTN	Vietnam, North
817	VTS	Vietnam, South
818	VCG	Vietcong and NLF
820	MAL	Malaysia
830	SIN	Singapore
840	PHI	Philippines
850	INS	Indonesia
900	AUL	Australia
905	PAP	Papua New Guinea
920	NEW	New Zealand
921	NAU	Nauru
980	FIJ	Fiji
990	WSM	Western Samoa
992	SEA	SEATO
998	MLG	Any ad-hoc multi-lateral group
999	NSC	Not stated, unidentified target

ALPHABETICAL LISTING OF COUNTRY CODES

700	AFG	Afghanistan
339	ALB	Albania
615	ALG	Algeria
232	AND	Andorra
561	ANG	Angola
160	ARG	Argentina
900	AUL	Australia
305	AUS	Austria
695	BAH	Bahrain
053	BAR	Barbados
765	BGD	Bangladesh
211	BEL	Belgium
266	EBE	Berlin/East
267	WBE	Berlin/West
760	BHU	Bhutan
476	BIA	Biafra
145	BOL	Bolivia
571	BOT	Botswana
140	BRA	Brazil
355	BUL	Bulgaria
775	BUR	Burma
516	BUI	Burundi
811	CAM	Cambodia
471	CAO	Cameroun
020	CAN	Canada
431	CPV	Cape Verde
482	CEN	Central Africa Rep.
780	CEY	Sri Lanka (Ceylon)
483	CHA	Chad
155	CHL	Chile
710	CHN	China, Peoples Rep.
713	CHT	China, Republic of
100	COL	Columbia
495	COM	Comoro Islands
484	CON	Congo Brazzaville
490	COP	Zaire (Congo-Kinshasa)
094	COS	Costa Rica
040	CUB	Cuba
352	CYP	Cyprus/Greek
353	CYT	Cyprus/Turkish
315	CZE	Czechoslovakia
434	DAH	Dahomey
390	DEN	Denmark
042	DOM	Dominican Rep.
130	ECU	Ecuador
092	ELS	El Salvador
440	GUE	Equitorial Guinea
531	ELF	Eritrean Liberation Front
530	ETH	Ethiopia
375	FIN	Finland
220	FRN	France
980	FIJ	Fiji
555	FRE	Frelimo-Mozambique Liberation Org.
481	GAB	Gabon
420	GAM	Gambia
265	GME	Germany/Dem. Rep.
255	GMW	Germany/Fed. Rep.
452	GHA	Ghana
350	GRC	Greece
090	GUA	Guatemala
438	GUI	Guinea
441	GBI	Guinea-Bissau
110	GUY	Guyana
041	HAI	Haiti
091	HON	Honduras
310	HUN	Hungary
720	HOK	Hong Kong
395	ICE	Iceland
750	IND	India
850	INS	Indonesia
630	IRN	Iran
645	IRQ	Iraq
205	IRE	Ireland
666	ISR	Israel
325	ITA	Italy
437	IVO	Ivory Coast
051	JAM	Jamaica
740	JAP	Japan
663	JOR	Jordan
501	KEN	Kenya
731	KON	Korea/North
732	KOS	Korea/South
641	KUR	Kurdistan
690	KUW	Kuwait
812	LAO	Laos
660	LEB	Lebanon
570	LES	Lesotho
450	LBR	Liberia
620	LBY	Libya
223	LIC	Liechtenstein
212	LUX	Luxemburg
721	MAC	Macao
580	MAG	Malagasy
553	MAW	Malawi
820	MAL	Malaysia
782	MAD	Maldive
432	MLI	Mali
338	MLT	Malta
435	MAU	Mauritania
590	MAR	Mauritius
070	MEX	Mexico
221	MOC	Monaco
712	MON	Mongolia
600	MOR	Morocco
698	MOM	Muscat and Oman
562	NMB	Namibia (Former South-West Africa)
921	NAU	Nauru
790	NEP	Nepal
210	NTH	Netherlands
920	NEW	New Zealand
093	NIC	Nicaragua
436	NIR	Niger
475	NIG	Nigeria
385	NOR	Norway
770	PAK	Pakistan
095	PAN	Panama
905	PAP	Papua New Guinea
150	PAR	Paraguay
135	PER	Peru
840	PHI	Philippines
290	POL	Poland
235	POR	Portugal
485	STV	Principee & Sao Tomee
696	QAT	Qatar
552	RHO	Rhodesia
360	RUM	Rumania
517	RWA	Rwanda
331	SAN	San Marino
670	SAU	Saudi Arabia
433	SEN	Senegal
451	SIE	Sierra Leone
830	SIN	Singapore
520	SOM	Somalia
560	SAF	South Africa
681	SYE	South Yemen
230	SPN	Spain
780	CEY	Sri Lanka (Ceylon)
625	SUD	Sudan
105	SUR	Surinam
572	SWA	Swaziland
380	SWD	Sweden
225	SWZ	Switzerland
652	SYR	Syria
510	TAZ	Tanzania
800	TAI	Thailand
861	TIB	Tibet
461	TOG	Togo
052	TRI	Trinidad-Tobago
616	TUN	Tunisia
640	TUR	Turkey
500	UGA	Uganda
365	USR	USSR
675	UAE	United Arab Emirates
651	UAR	UAR (Egypt)
200	UNK	United Kingdom
002	USA	USA
439	UPP	Upper Volta
165	URU	Uruguay
328	VAT	Vatican
101	VEN	Venezuela
816	VTN	Vietnam/North
817	VTS	Vietnam/South
990	WSM	Western Samoa
678	YEM	Yemen
681	SYE	Yemen/South
345	YUG	Yugoslavia
490	COP	Zaire (Congo-Kinshasa)
551	ZAM	Zambia
554	ZIM	Zimbabwe-Rhodesia Liberation Org.

NON-GOVERNMENTAL ACTORS

198	AFP	Alliance for Progress
699	ARL	Arab League
692	OAP	Organization of Arab Petroleum Exporting Countries
693	OPC	Organization of Petroleum Exporting Countries
397	EEC	EEC
398	EFT	EFTA
396	NAT	NATO
199	OAS	OAS
599	OAU	OAU
697	PLO	Palestinian Liberation Organization
992	SEA	SEATO
818	VCG	Vietcong and NLF
394	WAR	Warsaw Pact
399	UNO	Any intl. org. (UN)
999	MLG	Any multilateral grp.
999	NSC	Not stated, Unidentified target
813	LAP	Pathet Lao

PART II

THREAT RECOGNITION AND ANALYSIS IN A REGIONAL SUBSYSTEM: THE CASE OF SOUTHERN AFRICA SINCE JANUARY 1973

Threat Recognition and Analysis in a Regional Subsystem:
The Case of Southern Africa since January 1973

Section I: INTRODUCTION

The purpose of this report is to demonstrate how an analyst may go about recognizing and analyzing international threat phenomena in the context of a regional subsystem. Southern Africa has been chosen as an example of the problem at hand, although the decision to focus on this particular regional subsystem was made in 1973, well prior to the series of events beginning with the collapse of the Portuguese dictatorship in April, 1974, that has placed Southern Africa on the front page of our daily newspapers and made this area one of the principal concerns of United States foreign policy.

As a demonstration, this report does not claim to provide new factual information or to have tested heretofore unsubstantiated theories and hypotheses. Rather, beginning with the intuitively plausible proposition that "crisis management" is, by definition, an admission of the failure of intelligence and policy preparedness, we have tried to anticipate crises by concentrating on "threats" that, under certain conditions, may lead to international crises. If threats sometimes lead to crises, open conflict, and war, then one's ability to recognize threats and to analyze them could be directly relevant to crisis avoidence and crisis prevention. Within the contemporary world system the United States represents an advantaged and hence a status quo supporting state. If leaders are to protect American possessions while at the same time avoiding blind forms of opposition to international change, the capacity to anticipate, to prevent, and to avoid must be developed to match current abilities to control, manage, and destroy.

Given this perspective, a focus on THREATS - which we shall initially define as possibly or actually harmful conditions that have not yet become crises - recommends itself. In the context of our overall Project, our major working hypothesis has been that insights into threat phenomena and processes could be maximized if a variety of approaches and levels of analysis were undertaken. The traditional levels of analysis in international politics have been individual leaders (man), countries (the state), and war (the global system). Beginning in the 1960's, a number of writers came to argue for a unit of analysis intermediate between the state and the entire system. This new unit often, but not always, called the regional

subsystem, was said to be both a fact of world politics and a useful analytical device. In accord with our pluralistic approach to the study of threat phenomena, we decided to work with such a regional subsystem, that of Southern Africa.

Our approach is as follows: in the next section we specify what we mean by the concept of a regional subsystem and we procede to describe how behavior within such systems may be observed, thereby operationalizing the concept. In section three we rely on other aspects of the overall TR&A project to offer a succinct description of the current state of the Southern African regional subsystem focusing on the capabilities of the core states, their external linkages, and the fundamental aspects of subsystem dynamics.

Section four represents the major conceptual effort of this report. There we make distinctions between "threats" and "opportunities". We go on to conceptually and operationally define threats as conflictual interactions relating to the substance and procedures whereby the values of security, territory, status, human and non-human resources are allocated and reallocated among subsystem members. Looking at the pattern of these interactions over time we introduce the concepts of "threat agendas", "threat episodes", "chronic threats" and "acute threats".

With these concepts in hand, in section five we undertake the major analytical effort of our report by subjecting the threat episode of the Rhodesian-Zambian border closure and the acute threats of wars of liberation and the denial of human and civil rights to sustained and detailed analysis.

We conclude our effort by placing our study in the appropriate context in the sixth section where we emphasize how this report is distinct from both an original scholarly monograph and an intelligence study. We would stress now what we say there - what follows is a DEMONSTRATION of part of what could be done in government or in research institutes if the political will and the political need are accepted by decision-makers.

In this report, the choice of Southern Africa as a regional subsystem case study for the recognition and analysis of international threat phenomena has been both apt and painful. The remainder of this report will show that Dr. Kissinger's current efforts to manage the crises centering on Rhodesia, Namibia and South African Apartheid could well have begun years ago if the political will to do so had

existed and if responsible decision-makers had had available to them the concepts and data we present. Our report is regretably after the fact, it is written in the hope that we can learn from our mistakes and thereby reduce their frequency and magnitude. We say this because perhaps the greatest "threat" in international politics is presented by great powers that are incapable of foresight and imagination.

SECTION 2: DEFINITION OF THE REGIONAL SUBSYSTEM

2.1 Conceptual Considerations.

The recognition and analysis of international threat phenomena in a regional subsystem is particularly frought with difficulties because there is no "natural" unit associated with the subsystem concept. When one considers the global international system, as done for example in McClelland's recent paper (1976), the system comprises the interactions of "all" international actors. All is normally defined as the membership list of the United Nations, giving over 140 nation-states, plus non-member states such as Switzerland and the two Koreas, and selected key transnational and organizational actors such as the PLO, NATO, and the UNO. Current procedures within our Project produce a list of 180 actors in the global international system. To be sure this list does not represent truly all international and transnational actors, but the system does have an easily operationalized core - ALL STATE TERRITORIES - and can be easily expanded to include other entities to suit specific research questions. When research focuses on threats at the level of nations the obvious empirical referents are the particular nation-states selected for analysis. We have found, however, that when the focus of research is an international regional subsystem such as "Southern Africa" no simple and widely agreed upon rule exists for the definition of the subsystem.

At the conceptual level, Thompson (1973) has carefully documented the confusion and lack of consensus among scholars as to the meaning of the regional subsystem concept. Surveying twenty-one authors who published studies of international systems intermediate in scope between the global and national levels during the period 1958 to 1971, Thompson (1973: 92-3) found eight different terms used to name such systems and twenty-one different attributes associated with this concept. Moreover, there was no evidence of increasing consensus among scholars as to the necessary and sufficient conditions for utilizing the concept of regional subsystem over the fourteen year period of their work. Via a systematic comparison of the authors' uses of these attributes and a logical analysis of their meanings and interrelations, Thompson (1973: 101) proposed four necessary and sufficient conditions for defining a regional subsystem that we have followed in our research.

(1) THE SYSTEM LOGICALLY CONSISTS OF AT LEAST TWO AND QUITE PROBABLY MORE ACTORS, and (2) THE ACTOR'S PATTERN OF

RELATIONS OR INTERACTIONS EXHIBIT A PARTICULAR DEGREE OF REGULARITY AND INTENSITY TO THE EXTENT THAT A CHANGE AT ONE POINT IN THE SUBSYSTEM AFFECTS OTHER POINTS. These two conditions suffice to define any international system. When the following two conditions also are met, a regional subsystem may be said to exist: (3) THE ACTORS ARE GENERALLY PROXIMATE, and (4) INTERNAL AND EXTERNAL OBSERVERS AND ACTORS RECOGNIZE THE SUBSYSTEM AS A DISTINCTIVE AREA OR "THEATER OF OPERATION". As we shall demonstrate in the next subsection, "Southern Africa" clearly meets these conditions and can be identified as one of the world's key regional subsystems.

Interestingly, while the scholars surveyed by Thompson did not agree on the meaning of the regional subsystem concept, necessitating his useful conceptual explication, there was consensus among the group as to the advantages regional subsystem analysis offers to international relations researchers (Thompson, 1973: 91). Obviously, we share their view on these matters. FIRST, while all analytical distinctions are in an ultimate sense arbitrary, some may be more justified and useful than others. Thus, if national elites within and outside a region regard it as a "theater of operations", research on the region achieves a degree of policy relevance superior to more abstract regional analyses such as those of Russett (1967). Certainly for United States decision-makers in foreign affairs the recent trips and policy statements of Secretaries Kissinger and Rumsfeld indicate their recognition of Southern Africa as an area of significant concern to the U.S. SECOND, by studying regional subsystems in which superpowers are not core actors international relations research may overcome some of the biases associated with its traditional great power focus. Thus, in the Southern African subsystem involved great powers - the United States, United Kingdom, the Soviet Union, and China - are acting at great distances from their poles of power and what is true of their interactions with each other in the global arena may not be true in the Southern Africa region. THIRD, the analysis of regional subsystems permits some reduction in the complexity of world politics by achieving a more limited focus which should make possible more comprehensive examinations of relevant variables and processes. FOURTH, the study of regional subsystems presents an opportunity for the integration of the methods and findings of area specialists and international relations students. Given that in both government and universities area experts and behaviorally oriented IR experts represent "two cultures" that insufficiently interact, if studies of regional subsystems achieve such integration, the benefits could be

considerable. FIFTH, the analysis of various regional subsystems should permit comparisons among regions as well as over-time. While comparison may be thought of as primarily useful in theory construction and validation, it is equally appropriate to policy evaluation research seeking to determine "what works and what doesn't work" in differing international contexts. Thus, while we are dismayed that specialists on regional subsystems have not achieved greater agreement among themselves on the nature of such systems, we agree wholeheartedly with their rationales for such studies. (See McGowan, 1976, for a select bibliography on international regional subsystem analysis.)

2.2 Empirical Considerations.

Having chosen Southern Africa as for the purposes of a regional subsystem case study of international threat recognition and analysis for the reasons outlined in the introduction of this report, it was next necessary to determine the members of this regional subsystem. 1972-73 saw the publication of the first book length works that explicitly were devoted to the analysis of the Southern African subsystem. Potholm and Dale's edited volume - SOUTHERN AFRICA IN PERSPECTIVE: ESSAYS IN REGIONAL POLITICS (1972) - contains twenty-three original essays on "the nine states of the Southern African subsystem" and the subsystem's structure and processes. The book as a whole and many of the individually authored chapters explicitly treat their subject matter in a regional subsystem perspective. However, the criteria for defining the system and its members (South Africa, South West Africa, Malawi, Rhodesia, Angola, Mozambique, Botswana, Swaziland, and Lesotho) are never made explicit. Only by implication may one infer that geographical proximity is the criterion, but one may object that this is insufficiently discriminating for Zambia is proximate to Southern Africa, it has a long history of ties to that region, and our data will show that it is the second most active actor in the system, second only to South Africa; yet Zambia is excluded from the system in Potholm and Dale with no apparent justification.

Grundy in his CONFRONTATION AND ACCOMODATION IN SOUTHERN AFRICA: THE LIMITS OF INDEPENDENCE (1973) adopts a more sophisticated approach to the definition of this regional subsystem. In an illuminating appendix he compares subsystem member definitions given in nine studies of the region published between 1962 and 1970. If we update his table to include Grundy's own definition and Potholm and

Dale's, we get Table 2.1. If we exclude the 1967 Robson article because of its rather narrow focus on the Southern African Customs Union, we see that the other ten studies all agree that South Africa, Rhodesia, Botswana, Lesotho, Swaziland, Mozambique, and Namibia are members of the subsystem. Disagreement exists over the other seven states and territories, althouth Angola is included in all except Green and Fair (1962). There is little agreement across scholars - Kuper and Rhoodie (both of white South African origin) agree as do Bowman and Potholm and Dale (representatives of younger white American political scientists). While definitional agreement is limited, there does seem to be a tendency to include more members in the later studies. The three criteria that all these studies seem to share are geographical proximity, a willingness to view Southern Africa as a theater of operation, and a subsystem of from 9 to 13 members. However, since all eleven studies represent historical narratives and more or less sophisticated qualitative analysis of interactions among subsystem members, the degree to which these interactions manifest regularity, intensity, and interconnectedness is never defined and operationalized in a rigorous quantitative and comparative fashion.

Our approach to the empirical definition of the Southern African regional subsystem builds upon these previous studies but differs from them in one important respect - membership in the subsystem is ultimately defined by actual behavior exchanged during the period of observation. International regional subsystems are systems of interaction among international and transnational actors that besides manifesting Thompson's four criteria - in particular patterns of regular and intense interactions - also manifest some degree of autonomy within the larger global system. By event interaction monitoring it should be possible to observe interaction patterns and by a comparison of these patterns to those found in the global system to measure the degree of subsystem autonomy. Since Southern Africa is so geographically remote from areas of direct great power confrontation, the autonomy of this regional subsystem ought to be considerably greater than many others, such as Europe or the Middle East. However, we would stress that this is an empirical question, it is not true by definition.

Having surveyed the relevant literature on the Southern Africa subsystem and its membership (see McGowan, 1976, for a select bibliography on Southern Africa), we drew up a list of fifty-six international and transnational actors that had been suggested as being members of the subsystem by at least

TABLE 2.1: Varying Definitions of the Southern African Regional Subsystem

Members	Green & Fair (1962)	Kuper (1964)	Nielsen (1965)	Davis & Boher (1966)	Robson (1967)	Bowman (1968)	Hance (1968)	Rhoodie (1968)	Cantori & Spiegel (1970)	Potholm & Dole (1972)	Grundy (1973)
1. South Africa	X	X	X	X	X	X	X	X	C	X	X
2. Rhodesia	X	X	X	X		X	X	X	C	X	X
3. Zambia	X	X		X				P	P		X
4. Malawi	X	X		X		X		P	P	X	X
5. Botswana	X	X	X	X	X	X	X	X	P	X	X
6. Swaziland	X	X	X	X	X	X	X	X	P	X	X
7. Lesotho	X	X	X	X	X	X	X	X	P	X	X
8. Mozambique	X	X	X	X		X	X	X	C	X	X
9. Angola		X	X	X		X	X	X	C	X	X
10. Namibia	X	X	X	X		X	X	X	C	X	X
11. Malagasy			X						P		X
12. Mauritius									P		
13. Zaire				X		P					P
14. Tanzania											X
Total	9	10	9	11	4	10	8	10	12	9	13

X = member; C = core member; P = peripheral member.

Source: Modified from Grundy (1973:311)

one authority surveyed. Following Cantori and Spiegel (1970), these actors were grouped into the following conceptual categories:

A. Core States and Territorial Actors:
   1. Angola (ANG, 5400) *
   2. Mozambique (MOZ, 5410)
   3. Zambia (ZAM, 5510)
   4. Rhodesia (RHO, 5520)
   5. Malawi (MAW, 5530)
   6. Republic of South Africa (SAF, 5600)
   7. Namibia (NMB, 5650)
   8. Lesotho (LES, 5700)
   9. Botswana (BOT, 5710)
   10. Swaziland (SWA, 5720)

B. Peripheral Powers:
   1. Zaire (COP, 4900)
   2. Tanzania (TAZ, 5100)
   3. Malagasy Republic (MAG, 5800)
   4. Mauritius (MAR, 5900)

This list of fourteen potential subsystem members is identical to those considered members by at least one of the authorities surveyed in Table 2.1. However, it would be a serious error to consider this list exhaustive. First of all, it ignores certain non-African powers that recent events as well as historical, cultural, and commercial ties show to be involved participants in this subsystem. Cantori and Spiegel call such actors "intrusive powers" which they define as "external countries (which) involve themselves in the international politics of subordinate systems other than their own" (1970: 25). Since noone has previously attempted to define the intrusive powers involved in Southern Africa except Cantori and Spiegel (1970: 9-10) we adopted a rather open ended definition of this category, including all plausible intrusive powers and leaving it to the actual patterns of interaction to determine which ones would be included in subsequent analyses.

C. Intrusive Powers
   1. United States (USA, 0020)**
   2. Cuba (CUB, 0040)
   3. Brazil (BRA, 1400)
   4. United Kingdom (UNK, 2000)**
   5. Netherlands (NTH, 2100)
   6. France (FRN, 2200)
   7. Portugal (POR, 2350)**
   8. German Federal Republic (GMW, 2550)
   9. Soviet Union (USR, 3650)

10. China (CHN, 7100)
11. Japan (JAP, 7400)

It must be stressed that our definition of intrusive power was completely open ended and intended to be changed as events necessitated. Thus, actual data collection for our study began in January, 1975, with a starting date of 1 January, 1973. Cuba was not included in our original list of intrusive powers (see McGowan, 1974 for our CODEBOOK) but Castro's intervention in the Angolan civil war during the summer of 1975 required that Cuba be added to our list during the process of data-making. (In point of fact, during the 16 months prior to the Portuguese coup of April 25, 1974, that is from 1-1-73 to 4-30-74, we found Cuba was uninvolved in the Southern African subsystem, sending only 8 acts, 0.18% of the total, and receiving only 2 actions, just 0.04%.) Each of the intrusive powers listed above has been suggested as having linkages to and interests in the Southern African region and was, on that basis, included in our list. (See McGowan, 1976, for a bibliography on United States and United Kingdom linkages to South Africa and the region as a whole.)

A second reason that it would be an error to limit an analysis of this regional subsystem to the above African and intrusive states is that Southern Africa is a region where non-state actors are particularly important for an understanding of system dynamics relating to threat recognition and analysis. These involved non-state actors take three forms, the most important of which are, perhaps, the local liberation movements struggling against minority rule in the region. Again, we chose to be open-ended in our listing of these movements, including what were little more than paper organizations and redefining the list as mergers and splits affected it. As of September, 1976, our liberation movements list includes:

D. Liberation Movements:
   1. MPLA - Angola (5401) which becomes Angola (5400) on 11 February, 1976, due to MPLA's recognition by the Organization of African Unity on that date as the government of Angola.
   2. UNITA - Angola (5402)
   3. FNLA - Angola (5403)
   4. COREMO - Mozambique (5411)
   5. FRELIMO - Mozambique (5412) which becomes Mozambique (5410) on 25 June, 1975, as a result of the grant of independence by Portugal on that date to a FRELIMO

government.
6. MOLIMO - Mozambique (5413)
7. ZANU - Rhodesia (5521)
8. ZAPU - Rhodesia (5522)
9. FROLIZI - Rhodesia (5523)
10. African National Council (ANC) - Rhodesia (5524) beginning on 8 December, 1974, when ANC, ZANU, ZAPU, and FROLIZI merged. After 28 September, 1975, this code represents the Nkomo "internal" faction of the ANC of Rhodesia.
11. Muzorewa-Sithole "external" faction of ANC - Rhodesia (5525) after 28 September, 1975.
12. Zimbabwe Liberation Army (5526)
13. African National Congress (ANC) - South Africa (5601)
14. Pan-Africanist Congress (PAC) - South Africa (5602)
15. SWANU - Namibia (5651)
16. SWAPO - Namibia (5652)

The next category of non-state actors included in our project are certain international organizations that are unquestionably involved in the Southern African regional subsystem or that have been alledged to be so involved. They are:

E. International Organizations:
1. North Atlantic Treaty Organization (NATO, 2040)
2. The European Community (EEC, 2140)
3. The Customs Union of Southern Africa (CUSA, 4210)
4. The Organization of African Unity (OAU, 4280) except 5 and 6.
5. The OAU African Liberation Committee (4281)
6. The OAU Committee of Five on Rhodesia (4282)
7. The United Nations Organizations (UNO, 9700) except 8.
8. The United Nations Council on Namibia (9701)

Indeed, as we shall see, the OAU and UNO are among the most involved participants in the Southern African regional subsystem.

The final category of actors considered by our project is the so-called "Bantu Homelands" or "Bantustans" within the Republic of South Africa. The apartheid policy of the Nationalist Party regime in the Republic theoretically aims at the complete separation of the peoples of South Africa

along racial and ethnic lines, except, of course, for non-White participation as workers in the country's advanced industrial economy. As this policy applies to black South Africans (officially termed "Bantus" by the government) each black belongs to a "nation" and each of these nations should have its own territorial state and "independent" existence. In point of fact, this doctrine aims to fragment the existing Republic of South Africa into a "white" Republic controlling 87% of the territory wherein any black resident will be a "foreign African", as if he or she came from Malawi, and a series of entirely black mini-states bordering this purified Republic wherein the black population of nearly 20 million will be expected to exist on the remaining 13% of the former Republic's territory. Whatever one thinks of this policy - and we consider it both politically impractical and morally repugnant - it is a fact that one of these "proto-nations", the Transkei, is scheduled to receive its independence from the Republic in October, 1976. It is also a fact the leaders of government in two of the Homelands, Chief Gatsha Buthelezi of Kwazulu and Chief Kaiser Matanzima of the Transkei, have become recognized spokesmen for black interests throughout the region - in part because of the limited but real freedom of action afforded them by their official positions. We therefore decided to include in our study seven of the constitutionally most advanced Homelands as follows (see McGowan, 1976, for a bibliography on this issue):

F. Bantu Homelands in the Republic of South Africa:
   1. Bophutha Tswana (5603)
   2. Ciskei (5604)
   3. Gazankulu (5605)
   4. Kwazulu (5606)
   5. Lebowa (5607)
   6. Transkei (5608)
   7. Vhavenda (5609)

in point of fact, only Kwazulu and Transkei are relatively active and involved members in the subsystem.

Finally, we created several codes for general references to the region and collective entities in anticipation of the possibility of unclear and vague references to them by our actors. These categories only serve as targets of other action and not as actors themselves:

G. Residual Categories:
   1. References to "Bantu Homelands" in general (5610)

2. Southern Africa as a region (9280)
3. References to Liberation Movements in general (9998)
4. Unclear targets (9998)

In the sixteen month period used prior to the Portuguese coup - Jan. 1, 1973, to April 30, 1974, there were 83 references to Southern Africa representing just 1.9% of all behavior recorded. One-third of these references were by Zambia's President Kaunda who has been actively and persistently involved in efforts to shape non-violent strategies of change in the region. There were 48 references to liberation movements, 1.1% of all behavior, made primarily by Zambia and the O.A.U. in support of these movements. Only three of the 4,459 events refered to unclear targets.

Thus, our preliminary definition of the Southern African regional subsystem involved the creation of a 56 actor by 60 target matrix including core states, intrusive powers, and unlike previous definitions of the subsystem, a variety of transnational and subnational actors. This matrix meets three of Thompson's four criteria for defining regional subsystems: (1) two or more actors, (2) proximate actors, and (3) distinctiveness as a "theater of operation". However, only observation over-time of the actual behavior of these entities will permit us to show the necessary regularity and intensity of interaction that empirically defines the subsystem. It is to this problem that we now turn.

2.3 Operational Procedures

If regular and intense interaction is the SINE QUA NON of a regional subsystem, it is therefore necessary to observe and record such interaction in a reliable and valid fashion. Event interaction data and analysis, developed by Charles A. McClelland and associates at U.S.C. during the 1960's (Sherwin, 1973), is ideally suited to this purpose. The major competing approach, transaction flow analysis pioneered by Karl W. Deutsch and associates, was judged inappropriate since trade flows, mail flows, and diplomatic linkages are insensitive to rapid changes in subsystem behavior and inaccurate in Southern Africa because of the cleavages within the region.

Interactive behavior may be taken from a variety of sources. As described elsewhere in our Final Report,

McClelland has long focused on the analysis of the global international system by use of events taken from the NEW YORK TIMES and THE TIMES of London. These elite, prestigeful and experienced daily newspapers are particularly suited for picking our major international threats and crises areas (see McClelland, 1976). One is not certain of their usefulness for regional studies because of their Great Power and European focus. Tables 2.2 and 2.3 report the behavior the 26 actors that are common to the global system event files developed by McClelland and our own regionally defined matrix. In Table 2.2 reporting event interaction taken from the NEW YORK TIMES, we see how the NYT filters out information on the behavior of most Southern African actors in order to focus on the interactions of the super and great powers. Because of the 1973 border crisis between Rhodesia and Zambia and the persistent interest in South Africa, the NEW YORK TIMES reports some of their behavior but our remaining seven core actors' behavior is not reported. When a crisis such as the Angolan civil war of 1975-76 erupts, the NYT does turn its search light on the region, but Table 2.2 shows that this source would not be useful for an analysis of the pre-crisis conditions or threats that resulted in that episode.

Table 2.3 reports similar data for THE TIMES of London event file. Because of Britain's own involvement in the Rhodesian situation and its other historical ties to the region, THE TIMES devotes somewhat more attention to Southern Africa, but its own focus on the Great Powers and Europe relegates most of our core states to the periphery. Indeed, both sources produce similar records of international behavior (the rank order correlation of the actors is .89) that would appear to be highly useful for monitoring global system dynamics but not Southern African interactions. Only 2.4% of the behavior reported in the NEW YORK TIMES involves the ten core states of Southern Africa and while THE TIMES percentage, 10.2, is considerably higher, it also is insufficient for our purposes.

Now, it must be stressed that our comments are not meant to be a criticism of global event monitoring systems based on sources such as these two daily newspapers. When the research questions focus on GLOBAL threat and crisis warning applications, the NYT and TOL data sets are highly useful. Cold War type crises are particularly suited to this approach, but as the global system becomes increasingly regionalized (as argued by Brown, 1973) and therefore as threats and crises have regional subsystem focii, warning indexes based on global sources may not prove as useful as they have in the past. We would argue that a prudent policy

TABLE 2.2: Southern African Subsystem, 1 January 1973 to 30 April 1974, as Reported in The New York Times WEIS File

Rank	Member	Type	Acts Sent N	Acts Sent %	Acts Received N	Acts Received %	Total N	Total %
1.	U.S.A.	Intrusive Power	852	30.8	861	31.1	1713	30.9
2.	U.S.S.R.	Intrusive Power	554	20.0	497	18.0	1051	19.0
3.	U.N.O.	Int. Organization	371	13.4	600	21.7	971	17.5
4.	China	Intrusive Power	222	8.0	193	7.0	415	7.5
5.	Japan	Intrusive Power	156	5.6	140	5.1	296	5.4
6.	France	Intrusive Power	159	5.7	129	4.7	288	5.2
7.	West Germany	Intrusive Power	155	5.6	102	3.7	257	4.6
8.	U.K.	Intrusive Power	137	4.9	92	3.2	229	4.1
9.	Cuba	Intrusive Power	42	1.5	40	1.4	82	1.5
10.	Zambia	Core State	32	1.2	28	1.0	60	1.1
11.	Rhodesia	Core State	15	0.5	20	0.7	35	0.6
12.	South Africa	Core State	15	0.5	19	0.7	34	0.6
13.	Holland	Intrusive Power	18	0.7	7	0.3	25	0.5
14.	Portugal	Intrusive Power	8	0.3	16	0.6	24	0.4
15.	Brazil	Intrusive Power	11	0.4	9	0.3	20	0.4
16.	Tanzania	Peripheral Power	9	0.3	4	0.1	13	0.2
17.	Zaire	Peripheral Power	5	0.2	5	0.2	10	0.2
18.	Malagasy	Peripheral Power	3	0.1	2	0.1	5	0.1
19.5	Mauritius	Peripheral Power	2	0.1	1	0.0	3	0.0
19.5	Swaziland	Core State	2	0.1	1	0.0	3	0.0
21.5	Botswana	Core State	0	0.0	1	0.0	1	0.0
21.5	Namibia	Core State	0	0.0	1	0.0	1	0.0
24.5	Angola	Core State	0	0.0	0	0.0	0	0.0
24.5	Lesotho	Core State	0	0.0	0	0.0	0	0.0
24.5	Malawi	Core State	0	0.0	0	0.0	0	0.0
24.5	Mozambique	Core State	0	0.0	0	0.0	0	0.0
TOTALS			2,768	1.0	2,768	100.0	5,536	100.0

Core State = 134 = 2.4%

TABLE 2.3: Southern African Subsystem, 1 January 1973 to 30 April 1974, as Reported in The Times of London WEIS File

Rank	Member	Type	Acts Sent N	Acts Sent %	Acts Received N	Acts Received %	Total N	Total %
1.	U.S.A.	Intrusive Power	148	15.0	179	18.2	327	16.6
2.	U.K.	Intrusive Power	135	13.7	159	16.1	294	14.9
3.	U.S.S.R.	Intrusive Power	146	14.8	145	14.7	291	14.8
4.	China	Intrusive Power	112	11.4	71	7.2	183	9.3
5.5	France	Intrusive Power	104	10.5	78	7.9	182	9.2
5.5	West Germany	Intrusive Power	94	9.5	88	8.9	182	9.2
7.	U.N.O.	Int. Organization	39	4.0	75	7.6	114	5.6
8.	Zambia	Core State	54	5.5	37	3.8	91	4.6
9.	Japan	Intrusive Power	41	4.2	37	3.8	78	4.0
10.	Rhodesia	Core State	24	2.4	33	3.3	57	2.9
11.	Portugal	Intrusive Power	18	1.8	25	2.5	43	2.2
12.	South Africa	Core State	24	2.4	18	1.8	42	2.1
13.	Tanzania	Peripheral Power	13	1.3	14	1.4	27	1.4
14.	Zaire	Peripheral Power	11	1.1	7	0.7	18	0.9
15.	Holland	Intrusive Power	11	1.1	5	0.5	14	0.7
16.	Cuba	Intrusive Power	6	0.6	6	0.6	12	0.6
17.	Lesotho	Core State	3	0.3	3	0.3	6	0.3
18.5	Brazil	Intrusive Power	2	0.2	1	0.1	3	0.2
18.5	Malagasy	Peripheral Power	1	0.1	2	0.2	3	0.2
20.5	Botswana	Core State	0	0.0	1	0.1	2	0.1
20.5	Malawi	Core State	1	0.1	1	0.1	2	0.1
22.	Mozambique	Core State	1	0.1	0	0.0	1	0.1
24.5	Angola	Core State	0	0.0	0	0.0	0	0.0
24.5	Mauritius	Peripheral Power	0	0.0	0	0.0	0	0.0
24.5	Namibia	Core State	0	0.0	0	0.0	0	0.0
24.5	Swaziland	Core State	0	0.0	0	0.0	0	0.0
TOTALS			986	100.0	986	100.0	1972	100.0

Rhodesia with NYT=.8913
Core State = 201 = 10.2%

would be one in which global monitoring continues but that regionally specialized warning systems be developed as well. The necessity of such an approach is illustrated by the last three months of 1975 when the Angolan and Lebonese civil wars were the principal conflict areas in the global system. Neither crisis fits the classical Cold War pattern of more or less direct Super Power confrontation and therefore threat and warning indexes created from these two global sources do not anticipate either crisis well (McClelland, 1976: 13-15).

Considerations such as these led us to decide to use a regionally specialized event chronology for the purpose of observing interaction behavior among the Southern African regional subsystem members. As the select bibliography on data sources and event chronologies in McGowan (1976) illustrates, there are many possible sources we could have used for this purpose. However, since one must always begin with one source and because previous research by McGowan had shown its utility, it was decided to use AFRICA RESEARCH BULLETIN, a monthly regionally specialized event chronology that appears in two series, "Political, Social, and Cultural" and "Economic, Financial, and Technical". Not only does ARB compare well to competing chronologies of African events such as AFRICAN RECORDER and AFRICA DIARY, it is very frequently used as a source of information in non-quantitative studies of the region, such as Grundy's recent book (1973).

Following our Codebook (McGowan, 1974), the process of event monitoring of our 56 actors and 60 targets was initiated. This involved training two teams of research assistants, one to abstract events from ARB such as

> "a UN Security Council resolution reiterated a demand that South African forces be withdrawn from Rhodesia" March 10, 1973, and
> "at a press conference, President Kaunda (Zambia) spoke of 'joint operations' by South Africa, Rhodesia, and Portugal mercenaries directed against Zambia" August 23, 1973

and a second team to code these events across a series of eleven variables describing the actor, date, target, type of action, issue areas, and related scales. Computer programs developed as part of our Project were then used to enter these event interactions and to retrieve them for analytic purposes.

On April 25, 1974, the Armed Forces Movement coup

d'etat against the Portuguese government in Lisbon initiated events whose consequences are not yet fully understood and which have not yet run their full course. We intentionally began observing the Southern African regional subsystem on January 1, 1973, so that we could have a period of sixteen months to observe the system in its pre-Portuguese coup "normal" state so that a bench mark could be established against which post-coup changes could be evaluated. During the period 1-1-73 to 4-30-74 the 56 actors in our tentative list directed 4,459 actions towards the 60 targets in our list. As expected, not all actors were observed engaging in subsystem relevant behavior (eight did not) and some were many times more active than others. It should be noted, however, that ARB provided far more information on the region, 4,459 events, than did the NEW YORK TIMES, 2,768 events, or THE TIMES of London, 986 events for the same period of time.

With these observations in hand, it was next necessary to devise an operational rule to determine when interactions were sufficiently regular and intense to represent subsystem membership. Because our approach to the study of this regional subsystem differs significantly from other such studies, no precedent exists in this regard. Our 56 actors represent 1,540 (n(n-1)/2) pairs of potentially interacting units. One possible rule would be to define a system member as an actor or target with behavioral linkages to a certain proportion of other actors and targets. Thus, South Africa sent behavior to 30 out of 55 targets during this 16 month period (54.5%) and was the target of the behavior of 35 out of 55 actors (63.6%) and should certainly be considered a member of the subsystem. Malawi, on the other hand, sent behavior to 16 targets (29.1%) and received acts from 18 actors (32.7%). Should Malawi be considered a member or not? Obviously, decisons on the operational definition of subsystem members will be arbitrary until research has adequately explored the consequences of varying definitions. For the purposes of this report we shall work with two different definitions of the Southern African regional subsystem.

Our first definition is intended to be as meaningfully inclusive as possible. Since our initial 56 actors initiated 4,459 actions between 1-1-73 and 4-30-74, we defined as a subsystem member any actor that sent or received 1% or more of these acts, that is 45 or more interactions. This rule resulted in a reduced system of 33 actors and targets listed in Table 2.4 that initiated or received 3,884 events, or 87.1% of the total behavior initiated during the period. Thus, by eliminating 23 actors and 27 targets considerable

simplicity is achieved without the loss of very much information, 13% or 575 events.

Table 2.4 shows that all ten of our core states are included in the reduced subystem and that they account for 43.5% of the interactions undertaken, in sharp contrast to the records provided by the NYT and the TOL files. All four peripheral powers are also represented, accounting for 10.8% of subsystem behavior. Only five of eleven possible intrusive powers are included (U.K., Portugal, U.S.A., France, and China) and they produced 16.9% of the activity observed. During the period 1-1-73 to 4-20-74, the Soviet Union was not a participant in the Southern African Regional Subsystem, sending only 34 acts to 14 targets and receiving only 24 acts from 13 actors. Only three of our initial list of transnational liberation movements were at all in interaction with other subsystem members before the Portuguese coup - FRELIMO, ZANU, and SWAPO. They account for 3% of the observed behavior. Thus, while the three Angolan liberation movements became active participants in the subsystem after April, 1974, our data show that in Angola, at least, the Portuguese had contained the struggle at the time of the coup. The subsystem includes four of our initial eight international organizations, and two of them, the U.N. and the O.A.U., are among the very most active subsystem participants. All together, I.O.'s represent 17.5% of the behavior in the subsystem. Finally, all seven of the South African "Bantu" Homelands are subsystem members, representing the remaining 8.3% of behavior recorded.

Even with this operationally defined and reduced Southern African Regional Subsystem of 33 actors and targets, there are 528 pairs of subsystem members and most members do not interact with most targets. Thus, in our subsystem matrix of 33 actors and targets, there are 1,056 nonredundant cells (the diagonal cells representing "action towards oneself" are excluded) and 626 of these are empty - representing 59.3%. Figure 2.1 illustrates how within Southern Africa and, in fact, all international systems, action is concentrated on just a selected number of targets. Each linkage in the Figure represents 0.5% of the behavior in our reduced subsystem, or 19 or more events. While such analytical techniques as graph theory could be applied to our data, the Figure has been drawn as a simple heuristic to aid our understanding of the structure of relations in the Southern African regional subsystem during the 16 months prior to the Portuguese coup d'etat.

During our baseline period before the Portuguese coup there were two clear centers of action within Southern

TABLE 2.4: Southern African Subsystem, 1 January 1973 to 30 April 1974, Defined by Sending and/or Receiving ≥ 1% of All Interactions During the Period Examined (N-4,459)

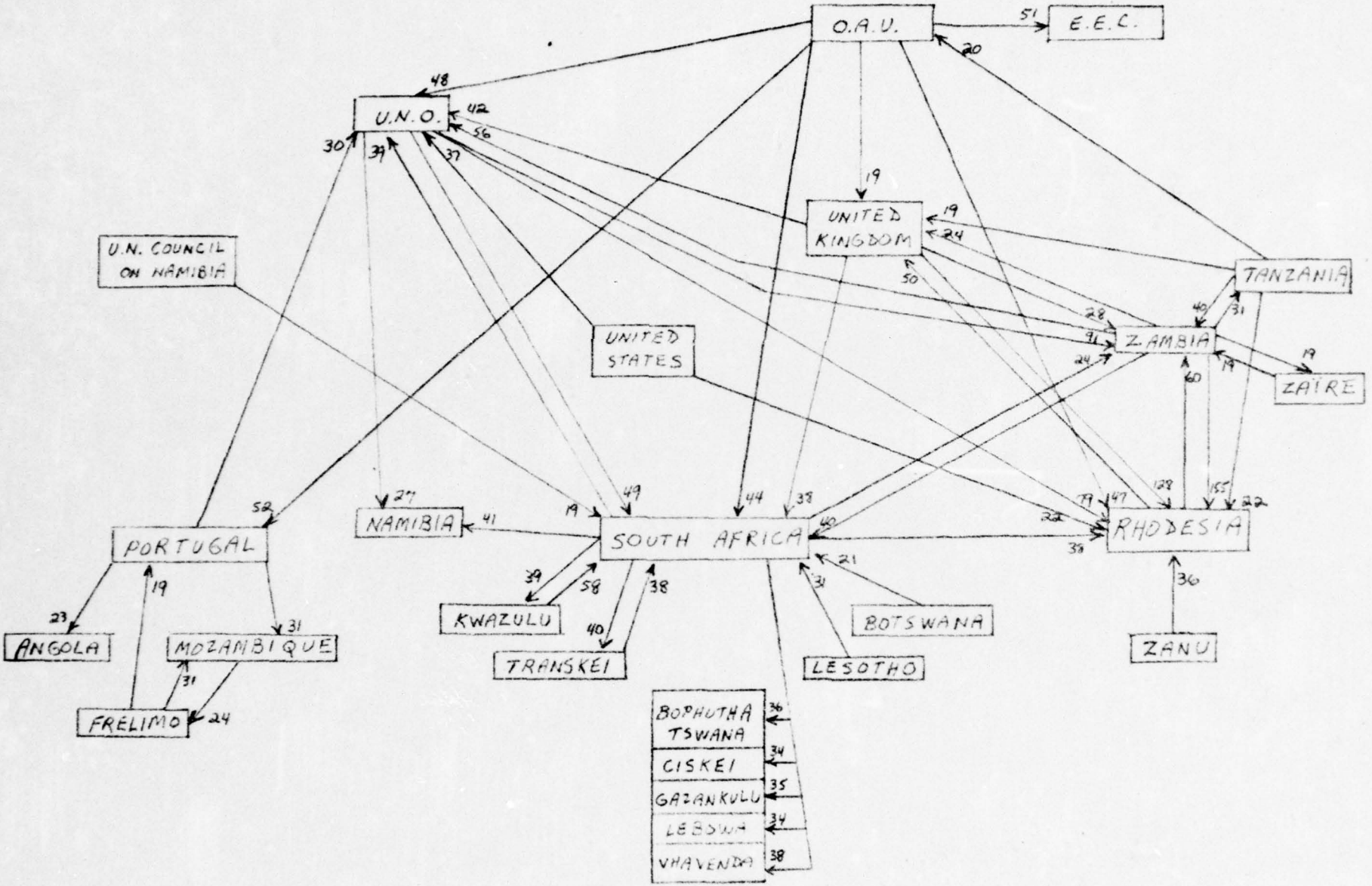
Rank	Member	Type	Acts Sent N	Acts Sent %	Acts Received N	Acts Received %	Total N	Total %
1.	South Africa	Core State	488	12.56	490	12.62	978	12.59
2.	Zambia	Core State	434	11.17	338	8.70	772	9.94
3.	Rhodesia	Core State	163	4.20	581	14.96	744	9.58
4.	United Nations	Int. Organization	355	9.14	352	9.06	707	9.10
5.	O.A.U.	Int. Organization	403	10.38	99	2.55	502	6.46
6.	United Kingdom	Intrusive Power	286	7.36	186	4.79	472	6.08
7.	Tanzania	Peripheral Power	228	5.87	135	3.48	363	4.67
8.	Portugal	Intrusive Power	133	3.42	188	4.84	321	4.13
9.	Zaire	Peripheral Power	122	3.14	84	2.16	206	2.65
10.	Malagasy	Peripheral Power	104	2.68	101	2.60	205	2.64
11.	Mozambique	Core State	54	1.39	143	3.68	197	2.54
12.	U.S.A.	Intrusive Power	121	3.12	65	1.67	186	2.39
13.	France	Intrusive Power	101	2.60	81	2.09	182	2.34
14.	KwaZula	Bantustan	117	3.01	54	1.39	171	2.20
15.	China	Intrusive Power	74	1.91	76	1.96	150	1.93
16.	Botswana	Core State	89	2.29	57	1.47	146	1.88
17.	Malawi	Core State	62	1.60	67	1.73	129	1.66
18.	Namibia	Core State	5	0.13	122	3.14	127	1.63
19.	Lesotho	Core State	73	1.88	43	1.11	116	1.49
20.	Transkei	Bantustan	53	1.36	59	1.52	112	1.44
21.	Bophutho Tswana	Bantustan	51	1.31	51	1.31	102	1.31
22.	Swaziland	Core State	56	1.44	45	1.16	101	1.30
23.	FRELIMO	Lib. Movement	60	1.54	36	0.93	96	1.24
24.	ZANU	Lib. Movement	70	1.80	19	0.49	89	1.15
25.	E.C.	Int. Organization	14	0.36	69	1.78	83	1.07
26.	VhaVenda	Bantustan	17	0.44	56	1.44	73	0.94
27.5	Angola	Core State	1	0.03	67	1.73	68	0.88
27.5	Mauritius	Peripheral Power	41	1.06	27	0.70	68	0.88
29	U.N. Council on Namibia	Int. Organization	53	1.36	14	0.36	67	0.86
30.	Ciskei	Bantustan	8	0.21	55	1.42	63	0.81
31.	GazanKulu	Bantustan	6	0.15	54	1.39	60	0.77
32.	Lebowa	Bantustan	6	0.15	54	1.39	60	0.77
33.	SWAPO	Lib. Movement	36	0.93	16	0.41	52	0.67
TOTALS:			3,884		3,884		7,768	
				100.00		100.00		100.00

Africa. The first centered on the intense interactions between Rhodesia and Zambia that have their historical roots in the defunct Central African Federation and Rhodesia'a Unilateral Declaration of Independence in November, 1965, but which were sharply magnified by Rhodesia's surprise decision to close its border with Zambia in January, 1973. This action precipitated what we shall call a "threat episode" within this regional subsystem (see IDAF, May 1973, for a description) with numerous friendly actors directing cooperative behavior to Zambia and hostile behavior toward Rhodesia. Zambia was supported by the U.N., United Kingdom, Tanzania, and Zaire. Rhodesia only received support from South Africa and the United States and was attacked by Zambia and her friends, including the O.A.U. In a region where six of the ten core states are landlocked, access to the sea and international trade are vital concerns. Threats to such access as presented by Rhodesia's action against Zambia are very serious and capable of provoking severe subsystem crises.

The second focus of subsystem activity was South Africa itself. Because of its apartheid system, its Bantustan policies, its control of the disputed territory of Namibia, and its economic and military superiority within the region, South Africa is the hub of the subsystem. During this period the OAU and UN directed considerable hostile behavior at the Republic. While South Africa responds to UNO-initiatives, usually by rejecting them. It ignores OAU activities. Only Zambia among independent African states was in full interaction with South Africa, because of its border crisis and because of continuous behind the scenes negotiations, sometimes called "detente" policies by the South African press. Two of South Arica's, dependent neighbors, Botswana and Lesotho, directed behavior at the Republic which was not reciprocated. The seven Homelands were in interaction with the government in Pretoria, but in two distinct patterns. South Africa directed behavior at all seven homelands, mainly involving its plans for their future. However, both the Transkei and Kwazulu directed a high level of behavior back at the Republic, the other five Homeland governments were quite passive.

It is interesting to note that Portugal and its two Southern African territories - Angola and Mozambique - as well as FRELIMO represent a rather isolated subsystem within the overall regional subsystem. Like South Africa, Portugal directed behavior toward the UN and ignored the OAU. The capabilities of FRELIMO and its successes in its war against the Portuguese authorities in Mozambique are reflected in this pattern of interactions, whereas Angola was passive as

Figure 2.1: Southern African Subsystem 1 January 1973 to 30 April 1974



were the three liberation movements operating in the territory - MPLA, FNLA, and UNITA.

Throughout the remainder of this Report, therefore, when we speak of "the Southern African regional subsystem" we shall refer to the thirty-three actor system defined by Table 2.4 and Figure 2.1. We shall also work with a more limited subsystem defined on the basis of conflict within the region which we shall now describe.

In subsequent sections of this Report, we shall build a case for studying international threat phenomena based upon the notion that threats represent CONFLICT over specific substantive and procedural issue-areas such as territory and human welfare. We therefore decided to redefine the Southern African subsystem as all actors and targets who sent or received, 1% or more of the conflict actions observed from January 1, 1973, through April 30, 1974. As noted above, our actors sent and received 4,459 events during this period of which 1,229 or 27.6% were coded as conflictful type behavior. This is a rather high proportion, much greater than found in general studies of AFRICAN FOREIGN POLICY (McGowan,1976) and illustrating the conflict ladden nature of this regional subsystem. Applying our rule to conflict behavior meant that to be included an actor had to send or recieve 13 or more conflict type actions. Table 2.5 lists the twenty-four members of the "Southern African Conflict subsystem" resulting from this rule. These actors sent and received 1,071 conflict acts or 87.1% of all conflict behavior, again showing how by redefining the subsystem much greater simplicity can be achieved without the loss of much information.

Table 2.5 shows that eight out of ten of our core states are members of this conflict subsystem and that they account for 54.6% of observed conflict behavior, a much larger percentage than their contribution to general subsystem interactions (43.5%). This tends to confirm the insight that regional subsystems receive their dynamics from the threats and crises exchanged among the members. AMong core states in this pre-coup period, Malawi and Swaziland were not subsystem participants, illustrating that geography alone is insufficient to define regional subsystems. Three of the four peripheral powers participate in this conflict subsystem and represent just 4.53% of conflict, much less than their 10.8% of all behavior. This supports their categorization as peripheral powers. The same five intrusive powers are members of the conflict subsystem as were members of general Southern African regional subsystem - Portugal, U.K., U.S.A., France, and China. Together they account for

TABLE 2.5: Southern African Subsystem, 1 January 1973 to 30 April 1974, Defined as Sending or Receiving ≥ 1% of All Conflict Interactions During the Period Examined.

Rank	Member	Type	Acts Sent N	Acts Sent %	Acts Received N	Acts Received %	Total N	Total %
1.	Rhodesia	Core State	75	7.00	326	30.44	401	18.72
2.	South Africa	Core State	48	4.48	235	21.94	283	13.21
3.	Zambia	Core State	197	18.39	71	6.63	268	12.51
4.	O.A.U.	Int. Organization	180	16.81	4	0.37	184	8.59
5.	U.N.O.	Int. Organization	118	11.02	12	1.12	130	6.07
6.	Portugal	Intrusive Power	13	1.21	113	10.55	126	5.88
7.	United Kingdom	Intrusive Power	58	5.42	65	6.07	123	5.74
8.	Mozambique	Core State	26	2.43	62	5.79	88	4.11
9.	FRELIMO	Lib. Movement	55	5.14	25	2.33	80	3.73
10.	Tanzania	Peripheral Power	47	4.39	9	0.84	54	2.52
11.	Namibia	Core State	3	0.28	44	4.11	47	2.19
12.	ZANU	Lib. Movement	37	3.45	3	0.28	40	1.87
13.	Kwazulu	Bantustan	29	2,71	8	0.75	37	1.73
14.	Botswana	Core State	30	2.80	4	0.37	34	1.59
15.	U.N. Council on Namibia	Int. Organization	31	2.89	1	0.09	32	1.49
16.	Zaire	Peripheral Power	25	2.33	5	0.47	30	1.40
17.	U.S.A.	Intrusive Power	8	0.75	21	1.96	29	1.35
18.5	Angola	Core State	0	0.00	27	2.52	27	1.25
18.5	France	Intrusive Power	6	0.56	21	1.96	27	1.25
20.	SWAPO	Lib. Movement	20	1.87	6	0.56	26	1.21
21.	Tronskei	Bantustan	18	1.68	6	0.56	24	1.12
22.	Lesotho	Core State	20	1.87	2	0.19	22	1.03
23.	China	Intrusive Power	14	1.31	1	0.09	15	0.70
24.	Malagasy	Peripheral Power	13	1.21	0	0.00	13	0.61
TOTALS			1071	100.00	1071	100.00	2142	100.00

14.9% of conflict behavior as compared 16.9% of all behavior. This suggests that intrusive powers, who are by definition geographically remote from regional subsystems, become involved in regional subsystems on the basis of their participation in subsystem conflicts. Again, the Soviet Union and Cuba were not involved in the Southern African Conflict subsystem during this baseline period (the Soviets sending 9 conflict acts to 4 targets and receiving 1). The same three transnational liberation movements are participants in the conflict subsystem accounting for 6.8% of all conflict as compared to just 3% of all behavior. Their central roles in ongoing regional conflicts and their threat to the security and tenure of the white minority regimes in Mozambique, Rhodesia, and Namibia are apparent. Just three of our eight international organizations participate and again the OAU and UNO are highly involved. Together, the three I.O.'s represent 16.2% of all conflict behavior, close to their 17.5% of all Southern African behavior. International Organizational involvement in regional subsystems seems to parallel that of intrusive powers. Finally, only two of seven Bantu Homelands participate in this conflict subsystem, Kwazulu and the Transkei, accounting for the remaining 3% of conflict among our 24 actor conflict subsystem.

As in the general Southern African regional subsystem, not all participants in the conflict subsystem conflict with each other, only 22.6% of the 552 cells in our 24 actor to target matrix contain conflict behavior. This proportion of non-empty cells compares to 40.7% for all behavior, indicating the more concentrated nature of international conflict than general interaction behavior. Figure 2.2 which should be compared to Figure 2.1 presents each conflict linkage containing .5% of the conflict exchanged in our reduced subsystem, 5 or more conflict events.

The Southern African conflict subsystem is smaller in membership but structurally similar to the general Southern African regional subsystem. Rhodesia and South Africa are the main focii of conflict with the U.K., Portugal, and Namibia secondary conflict focii. These actors were in a pattern of conflict with the so-called confrontation states, Zambia, Tanzania, Zaire, and Botswana, with the relevant liberation movements and with the O.A.U. and the U.N. The structural similarities between the two Figures clearly suggests that regional subsystems derive their structure from the issues in conflict among the members. Since our notion of threat is similar, we suggest that regional subsystems such as Southern Africa may be defined as clusters of related threats to intensively interacting

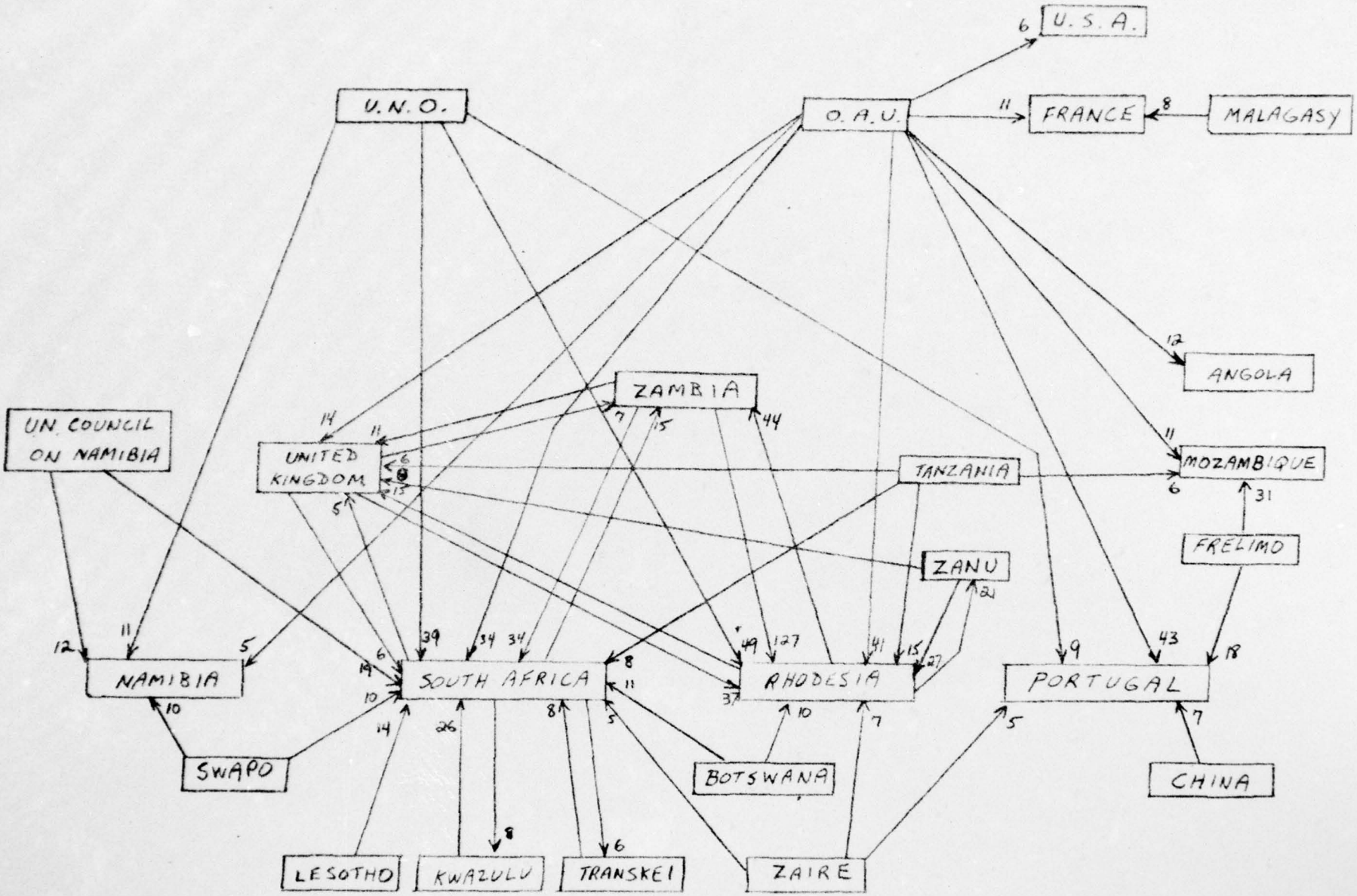


Figure 2.2: Southern African Conflict Subsystem, 1 January 1973 to 30 April 1974

actors. In the following section we shall discuss the principal characteristics and capabilities of the Southern African regional and conflict subsystem members.

SECTION 3: MAIN FEATURES OF THE SOUTHERN AFRICAN SUBSYSTEM

While Southern Africa has been much in the American daily and TV-news of late because of the Angolan civil war, the guerrilla war in Rhodesia, racial unrest in South Africa, Dr. Kissinger's visits this year to the area, and his meetings with South Africa's Prime Minister, John Vorster, it is a region of the world not well known to most Americans; just one of the many analogies that could be drawn with Vietnam from an American point of view. In this section of our report we shall present a brief summary of the most salient characteristics of the system and its members in order to put our study of threat phenomena in a meaningful context (for more detailed studies see the books by Grundy, 1973, and Potholm and Dole, 1972, as well as the bibliographies in McGowan 1976).

3.1 The Core States

If we focus on the ten core states of the Southern African subsystem, the strikingly hierarchical nature of the system becomes immediately evident. Some 60 million people inhabit the region, over 90% being black Africans and some 5 million being European descended white immigrants. South Africa with nearly 25 million people comprises 42% of the total population and its GNP of $28 billion is 69.7% of the regional GNP of $40.2 billion. With the largest industrial complex south of northern Italy, the Republic of South Africa overwhelms all other states in the region combined. As Table 3.1 shows, these human and material resources have been translated by the South African authorities into a powerful military/security apparatus of some 45,00 with a military expenditure of nearly $1 billion per annum in recent years.

Indeed, when one compares the predominance of South Africa in Southern Africa to the character of other regional subsystems, perhaps only India in the South Asian subsystem rivals South Africa's position of strength. It would, however, be seriously mistaken to think that white South Africans, who control its political-military-industrial complex, feel secure in their dominance. The whites are

Table 3.1: Southern African Core States Ranked by Size of GNP, c. 1975

Country	Area (sq. mi.)	Population	GNP (bil.)	GNPp.c.	Armed	Defense Expenditure (mil.)	As % of GNP
1. South Africa	472,000	24,900,000	$28.0	$1,120	45,000	$918	3.28
2. Zambia	288,000	4,960,000	3.2	148	6,000	77	1.20
3. Angola	481,000	6,052,000	3.0	500	---	--	----
4. Rhodesia	151,000	6,360,000	2.7	422	14,000	59	2.18
5. Mozambique	303,769	9,116,000	2.3	250	---	--	----
6. Malawi	36,700	4,920,000	0.6	116	5,000	4	0.74
7. Namibia	318,000	902,000	---	---	---	--	----
8. Botswana	220,000	661,000	0.2	348	1,000*	--	----
9. Swaziland	6,700	502,000	0.1	280	700*	--	----
10. Lesotho	11,700	996,000	0.1	100	1,000*	--	----

* Police, not regular military forces.

themselves divided into two linguistic-cultural groups, Afrikaans speakers and English speakers much as in Canada, and they are a distinct minority within their own country. Moveover, because of their racist policies at home they have become the implacable enemies of the rest of independent Africa and its more powerful friends in the Soviet Union, Cuba, and China.

The two other territories under minority white control, Rhodesia with its own small settler elite and Namibia under South African occupation, are the current centers of threat and crisis within the subsystem. The quarter million white farmers and businessmen who declared their independence from the British crown in November, 1965, have attempted to turn Rhodesia into another South Africa in the face of international opposition and increasingly violent attacks by Zimbabwe nationalists. Probably the two most important factors in keeping the Smith regime in power in Salisbury have been South African military and economic support and the bitter rivalries among the Zimbabwe nationalists themselves.

In Namibia, long quiet under tight South African Control, the Coming to power of the MPLA regime in Angola has now made it possible to begin serious guerrilla war in the northern part of the territory in an attempt to liberate Namibia from its dominant white minority.

The basic cleavage dividing the core states of the Southern African subsystem has long been the dispute over who shall rule in each member state. In 1960, all ten territories were under white domination. South Africa was, of course, an independent member of the British Commonwealth; indeed under its statesman-general and Prime Minister, J.C. Smuts, it had helped found both the modern Commonwealth and the League of Nations. South West Africa was firmly part of South Africa and its control had not yet been seriously challenged. The so-called High Commission territories of Bechuanaland (Botswana), Basutoland (Lesotho), and Swaziland were neglected backwaters of the declining British Empire. Northern Rhodesia (Zambia), Ngasaland (Malawi) and Southern Rhodesia were grouped into the British sponsored and white dominated Central African Federation. Finally, both Angola and Mozambique were underdeveloped parts of Portugal's overseas empire, although beginning in the 1950's Portugal had launched serious development projects for the first time in its nearly 500 years of "control" over these territories.

In retrospect, key events in the period 1961 to 1964

set in motion the process of change in Southern Africa that is still unfolding with ever increasing violence and international implications. In February and March 1961, to the surprise of the Portuguese and most outside observers, the FNLA and MPLA launched their guerrilla based wars of liberation in Angola. In September, 1964, FRELIMO did the same in Mozambique. By the late 1960's, these two wars tied down over 100,000 Portuguese troops in unwinable wars that eventually led to the overthrow of the Portuguese government in Lisbon and the emergence of Angola and Mozambique as Marxist oriented African one-party states. In March, 1961, the about to be formed Republic of South Africa (having voted in 1960 to change its status from a Dominion) withdrew its application to remain in the Commonwealth because of African Commonwealth member opposition and began its march into international isolation. In March, 1963, the Organization of African Unity was formed and set as one of its main goals the liberation of Southern Africa. Finally, on December 31, 1963, the British government dissolved the Central African Federation because of African opposition to white Southern Rhodesian dominance of the Federation.

These changes split the Southern African subsystem's political alignments along two poles - the achievement of black majority rule and the preservation of white minority rule - which to this day form the dynamics of the subsystem. In South Africa, Rhodesia, and Portugal, there was increased determination to maintain white control causing the South Africans to crush all local black political movements and to create a powerful military and counter insurgency capability; causing Portugal to spend nearly one-half of its budget on colonial wars; and causing the white Rhodesians to sieze their "independence" in November, 1965. In Zambia, Malawi, Botswana, Swaziland, and Lesotho, political movements were created or rapidly grew seeking independence from the Fritish crown which began with Zambia's independence in October, 1964, and ended when Swaziland achieved the same status in September, 1968.

As Table 3.1 indicates, the result of these changes has been to produce seven small, poor, weak, and underdeveloped majority ruled member states within the region (majority rule did not create this underdevelopment it must be stressed, it is more a consequence of centuries or decades of minority colonial rule) and three white, minority controlled members of vastly greater development progress. The three former High Commission territories, now often referred to as the BLS states, are all small and exceedingly poor. Grouped with South Africa in the Southern African Customs Union they are, in fact, economic dependencies of

the Republic and models for its Bantustan policies. Angola and Mozambique face severe domestic problems involving attempts to overcome the effects of wars of liberation and in Angola's case, a brief but disruptive civil war. The victorious liberation movements, MPLA, and FRELIMO, are currently dedicated to the consolidation of their regimes and the mobilization of the populations along Marxist, one-party lines. In Malawi, Africa's odd-man-out, Dr. H. Kamuzu Banda, continues his one man rule of his impoverished and overpopulated state. Long noted for his willingness to cooperate with South Africa, the collapse of Portuguese rule in Mozambique has forced Banda to befin to realign his policies with those of his more militant neighbors.

Among the core states of the system, it has long been the Zambia of Kenneth Kaunda that has worked most aggressively for continued change within the system. HLWEVER| Zambia's freedom of action has been constrained by a paradoxical and most intriguing aspect of the Southern African subsystem, its economic and communications/transportation linkages with Rhodesia an South Africa. Colonial "economic development" in Southern Africa more tightly integrated the economies of the ten member states than in any other African regional subsystem. Also constraining Zambia's ability to act consistently and effectively has been internal political discord, a factor frequently involved in weakening African foreign policy capabilities (see McGowan, 1976, for a bibliography on Zambian foreign policy).

3.2 External Linkages

As we demonstrated in Section 2 of this Report the Southern African regional subsystem is not limited to the ten core states that are geographically proximate. Also participants are neighboring African "peripheral powers" - Tanzania, Zaire, Malagasy, and Mauritius; global "intrusive powers" - United Kingdom, Portugal, U.S.A., France, and China; local liberation movements - FRELIMO, ZANU, and SWAPO; international organizations - the O.A.U., and U.N.O.; and the South African bantu homelands, principally Kwazulu and the soon to be independent Transkei. The linkages of the core member states to these other subsystem members are a fundamental aspect of the character of Southern Africa in world affairs.

The structure of these linkages suggests that in the economic sphere the Southern African regional subsystem is

linked to the Western dominated international economy via South Africa and by direct South African and Western economic ties to the other core member states. South Africa's major trading partners are Great Britain, the United States, West Germany, and Japan. These states plus South Africa itself, Italy, Portugal, the EEC, the Netherlands, and Rhodesia are the main trading partners of all of the other core states. The black ruled core states show the typical tropical, dependent economic syndrome, exporting mineral and agricultural raw materials and importing machinery and other manufactured products. South Africa and Rhodesia because of their relatively advanced stage of capitalist economic development, play a more complex role, exporting raw materials to the more developed Western societies and Japan, but exporting finished products to their Southern African neighbors. From the other core members, Rhodesia and South Africa import raw materials, agricultural products, and manpower for their farms, factories, and mines.

Southern Africa's close economic linkages to the West are perceived to be threatened by the recent course of events within the subsystem. If Marxist oriented regimes can be established in Zimbabwe and Namibia in addition to the already established ones in Angola and Mozambique, the interests of Western and South African capital throughout the region will be put into question. Many observers feel that these are the real long term stakes at issue provoking both Western and Communist state participation in the politics of the region.

Table 3.3 summarizes the political and military linkages of the ten core states of Southern Africa and the two main peripheral powers, Tanzania and Zaire. A more complex picture emerges than the one shown by Table 3.2's economic linkages. Two core states, Angola and Mozambique, are currently politically and militarily dependent on the Soviet Union and its ally, Cuba. This dependence, which is mitigated only slightly by small amounts of economic assistance from Western powers, is a direct consequence of the support for FRELIMO and the MPLA by the Soviets during their protracted wars of liberation and the lack of support and opposition from Western powers. Not only are thousands of Cuban troops still in Angola, but persistent rumors of Soviet base agreements with both regimes continue to circulate.

The other independent black ruled states present a more mixed pattern of linkages. Both Zambia and Tanzania have received substantial economic assistance from China and some

Table 3.2: Economic Linkages

State	Major Exports	Export Partners	Major Imports	Import Partners	Balance o Trade(mi
1. South Africa	Diamonds 15% Wool 8% Iron & Steel 8%	UNK 29% JAP 10% GMW 8%	Machinery 23% Transport 17% Textiles 8%	UNK 23% USA 16% GMW 14%	$-3,033
2. Zambia	Copper	UNK 23% JAP 18% ITA 13%			- 530
3. Angola	Petroleum 30% Coffee 26% Diamonds 10%	POR 30% USA 29% EEC 15%	Vehicles 13% Iron & Steel 9%	EEC 36% POR 24% USA 10%	612
4. Rhodesia	Tobacco 51% Asbestos 12% Machinery 9%	ZAM 29% UNK 20% SAF 11%		UNK 30% SAF 23% USA 7%	- 42
5. Mozambique	Textiles 25% Cashew Nuts 22% Cotton 20%	POR 35% USA 13% SAF 9%	Machines 27% Transport 12% Metals 11%	SAF 20% POR 19% GMW 13%	
6. Malawi	Tobacco 38% Tea 17% Peanuts	UNK 33% USA 8% RHO 6%	Comsumer 27% Goods Transport 15%	UNK 25% SAF 18% RHO 15%	8
7. Namibia	----		----		- 49
8. Botswana	Meat 42% Hides 18% Meat Extract 14%	USA 23% GMW 8% NTH 8%	Mining 26% Equipment Manufact. 12%	USA 28% GMW 14% JAP 8%	--
9. Swaziland	Sugar 29% Wood Pulp 17% Asbestos 15%	UNK 25% JAP 24% SAF 21%	Machinery 24% Manufact. 16% Oil & Fuels		- 111
10. Lesotho	Cattle 28% Mohair 15% Diamonds 11%	SAF	Manufact. 21% Food 20% Machinery 14%	SAF 6%	6

Codes: UNK = United Kingdom, JAP = Japan, GMW = German Federal Republic, USA = United States, ITA = Italy, POR = Portugal, EEC = European Community, ZAM = Zambia, SAF = South Africa, RHO = Rhodesia, NTH = Netherlands.

Table 3.3: Political and Military Linkages

State	Sources of Economic Aid	Sources of Military Aid & Sales	Military Base Agreements	Main Organizational Memberships
1. South Africa	none	USA, FRN, UNK, GMW, ISR, ITA, JOR	UNK naval base USA tracking station	UNO, GATT, IMF IBRD
2. Zambia	ITA, UNK, SWD, CHN, IBRD, USA, USA, GMW, CAN, FIN	USA, FRN, UNK, GMW, CAN, ITA	none	UNO, OAU, Commonwealth, GATT, UNESCO, IBRD, IMF
3. Angola	SWD, GMW, UNK, NTH, BEL, DEN	CUB, USR	Cuban Troops	OAU
4. Rhodesia	SAF	SAF	SAF troops & police	ITU
5. Mozambique	POR, ZAM, USA GMW, NOR, UNO	USR	none	OAU, UNO
6. Malawi	UNK, USA, SAF, EEC, GMW	UNK	none	EEC, GATT, IBRD, IMF, OAU, UNO, UNESCO, Commonwealth
7. Namibia	SAF	none	SAF, army air force & naval	none
8. Botswana	EEC	none	none	Commonwealth, GATT, IBRD, IMF, OAU, UNO
9. Swaziland	UNK, USA	UNK	none	Commonwealth, GATT, IBRD, IMF, OAU, UNO
10. Lesotho	UNK, CAN, IDA, UNO	UNK	none	Commonwealth, IBRD, IMF, OAU UNO, UNESCO
1. Tanzania	DEN, NOR, USA, CHN, EEC, CAN, BEL, SWD, GMW	UNK, CHN, USA, USR, CAN	Chinese Naval Base ?	Commonwealth, GATT, IBRD, IMF, OAU, UNO, UNESCO
2. Zaire	USA, BEL, FRN, CHN, UNO, EEC	USA, FRN, GMW ITA	none	GATT, IBRD, IMF, OAU, OCAM, UNO, UNESCO, EEC

military aid as well as receiving considerable economic and military support from Western, Scandinavian, and international actors. Among the states of the region, Zambia and Tanzania are the most non-alligned politically. Malawi, Botswana, Swaziland, and Lesotho are as politically dependent on Western powers and South Africa as they are economically dependent, even though Botswana has attempted to play as independent a role as possible.

Finally, the political and military linkages of Namibia and Rhodesia are exclusively with South Africa and Pretoria's linkages are solely with Western powers, putting all three into that side of the global power equation. South Africa has recently strengthened its ties to Israel, but this only increases this persuasion.

These patterns of political, military, and economic linkages reflect the current political dynamics and vital concerns within the Southern African regional subsystem, a brief description of which we shall now present.

3.3 Subsystem Dynamics

The current dynamics of the Southern African regional subsystem center aroung three problem areas: (1) the guerrilla war in Rhodesia/Zimbabwe, (2) the process of decolonization in Namibia, and (3) the domestic politics of Apartheid in South Africa. Again, all three issues relate to differing answers to the question, who shall rule?

One set of answers are proposed by the leaders of the so-called "confrontation states" - Tanzania, Zambia, Botswana, Angola, and Mozambique, and the Liberation movements in Rhodesia and Namibaia. These states and movements have decided to focus on the weakest link in the chain of white ruled states, Rhodesia, in an effort to bring a speedy end to minority rule there. It is apparent that the Rhodesian security forces are increasingly hard pressed and could not continue for long without South African support via transportation, goods, and military supplies, even under the assumption of continued South African support, the pressure of Cuban troops in Angola and the possibility of the Soviet Union's upgrading the quality of weapons provided to the liberation groups - such as 122 mm rockets and surface to air missiles - makes the Rhodesian position extremely precarious.

In Namibia, because of the greater capability of the

South Africans who occupy it and the relatively recent origion of serious guerrilla activity by SWAPO, the military situation has not yet escalated to Rhodesian proportions. The United Nations has demanded of South Africa that Namibia be granted independence forthwith or face economic sanctions. The South African response has been to assemble a multi-racial constitutional conference that agreed to independence for Namibia at the end of 1978. This is not viewed as satisfactory by most members of the system because it gives no role to the UN in the process and because the major black political force in the territory, SWAPO, has been excluded from the discussions.

Finally, there is the severe and unprecedented civil unrest with South Africa itself where over 300 persons have been killed and 1,600 injured since rioting broke out there in June. Despite official South African claims to the contrary, there can be no question that this violence is an expression of black (including Coloured) frustration and anger over the oppressive Apartheid conditions under which they are forced to live by the authorities. The myth that South Africa is the one stable country in a continent of instability and violence is now forever broken. It is also clear, however, that nothing has changed Prime Minister John Vorster's Nationalist Party's determination to maintain white rule at all costs.

Since Southern Africa represents a true international regional subsystem, these dynamics involve all of the core states and most, if not all, of the other subsystem members. Thus, in the brief period of three years, the United States, whose 1973 Southern African policies were based on the assumption that violence was not working and that the white regimes - including the Portuguese - were there to stay, has had to alter radically its policies and move from a posture of benign neglect which favored the white ruled states to one of active involvement in the region's affairs in an effort to bring about non-violent and non-Marxist change. In retrospect, the preparation of the National Security Council Study Memorandum No. 39 in 1969- 1970 which made the prediction of white permanence appear to have been one of the major known intelligence failures in recent U.S. history. The current problems of Dr. Kissinger's efforts in Southern Africa are in large part due to the consequences of his policies up to 1975 based on NSSM 39. The remainder of this Report will be devoted to asking and answering the question whether different methods might avoid such failures in the future.

Appendix to Section 3

As part of our TR&A Project we have created a "Country Threat File" which represents a computerized almanac of national characteristics and vulnerabilities. Many of these data have been used in the creation of the table in this section. We present here, for each of our ten core states, their major vulnerabilities as of June, 1976, to further describe the dynamics of the Southern African regional subsystem.

1. ANGOLA

V01: Coping with the remains of UNITA forces operating a guerrilla struggle, and seeking the political unification of ANG;
V02: Presence of SAF troops in the border region of southern ANG;
V03: Restarting the Foreign economic flow hampered by the civil war and seeking a revision of the nation's economic standing & domestic enterprises;
V04: Normalization of relations with its neighbors, particularly Zambia;
V05: Providing a home base for SWAPO guerrillas operating against South-West Africa;
V06: Deterioration of relations with PortugAl, primarily a result of Portugal's aid to ANG refugees.

2. BOTSWANA

V01: The acceleration of plans to nationalize the Rhodesian railway line, with the realization that this may lead to the economic isolation of BOT, severely damaging its economy;
V02: The development of a political and military strategy towards RHO and the coordination of policy with its Southern African neighbors.

3. LESOTHO

none

4. MALAWI

V01: The economic effects of the suspension of daily passenger and cargo flights to RHO, an act taken by MAW to avoid incidents with Mozambique;

V02: The inconvenience caused to MAW by the closure of the railway link between RHO and FRE;

5. MOZAMBIQUE

V01: The escalation of the guerrilla war with RHO, as the country moves towards a war footing;
V02: A promotive domestic program involving clamp downs and nationalizations;
V03: The participation in sanctions against RHO, primarily the closing of the border with RHO, resulting in serious economic difficulties for MOZ, such as a loss of imports, railway revenues, and a freezing of its assets in RHO;
V04: The apparent abuse of the domestic Portuguese population, leading to border incidents with South Africa as fleeing refugees are pursued, and a deterioration of relations with POR.

6. NAMIBIA

V01: International pressure, but particularly UNO, Africa, and USA, to change the SAF position towards NMB, so as to make it independent;
V02: The degree to which SAF is moving towards independence of NMB;
V03: An increase by SWAPO of guerrilla attacks against civilian and military targets;
V04: The creation of an alliance of various parties and tribal factions demanding independence. The continuation of the constitutional debate within NMB, involving conferences and the controversy over various formulaes, including variance with the position of SWAPO;
V05: The continued presence of ANG refugees in the territory.

7. RHODESIA

RHO, particularly from neighboring Mozambique, with movement towards a state of war, and its physical as well as economic repercussions;
V02: Growing RHO diplomatic isolation as USA, UNK, and others move towards active opposition, and even SAF becomes less supportive;
V03: The increase in the application of economic sanctions against RHO, particularly by bordering African states;
V04: The breakdown of talks with the African National Council, and the resulting harsh increase in

political tensions;
V05: The maintenance of domestic political stability.

8. SOUTH AFRICA

V01: Growing SAF diplomatic isolation, particularly the SAF position with regard to the incorporation of South-West Africa, holding implications for the SAF position of detente with black Africa;
V02: The attempt to come to terms with ANG, trading a SAF military withdrawal for an ANG guarantee to respect their common border and the SAF-hydro-electric facility;
V03: The persistence of internal dissent, but most particularly the dramatic resurgence of politi cal violence through massive street riots that take a heavy toll;
V04: The acceleration of SWAPO's guerrilla war against South West Africa;
V05: The movement of SAF towards the granting of independence to NMB, and the resulting balancing of political forces;
V06: The continued presence of ANG refugees in NMB.

9. SWAZILAND

none

10. ZAMBIA

V01: A dramatic increase in tension with RHO, involving calls for a military solution;
V02: A crackdown on domestic dissidents, particularly in the universities;
V03: The continuation of strained relations between ANG and ZAM;
V04: The continued presence of ANG refugees in ZAM;
V05: The involvement in an internal dispute within SWAPO through an arrest of some of its members.

SECTION 4: THREATS IN REGIONAL SUBSYSTEMS.

4.1 Introduction

As section 2 illustrates, international regional

subsystems are analytical categories created by scholars and practitioners to aid their understanding of international phenomena, such as threats and crises. As such, subsystems cannot be "threatened", only humans can activate threats and perceive or fail to perceive threats. However, if these individuals and collectivities stand in a patterned set of relationships, that is, if they comprise a system, perceptions of stability and change in these relations may be considered as "threats" to the current subsystem. For example, the current policy of apartheid within South Africa is viewed as a threat to peace and human dignity by the Black African members of the Southern African subsystem. Similarly, the guerrilla activities of Zimbabwe nationalists aiming at a change of regime in Rhodesia are perceived as a threat by most white Rhodesians and South Africans.

AT THE LEVEL OF REGIONAL SUBSYSTEMS, it is therefore meaningful to speak of threats to the subsystem if we keep in mind that by this phrase we refer to undesired (by some subsystem member) changes in the patterned sets of relations among the human collectivities that comprise the set of system members. In general, such threats may arise from three sorts of pattern-maintaining or pattern-altering events.

(1) To exist, regional subsystems must evidence some degree of autonomy from their environments. Thus, it is almost certain that some subsystem members will view as a threat to themselves and to the subsystem interventions into the affairs of the subsystem by previously non-member actors. As section 2 demonstrated, up to April 1974, neither Cuba nor the Soviet Union were participants in the Southern African subsystem. However, as Angola declined into civil war in 1975, both intrusive powers became actively involved on the side of the MPLA in its struggle against FNLA and UNITA. This intervention was, of course, welcomed by some subsystem members such as Mozambique, Tanzania, and, of course, the MPLA. But it was opposed and viewed as a threat by such diverse "old" subsystem members as the United States, Zaire, Zambia, and South Africa.

(2) A second sort of threat to a regional subsystem and at least some of its members can arise when one or more members act to alter radically existing patterns of relationships. Three examples in the recent history of Southern Africa illustrate well this threat phenomenon. In January, 1973, Rhodesia closed its border with Zambia, thereby provoking the major subsystem crises before the Portuguese coup of April, 1974. This action was designed to alter Zambia's patterns of support and sanctuary for

Zimbabwe nationalist guerrillas but it also had the consequence of disrupting the trading and commercial relationships of many subsystem members and was perceived by them as a threat to their interests. Then, in late 1974, the new government in Portugal decided to decolonize its African territories making possible a host of new relationships among members of the subsystem and clearly threatening Rhodesia, Malawi, and Zaire. Finally, in the late summer of 1975, South African military forces intervened in the Angolan civil war because South Africa felt threatened by the course of the war. This intervention sent shock waves throughout the subsystem and beyond because of the already existing hostility toward and fear of the South African authorities by most subsystem members.

Thus, at any point in time, the pattern of relationships among subsystem members defines a "system state". Attempts to sharply alter these relations by a subsystem member will almost always be perceived as threatening to some other member. This is so because international regional subsystems, like all open socio-political systems comprise sets of members that derive differing degrees of benefits from the current system state. As argued in section 3, the state of the Southern African regional subsystem up to April, 1974, tended to favor the white minority regimes and their Western economic partners and to deprive the majority ruled members and Liberation Movements. In every regional subsystem there will therefore be some members who favor the STATUS QUO, or current system state, and other members who oppose it. Southern Africa is a crisis region at present because of the intensity of these positions. Efforts to maintain current patterns of relations will "threaten" the revisionist members and efforts to foster change will threaten the status quo supporting members. Our position then is that within regional subsystems actions and events are evaluated and perceived by subsystem members in terms of their likely or actual effects on the state of the subsystem. These events and actions are then categorized as "opportunities" or "threats" depending on (1) whether or not they may change the subsystem and (2) the member's overall stance toward stability and change within the subsystem. This notion of threats within regional subsystems is summarized by the simple 2 x 2 table of Figure 4.1.

(3) The final type of event that may pose a threat within a regional subsystem is one that changes the fundamental character or capabilities of a subsystem member. In June, 1975, when Mozambique became independent under a FRELIMO government that member changed from a status quo to

Figure 4.1: Character of Threat Phenomena in Regional Subsystems

Member's Assessment of Impact of Event	Member's Policy Stance: Status Quo	Member's Policy Stance: Revisionist
Promote Stability	Opportunity	Threat
Promote Change	Threat	Opportunity

sharply revisionist stance, causing Malawi to begin to realign its subsystem relations and posing a clear and eventually fulfilled threat to Rhodesian interests. Another such event would be a breakdown of civil authority in Zambia because of ethnic and regional rivalries. Zambia's role as perhaps the leading confrontation state would be put into serious question by such an event. A final example would be the development or acquisition of a nuclear capability by South Africa, an event not beyond the realm of possibility at the moment.

International regional subsystems, because they are ultimately comprised of human beings, have memories and repetories of behavior similar to most organisms. Thus, a fourth process that may trigger threat processes is what may be called a "replication". Such an event is one that sufficiently resembles a past event that was categorized as a threat to be rather unthinkingly classified again as a threat. Within the Southern African subsystem because six of the ten core members are landlocked, border closures fit this pattern nicely.

It must also be recognized that Figure 4.1 implies a rational-actor approach to threat recognition. Subsystem members must know what their policies are and accurately assess the impact of events to be able to distinguish between threats and opportunities. Not all national leaders can with consistency define their policy orientations. Bureaucratic inertia and cognitive rigidity arising from closed policy-making procedures or ideologically closed minds may not accurately determine the implications of certain events. There is also the problems of inadequate information and information overload that may hinder threat assessment. We would suggest, however, that as a point of departure, Figure 4.1 provides a useful starting point for the analysis of threats within regional subsystems.

4.2 Issue-Areas as Threat Arena

Two aspects of Figure 4.1 need to be modified immediately if it is to get us very far in the analysis of regional subsystem threat behavior. The first is to note that the source of the action or event that is assessed as having implications for the subsystem is likely to affect perceptions of whether it is promotive of stability or change. If a subsystem member known for its overall support of the status quo acts, it is likely that most members will read this as an attempt to promote stability or forstall

change and conversely when a known revisionist acts. This relationship can be a source of serious misperceptions. For example, as an intrusive power-subsystem member, the United States has long been identified with a status quo policy in Southern Africa. Dr. Kissinger's new policy toward the region, announced in April, 1976, at Lusaka, Zambia, has produced mixed reactions among other subsystem members and outside observers. Some, such as the Rhodesians and conservative elements in America who are strongly status quo oriented have condemned this "change" in U.S. policy, while others such as the Zimbabwe and Namibian Liberation Movements and "radical" American Africanists have read it as merely an attempt to buy time and preserve Western influence and control in the area; that is, that the U.S. is still on the side of the status quo in Southern Africa. Both sets of reactions obviously cannot be correct.

The second factor to note is that international actors, including regional subsystem members, have complex and differentiated policies and interests depending upon the issues involved. The three BLS states, for example, are clearly revisionist when it comes to the human resources issues relating to civil and human rights in South Africa and Rhodesia. On the other hand, they are more status quo than revisionist when it comes to issues of trade and economic development policies that may be grouped under the non-human resources issue-area. Thus, even South Africa cannot be considered as entirely status quo oriented for the authorities there are seriously planning on independence for the Transkei and Namibia. Revolutionary Angola is not entirely revisionist, for it continues to control the Cabinda enclave and protect the Gulf Oil operations there. Thus, in working with a classification scheme such as Figure 4.1, one must always ask "with respect to what issues", as do most sophisticated decision-makers.

As we noted above, all international regional subsystems differentially benefit the members of the subsystem. That is to say, international politics is just another, perhaps refined, form of politics everywhere which is always about "Who sets What, When, How?" A convenient way to think about the "what" of regional subsystem politics is to think of the subsystem as a mechanism for allocating among members five types of VALUES or VALUABLES - security, territory, status, human resources, and non-human resources. Changes in subsystem states then, by definition, may be viewed as affecting the distribution of these resources and subsystem members will have different perceptions of events AS THEY RELATE TO VALUES depending upon their relative existing possession of the value in question. Deference on

human rights and dignity is an example of a human resources value. The achievement of majority rule in most member states of the Southern African subsystem greatly enhanced black Africans' portion of this value, but the continuation of minority rule in certain other members denies this value to millions and is thus a cause of intense conflict in the region.

Our study of threat processes within the Southern African regional subsystem is therefore based on the assumption that international threats and resulting crises derive from subsystem member interactions involving attempts to secure one or more concrete aspects of the five core values of security, status, territory, human and non-human resources. Subsystem behavior is assumed to be mostly purpositive, undertaken to protect values already possessed or to secure values denied, hence our distinction between status quo and revisionist policy stances.

Operationally, every event interaction abstracted from AFRICAN RESEARCH BULLETIN is viewed as a political act capable of answering the question who gets what, when, how? Via coding the events according to well established procedures, (Sherwin, 1973) we determine the WHO by specifiying the actor and target of the action. The WHEN is given by the date. The HOW is given by coding the event into one of forty mutually exclusive and exhaustive categories presented in Table 4.1 that were derived from the WEIS coding scheme. Because as McClelland (1976) and Beal (1976) argue, threats imply harm and attempts to cope with the threat and thereby avoid or minimize harm, only events coded as conflictful are considered related to threat phenomena. It must be stressed that conflict does not mean threat, it is merely a necessary but not sufficient condition for recognizing threat phenomena. A regional subsystem without conflict would be a subsystem without threat, but the existence of conflict does not answer the vital ABOUT WHAT question, which is what threats are all about.

Issue-areas were defined in our project as those values over which subsystem members interact and the substantive and procedural matters through which actors attempt to secure those values. Thus, non-human resources are a general value category representing the allocation of financial and physical goods to subsystem members and their component parts. Public works and infrastructure such as the Cobora Bassa dam in Mozambique are a concrete substantive aspect of this issue area while investment in that project is a precedural matter, Conflict interactions relating to subsystem member investment in the Cobora Bassa project

Table 4.1

CATEGORIES OF ACTION BETWEEN ACTORS

	VERBAL ("words")			NON-VERBAL ("deeds")
	Actor's Evaluation, Perception of Past or Current Action by Target	Actor's Desire for Future Action by Target	Actor's Intent Regarding Own Possible Future Action Vis-a-Vis Target	
CONFLICT	(1) 1140 DENY (deny accusation, attributed action, or policy) 1120 ACCUSE (charge, criticize, blame, disapprove, denounce, denegrate) 1020 NEGATIVE COMMENT (comment on situation, explain policy undesired by target)	(3) 3150 DEMAND (order, command, insist, demand compliance) 3130 PROTEST (make formal or informal complaint) 3100 NEGATIVE PROPOSE (offer proposal, urge, suggest action, policy undesired by target) 3090 NEGATIVE REQUEST (appeal, ask for information, aid, action in context undesireable to target)	(5) 5170 THREATEN (threaten to take future action undesired by target, with or without specific negative sanctions: a contingent "if... then statement) 5160 WARN (warn of a future situation or action undesired by target. Warn against action by target undesired by actor) 5110 REJECT (turn down proposal, protest, demand, threat; refuse, oppose, harden position) 5020 NEGATIVE INTENTION (explain future policy undesired by target)	(7) 7220 FORCE (forceful or violent use of military resources, equipment to achieve objectives. Military engagement, non-military destruction, non-injury destruction) 7180 DEMONSTRATE (armed force mobilization, movement, exercize, boycott, or walk-out) demonstration, meeting, display. Non-military 7230 INCREASE MILITARY CAPABILITY (increase military spending, troop levels; develop weapons, authorize military action, reserve call-ups) 7240 AID OPPONENT (give military aid to opponent of target) 7190 REDUCE RELATIONSHIP (cancel or postpone planned event, reduce routine international activity, recall officials, halt negotiations, break diplomatic relations) 7210 SEIZE (seize position or possessions, detain or arrest personnel) 7200 EXPEL (expel organization, group, or personnel) 7280 SUBVERT (aid to insurgents, non-verbal attempts to influence internal politics of target undesired by target)
COOPERATION	(2) 2020 POSITIVE COMMENT (comment on situation, explain policy desired by target) 2040 APPROVE (praise, hail, applaud, support, thank)	(4) 4090 POSITIVE REQUEST (appeal, ask for action, aid, information, policy in context desireable to target) 4100 POSITIVE PROPOSE (offer proposal, urge, suggest action, policy desired by target) 4250 NEGOTIATE (participate in substantive talks, negotiations on specific issue or interest area)	(6) 6020 POSITIVE INTENTION (explain future policy desired by target) 6100 OFFER (offer to take future action desired by by target) 6050 PROMISE (assure of future action desired by target) 6080 AGREE (accept proposal, agree to meet or negotiate, agree to future action, substantive agreement)	(8) 8010 YIELD (surrender, submit, retreat, evacuate) 8030 CONSULT-VISIT (make official visits, participate in a meeting involving foreign travel for at least one participant, consult) with some foreign official at home or abroad) 8060 GRANT (end negative sanctions, end conflictful action, end threat of conflict action; express regret, apologize; give invitation, asylum, privilege, diplomatic recognition, release, return persons, property) 8070 REWARD (give economic, technical, military aid) 8260 REDUCE MILITARY CAPABILITY (reduce military spending, troop levels, reduce readiness for military action 8270 CARRY OUT AGREEMENT (implementation by actor of a previous agreement, e.g., a diplomatic, economic, cultural or military agreement. Host conferences) 8290 INCREASE RELATIONSHIP (increase economic, diplomatic relations) 8300 ACCEPT (accept or receive official visits, economic, financial, cultural, military aid or support)
NEUTRAL	0 NEUTRAL COMMENT	9090 NEUTRAL REQUEST 9100 NEUTRAL PROPOSE	9020 NEUTRAL INTENTION	

represent threat phenomena to those members favoring or opposing the project. Thus, a first step in regional subsystem threat recognition and analysis is to define a satisfactory issue area typology and then to observe behavior with regard to these issues.

4.3 An Issue-Area Typology

International threat processes relate to the allocation or reallocation among system members of the five types of values introduced above: (1) security, (2) territory, (3) status, (4) human resources, and (5) non-human resources. Threats may occur when these values are affected. In general subsystem members may acquire valuables in two fashions, by autogeneration as when the discovery of a valuable mineral product augments economic activity and welfare or when a technological breakthrough contributes to greater military security and by interaction with their environment of other subsystem members as via alliances, military and economic assistance and in international organizational activity as when the OAU recognizes a particular Liberation Movement and thus enhances the movement's status.

Subsystem members, in their foreign and domestic policies, may be thought of as having two basic objectives: (1) to protect their existing supply of values and (2) to augment their supply via autogeneration and interaction. Members of subsystem will tend to classify as THREATS events and actions that they perceive to have actual or possible harmful consequences for their present supply of values or their ability to generate new valuables. Take the value of territory as an example. Each territorial member of the Southern African subsystem - and this includes the core states, the peripheral powers, the Liberation movements, and the homelands - is concerned with protecting its use of or access to earth-space, including in this concept land, air, sea, and ocean floor. There is even a lingering border dispute between Malawi and Tanzania that involves the possible increase in territory in Lake Nyasa for one or the other party in the dispute. The Liberation Movements are interested in sanctuaries in Angola, Zambia, and Mozambique which also involves an increase in their use of territory, whereas the Rhodesian and South African authorities seek to prevent or hinder this goal.

Within our SASS Project we defined our five values as follows:

Table 4.2

SECURITY (1000-1999)

	Nuclear Weapons/ Nuclear Capability (1100-1199)	Conventional Military Activity and/or Weapons (1200-1299)	Guerrilla/ Liberation/ Counter-insurgency Activity or Weapons (1300-1399)	Espionage (1400-1499)	Revolution/ Intervention (1500-1599)	Peace/ Unity/ Detente/ Tensions (1600-1699)	Other (1700-1799)
1. Combat use of troops bases or arms	1101	1201	1301	1401			
2. Military aid	1102	1202	1302	1402			
3. Military sales, purchase of	1103	1203	1303	1403			
4. Expenditures for	1104	1204	1304	1404	1504		
5. Loan of equipment	1105	1205	1305				
6. Training, maneuvres	1106	1206	1306	1406			
7. Testing	1107	1207	1307				
8. Arms control, limitations of	1108	1208	1308	1408	1508		
9. Limitations on delivery systems	1109						
10. Non-proliferation treaty	1110					1610	
11. Force cuts	1111	1211	1311				
12. Arms races	1112	1212					
13. Espionage concerning	1113	1213	1313	1413			
14. Terrorism, torture, kidnapping			1314	1414	1514		
15. Revolution			1315		1515		
16. Intervention, invasion, use of	1116	1216	1316		1516		
17. Subversion				1417	1517		
18. Peace proposals, negotiations	1118	1218	1318			1618	
19. Attempts at unity or detente						1619	
20. General tensions regarding	1120	1220	1320	1420	1520	1620	
21. Balance of tensions, power regarding	1121	1221				1621	
22. Use of IGO's regarding	1122	1222	1322	1422		1622	
23. Alliances regarding	1123	1223			1523		1723
24. NATO regarding	1124						1724
25. Prisoners of War			1325				1725
26. Defense personnel, visits and relations							1726
27. Not otherwise specified	1199	1299	1399	1499	1599	1699	1799

Table 4.3

TERRITORY (2000-2999)

	Air Space and Airflight (2100-2199)	Land Rights (2200-2299)	Water and Seabed Rights (2300-2399)	Other Territorial Rights (2400-2499)
1. Air space and overflight	2101			
2. Land rights		2202		
3. Border issues, disputes		2203		
4. Water rights			2304	
5. Territorial limit at sea			2305	
6. Fishing rights, river, lake, sea			2306	
7. Control of or access to common waterways			2307	
8. Seabed rights (other than 9)			2308	
9. Oil rights of seabed			2309	
10. Not otherwise specified	2199	2299	2399	2499

Table 4.4

STATUS (3000-3999)

	Diplomatic Status Support or Opposition (3100-3199)	Use of IGO's (3200-3299)	Ideology/Autonomy Dependency (3300-3399)	Other Status Issues (3400-3499)
Status of representatives, diplomatic credentials, diplomatic immunity	3101	3201		
Diplomatic or official visits (with no specific purpose, if purpose is specified, code under appropriate issue area)	3102			
Diplomatic recognition, establishment of diplomatic relations	3103			
Friendly or good relations, cooperation, support for another government	3104	3204		
Opposition to another government, including sanctions	3105	3205		
Agreements, treaties, conventions (with no specific purpose, if purpose is specified code under appropriate issue area	3106	3206		
Use of OAU		3207		
Use of inter African IGO other than OAU		3208		
Use of UN or associated agency		3209		
Use of other IGO or more than one type of IGO		3210		
Independence			3311	
Sovereignty, autonomy, non-intervention			3312	
Dependency, external pressures, economic aggression			3313	
Ideology and ideological justification			3314	
Political asylum			3315	
Political unification				3416
International law				3417
Not otherwise specified	3199	3299	3399	3499

Table 4.5

HUMAN RESOURCES (4000-4999)

	Travel/Tourism/Culture/ Education (4100-4199)	Information/ Communication (4200-4299)	Human Rights/ Human Problems (4300-4399)	Religion/Moral Standards (4400-4499)
1. Travel and tourism	4101			
2. Culture	4102			
3. Education	4103	4203		
4. Student and Youth Exchange	4104			
5. Sports	4105		4305	
6. Information, news		4206		
7. News media personnel		4207		
8. Scientific knowledge		4208		
9. Scientific research and exploration		4209		
0. General communication		4210		
11. Hijacking			4311	
12. Drug control			4312	
13. Refugees	4113		4313	
14. Immigrants and emmigrants	4114		4314	
15. Extradition			4315	
16. Expulsion, seizure, arrest, killing			4316	
17. Population			4317	
18. Human rights, civil rights			4318	
19. Health, welfare			4319	
10. Religion				4420
11. Moral standards, ethics				4421
12. Not otherwise specified	4199	4299	4399	4499

Table 4.6

NONHUMAN RESOURCES (5000-5999)

	Trade (5100-5199)	Investment (5200-5299)	International Financial Relations (5300-5399)	Foreign Aid (5400-5499)	Technology/ Environment/ Transportation/ (5500-5599)	Integration Development (5600-5699)
1. Manufactured or semi-manufactured goods	5101	5201		5401		
2. Minerals, raw materials (not food or oil)	5102	5202		5402		
3. Petroleum & petrol products	5103	5203	5303	5403	5503	
4. Energy products not #2 or 3	5104	5204	5304	5404		
5. Foodstuffs, raw and processed	5105	5205		5405		
6. Public services, public utilities		5206		5406		
7. Public works, infrastructure construction		5207		5407		
8. Joint work on construction projects		5208		5408		
9. Technology, technical cooperation or assistance		5209		5409	5509	
10. Debt and refinancing			5310	5410		
11. Balance of payments			5311			
12. Exchange rates			5312			
13. General loans				5413		
14. General grants				5414		
15. Emergency or humanitarian relief				5415		
16. Climatic factors, drought					5516	
17. Environmental quality, pollution					5517	
18. Transportation					5518	
19. Economic integration						5619
20. Economic development						5620
21. Not otherwise specified	5199	5299	5399	5499	5599	5699

1. SECURITY - interactions that involve a threat to or protection of the survival and well being of members and the means by which this threat or protection is accomplished.

2. TERRITORY - interactions that involve a threat to or protection of member control over, use of, or access to earth-space, including land, air, sea, and ocean floor.

3. STATUS - interactions that involve a threat to or protection of the condition of members in their external relations with each other and in their autonomy or dependence.

4. HUMAN RESOURCES - interactions that involve a threat to or protection of the well-being, improvement, or life-chances of human beings, individually or in groups that are part of subsystem members (compare to security which refers to the survival or well-being of members as entities).

5. NON-HUMAN RESOURCES - interactions that involve a threat to or protection of the allocation of financial and physical goods and services to members and to parts of members.

Each of these categories was then broken down into a variety of subcategories depending upon the substantive or procedural issue-area within each value. Our actual coding categories are presented in Tables 4.2 to 4.6. Every event interaction was coded on up to three such issue-areas because events may have implications for more than one value.

4.4 Threat Behavior Over Time: 1 January, 1973 - 30 April, 1975.

Just as every member of a regional subsystem does not necessarily interact with every other member but rather tends to concentrate its behavior on a handful of other salient members, not every conceivable issue is a subject of threat behavior within regional subsystems. Take, for example, Table 4.3 where our substantive and procedural issue-areas concerning the general value category of territory are given. While only thirteen actual code numbers are listed in the table, it is logically possible that 40

TABLE 4.7: Conflict Behavior Over Territorial Issues in the Southern African Regional Subsystems, January 1, 1973 to April 30, 1974.

Issues / Actor	Air Space & Overflight	Land Rights	Border Disputes	Access to Sea	General Land Rights	Territorial Limit at Sea	Common Water Ways	Other Water & Sea-bed	Other	Total
1. Rhodesia	1		26		1			2		30
2. South Africa		1	6							7
3. Zambia	1		47		5			7	6	66
4. O.A.U.			3							3
5. U.N.O.			5						4	9
6. Britain			9		1				2	12
7. U.S.A.			1							1
8. Mozambique			2							2
9. Tanzania	1		2						1	4
10. Zaire			1							1
11. ZANU			3							3
12. Kwazulu		1		1		1	1			4
13. Transkei		2								2
14. Botswana			3							3
TOTAL	3	4	108	1	7	1	1	9	13	147

different issue-areas involving territory could be involved in threat phenomena in Southern Africa. Table 4.7 on the other hand shows that among the 147 conflictful interactions involving territorial matters during the period prior to the Portuguese coup, 108 or 73% were concerned with the single matter of border disputes (code 2203) and that only nine out of forty, 23%, recorded any threat behavior at all.

This fact of international behavior suggests the idea of a threat agenda and distinctions between latent and active threat become foci of threat behavior in the interactions among system members. Table 4.7 represents an empirical instance of an activated threat process, Rhodesia's closure of its border with Zambia in January, 1973. Thus, the threat agenda of a regional subsystem represents the set of activated issue-areas that is a subset of the much larger set of latent threats.

A fundamental aspect of the process of threat recognition and analysis is, therefore, the description of the threat agenda of a regional subsystem at a given point in time and the analysis of the changes the agenda undergoes over time. Key questions center on how threats become activated and thereby get on the agenda, what keeps certain threats on the agenda while others leave and what subsystem members are involved and why in these processes. The remainder of our report will be devoted to these tasks.

In a fashion similar to the process used to generate Table 4.7, each of our five value categories was examined to determine what actual issue areas were on the subsystem threat agenda because they were the subject of conflict interactions among subsystem members. The thirty-five substantive and procedural issue-areas listed in Table 4.8 represent the active threat agenda of the Southern African subsystem during the period from January 1, 1973 to the time of the Portuguese coup of April, 1974. To be included on the agenda each issue-area had to record 16 or more conflict interactions (one per month) relating to the value in question in order to assure an adequate data base for further analysis. Thus, in Table 4.7 we see that only border disputes recorded > 16 interactions in the territory category.

Specialists on Southern Africa are not likely to be surprised by what is included in our threat agenda, although the absence of certain pet concerns might surprise them. First, we note that all five value categories have at least one activated threat although the number of threats and their intensity as measured by the frequency of interaction

Table 4.8: Threat Agenda of the Southern African Subsystem
January 1, 1973 - April 30, 1974

Code	Definition and Value Involved
	SECURITY THREATS:
1299	General conventional military activity and/or weapons.
1301	Combat use of guerrilla and counter insurgency forces.
1314	Terrorism, torture, or kidnapping involving guerrilla and counter insurgency activity.
1319	Attempts at unity or detente involving guerrilla and counter insurgency activity.
1320	General tensions regarding guerrilla and counter insurgency activity.
1399	General guerrilla and counter insurgency activity.
1516	Intervention and invasion in revolutionary situations.
1702	General military assistance
1799	Not otherwise specified threats to security.
	TERRITORIAL THREATS:
2203	Border issues and disputes.
	THREATS TO MEMBER STATUS:
3104	Maintenance of friendly diplomatic relations.
3105	Opposition to diplomatic status and sanctions.
3199	General diplomatic status.
3205	Opposition to diplomatic status via use of an I.O.
3207	Use of the O.A.U. to oppose another system member.
3209	Use of the U.N.O. to oppose another system member.
3210	Use of other I.O.'s to oppose a system member.
3299	General threatening use of I.O.'s.
3311	Threats to independence.
3312	Threats to sovereignty and autonomy.
3313	Threats via dependence and external pressure.
3314	Ideological threats.
3316	Threats to national unity.

3399	Not otherwise specified threats to member status.
	THREATS TO HUMAN RESOURCES
4316	Expulsion, seizure, arrest, killing of individuals.
4318	Violations of human and civil rights of individuals.
4399	General human rights and problems.
	THREATS TO NON-HUMAN RESOURCES
5102	Disruption of trade in minerals and raw materials other than petroleum.
5118	Disruption of trading transportation infrastructure.
5199	General international trading relations.
5299	Threats to investments.
5303	Disruptions of financial relations regarding petroleum.
5399	Threats to financial relations in general
5499	Threats to foreign assistance.

varies considerably from value to value.

The general value category of status relating to the external relations, autonomy, and dependence of members was the most intensely activated threat area with 826 or 46% of all threat behavior. Because of the still colonial and/or minority ruled status of a number of subsystem members including ongoing disputes over Rhodesia and Namibia, attacks on and defenses of the current international status of these members were frequent. Most of this threat behavior, however, represents low level diplomatic harassment and support and is not likely to lead to serious international crises.

The next most activated part of the agenda was security, particularly relating to the general and combat use of guerrilla and counter-insurgency forces and weapons (codes 1301 and 1399). This value category accounted for 423 events or 23% of the threat behavior within the subsystem and was a consequence of on-going wars of liberation in Angola, Mozambique, Namibia, and Zimbabwe.

Third in degree of activization was the general value of human resources, although only three specific threat issue-areas were involved. Human resource problems represented 328 or 18% of threat behavior observed prior to the Portuguese coup. The single threat issue area of violations of human and civil rights was the most intense of all such specific categories, representing 225 or 12% of all threat interactions. The issue of human and civil rights, including voting and labor organization, for the black majorities in the minority-ruled subsystem members created and still creats a basic polarization within the Southern African subsystem that provides the basis of the subsystem's dynamics.

Threats to territory and non-human resources were the least activated during this base-line period of observation. While seven distinct issues were active in the non-human resources category, overall this value represented only 120 events or 7% of all behavior. The single territorial threat issue area of border disputes accounted for 6% or 108 threat actions. Moreover, the two were related for the threats to subsystem member interests arising out of the disruption of trading relations were a consequence of the Rhodesian border closure.

Given the nature of our issue area coding scheme, it is possible to achieve as specific or as general an analysis of threat phenomena as desired. Thus, if one wishes to study

the specific threat involved in border disputes one need only select all events relating to threat issue code 2203. At a somewhat more general level of analysis, if one wishes to describe and attempt to forecast threats relating to guerrilla and counter-insurgency activity one examines all events whose issue codes begin with 13, that is codes 1301 through 1399. Finally, at the most general level of analysis that may prove analytically useful, one can study all threat behavior relating to a general value category such as human resources by selecting all interactions that begin with an issue code of 4, i.e., codes 4101 to 4499.

In table 4.9 we have chosen to work at an intermediate level leaving certain threats such as general conventional military activity unaggregated (code 1299) and grouping others such as threats to human and civil rights (codes 4316, 4318, 4399) according to the substantive or procedural aspect of the issue concerned. The rows of Table 4.9 represent the twenty-eight month period from January, 1973, through April, 1975. We thus have sixteen months of observations prior to the Portuguese coup and twelve months of observations thereafter.

A comparison of the columns in Table 4.9 suggests three rather distinct types of threat processes within the Southern African regional subsystem. The first may be called a THREAT EPISODE that flares up with intensity and that then subsides into relative inactivity. Border disputes, column 5, illustrate this well. 72% of all border related threat behavior took place in the first quarter of 1973 arising out of the January 9th Rhodesian closure of its border with Zambia. Conventional military threats, general threats to security, and general threats to non-human resources also fit the threat episode pattern. In many respects insights gained from the study of international crises may be useful in the analysis of threat episodes, particularly regarding the processes whereby such episodes abate. For forecasting purposes, however, the prediction of when a key event will trigger a threat episode seems considerably more difficult. Threat episodes are therefore more likely to be a subject for crisis management than for crisis avoidance and prevention.

The second threat pattern revealed in Table 4.9 concerns persistent but only partially activated threats. The best example of this pattern is with respect to threats to international trade but the other non-human resource threat issue-areas of threats to investments and financial relations and general threats to status fit as well. In this pattern, which we shall call CHRONIC THREATS, threat

TABLE 4.9: Southern Afri[illegible] Threat Behavio[illegible] By Month, January 1973 to [illegible]pril 1975

	Conventional Military Threats		Guerilla Counter Insurgency Threats		Intervention Invasion Threats		General Threats To Security		Border Issues and Disputes	
	N	%	N	%	N	%	N	%	N	%
1-73	4	.05	39	.07			14	.13	56	.41
2-73	11	.14	55	.10	2	.11	7	.07	22	.16
3-73	9	.12	30	.06			10	.10	20	.15
4-73	9	.12	32	.06			2	.02	1	.01
5-73	13	.17	18	.03	6	.33	19	.18	4	.03
6-73	2	.03	9	.02					1	.01
7-73			3	.01					1	.01
8-73	4	.05	2	.00			10	.10	2	.01
9-73			17	.03			1	.01		
10-73	4	.05	24	.04			8	.08		
11-73	7	.09	7	.01			18	.17	1	.01
12-73			6	.01			2	.02		
1-74			2	.00	1	.06	5	.05	2	.01
2-74			6	.01			3	.03	2	.01
3-74	3	.04	15	.03			4	.04		
4-74			15	.03					1	.01
5-74	1	.01	4	.01					1	.01
6-74	2	.03	49	.09			1	.01		
7-74			8	.01					4	.03
8-74			23	.04						
9-74	8	.10	7	.01						
10-74			24	.04					12	.09
11-74			29	.05						
12-74	1	.01	35	.06					2	.01
1-75			27	.05					1	.01
2-75			6	.01						
3-75			32	.06						
4-75			41	.07					3	.02
TOTAL	78	1.00	571	1.00	18	1.00	104	1.00	136	1.00

TABLE 4.9: (2)

	Threats To Diplomatic Status		International Org. Threats To Status		General Threats to Status		Threats To Independence, Autonomy and Dependency		Threats To Human and Civil Rights	
	N	%	N	%	N	%	N	%	N	%
1-73	18	.05	11	.03	5	.02	12	.02	43	.06
2-73	35	.09	20	.06	7	.03	16	.02	17	.02
3-73	7	.02	21	.06	4	.02	9	.01	34	.05
4-73	28	.08	20	.06	7	.03	28	.04	45	.06
5-73	32	.09	44	.13	17	.07	65	.08	58	.08
6-73	5	.01	5	.01	15	.06	10	.01	11	.02
7-73	4	.01	1	.00	6	.03	3	.00	8	.01
8-73	15	.04	12	.03	21	.09	45	.06	32	.05
9-73	16	.04	9	.03	8	.03	22	.03	24	.03
10-73	6	.02	16	.05	13	.06	25	.03	14	.02
11-73	21	.06	33	.09	2	.01	20	.03	37	.05
12-73	3	.01	10	.03	6	.03	28	.04	10	.01
1-74	1	.00	12	.03			12	.02	3	.00
2-74	15	.04	1	.00	5	.02	11	.01	10	.01
3-74	18	.05	2	.01	11	.05	24	.03	16	.02
4-74	9	.02	10	.03			37	.05	8	.01
5-74	10	.03	3	.01	1	.00	16	.02	13	.02
6-74	12	.03	22	.06	8	.03	44	.06	33	.05
7-74	14	.04	4	.01	8	.03	33	.04	14	.02
8-74	5	.01			4	.02	13	.02	7	.01
9-74	9	.02	2	.01	1	.00	64	.08	35	.05
10-74	16	.04	27	.08	5	.02	23	.03	17	.02
11-74	13	.04	10	.03	16	.07	44	.06	20	.03
12-74	8	.02	8	.02	11	.05	52	.07	16	.02
1-75	7	.02	17	.05	32	.14	40	.05	74	.11
2-75	6	.02	16	.05	17	.07	29	.04	16	.02
3-75	2	.01			17	.07	4	.01	49	.07
4-75	35	.09	15	.04	24	.06	38	.05	33	.05
TOTAL	371	1.00	351	1.00	233	1.00	767	1.00	697	1.00

TABLE 4.9: (3)

	Threats International Trade		Threats To Investments		Threats To Financial Relations		General Threats To Non-Human Resources		TOTAL	
	N	%	N	%	N	%	N	%	N	%
1-73	30	.16	3	.08					236	.0640
2-73	18	.10					4	.10	214	.0580
3-73	4	.02	2	.06	1	.02	4	.10	161	.0436
4-73	1	.01	4	.11	2	.03	1	.03	180	.0488
5-73	2	.01	7	.19	6	.09	11	.28	302	.0818
6-73	2	.01							60	.0163
7-73					1	.02	1	.03	28	.0076
8-73	4	.02			1	.02			148	.0401
9-73	2	.01							99	.0268
10-73	1	.01					2	.05	113	.0306
11-73	1	.01	2	.06	11	.17			169	.0458
12-73							1	.03	66	.0179
1-74	8	.04			1	.02			47	.0127
2-74	5	.03			8	.13	2	.05	68	.0184
3-74	2	.01							95	.0257
4-74	5	.03							85	.0230
5-74	9	.05							58	.0157
6-74	8	.04	4	.11	5	.08			188	.0509
7-74	7	.04	3	.08	2	.03	1	.03	98	.0266
8-74	5	.03			1	.02			58	.0157
9-74	10	.05			1	.02	6	.15	143	.0388
10-74	12	.07	2	.06	11	.17			149	.0404
11-74	3	.02			1	.02	1	.03	146	.0396
12-74	8	.04	3	.08	4	.06	2	.05	150	.0407
1-75	19	.10	3	.08					220	.0596
2-75	4	.02	1	.03	6	.09	3	.08	107	.0290
3-75	4	.02			1	.02			109	.0295
4-75	1	.01	2	.06	1	.02			193	.0523
TOTAL	184	1.00	36	1.00	64	1.00	39	1.00	3690	1.0000

activity persists over time, but at a relatively low level of intensity or activization. There may even be time periods where no threat activity occurs, but they are few and irregular. As such, chronic threats may serve an early warning function, they signal issues that must be watched but that are not sufficiently episodic or accute to require action by subsystem members. The key question for the analysis of chronic threats is the conditions under which they may become the basis for a threat episode or shift into the third pattern, accute threats.

ACCUTE THREATS represent the third pattern observed in Table 4.9 relating to guerrilla and counter-insurgency activity, diplomatic status, international organizational threats to status, independence and autonomy, and human and civil rights. The pattern of accute threats is distinguished by its nearly continuous persistence over time and its high degree of activization as recorded by frequent and intense threat activity. Thus, of the five different acute threat issues identified, all are continuous except for international organizational threats to status which recorded no threat behavior in two different months and these five account for 75% of all threat events observed among our fourteen threat issue areas.

The degree of activization of accute threats does vary over time as illustrated in Figure 4.2, suggesting that a wide variety of quantitative and qualitative forecasting techniques may be used for their analysis. But also, almost by definition, accute threat processes are expected to continue into the future if no coping activity by subsystem members is undertaken. As these lines are being written, Dr. Kissinger is on his second trip to Southern Africa in an attempt to moderate the international crises centering on the guerrilla war in Rhodesia, the disputed status of Namibia, and the human and civil rights issues of minority rule in Rhodesia and South African apartheid. As our data demonstrate all of these were accute threats two or more years ago. What has, of course, changed since early 1975 when our currently available data end is the presence of Cuban troops in Angola, Cuban and Soviet advisors elsewhere in the region, vastly increased arms flows from Communist countries to the Liberation Movements, and the emergence of Marxist oriented regimes in Angola and Mozambique. Readers are asked to draw their own conclusions as to why the United States decided to play a direct role in Southern Africa in 1976 rather than in 1974.

In the final section of this report we shall present more detailed analyses of one threat episode, the

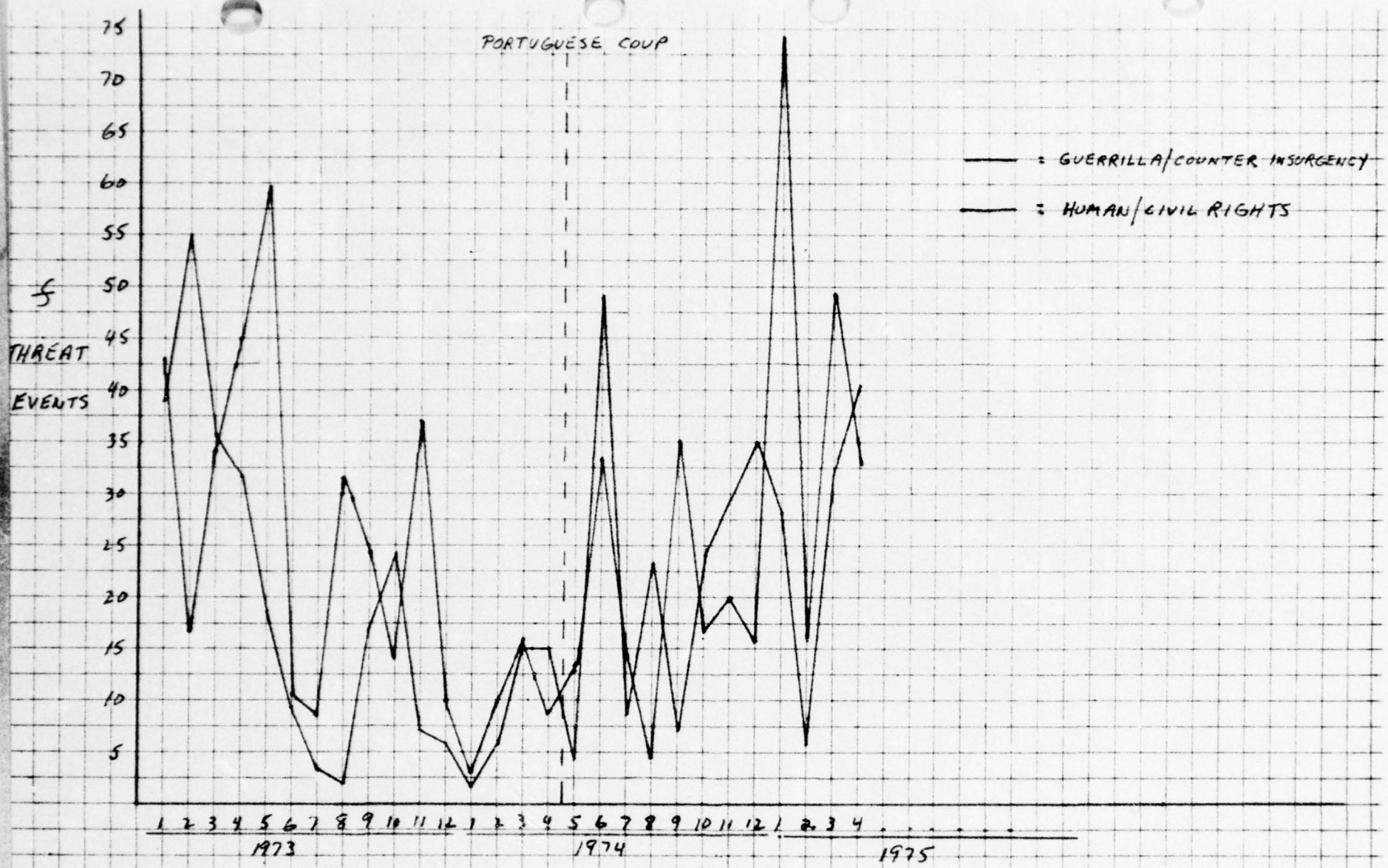


Figure 4.2: Two Accute Threats in the Southern African Regional Subsystem by Month

Rhodesian-Zambian border closure, and two accute threat processes, liberation warfare and human and civil rights in order to illustrate further how regional subsystem threat phenomena may be recognized and analyzed.

SECTION 5: THE ANALYSIS OF THREAT PROCESSES

Up to this point in our Report we have focused on the analysis of the Southern African regional subsystem as a whole. More detailed studies of threat processes within subsystems must also consider the patterns of interations of subsystem members, thereby changing our level-of-analysis to that of states and transnational and international organizations. Subsystem members comprise the concrete entities whose interactions produce a system. As argued in an earlier paper (McGowan, 1974), threat processes occuring at the level of a regional subsystem are likely to have profound effects for national and transnational level actors. Moreover, the greater the degree of isolation and autonomy of a subsystem, the stronger and more consequential will be the effects on members of subsystem processes. Up to the recent past Southern Africa has been one of the most autonomous regional subsystems on the globe. Recent Cuban, Soviet, and American involvements have reduced this degree of autonomy, but it is never the less still considerable.

5.1 A Threat Episode: The 1973 Rhodesian-Zambian Border Closure

As discussed in the preceding section, a threat episode is one that rapidly emerges but does not endure for extended periods of time. Such episodes may end either because the threat is withdrawn, because threatened actors successfully cope with the threat, or because the episode escalates into a genuine international crisis affecting actors beyond the regional subsystem. As a consequence, subsystem members such as the United States have open to them three courses of action at the onset of an episode: (1) initiatives to get the threat withdrawn, (2) initiatives to help threatened members to cope with the threat and (3) actions designed to involve the global community, such as U.N. Security Council activity. What course or combination of courses of action are chosen will depend upon all of the factors that normally influence important foreign policy decisions. The key point is that there is little a subsystem member can do to anticipate threat episodes, the best that can be done is to

attempt to cope with them once they have been initiated.

The background to the threat episode we have selected for more detailed analysis goes back at least as far as November, 1965, when the Rhodesian Front Party under the leadership of Prime Minister Ian Smith unilaterally declared Rhodesia's independence from Great Britain. This presented a severe foreign policy dilemma for the Zambian government. Bitterly opposed to minority rule in Rhodesia, Zambia's economy, communications, and energy networks were tightly integrated with Rhodesia's as a consequence of the pattern of colonial economic development in the region. At great cost, Zambia chose to oppose the breakaway Smith regime and to make every effort to reorientate its economic linkages northward towards the black ruled Tanzania and Zaire. By 1973, this process was still underway and certain linkages, such as the export of copper and the importation of mining equipment and supplies, were still southward oriented through and from Rhodesia.

It was initially hoped that economic sanctions proposed by Great Britain and voted by the United Nations, would be sufficient to overthrow the Smith regime. Sanctions, of course, have not worked because certain states, particularly South Africa, but also Portugal and the United States (with the open importation of Rhodesian chrome) found it in their interests not to fully support a complete economic boycott of Rhodesia. As a consequence, Zimbabwe nationalists and neighboring black ruled states have increasingly turned to the violent tactics of guerrilla war to achieve this end. While this war is front page news today, it is often forgotten that it began in the late 1960's and by 1972-1973 was posing a serious threat to Smith's rule. Because the Portuguese authorities still controlled most of Angola and Mozambique, during the early 1970's Zimbabwe liberation fighters were mainly operating from training camps and sanctuaries in Zambia. Thus the stage was set for this threat episode.

Without prior public discussion and apparently without consultation with his Portuguese and South African allies, on January 9th, 1973, Smith announced that Rhodesia had closed its border with Zambia and that the border would remain closed until he received acceptable assurances from the Zambian authorities regarding their support for the Zimbabwe nationalists. As Zambia is an entirely landlocked state and its rail routes to the sea ran through unfriendly Portuguese controlled territory and Rhodesia, this action represented a clear and significant threat to Zambian welfare. Although within a few days Smith's government

backed down somewhat by saying that Rhodesian Railroads would continue to move Zambian copper, a serious threat episode had been launched.

In tightly interdependent regional subsystems such as Southern Africa or in subsystems with relatively diffused capabilities, such as the Middle East, such severely threatening actions can occur at almost any time. A parallel is Nasser's attempt to close the Gulf of Aqaba to Israeli shipping that precipitated the 1967 war. It is therefore unlikely that monitoring and intelligence services will have much success in forecasting the onset of threat episodes. However, as our comparative knowledge of these episodes accumulates it should prove possible to monitor the evaluation of a given threat episode and to assess the degree to which coping strategies by particpipants are working or not. A descriptive analysis of what happened in the Rhodesian-Zambian border closure threat episode is therefore in order.

The event triggering this threat episode occurred on January 9th, 1973, when the Rhodesian government announced that as an economic reprisal it was closing its border with Zambia following increased "terrorist" activity in its northeastern border area. Two days later Zambia responded by halting all exports of copper through Rhodesia even though the Rhodesian authorities had promised that copper traffic could continue despite the border closure. The threat to Zambia of Rhodesia's initial action was one of strangulation, for without the Rhodesian rail link to the ports of Beira and Lourenco Marques it would become extremely difficult if not impossible to maintain copper exports, Zambia's principle economic activity. The threat to Rhodesia of Zambia's counter-move was less severe, but of some consequence, as it represented a considerable loss of revenue previously earned via rail charges on Zambian copper. These actions represented actual or potential threats to other subsystem members as well. There was, of course, the possibility that the threat situation could escalate into an international conflict and crisis involving Zambian and Rhodesian forces. At a less severe level of danger, subsystem members with trade linkages to Zambia found these links abruptly broken. South Africa was particularly affected in this regard. How did the episode evolve?

Table 5.1 reports all subsystem members who initiated and/or received conflict interactions relating to border disputes during the period from January 1, 1973 through April 30, 1974. Overwhelmingly, threat behavior was limited

Table 5.1: Threat Interactions During the Rhodesian-Zambian Border Closure Threat Episode

Actors				Targets			
Rank		N	%	Rank		N	%
1.	Zambia	47	41.59	1.	Rhodesia	69	61.06
2.	Rhodesia	26	23.01	2.	Zambia	29	25.66
3.	United Kingdom	9	7.96	3.	South Africa	4	3.54
4.	South Africa	7	6.19	5.5	Malawi	2	1.77
5.	United Nations	5	4.42	5.5	Portugal	2	1.77
6.	Mozambique	4	3.54	5.5	United Kingdom	2	1.77
8.	Botswana	3	2.65	5.5	Zaire	2	1.77
8.	O.A.U.	3	2.65	9	Botswana	1	.88
8.	ZANU	3	2.65	9	Tanzania	1	.88
12.5	Malawi	1	.88	9	Vha Venda	1	.88
12.5	United States	1	.88				
12.5	Zaire	1	.88				
12.5	ZAPU	1	.88				
TOTAL		113	100.00			13	100.00

to the two principles in the dispute, Zambia and Rhodesia. That the episode was not generalized to a larger number of subsystem members is probably one reason it did not evolve into a more severe crisis. Also important in this regard is the lack of involvement of intrusive powers with the exception of the residually involved United Kingdom and the low profile adopted by the dominant core state, South Africa.

Figure 5.1 compares the patterns of threat interactions during the threat episode to those in the period since April, 1974. During this episode the initiator of the original threat, Rhodesia, became the focus of threatening behavior by a strange coalition of involved subsystem members. The United Nations and the O.A.U., which we will see came to the aid of Zambia, directed criticism toward Rhodesia. Great Britain as the nominal sovereign in the Colony of Rhodesia also helped Zambia as expected and Botswana through which an important railroad to landlocked Rhodesia runs, took actions against Rhodesia. Perhaps most importantly for the white Rhodesians, the white South African authorities did not welcome the closure and in fact expressed concern over the "surprise" Rhodesian action. The pattern of interactions shown in Figure 5.1 and the actual texts of the events retrieved from our computer file show that intense pressure was exerted on Rhodesia to withdraw its threat by reopening its border. This is, of course, one of the key approaches to terminating a threat episode and in this instance it proved successful for on February 3rd, Rhodesia announced that "satisfactory messages" had been received from Zambia and that the border would be reopened. Zambia immediately denied that any such assurances had been given, but with the withdrawal of the original threat the episode entered its terminal phase.

During the course of this threat episode, what types of interactions of a threatening character were exchanged among the participants? This important feature of the border closure episode is shown in Figure 5.2. The most dangerous forms of threat activity are negative actions that can harm the security, territory, status, human and non-human resources of subsystem members. During this threat episode such actions were exclusively limited to actions that reduced relations among members, i.e., border closures. It would appear that one of the key features to monitor in a threat episode is the VARIETY of negative actions. If threats stay locked into one or two behavioral possibilites, the situation is contained whereas if participants initiate a growing variety of negative actions the episode may be evolving into a more accute threat situation or an all out

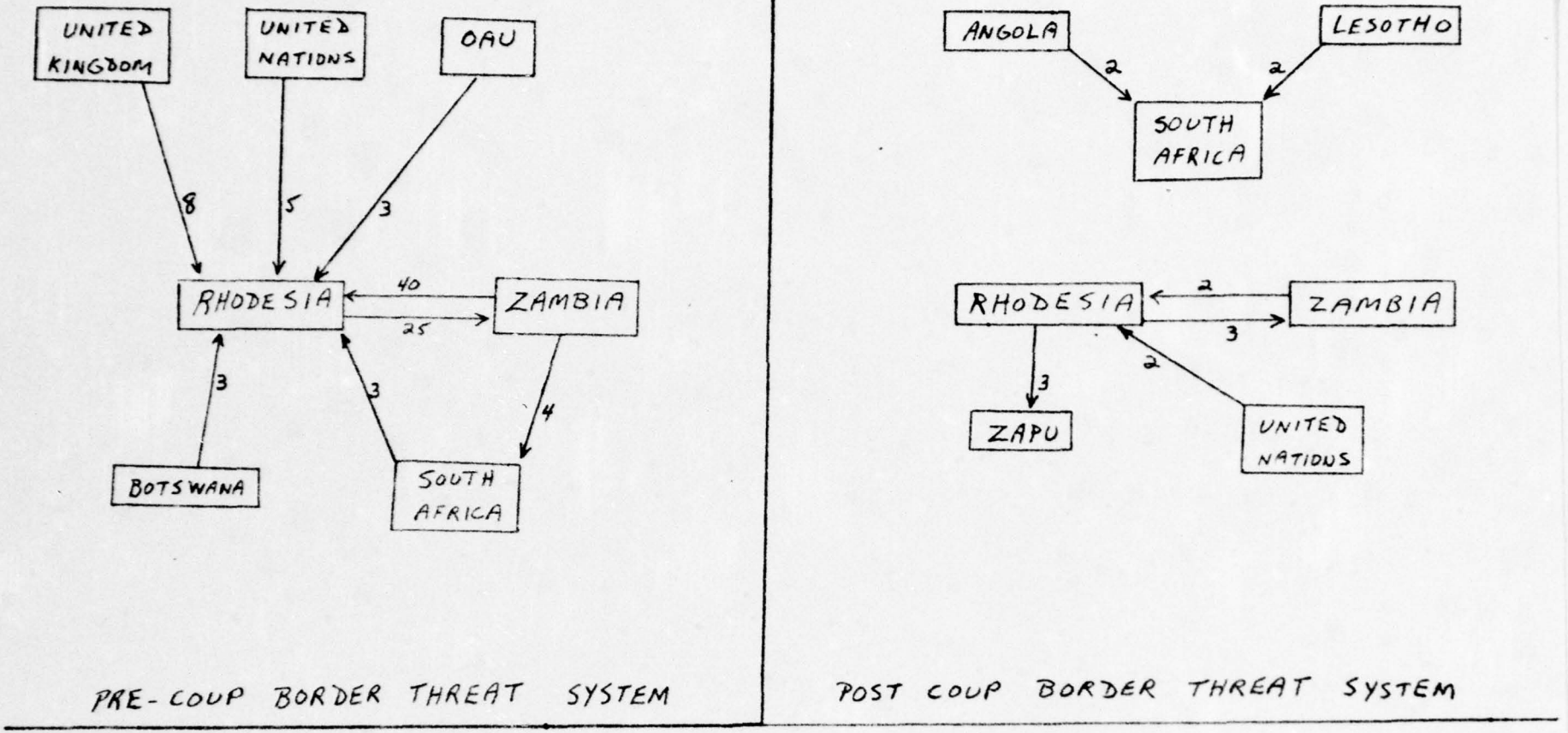


Figure 5.1: The Rhodesian-Zambian Border Closure Threat Episode

international crisis.

Previous research suggests that the proportional distribution of negative verbal behavior involving statements of negative evaluation, desire, and intent shown in Figure 5.2 is typical of international behavior. Since the degree of commitment involved in statements as compared to actions is slight, statements are less costly, more easily denied or fudged, and thus far more frequent than physical acts. This verbal behavior is nevertheless important in the analysis of threat episodes for it tends to co-occur with more serious threatening actions and thus represents a useful signalling function. This is clearly shown in Figure 5.3 which plots the evolution of behavior in the Rhodesian-Zambian threat episode over time.

While our data begin on January 1, 1973, we know from other sources (IDAF, 1973) that there was little in the relations between Zambia and Rhodesia in late 1972 to predict the January 9th border closure. Throughout December, 1972, and early 1973, incidents involving Zambian based ZANU guerrillas and Rhodesian security forces occurred, but land mining and security sweeps had been going on in northeastern Rhodesia for years. Our own data show no interactions between Zambia and Rhodesia during the first eight days of the month, but beginning on the 9th and continuing through March, 1973, a high level of threat interaction was undertaken. By April relations between Zambia and Rhodesia had returned to a more normal state of latent hostility. Threat episodes that do not become generalized international crises or continuing accute threats should show a pattern over time similar to that given in Figure 5.3.

In managing the Rhodesian-Zambian border closure and keeping it limited to a threat episode, initiatives designed to help the threatened member Zambia, and to internationalize the threat were also undertaken. A variety of actors but particularly the United Nations, the O.A.U., Tanzania, and Great Britain came to the aid of Zambia to help it cope with the threat. Tanzania promised to make every effort to expedite the flow of Zambian copper through its own transportation and harbor facilities, while the U.K., the U.N., and the O.A.U. offered diplomatic and financial support to help Zambia meet the increased costs of alternative routes. Zambia itself took intelligent emergency actions including a harsh budget in order to pay for its coping measures and expressed a willingness to pay the price of refusing to ship copper south even after the border was reopened in February.

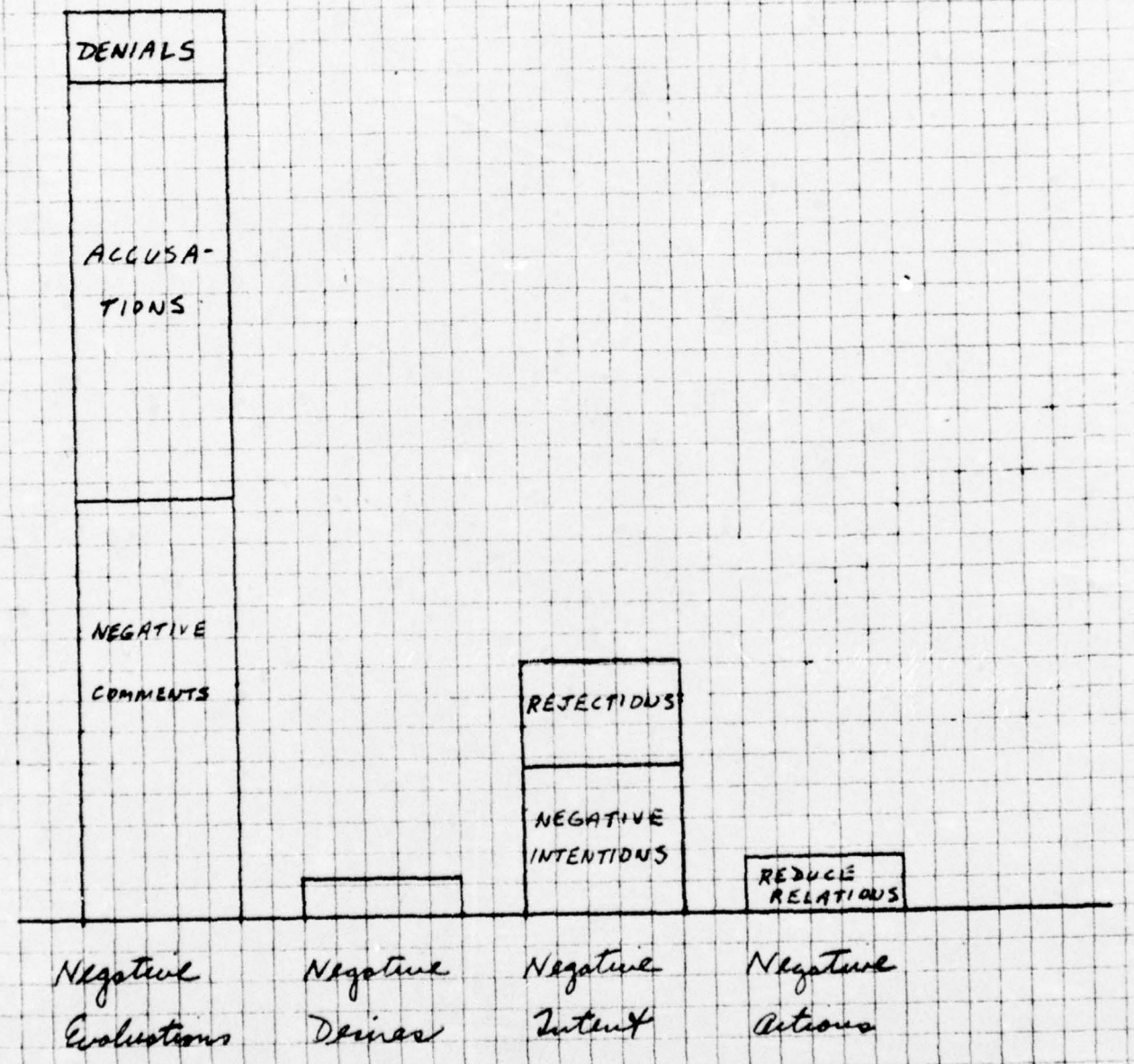


Figure 5.2: Types of Threat Action in the Rhodesian-Zambian Border Closure Threat Episode

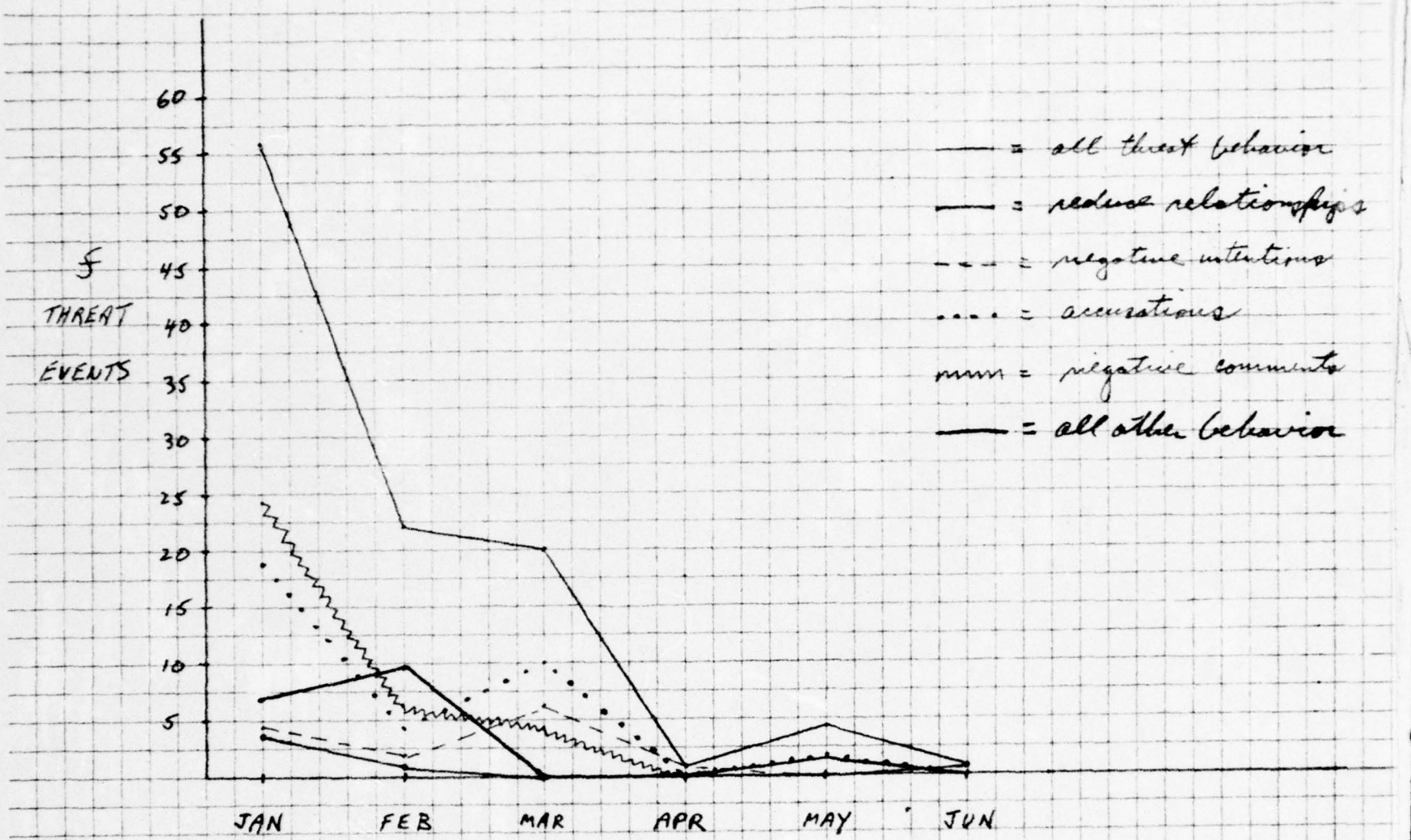


Figure 5.3: Volume and Variety of Threat Events in the Rhodesian-Zambian Border Closure Threat Episode

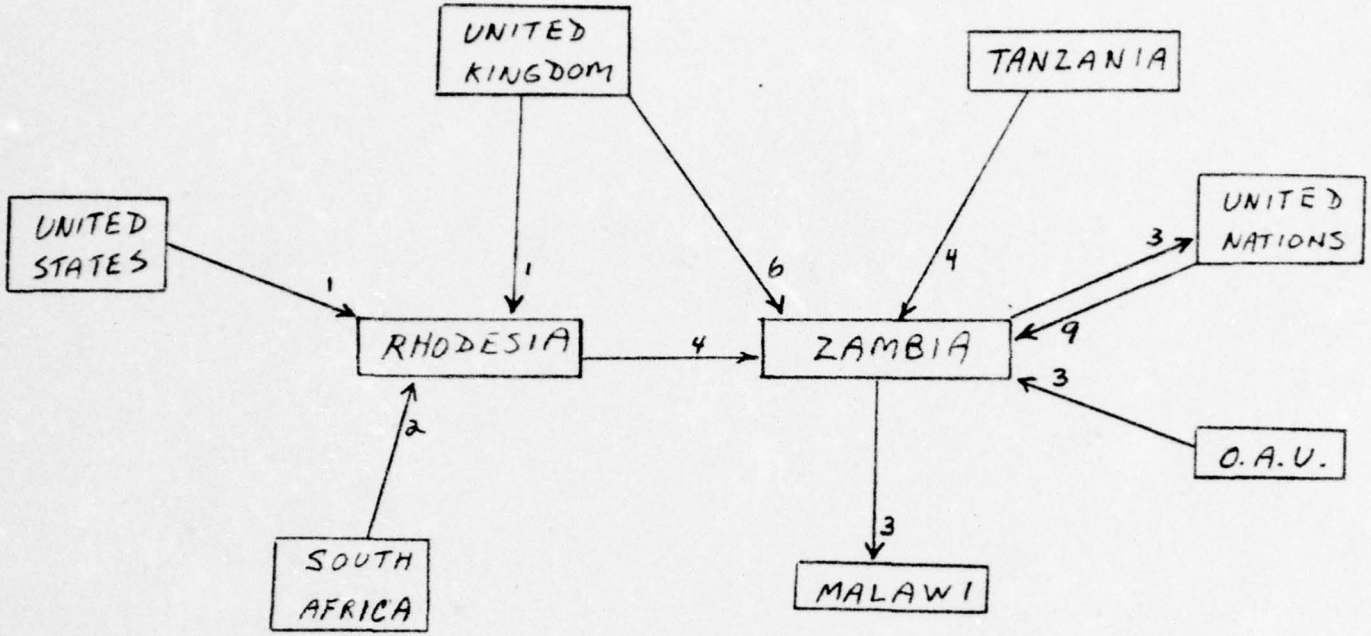


Figure 5.4: Cooperative Behavior During the Rhodesian-Zambian Border Closure Threat Episode

This pattern of cooperative coping behavior is shown in Figure 5.4 where it is shown that Zambia was the recipient of most assistance. The little support Rhodesia received was limited to initiatives at the United Nations where military sanctions against Rhodesia were opposed. That a number of subsystem members initiated cooperative behavior but that Zambia was the main target of these actions is also shown in Figure 5.2. Finally, attempts to generalize the episode were limited to the United Nations and subsystem members such as South Africa and the United States that had the capability of escalating the episode into something more serious remained basically passive throughout.

Threat episodes, then, will tend to originate from a negative action that directly threatens a basic value of a subsystem member. By their nature, such events are difficult if not impossible to forecast accurately except, perhaps, when they occur in the context of an ongoing accute crisis. In point of fact the Rhodesian-Zambian border closure was engendered because of two accute threat situations that had existed for years within the region, the issue of human and civil rights in minority ruled system members and the guerrilla wars designed to overthrow minority rule. As we shall argue in the next two parts of this section, it is a characteristic of accute threats that they may at any time trigger a threat episode that may evolve into a true international crisis. Thus, that the Rhodesian authorities would take extreme actions to counter the threat of guerrilla activity should not have "surprised" anyone. But the actual timing and nature of the threat is not open to prediction except via covert intelligence activities if they exist in the region in question.

Thus, one may recognize the onset of a threat episode once it has occurred. The analytical function is to recommend threat management and coping strategies and to evaluate rapidly and reliably the effectiveness of such initiatives. The Rhodesian-Zambian border threat episode did not evolve into a more general crisis because of the isolation of Rhodesia and because the most threatened party, Zambia, received considerable and varied assistance in coping with the threat. Comparative evidence from other episodes is necessary before firm conclusions can be reached about how best to control threat episodes in the future.

5.2 An Accute Threat: Wars of Liberation in Southern Africa

Table 5.2: Cooperative Interactions During the Rhodesian-Zambian Border Closure Threat Eqisode

Actors				Targets			
Rank		N	%	Rank		N	%
1.	United Nations	11	21.15	1.	Zambia	31	59.62
2.	Zambia	9	17.31	2.5	Rhodesia	4	7.69
3.5	South Africa	7	13.46	2.5	Tanzania	4	7.69
3.5	United Kingdom	7	13.46	4.5	Malawi	3	5.77
5.	Tanzania	5	9.62	4.5	United Nations	3	5.77
6.	Rhodesia	4	7.69	6.	China	2	3.85
7.	O.A.U.	3	5.77	9.	Portugal	1	1.92
8.	Botswana	2	3.85	9.	South Africa	1	1.92
10.5	Malawi	1	1.92	9.	Swaziland	1	1.92
10.5	Swaziland	1	1.92	9.	United Kingdom	1	1.92
10.5	United States	1	1.92	9.	Unclear	1	1.92
10.5	ZANU	1	1.92				
TOTAL		52	100.00			52	100.00

Within regional subsystems the main characteristics of accute threats are that they are not episodic, but continuous, and that they involve a number of subsystem members and a variety of threat behaviors. Beginning in 1961 in Angola, and in 1964 in Mozambique, guerrilla and counter-insurgency warfare rapidly spread throughout the Southern African regional subsystem. In 1966, guerrilla activity was initiated in Rhodesia and Namibia. While the war of liberation in Mozambique was successfully terminated in June, 1975, with the achievement of independence, it continues at this moment with great intensity in Rhodesia and lingers in Namibia. It is reported that fighting still occurs in Angola against the MPLA government by UNITA forces in the south central highlands. While the level of conflict has waxed and waned, in fact Southern Africa has not been "at peace" since 1961, and has been involved in a subsystem wide accute threat situation at least since 1966.

Figure 5.5 illustrates the nearly continuous nature of this accute threat situation for the twenty-eight months of data presently available for analysis. Being continuous does not imply that accute threat situations manifest a constant level of activization. As the Figure shows, there was a high degree of activity early in 1973 coincident with the Zambian-Rhodesian border closure but that there was then a declining trend for the rest of the year. Shortly after the coup in Portugal, when it seemed that General Spinola's regime was not interested in total independence for the Portuguese territories, there was a resurgence of guerrilla/counter-insurgency that continued on into 1975.

In comparison to the onset of threat episodes, forecasting patterns of accute threat processes appears possible. Time series analysis requires twenty or more continuous observations and patterns in the data as revealed in Figure 5.5. The application of a variety of time series techniques from simple smoothing operations to complex univariate modelling techniques as developed by Box and Jenkins (1976) would appear feasible. For our purposes, it is sufficient to note that it is in the nature of accute threats to persist over time and what is important to threat analysis is the study of their changing character.

The second main feature of accute threat processes is illustrated in Figure 5.6 where the relative proportions of types of threat behaviors are given. The most serious category of negative actions comprises six different types of threat acts amounting to over 14% of all behavior involving this issue. Associated with this form of violently threatening activity was a great amount of verbal threats,

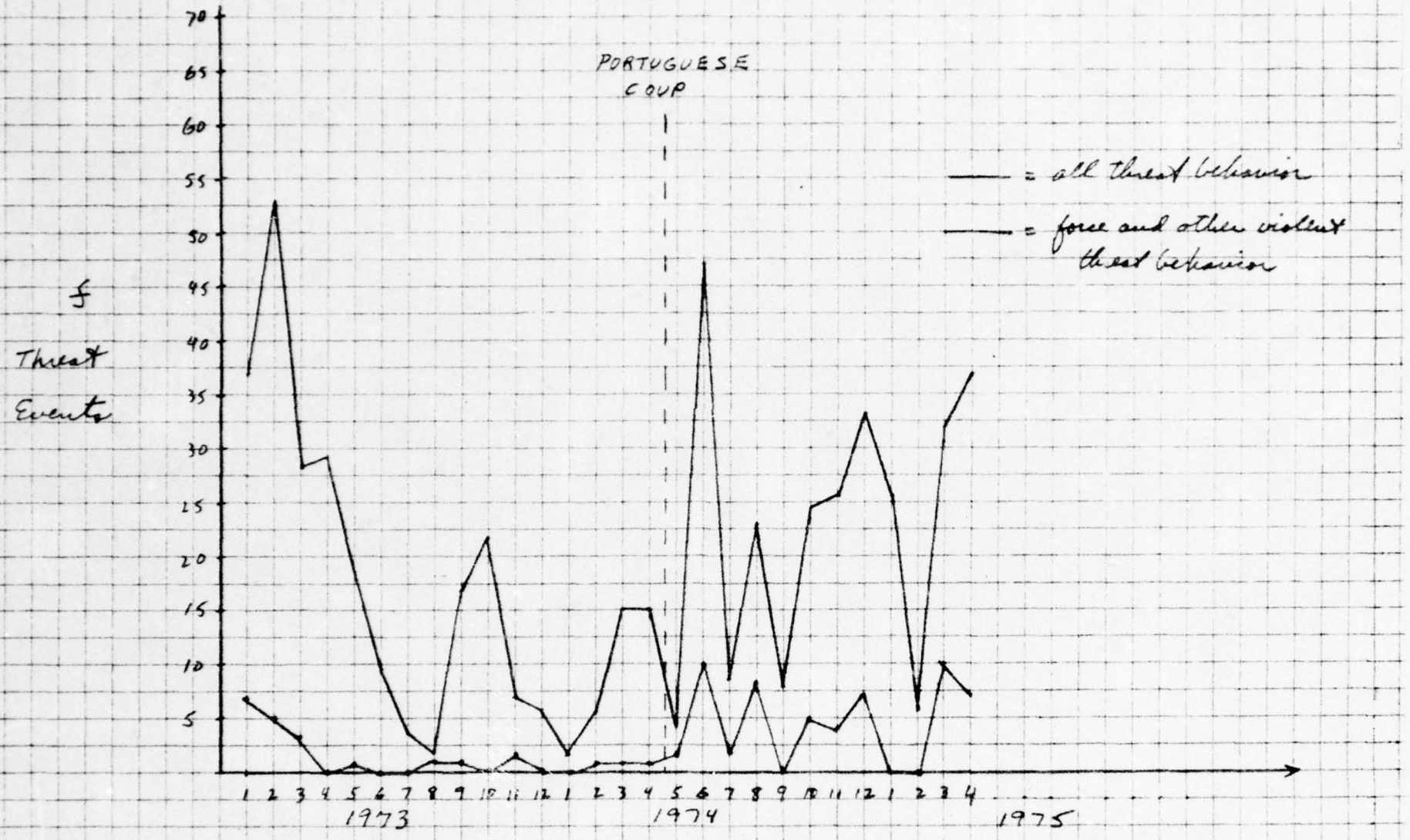


Figure 5.5: Threat Events by Month in the Accute Threat Represented by Guerrilla/Counter Insurgency Warfare.

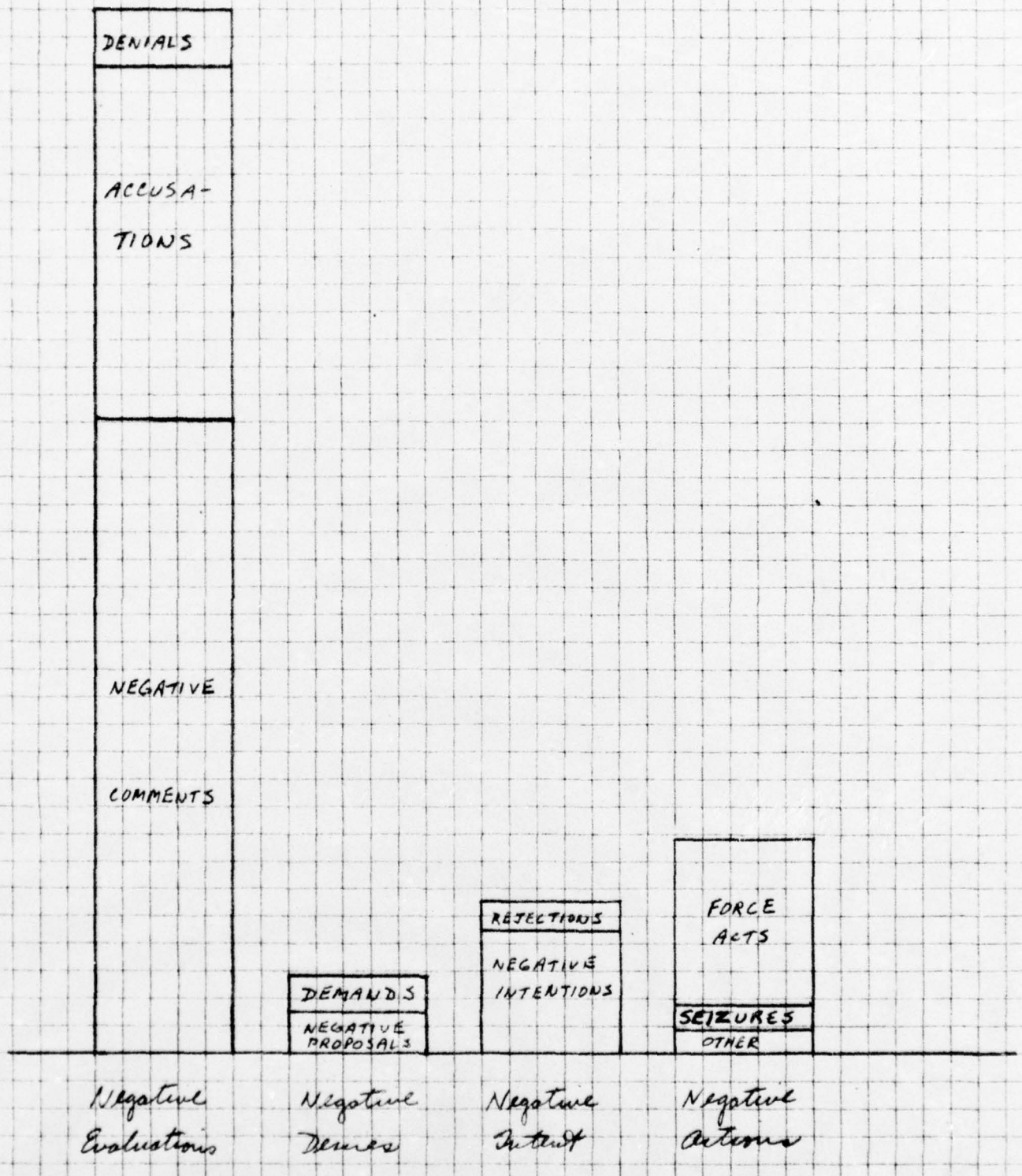


Figure 5.6: Types of Threat Actions in the Accute Threat of Guerrilla/Counter Insurgency War

charges, denials, and counter-charges. While again this pattern is typical of most international behavior, what would seem to activate and maintain accute threats is the recurrence of force and seize types of behavior that are the most threatening to basic values of security, territory, and human resources that can be undertaken by subsystem members.

For the purposes of the analysis of accute threat processes such as Southern African wars of Liberation the fundamental technique is explicit comparison of the accute threat via a series of before-after studies. The logic here is quite simple: both regional subsystems and accute threats persist over time, this being the case it is up to the analyst to choose key events that may represent "turning points" for the subsystem and the accute threat and to compare participants and behavior before and after the hypothesized subsystem change. In practice, as time progresses a variety of turning points should be explored in an effort to maximize analytical insight. In this report we shall illustrate this technique by using the Portuguese coup d'etat of April, 1974, as our turning point. It should be made clear, however, that turning point analysis may be applied to unintended events such as the coup or the Cuban intervention in Angola in 1975 and to intended events such as Dr. Kissinger's trip to Southern Africa in April, 1976.

Table 5.3 reports the initiators and recipients of threat behavior regarding guerrilla and counter-insurgency warfare in the sixteen month period prior to the Portuguese coup while Figure 5.7 illustrates the resulting system of interaction among the most involved subsystem members. With the exception of the O.A.U., during this period the accute crisis was limited to core and peripheral states within the region and liberation movements as actors and also as targets except for Portugal as the colonially instusive power. This demonstrates the degree to which the accute threat represented by wars of liberation was subsystem bounded. We have before us an instance of a threat process more general than one affecting particular states or transnational actors and more limited than one affecting the global system. We have, in other words, a regional subsystem threat unique to Southern Africa.

Figure 5.7 shows that while liberation wars were underway in Namibia, Angola, Mozambique, and Rhodesia, it was only in the latter two instances that these wars were highly activated prior to the coup. Moreover, the wars were not behaviorally linked, one focused on Rhodesia and the other on the liberation of Mozambique. In terms of intensity, the principal conflict was between FRELIMO and

Table 5.3: Threat Interactions During the Pre-Portuguese Coup Period of the Accute Threat of Guerrilla/Counter Insurgency War

Actors			Targets		
Rank	N	%	Rank	N	%
1. Zambia	47	17.47	1. Rhodesia	67	24.91
2. FRELIMO	36	13.38	2. Mozambique	40	14.87
3. O.A.U.	31	11.52	3. Portugal	29	10.78
4. Rhodesia	22	8.18	4. South Africa	28	10.41
5.5 Mozambique	21	7.81	5. Angola	23	8.55
5.5 ZANU	21	7.81	6. FRELIMO	22	8.18
7. Tanzania	15	5.58	7. Zambia	21	7.81
8.5 South Africa	9	3.35	8. Namibia	11	4.09
8.5 Zaire	9	3.35	9. United Kingdom	9	2.97
11. Liberation Com. OAU	7	2.60	10.5 SWAPO	4	1.49
11. SWAPO	7	2.60	10.5 ZAPU	4	1.49
11. ZAPU	7	2.60	12.5 Tanzania	3	1.12
14. Botswana	6	2.23	12.5 ZANU	3	1.12
14. Com. on Rhodesia, OAU	6	2.23	Others	6	2.23
14. Council on Namibia	6	2.23			
17. MPLA	3	1.12			
17. Lesotho	3	1.12			
17. Namibia	3	1.12			
Others	10	3.72			
TOTAL	269	100.00		269	100.00

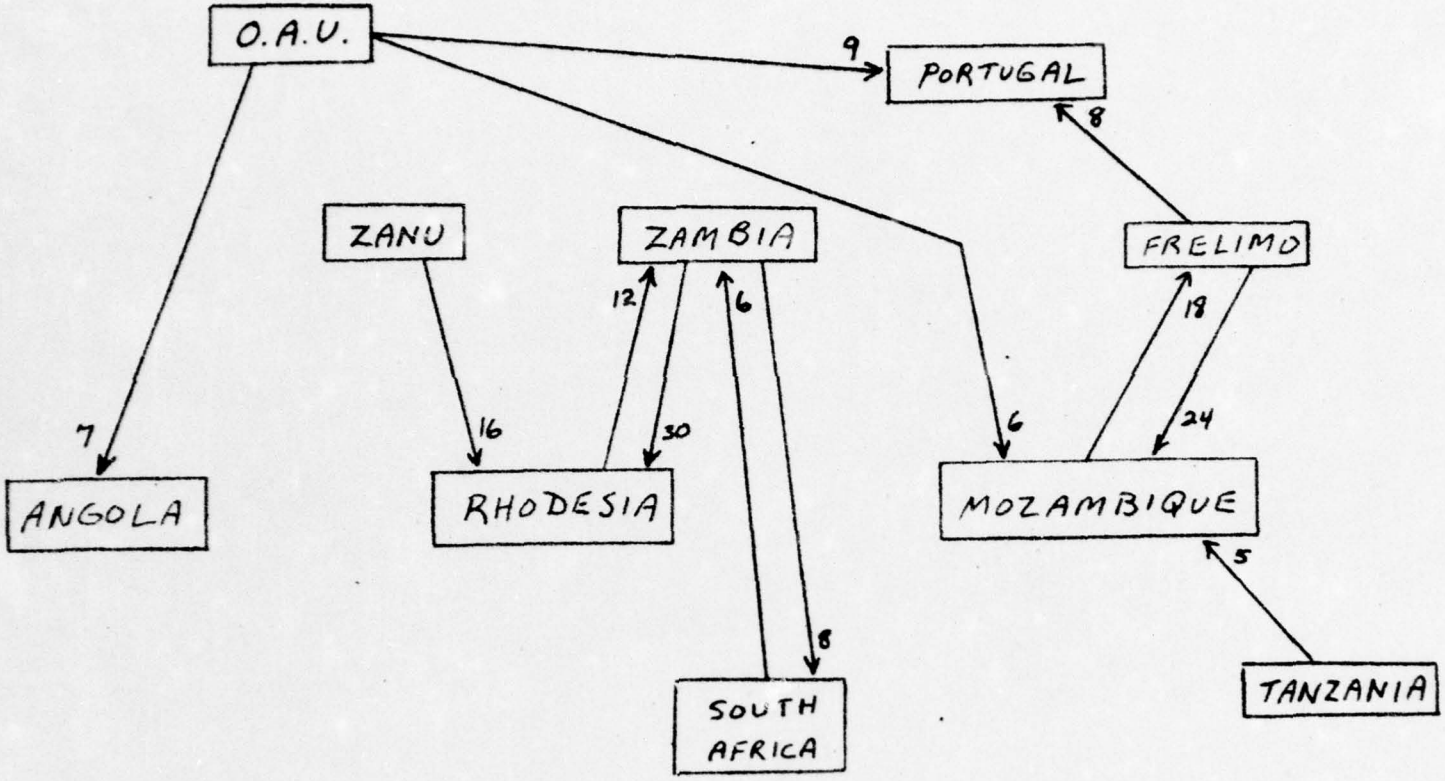


Figure 5.7: Pre-Portuguese Coup Guerrilla/Counter Insurgency Accute Threat System

the Portuguese authorities in Mozambique. Of course, we now know that the deterioration of the Portuguese position in Guinea-Bissau and Mozambique was one of the main causes of the coup in Lisbon. Our data do not "predict" the Portuguese coup in any fashion, but they do contradict the conclusions of National Security Study Memorandum 39 which found that the white regimes in Southern Africa had contained the nationalist guerrillas and were in the region to stay.

What changed in this accute threat situation during the twelve months after the Portuguese coup? Table 5.4 shows first of all an increase in threat behavior regarding guerrilla activity. Second, it shows that more subsystem members become involved after this turning point. Third, it shows the reactivization of the Angolan liberation wars, which had been inactive prior to the coup. Certain factors remained constant however. Rhodesia remained most active as a center of conflict and the accute threat was by April, 1975, still limited to geographically proximate members of the regional subsystem - with the continued exception of Portugal.

A comparison of Figure 5.8 to 5.7 shows that in the post coup period there was an even more clear cut separation of the three active wars of liberation and the different character of each war. To the east, in Mozambique, we observe a head on confrontation between the Portuguese authorities and FRELIMO that soon resulted in a transitional government and a fairly rapid and peaceful march toward independence. At the center is once again Rhodesia confronting Zambia, three separate liberation movements, and the residual colonial power. The intensification of the struggle there was in part due to the coming together of ZANU, ZAPU, and FROLIZI with the African National Council in December, 1974, to form a common front against the Smith regime. To the west in Angola, we see yet another pattern where a war of liberation has become reactivated but where the liberation movements have begun to fight each other as well as the Portuguese. We think it is reasonable to suggest that Figure 5.8 indicates the possibility of a civil war in Angola that in fact emerged by the late summer of 1975.

Before we offer some conclusions about the recognition and analysis of accute threat processes in regional subsystems we shall look at our second example of an accute threat, the issue of human and civil rights within the region.

5.3 An Accute Threat: Human and Civil Rights in Southern

Table 5.4: Threat Interactions During the Post Portuguese Coup Period of the Accute Threat of Guerrilla/Counter Insurgency War

Actors				Targets			
Rank		N	%	Rank		N	%
1.	Rhodesia	44	16.12	1.	Rhodesia	62	22.71
2.	FNLA	27	9.89	2.	Mozambique	27	9.89
3.	ANC (Rhodesia)	22	8.06	3.	MPLA	25	9.16
4.	FRELIMO	20	7.33	4.	Angola	24	8.79
5.5	MPLA	18	6.59	5.	ZANU	17	6.23
5.5	O.A.U.	18	6.59	6.5	FNLA	16	5.86
8.	Portugal	16	5.86	6.5	South Africa	16	5.86
8.	Zambia	16	5.86	8.	FRELIMO	14	5.13
8.	ZANU	16	5.86	9.	Portugal	12	4.40
10.	Mozambique	10	3.66	10.5	UNITA	9	3.30
12.	Angola	9	3.30	10.5	ZAPU	9	3.30
12.	Liberation Com. OAU	9	3.30	12.5	Namibia	8	2.93
12.	UNITA	9	3.30	12.5	Zambia	8	2.93
14.5	SWAPO	7	2.56	14.	ANC (Rhodesia)	6	2.20
14.5	Tanzania	7	2.56	16.	Botswana	3	1.10
16.	Namibia	4	1.47	16.	Malawi	3	1.10
17.	South Africa	3	1.10	16	United Kingdom	3	1.10
Others		9	3.30	Others		11	4.03
TOTALS		273	100.00			273	100.00

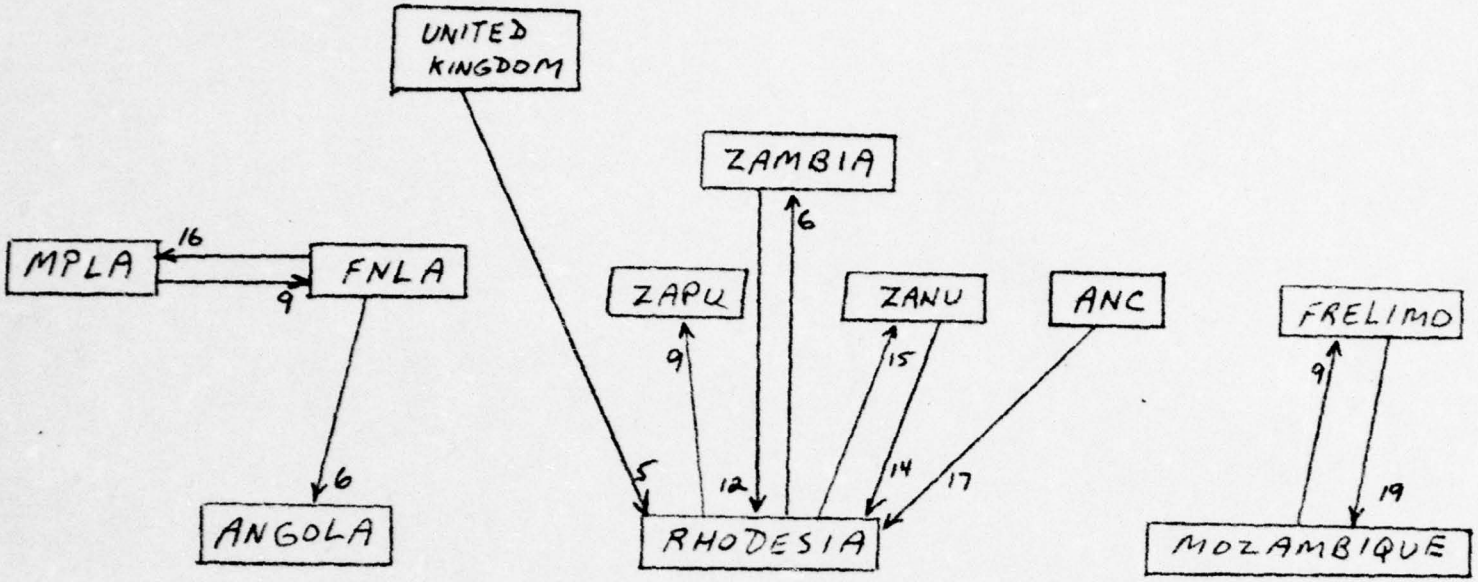


Figure 5.8: Post Portuguese Coup Guerrilla/Counter Insurgency Threat System, May 1974 to April 1975

Africa

Traditional conceptions of international threats, crises, and conflicts have focused on the "high politics" of security, territory, and status values and issues. Our studies of the Rhodesian-Zambian threat episode and the accute threat to security represented by the Southern African wars of liberation illustrate that the conventional wisdom is not wrong in its concentration on high politics. Many scholars, however, have begun to argue that as modernization spreads across the globe and as rapid communications make states and other actors ever more interdependent, a displacement is occurring and "low politics" issues dealing with human and non-human resources will become part of the international agenda and potential threat issues. Within Southern Africa this has already happened. The persistence of colonial and white minority rule in the region has made the issue of human welfare and civil rights central to the subsystem's threat agenda.

While general human welfare is not great in the black ruled states of the region because of their poverty and underdevelopment, it is the denial of civil and political rights to black majorities in Rhodesia, Namibia, and South Africa and their relative welfare deprivation in comparison to the welfare levels of the white minorities in each territory that has long provided the basic political cleavage within the subsystem. The historical origins of this problem go as far back as the 17th century when slavery was introduced to the Cape by Dutch farmer-settlers and when the slave trade from Angola to the New World began. But as a threat issue on the agenda of the Southern African regional subsystem, these conditions became important after World War II with the emergence of a new political consciousness among educated black Africans in Africa and international pressures instigated by the newly independent states, such as India. The general response to this threat to their superior status by the Portuguese, Rhodesians, and South Africans was to itensify their control over their black masses. The wars of liberation that began in the 1960's were a direct consequence of this problem. We thus find that the issue of human and civil rights has represented an accute threat situation within Southern Africa at least since the 1950's.

Figure 5.9 illustrates the persistence of this accute threat during the entire period for which we have data available to us. 1973 saw something of a decline in the activization of the threat, but the period after the

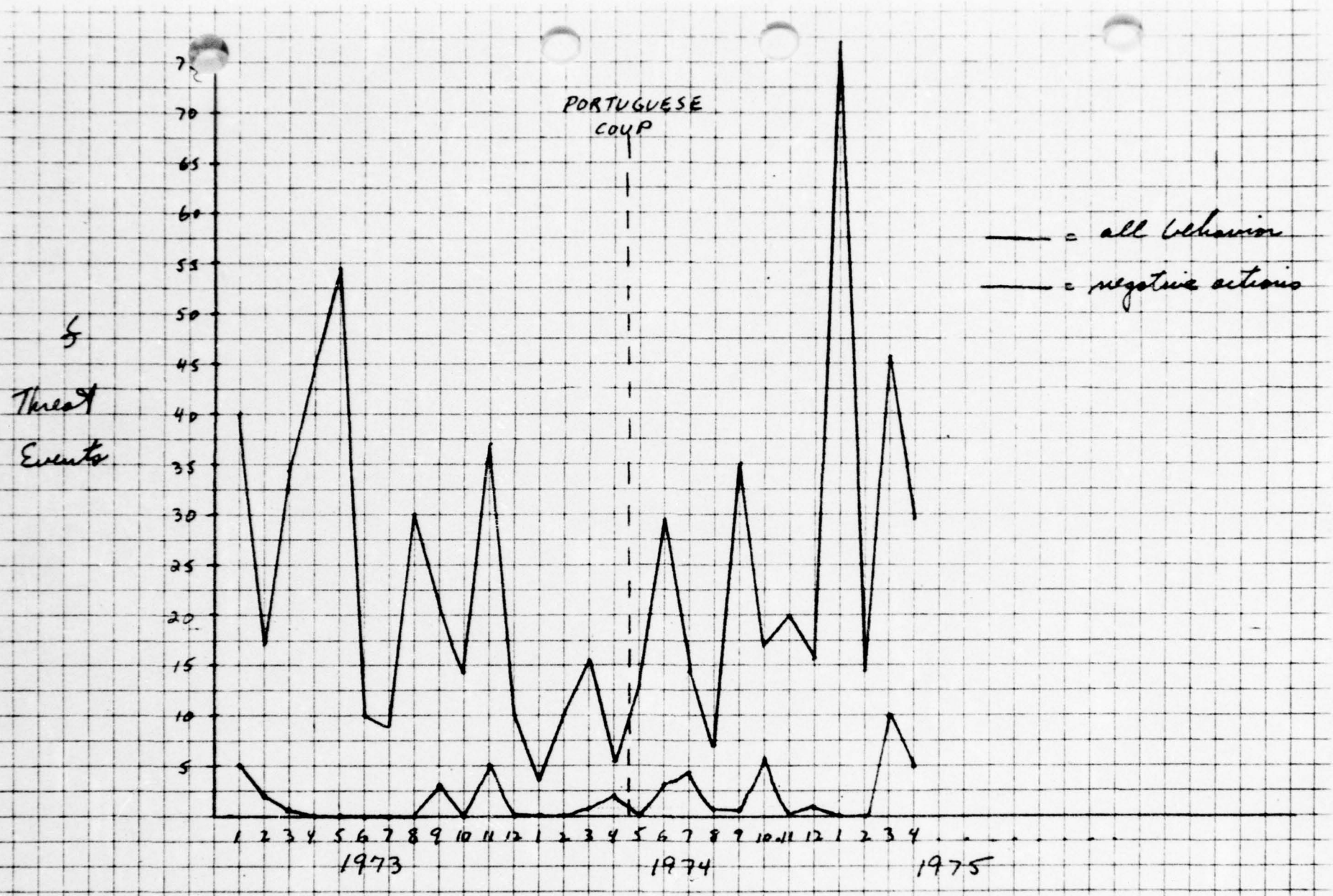


Figure 5.9: Threat Events by Month in the Accute Threat Represented by Human and Civil Rights

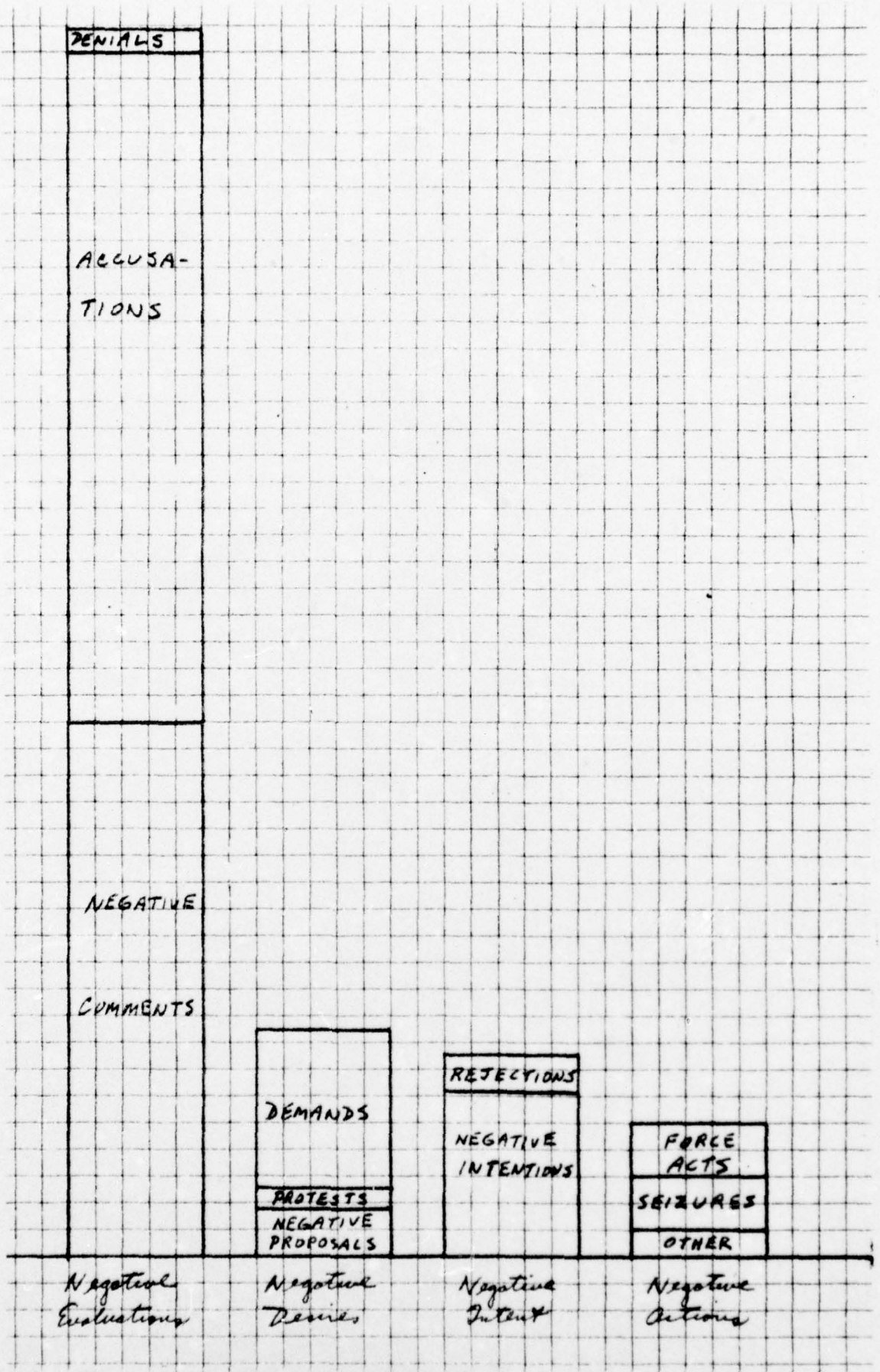


Figure 5.10: Types of Threat Actions in the Accute Threat of Human and Civil Rights

Portuguese coup reveals a steadily growing intensity which in fact continues up to this very moment. Figure 5.10 demonstrates that the issue of human and civil rights has all of the previously identified characteristics of an accute threat process. While the most threatening form of behavior, negative actions, comprises a smaller proportion of all behavior (7.5%) than in the case of wars of liberation, it is comprised of a variety of behavior including force and seize acts. Associated with these explicitly threatening behaviors is a very great quantity and variety of verbal threat statements. Our data show clearly that the issue of human and civil rights is not purely an internal matter in certain core states within the subsystem. Rather, it is an accute international threat involving many subsystem members.

Table 5.5 shows that the initiators and recipients of threat behavior concerning human and civil rights for the period prior to the Portuguese coup. A contrast is provided to the wars of liberation accute threat. In terms of the initiators of behavior they are more numerous and varied as regards human and civil rights than for guerrilla and counter-insurgency threats. In terms of the targets of action threats are more concentrated, with South Africa and Rhodesia being most threatened. South Africa was only marginally involved in the accute threats of wars of liberation, it was Rhodesia that was at the center of that threat process. It would appear that the history of the last ten years of Rhodesia may well represent the future ten years for South Africa.

Figure 5.11 illustrates the accute threat system prior to the coup in Portugal. Human and civil rights clearly represent a more generalized and therefore potentially more dangerous threat for the system than the other two threat processes we have examined. International organizations, represented by the United Nations and the O.A.U. are very involved participants. As regards human and civil rights in Southern Africa the O.A.U. represents a solid consensus of African opinion that only change will eliminate the threat. The United Nation's role, representing Third World interests, is also on the side of change. Indeed, it is fair to say that by 1973-74 the accute threat over human and civil rights in Southern Africa had become part of the global threat agenda.

Within the geographic region of Southern Africa, the participants in this accute threat represent a varied pattern. Threats involving guerrilla and counter-insurgency activity mainly involve the guerrilla forces of liberation

Table 5.5: Threat Interactions During the Pre-Portuguese Coup Period of the Accute Threat of Human and Civil Rights

Actors				Targets			
Rank		N	%	Rank		N	%
1.	O.A.U.	54	15.21	1.	South Africa	122	34.37
2.	Zambia	46	12.96	2.	Rhodesia	104	29.30
3.	U.N.O.	34	9.58	3.	Portugal	39	10.99
4.	Comm. on Namibia, U.N.	20	5.63	4.	Namibia	18	5.07
5.	Botswana	19	5.53	5.	United Kingdom	14	3.94
6.	United Kingdom	18	5.07	6.5	Mozambique	10	2.82
7.5	Malawi	16	4.51	6.5	Zambia	10	2.82
7.5	ZANU	16	4.51	8.	FRELIMO	5	1.41
9.5	Lesotho	14	3.94	9.	United Nations	4	1.13
9.5	Rhodesia	14	3.94		Others	29	8.17
11.	Kwa Zulu	13	3.36				
12.	FRELIMO	12	3.38				
13.	Zaire	11	3.10				
14.	Liberation Com., OAU	8	2.25				
15.5	Tanzania	7	1.97				
15.5	Transkei	7	1.97				
18.5	China	6	1.69				
18.5	Com. of 5 on Rhodesia	6	1.69				
18.5	Mozambique	6	1.69				
18.5	SWAPO	6	1.69				
21.	ZAPU	5	1.41				
22.	Portugal	4	1.13				
	Others	13	3.36				
TOTAL		355	100.00			355	100.00

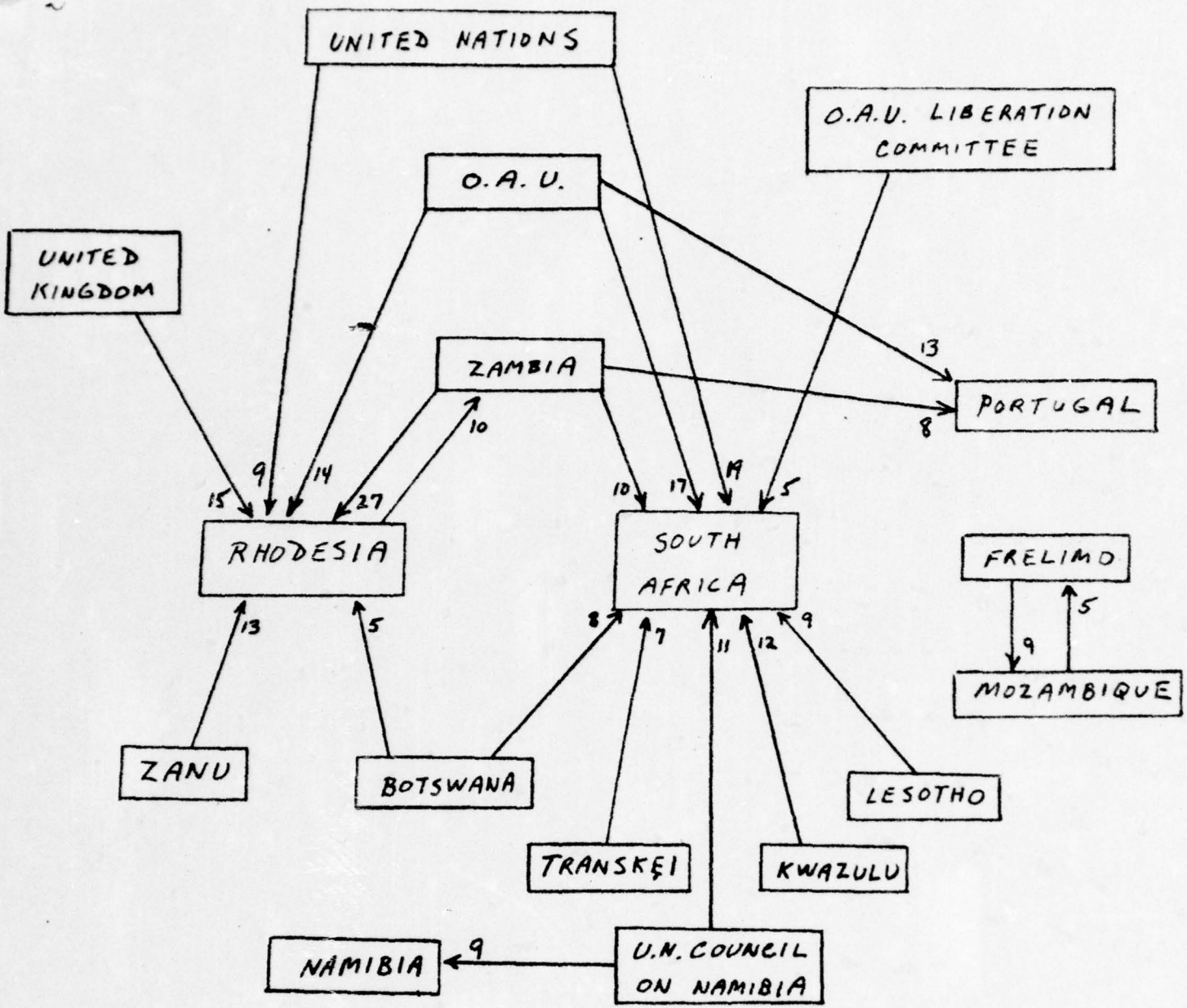


Figure 5.11: Pre-Portuguese Coup Human and Civil Rights Threat Subsystem

movements, the minority ruled territories, and the majority ruled states who offer sanctuary and other forms of assistance to the movements. Because of the social divisions in the region, every type of black led subsystem member-core states, peripheral states, liberation movements, and homelands within South Africa - were opposed to conditions in the white controlled territories. It is not surprising, then, that the intensification of the accute threats of civil and human rights was associated with the accute threat process of wars of liberation and that because of the intransigence of some subsystem members these related threat processes spilled over into the global system in 1975 with Soviet, Cuban, and American direct interventions.

The pattern of the accute threat represented by conflicts over human and civil rights in Southern Africa after the Portuguese coup d'etat is considerably different from that prior to the coup. There was a marked increase in the number of subsystem members involved in this threat and a corresponding increase in the targets of threat behavior. As Table 5.6 indicates, while South Africa and Rhodesia remained the source of the threat as indicated by the behavior directed towards them, a host of new actors, particularly all the Bantu Homelands, became active. The resulting system is shown in Figure 5.12.

We see that Portugal and its Southern African territories are no longer centers of this accute threat. The April, 1974, coup immediately created hopes for a "new deal" in Portuguese-speaking Africa, even if the initial Spinola regime was not fully committed to complete decolonization as a solution to the problem. The accute threat situation came to focus exclusively on the three remaining minority ruled core states - Rhodesia, Namibia, and South Africa. While the first two were the objects of threat behavior on this issue from liberation movements already engaged in guerrilla war, South Africa was challenged by a different set of actors - international organizations and Zambia as before and for the first time by all of the so-called Homelands.

This pattern presents interesting implications for the future evolution of the Southern African regional subsystem. First, if one compares Figure 5.12 to 5.11, one sees a simplification of the lines of cleavage and an increased focus on the three remaining minority subsystem members. This suggests to us that the achievement of majority rule in Zimbabwe and Namibia, supposedly the object of Dr. Kissinger's recent trip to Africa, will not lessen international pressure on South Africa as hoped for by Prime Minister Vorster. Our analysis suggests that the accute

TABLE 5.6: Threat Interactions During the Post Portuguese Camp Period of the Acute Threat of Human and Civil Rights

Actors				Targets			
Rank		N	%	Rank		N	%
.	Rhodesia	32	10.19	1.	South Africa	104	33.12
.	Zambia	30	9.55	2.	Rhodesia	67	21.34
.	ANC(Rhodesia)	25	7.96	3.	ZANU	22	7.01
.	O.A.U.	24	7.64	4.	Mozambique	18	5.73
.	ZANU	20	6.37	5.	Angola	16	5.10
.	Tanzania	13	4.14	6.	Namibia	14	4.46
.5	Lebowa	12	3.82	7.5	Portugal	9	2.87
.5	South Africa	12	3.82	7.5	France	9	2.87
.	U.N.O.	10	3.18	9.	SWAPO	8	2.55
1.5	Bophuthatswana	9	2.87	10.	ANC (Rhodesia)	7	2.23
1.5	FNLA	9	2.87	11.5	FNLA	5	1.59
.5	Kwazulu	9	2.87	11.5	ZAPU	5	1.59
.5	SWAPO	9	2.87	13.5	FRELIMO	4	1.27
7.5	Ciskei	7	2.23	13.5	MPLA	4	1.27
7.5	Gazankulu	7	2.23		Others	22	7.01
7.5	Malawi	7	2.23				
7.5	MPLA	7	2.23				
7.5	Namibia	7	2.23				
7.5	Transkei	7	2.23				
7.5	United Kingdom	7	2.23				
7.5	Vha Venda	7	2.23				
.	FRELIMO	6	1.91				
.	Lesotho	6	1.91				
.	Zaire	6	1.91				
6.5	Liberation Com.,OAU	5	1.59				
.5	Mozambique	5	1.59				
.5	Portugal	5	1.59				
.5	Soviet Union	5	1.59				
	others	6	1.91				
		314	100.00				
	TOTALS					314	100.00

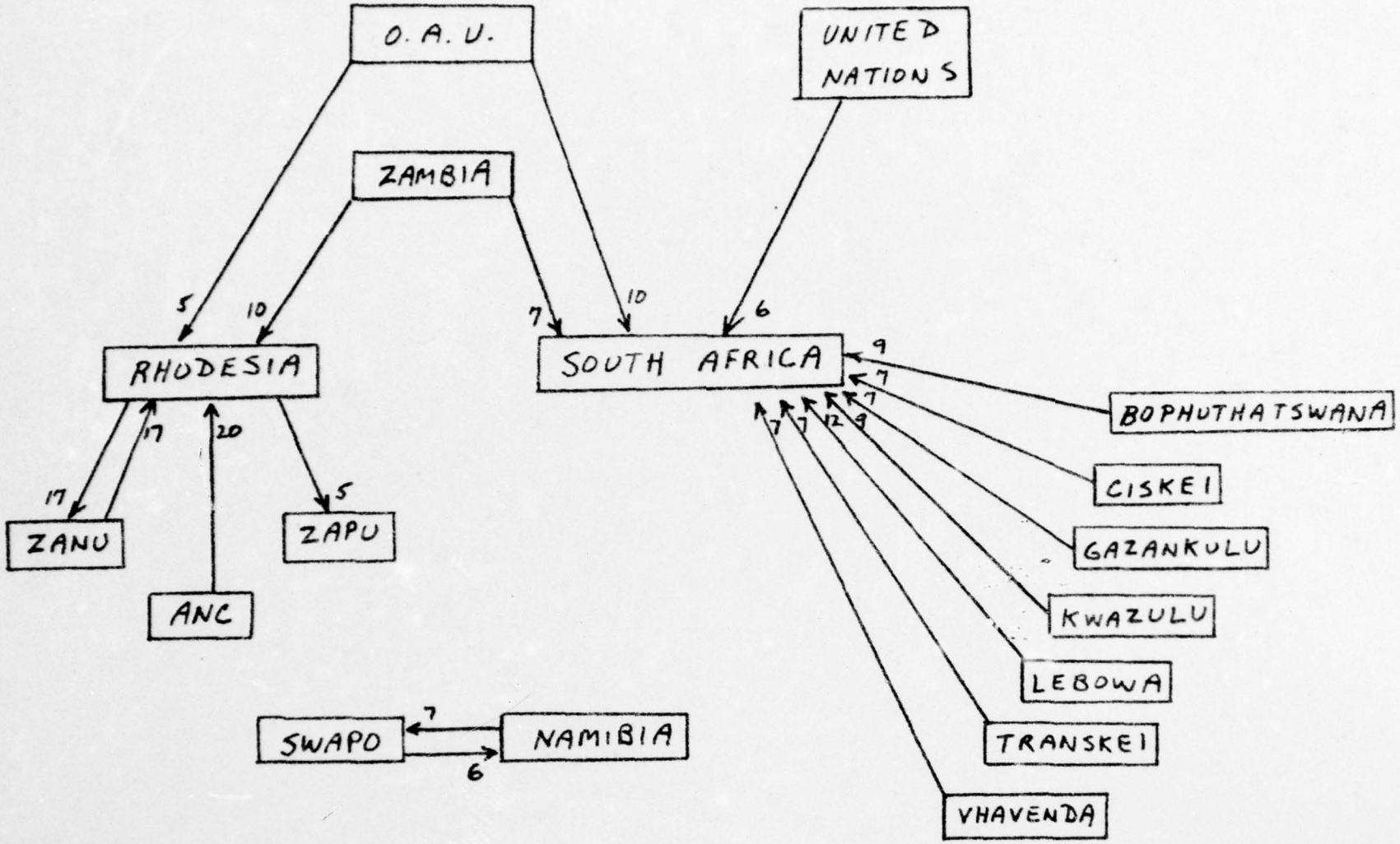


Figure 5.12: Post Portuguese Coup Human and Civil Rights Accute Threat System, May 1974 to April 1975

international threat situation concerning human and civil rights in Southern Africa will continue as long as the structures of Apartheid remain in place in South Africa. The past behavior of this regional subsystem as revealed in our study does not indicate that "time can be bought". Moreover, since the Afrikaans-speaking white South Africans are more rooted in Africa as well as more intransigent and capable than were the Portuguese or are the Rhodesians, the prolongation of this accute threat makes ever more likely that it will escalate into an international crisis of serious proportions.

The second striking feature of Figure 5.12 is the role of the Homelands within South Africa. The conventional wisdom on these proto-states and their leaders is that their inadequate size, their poverty, and their integration into the South African economy (primarily as labor suppliers) will make them passive, dependent clients of the Republic. Our data suggests that this is not a foregone or valid conclusion. Since it can be predicted with some degree of confidence that the white South African authorities will not award to the Homelands adequate territory and resources to make their populations and leaders status quo supporters and since it can also be predicted that the Nationalist regime will not grant full human and civil rights to the black African population remaining in South Africa, it may well be that the Homelands will serve as rallying points for continued pressures for change in South Africa itself. Therefore, the behavior of the Transkei after it becomes "independent" on October 26, 1976, should be watched most closely. The black African people of South Africa are too diverse to support the predictions that all Homelands will become new Lesothos.

What policy to adopt towards the Homelands is in many ways the most crucial policy question facing members of the Southern African subsystem at the moment. The South Africans appear determined to push ahead with their plans for the territorial fragmentation of the Republic while, of course, maintaining its highly profitable and integrated economic system. The United Nations and the independent black ruled states of Southern Africa have said that they will not recognize or deal with an independent Transkei. Intrusive powers such as the United States and Great Britain have not yet said what they will do. Can policies be devised by subsystem members in cooperation with willing Homeland leaders that can achieve the goal of promoting needed social change within the Republic of South Africa without so strengthening the Homelands that their eventual reintegration into a majority ruled South Africa is made

impossible?

The accute threat situation concerning human and civil rights will not leave the threat agenda in Southern Africa until Apartheid ceases to exist in South Africa itself. Indeed, it is far more likely to provoke serious great power confrontation and a genuine international crisis in the region. Yet, because of South Africa's military and economic dominance over other core states in the subsystem and the intransigence of white attitudes, subsystem members seeking to change the status quo have few and only weak levers to use on the Nationalist government. Consideration needs to be given to whether or not the Homelands, or at least some of them, may not represent the Achilles heel of South Africa.

5.4 Conclusions

The causal connection between the accute threat processes represented by the denial of human and civil rights to millions of people in Southern Africa, and the accute threat represented by wars of liberation suggests one way in which threat phenomena may differ in regional subsystems as compared to the global system. Because of geographical proximity and historical linkages in such areas as culture and commerce, threat processes are more interrelated and interdependent in regional subsystems than in the larger and more segmented global system. If this is true, then the analysis of threat processes within the regional subsystems may provide the most fruitful approach for the development of general methods and knowledge about how threats emerge, how they persist, and the conditions under which they either leave the regional threat agenda or lead to international crises. This is so because currently available analytical techniques presuppose patterning and connectedness in order to achieve generally useful findings.

An international crisis did erupt in 1975 concerning Angola and at present such a crisis may be said to exist over the future of Rhodesia. In both instances it was the involvement of previously non-participant intrusive powers that triggered the shift from an accute threat to a crisis. Threat processes in regional subsystems again differ from global system threats because of this feature. Relatively autonomous regional subsystems can be arenas of threat episodes and chronic and accute threat processes, but they are unlikely to become crisis theaters unless they lose their autonomy via intrusive power intervention.

While it may not be true of all regional subsystems, accute threats within South Africa have not had their origin in the pattern of relations among subsystem members. In every instance the origin of accute threats is to be found in the internal organization of one or more core states. In this regard, we suggest that the Southern African regional subsystem may not be fully represenative of other subsystems. It is true that the questions of who rules in Cyprus and Lebanon and how they rule have been issues that have activated accute threats in the Near East, as they were in Vietnam. But if we look at another area of instability, the Persian/Arab Gulf, the question is not who rules in Iran or Saudi Arabia but who will be the hegemonial power in the area. Thus, the character of the relations among subsystem members may be a source of accute threats as it was during the classical balance of power period in Europe.

This feature of threat phenomena is relevant to Southern Africa as well. Even if we suppose that all the core states of the region have achieved majority rule, it will still be the case that South Africa will dominate the region's economy and retain the capability to desire leadership in Southern Africa. Whether or not this capacity will be used in attempts to control the region's affairs or to reduce inequalities within South Africa itself represents a distant threat situation of considerable importance.

SECTION 6: DISCUSSION

The fundamental assumption behind this report has been that it is possible to develop prototypes of data, techniques of analysis, and concepts that might be of use to nationl level policy personnel in their necessary work of threat recognition and analysis. Thus, this report is different from a scholarly monograph and from a classified intelligence community study memorandum. In order to evaluate accurately the contribution attempted here these differences must be highlighted.

It is obvious that we have not attempted to write a scholarly monograph as evidenced by the absence of such paraphernalia as footnotes and extensive discussions of data reliability, validity, and measurement procedures. We have not done this because we do not feel that what we have reported represents "findings" that need to be supported via the usual scholarly apparatus. Rather, we have attempted to demonstrate that a regional subsystem is an operationally possible unit of analysis, that information about what is

happening in such subsystems can be gathered, rendered machine readable and stored in and retrieved from computers, and that the largely inductive examination of this information can suggest potentially useful concepts and techniques for future applied work. In brief, we have not had hypotheses to test or theory to build.

We think that scholars who specialize in the study of Southern Africa will not learn much in reading this report that they did not already know about the region. Likewise, specialists in quantitative international politics will not find here entirely new techniques of analysis or theoretical frameworks. Both groups (and there is little overlap between the two), however, may be intrigued by certain of our concepts such as threat episodes and the conceptualization of issue specific threat phenomena. Finally, the regional specialists may recognize applications of quantitative techniques they had heretofore ignored and the quantitatively oriented specialists may be encouraged to apply their skills to the study of regional subsystems, a topic they have generally ignored.

We cannot claim to have written a report that has immediate and direct intelligence relevance to current United States policy concerns in Southern Africa. This is so because by choice we have worked with unclassified public data that lags behind real time. Moreover, we have not attempted to set out policy options whose feasibility could be partially established via our analyses. As researchers at a University, we do not have nor do we feel we need access to classified information nor do we feel that it is appropriate to recommend policy without such "inside" knowledge.

For readers within government this report should be viewed from the perspective of "what if". That is to say, what would be the consequences if analysts thought more about threats before they become actual crises? What would be the consequence if "real" data as collected by Embassies and intelligence establishments were treated as was done in this report? What would be the consequence if some of the vastly greater resources of government were applied to the analysis and computer graphic display of these data? Finally, what would be the consequence if regional subsystems became the focii of analysis and bureaucratic organization rather than the continuing preoccupation with single country cases? Of course, we do not possess answers to these questions, but we feel that we will have accomplished our task if they seem to readers as worth asking.

NOTES: (Page 8)

* We include the abreviation and numerical code of each SASS actor for future reference.

** Included by Cantori and Spiegel as intrusive powers.

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PART III

INTERNATIONAL MILITARY COMMITMENT STUDY FINAL REPORT: A SUBTASK OF THE THREAT RECOGNITION AND ANALYSIS PROJECT

INTERNATIONAL MILITARY COMMITMENT STUDY FINAL REPORT: A SUBTASK OF THE THREAT RECOGNITION AND ANALYSIS PROJECT

INTRODUCTION

The main objective of the Threat Recognition and Analysis project has been to do basic research on the problem of developing a data-based and computer oriented system for worldwide threat identification and appraisal for defense early warning. To meet this objective four interdependent research tasks were initiated. The first task was concerned with the monitoring and analyzing of disturbances in the political event flows among nations. Previous research by members of the project team had shown that patterns of international behavior reflect international stress and tension and that indicators of certain types of international behavior can be developed to monitor for changes in systemic and dyadic threat propensities (McClelland, June 1975). The second, third, and fourth tasks were to break completely new ground. In these tasks procedures were to be examined and developed for monitoring worldwide threat conditions, national threat conditions, and the international networks through which threats are transferred among nations with new and experimental indicators (McClelland, September 1975). Considerable insight has now been gained on the multifaceted problem of threat analysis, and some preliminary findings on how threat identification and appraisal can be conducted for defense early warning can be stated. This paper presents some of the main findings from the fourth task which focused on the study of international military commitments as one type of network through which threats are spread among nations.

The international military commitment is not the only type of threat spreading network that needs to be examined, but it is an important one for defense early warning. Military commitments between nations almost always are created as responses to perceived threats, and while they may be maintained for a variety of reasons these relationships make vulnerable the associated nations to the national security dangers and troubles that each faces. Military commitments raise expectations of supportive obligations between allies in the contemporary international system, and as Secretary of State Kissinger has noted these expectations are not based simply on questions of assumed morality (Kissinger, April 21, 1975). Rather they are based on the actions and perceptions of those actions by national

decision-makers in an international system divided into independent, armed, unequal, and sometimes hostile units.

The monitoring of the status and changing status of international military commitments can provide defense analysts with useful information for early warning in several key ways. First, commitment monitoring can identify who stands with whom in the international system and locate where such alignments are shifting. Second, when coupled with threat identification, commitment monitoring can point out situations where existing commitment ties are likely to lead to conflict involvement or at least call for special decision-making situations. Awareness of such situations may warn that new or reinforced signals of commitment are needed to extend national influence into an area of special interest, or perhaps caution that this is a case where a particular commitment should be reduced or withdrawn. Third, commitment monitoring can warn of situations which Aron (1973) has called "dual commitments" where major nation adversaries may find themselves in direct confrontation because of the conflict engagements of their opposing pawn allies. And fourth, commitment monitoring and analysis may provide information on changing patterns of global military attention and interest that signal major transformations of the international system.

The watching of military commitment activity for defense analysis is not, of course, a new concern. The military commitment has been viewed traditionally as a key factor in balance-of-power politics and very often as an integral variable in the process of international system transformation and maintenence. Most contemporary strategic analysts consider cooperative deterrence and defense policies to be hinged upon effective images of military support and commitment, and policy makers have noted regularly the importance of commitment activities as both potential entanglements and essential components of national security. But even with the extensive amount of attention that the concept of commitment has received, the systematic and data-based monitoring of military commitments has not been practiced. In order to develop an operating procedure for commitment monitoring several conceptual and operational problems must be worked out. The intent of the commitment study was to examine some of these problems which ranged from the obviously difficult ones--such as establishing a simple and practical conceptual understanding of military commitment which could be operationally defined--to the seemingly less difficult ones--such as the selection of sources for data collection. At this point in the research, it has become very clear that the problems have not been

worked out completely, and that more research and study is needed on commitment definition, measurement, data collection, and analysis. But with this recognition also has come a conviction that military commitment activity can be watched and that such monitoring can give defense analysts considerable insight into system processes that directly affect national security. With this introduction some of the basic findings of the commitment study can be stated briefly. Following these statements the main working assumptions, operational procedures, and data analysis results are presented.

Finding One: An operational definition for international military commitment has been provided which is relevant to both the practical needs of defense early warning and commitment theory development. The definition has been used to guide the collection of data and to provide a descriptive and empirical measure for charting the military commitment activity of the United States, United Kingdom, Soviet Union, West Germany, France, Japan, and China toward 134 nations for each of the years 1968 through 1974.

Finding Two: The results of the commitment indicator analyses show that a composite multi-variable indicator can differentiate the relative degree of intensity of the commitment linkages between an actor and its target nations and provide a single distribution of commitment scores which range form the most comprehensive relations to the absence of a commitment. These distributions of commitment index scores have been calculated. They describe the status of the commitments of each actor to the 134 target nations in easy to read ranked listings for each of the seven years.

Finding Three: Analysis of these results indicate that during the period examined, the overall commitment patterns of the seven actors were very stable. No radical transformation in major nation military support activities took place between 1968 and 1974. The least amount of change in commitment patterns occurred in West German relations, and the most amount of change was recorded in French commitment activity.

Finding Four: While the overall commitment patterns of the actor nations were stable for the analysis period, there were dramatic shifts in a few commitment relationships. Changes in military defense arrangements, policy, economic and military support, foreign troop basing, and/or arms transfers were registered during the period. The indicator was sensitive enough to account for these changes and describe them as increases or decreases in commitment over

the seven year time period.

Finding Five: The international military commitment patterns of nations in alliance (e.g., the United States, United Kingdom, France and West Germany) tended to be positively associated, while the commitment patterns of "rival" nations (e.g., the United States--Soviet Union, China) tended to be unrelated or somewhat inversely related. This finding emphasizes the importance of understanding the problems of "dual commitments" as well as ally commitment linkages.

Finding Six: The indicator developed in the study was designed to be flexible enough to provide analysts different perspectives of international military commitment relationships. Accordingly the commitment data files can be accessed either by on-line or batch processing utilized in a variety of ways with the basic indicator methodology. The commitment variables which make up the composite indicator can be added to or deleted, conceptually or empirically derived weights can be used to modify the impact of each variable on the composite index, and simulated data can be used in place of the empirically collected data. The purpose of such modified uses of the original indicator is to give the analyst the ability to examine actual commitment relationships from a variety of perspectives and to simulate possible relationships for comparative purposes.

Finding Seven: The commitment indicator provides especially useful current information for nations with widespread and comprehensive military support activity such as the United States, United Kingdom, and Soviet Union. Examination of the data analysis results for these countries indicates that they have large numbers of military commitments spread throughout the international system. Japan and China on the other hand, had very few international military commitments. The United States, in fact, accounts for most of Japan's external military activity, and a very few countries account for almost all of China's foreign military support.

These findings are important in two ways. First, they suggest that Japan and China as well as other major actor international military commitments should be watched for changes which indicate major shifts from past policies. Such watching can help to answer the question of whether or not these nations are tending to extend their military support activity beyond their borders or local region or withdraw from their traditional or post-war lines of commitment. Second, other possible threat spreading networks need to be examined and indicators for them developed. The analysis conducted suggests that other underlying dimensions of

interaction need to be accounted for--especially if threat spreading networks are to be examined for non-major nations actors.

Finding Eight: The research on international military commitment is incomplete. The indicator described in this report and the variables and data used in the analysis need further testing and evaluation. There is an especially urgent need to continue this and other research on other possible threat spreading networks. Research is also needed to examine hypotheses which associate military commitments to other international processes.

MAJOR WORKING ASSUMPTIONS, DEFINITIONS, and DATA ANALYSIS PROCEDURES

Working Assumption One--Early Warning. An important assumption of the commitment study has been that national crises and conflicts which have resulted from involvement in foreign situations are not independent or unique events, and they are associated with certain observable antecedents. While it is not possible at this time to account for all of the intervening variables which give rise to a crisis or conflict for reliable prediction, some of the preconditions, events, and processes which can lead to crisis and conflict involvement are identifiable.

Historical experience has shown, for example, that international military commitments are often associated with foreign induced troubles and conflicts. The recent Korean border confrontation is a good demonstration of a situation which became a serious decision-making crisis for the United States and South Korea. While no one can predict accurately if or when another "Korean crisis" will occur for American decision-makers because of this relationship, the existence of the commitment can be considered a warning that a POTENTIAL crisis situation is "on the books" for the United States and preparation for such a crisis should receive active policy attention. If another Korean crisis is to be avoided or managed well, the warning should be heeded that events in the area whether taken by the United States, its ally, or its adversary--and even one as seemingly innocent as a tree trimming--could lead to a crisis that will be transmitted directly back to the United States.

The recognition and charting of the status and changing status of military commitment relationships for all nations and especially those of countries capable of regional or worldwide conflict involvement is understood here to be important for defense early warning. The appraisal of threat

spreading networks such as the military commitment should help to reduce the surprise factor of certain types of foreign born crises, extend the amount of time for crisis and conflict preparation, and improve the likelihood of early crisis and conflict management and avoidance.

Working Assumption Two--Descriptive Accounting and Charting. Descriptive empirical analysis which can reliably account for existing conditions and chart changes in these conditions over time are needed for both defense analysis and commitment theory development. A general theory of commitment which is either empirically tested or well developed conceptually is not available, and there is a need to provide useful conceptual and operational definitions which are at least descriptively powerful. The long range goal of commitment research should be cumulative theory development, and an assumption in this study has been that until good cognitive appraisals are available about international commitment patterns and processes neither theory development nor defense analysis of threats will produce very meaningful results.

Since there is not a highly tested and refined theory of international military commitment, considerable exploration of conceptual definitions and indicator constructs should be expected. The "best" indicator of international commitment can be determined only after alternative constructs have been defined and compared; and even then there may not be a single indicator of commitment but instead a set of indicators which are to be applied for different countries, time periods and international system structures. The work described below is not offered as a final statement on the problem of international military commitment measurement, but rather as a major step in the direction of providing useful descriptive measures for theory development and defense early warning.

An attempt has been made in the commitment study to examine the literature on commitment phenomena in order to develop a basic or preliminary descriptive indicator of international military commitment situations. One criterion for this indicator was that it should be flexible enough so that it could be modified to examine commitment linkages from more than one perspective since the commitment literature suggests strongly that there is no "best" approach to commitment measurement. A second criterion was that each of the various manifestations of commitment that would be examined in the study must be operationally defined and data-based. This should provide for the development of systematic indicators that can be corrected and updated on

the basis of empirical information. A third criterion was that the data collected should be for the major international actors, as many target nations as possible--since there are so few nation-states there was no need to "sample"--and for several current time periods. Current time period analyses were assumed to be important because the problem orientation of the study was to improve defense early warning in the present international system and example demonstration analyses would be more meaningful with contemporary data.

Working Assumption Three--Commitment Fulfillment. This study does not attempt to seek out answers about commitment guarantees or the fulfillment of particular commitments. There is no real evidence in the literature or history of past commitments which explains generally why some commitments are fulfilled and others not, although some relevant findings have been used in this study to help define commitment indicators. Commitments are apparently fulfilled for a variety of reasons which range from moral obligations and international power politics considerations to the psychological state of national decision-makers, bureaucratic politics, and organizational procedures. Whatever the reason(s) for any particular commitment fulfillment, there do appear to be certain conditions in the contemporary international system that create images of commitment relationships and according to the statements of decision-makers these images affect policy decisions. The intent of this research was to develop an indicator which measures the conditions that commonly represent military commitment, and not to seek to explain why some commitments are fulfilled and others not. This is, however, an important question that needs research.

A further consideration is that it is fully recognized here that the images of commitment relationships that decision-makers hold both within and across nations are not very likely to be exactly the same. The international relations literature is full of examples of "misperceptions", "failures to interpret commitment signals correctly," and so forth, and to assume that any single empirical indicator could account for all of these images of commitment situations at one time would be simplistic to say the least. Thus the basic indicator provided in this research is ONE view or perspective of international military commitment which has a particular operational definition. As noted, the basic indicator can be modified to represent other perspectives of international commitment and it is expected that analysts would make such modifications if they fully utilize the tool. It is also important to note

that further analysis of commitment images can be used to improve upon the assumptions and procedures used for any commitment indicator.

International Military Commitment--Conceptual Definition. An international military commitment as understood here is a particular type of international relationship which occurs among nations. The essential feature of a military commitment which distinguishes it from other types of international relations is that it implies that the decision-makers of an actor nation have an explicit interest in the security of another nation, and that this interest could lead to the use of force in support of maintaining the target nation's security. How this implication of support is created is a complex and not yet well understood process, and not the main concern of this report. That international military commitments exist can be accepted, nevertheless, as evidenced in the frequent and common statements of decision-makers and analysts. According to the generally accepted view, international military commitments are based on existing relationships between countries which are created and maintained by particular physical and verbal actions between countries which are observable and variable.

This definition of international military commitment suggests that the maintenance of specific subsystem structures is a very important national interest for some countries, and that evidence of such interest comes from specific types of national behavior. Which behavior patterns indicate military commitments, and how much confidence there is in such indicators is a research problem which only recently has received much attention. Social science analysis does provide, however, considerable insight into questions about the measurement of commitment behavior, including information on military commitment characteristics. Four of the most important of these are briefly reviewed below (Martin, January 1975).

In the sociological as well as military deterrence literature consistent behavioral activity commonly has been assumed to characterize an extant commitment. The periodic reissuance of similarly worded statements by American decision-makers in support of the maintenance of the state of Israel is an example of an assumed commitment based on consistent support behavior, and there are other more complex examples. The sociologist Howard Becker (1960) has noted, however, the tautological fallacy of simply defining commitment as consistent behavior. Becker, in developing a partial theory of commitment, states that to identify a

commitment specific factors "independent of the behavior commitment will serve to explain"--which he calls side-bets--must be identified. When a committed party, involved directly in an action pursues an interest that originally was extraneous to the action, then that party has engaged in a side-bet. A side-bet is then an interest that is viewed as a "stake" to remain consistent.

A side-bet can be action consciously taken to increase the reliability of a threat such as the placing of troops in a foreign area to enhance the credibility of a deterrent policy (Schelling, 1966). A side-bet also may exist more as a condition of membership in a particular system or organization than as a clearly conceived rational action. Situations of commitment are affected, for example, by "generalized cultural expectations", to use Becker's phraseology. Foreign policy and strategic analysts are familiar with such expectations (Harkabi, 1966:20) which are often described in terms of diplomatic obligation; national honor, face, and prestige; and credibility. An especially visible demonstration of how these expectations operate was evident recently in the historical events which occurred during the American withdrawal from Vietnam when President Ford (4/4/75), and Secretary of State Kissinger (4/21/75), among others felt it necessary to publicly warn that the U.S. withdrawal from Vietnam should not be interpreted as a signal of inconsistency in American support policy and that other completely independent commitments were as important to the U.S. after withdrawal as before. National leaders in Japan (4/4/75), the Philippines (4/17/75), and Thailand (5/3/75)--in spite of the warnings and reassurances--registered clearly their perceived expectations and fears about inconsistencies and degradations in American support policy.

Major material investments also can act as side-bets according to Becker. Once an actor has made a major investment in a target, it becomes costly for the actor to lose the investment. The situation of national economic interdependence may be the classic international example but there are others. To some, the latter years of the U.S. involvement in Vietnam were based upon certain expectations held by observers about the amount of American material investment in Vietnam. Several South Vietnamese Senators who once demanded the continuance of U.S. active participation in the war, for example, stated that if the U.S. pulled out of South Vietnam after eight years of direct involvement the "ultimate sacrifice" of 45,000 American dead would be a "useless gesture" (8/12/73).

Consistent supportive behavior and independent linkages to valuable stakes are two major characteristics of a commitment. A third characteristic is the public nature of a commitment. In order to accurately identify a commitment, there must be explicit evidence of consistent support behavior which can be linked to independent and valuable stakes. Without such evidence the analysis of commitment relationships becomes speculative and guesswork at best. When national decision-makers publicly commit their nations two factors can be assumed to contribute to their interest in maintaining consistency in their future behavior. One factor, which was discussed above, is the concern over "face-saving" and maintaining national prestige, reliability, and credibility. The other condition that very likely affects future decisions is post-decision dissonance (Allen, 1965). Both of these conditions appear to be expressed in Kissinger's April 21, 1975 statement on American commitments.

> Let us understand, too, the nature of our commitments. We have an obligation of steadfastness simply by virtue of our position as a great power upon which many others depend. Thus our actions and policies over time embody their own commitments whether or not they are enshrined in legal documents. Indeed our actions and the perception of them by other countries may represent our most important commitments.
>
> One lesson we must surely learn from Vietnam is that new commitments of our nation's honor and prestige must be carefully weighed. But after our recent experiences we have a special obligation to make certain that commitments we have made will be rigorously kept--and that this is understood by all concerned. Let no ally doubt our steadfastness. Let no nation ever believe again that it can tear up with impunity a solemn agreement with the United States.

The fourth major commitment characteristic is that military commitments are manifested in a variety of ways (Symington, 1970; Aron, 1973; Paul, 1973). Formal defense treaties, policy support statements and actions, the stationing of troops in foreign countries, the transfer of arms, economic and military aid programs and other international transactions which are reported regularly and openly indicate commitment behavior. A multiple indicator can provide the most information about international military commitment behavior.

International Military Commitment--Operational Definition. The international relations literature suggests that several different international relationships which may be completely independent of each other are indicators of military commitment, but that no one of these alone is generally descriptive of military commitment activity. The complex nature of the commitment phenomenon requires, therefore, that a multiple indicator be used for its measurement. Since there is no theory for explaining how any one indicator or a set of indicators can describe military commitments, major problems for commitment measurement are the selection of variables to indicate aspects of commitment activity and a procedure for combining these variables into a single comprehensive commitment indicator.

Six variables were selected for this study as widely recognized and generally representative indicators of international military commitment (Martin, July 1975). Each variable was identified explicitly in the international relations literature as an indicator of military commitment, and each one manifested the commitment characteristics listed above. Research is continuing in this project on the identification and evaluation of other possible military commitment variables, but in the analyses described below the variables were limited to the following six--Formal Defense Agreements, Policy Support Actions, Economic and Military Support Actions, Foreign Troop Deployment, Arms Transfers, and Total Trade. The operational definitions for each of these are given below. (See Appendix for a list of the variables and their data sources collected for the study. Efforts are now being made to increase the number of variables in the data set).

1. Defense Agreements. Formal defense treaties are fundamental features of international politics (Liska, 1962:3 and Russett, 1968:284) that are generally assumed to be associated with 1) the existence of a perceived common threat, 2) acceptance of the possibility of military engagement and a risk of war, and 3) mutual interest in either the preservation or change in the status quo (Friedman, 1970:5). A publicaly agreed upon security treaty is a particularly binding type of international relationship which raises a general expectation among decision-makers of shared international interests and military cooperation among the signatories (Modelski, 1963:773; Osgood, 1968:20; and Wolfers, 1968:268).

In this study, Defense Agreements are formally agreed upon bilateral and multilateral defense treaties in force

during the year of the data set where the actor or committing nation is obligated in writing to consider under certain conditions of military threat intervention with military force on behalf of the target nation. Defense Agreements were coded as dichotomous information to indicate the presence or absence of a security treaty.

2. Policy Support Actions (2). Unilateral statements of policy support and cooperative military exercises are important indicators of commitment. Statements made in support of another nation's security are actions which demonstrate in public similar national security interests and register intentions of support. Policy support actions which offer or clearly imply military support are involvements which tend to bind diplomatic prestige and national honor (Schelling, 1966). Aron suggests that policy support behavior along with treaties, foreign troop deployment and other similar relationships create for decision-makers stakes for the commiting nation that are difficult to break. According to Aron "the more solemn the promise, the more humiliating capitulation would be" (1973:199). Senator Symington also has noted that policy support actions especially in the form of joint military planning and exercises, "represent to host governments more valid assurances of U.S. commitment than any treaty or agreement" (1970, p. 20).

Policy Support Actions are considered here to be either publicaly made declarations of support for maintaining the national security and defense of another nation or active participation in joint military exercises. Data have been collected from public news services on the frequency of such actions from the major commiting nation to each target nation for the year of the data set and the previous two years. Three years of data are aggregated together to obtain an effective coverage for the occurrence of such events. Analysis of policy support behavior has shown that decision-makers do not often take such actions nor do such acts occur in any regular time pattern. An indicator of such commitment behavior must span, therefore, a relatively long period of time.

3. Aid Actions (2). Military and economic aid and assistance are transferred between nations for a variety of reasons. These include the building up of indigenous national forces against internal and external threats, the gaining of international political support from the recipient, the affecting of internal policies within the target nation, the possible denial of access to other foreign nations, the establishing of conditions for improved sales and

balance-of-payments, and other reasons (Wittkopf, 1972); but whatever benefits may accrue to the recipient or donor of foreign aid, aid programs create for the donor-target relationship an image of mutual interest. The authors of GLOBAL DEFENSE have noted, for example, that "foreign aid, whether economic or military, has been regarded since the early post-war period as a bulwark to allied and friendly countries against potential enemies. As such, it has been an important element in the total picture of U.S. global commitments" (1969:39). Another analyst has supported this view explaining that "common interests- in bases, military strength, aid programs or intelligence information--are the ties that bind" (Keohane, 1971:165).

For this study, Military and Economic Support Actions are defined as publicly made and reported intentions, promises, or agreements to provide economic or military aid. Like Policy Support Statements, the frequency of such statements as reported in open sources over a three year period has been collected.

4) Arms Transfers. Arms are transferred from one nation to another for many reasons (SIPRI, 1971:11-14; Kemp, 1970:12; and U.S. Senate Staff Sudy, 1967). The main purpose of arms transfers appears to be to improve the military capability of the recipient against commonly received threats, although direct policy influence and improved balance-of-payments goals also affect international arms transfer decision. Schlesinger, when Secretary of Defense, once explained that for the United States, each American arms transfer decision "is carefully reviewed in terms of its potential contribution to our domestic foreign policy and mutual security interests," and that the fundamental objective of American arms transfers is to strengthen the "shared security interests of our friends and allies" (1975, iv-7). Arms tranfers, like the variables discussed above, are controlled by governmental decision and can be considered generally as extensions of one nation's defense posture to another (GLOBAL DEFENSE: 43 and Frank, 1969). When arms are transferred between nations, military policies and diplomatic reputations become associated, defense successes and failures are shared, and images of interest and obligation are created (SIPRI, 1970:13-14).

Arms transfers are defined as the number of different types of major weapons systems ordered during the years of the data set and the preceding year as recorded in the annual editions of the MILITARY BALANCE and the SIPRI YEARBOOK OF WORLD ARMAMENTS AND DISARMAMENTS.

5. Foreign Troop Deployment. The maintenance of troops in foreign countries may be for at least four basic reasons. The first is for local commitment compliance. The second is for the enhancement of local military capabilities, and the third is for the enhancement of the major nation's military strength (Osgood, 1968:92). The fourth is for demonstrating a willingness or the necessity of a major nation to defend an ally (Schelling, 1966:47). Whatever the particular reason or reasons for deploying troops overseas, their presence implies a very special interest relationship(SIPRI, 1972:243) that suggests an obligation to defend those nations where the troops are deployed. General Wheeler has summarized the beliefs of many national decision-makers and analysts by noting that "by the presence of U.S. forces in Spain, the U.S. gives Spain a far more visible and credible security guarantee than any written document (GLOBAL DEFENSE, 1969:22).

For this variable, the number of deployed troops of the actor nation in target nations as reported in open sources was collected.

6. Trade. Trade unlike the other variables is not directly a military support activity. International trade is rather an indicator of the gross amount of economic interaction and interdependence among countries. In the highly interdependent contemporary international system, economic interactions affect directly and importantly, however, all foreign policy interactions. The assumption here is that international economic relationships are closely related to most international affairs-- including military support (Chadwick, 1969; and Russett, 1963)--and that trade data represent well the overall direction and intensity of international economic relationships. Russett has found, for example, that the credibility of a military commitment apparently can be strengthened by economic dependence. Russett explains, "if other factors are equal, an attacker will regard a military response by the defender as more probable the greater the number of military, political, and economic ties between pawn and defender" (Russett:107). He noted further that from his research findings he could conclude that "a nation might even deliberately increase its economic dependence upon supplies from a certain area, the better to enhance the credibility of a promise to defend it" (Russett:98).

For this study the total amount of trade (exports and imports) between the actor and target nations was collected to increase the sensitivity of the commitment indicator to international dependence and investment.

The six variables are then the components of the international military commitment index. Tests have been conducted to determine the empirical relationships among these variables with the data sets collected for each of the actors, and conceptual arguments about how each variable indicates military commitment have been reviewed to determine if there are strong and clear conceptual or empirical findings that show that the variables should be combined in special ways. So far, no clear evidence has been found that points in favor of any special treatment of the variables in index construction, and--as discussed below--a decision was made in the initial runs of the analysis to consider that each variable should be assumed to contribute equally in the measurement of a commitment relationship and that the greater the number of these six variables present in a relationship, the stronger the relationship. The results of the data runs based on this assumption are given below. More study of the problem of indicator construction, is needed, of course, including the examination of other possible commitment variables as well as more complex techniques of multivariate indicator construction.

The method for index construction used in this study is based upon summed standard (Z) scores for the six variables listed. The approach is neither new (Cutright, 1973) nor without some problems (Marquette, 1972), and has been accepted so far as a good basic measurement technique for the problem at hand. The procedure is to first standardize each variable which transforms linearly the data. The mean (zero) and variance scores for the distribution of cases for each variable is similar, and each variable, in effect, is weighted equally (Levine, 1973). These standardized scores are then summed for the six variables for each actor-target dyad (case) and divided by the number of variables (six) to provide an average military commitment index score for each dyad. These scores describe the degree of the commitment relative between the actor and each target nation for each of the seven years of data.

No weighting factor other than the assumption that each variable has an equal impact on the measurement of a military commitment has been made. This decision is based in part on the lack of evidence that any one of the variables is a better indicator of international military commitment. Weights for the variables derived from factor or regression analysis could, however, be used depending upon the assumptions that the analyst is willing to make. Conceptually derived weights based on an assumption such as that a defense treaty is more important than the other

variables making up the index might also be used. The testing of such modified indicators is planned as well as experiments using simulated data and constructs. Computer software to permit such optional testing from an interactive terminal mode is about ready to be implimented.

FINDINGS

The analysis of the data for all of the actors has provided a number of interesting general as well as specific country findings. Some of these are presented below. In Tables four through fifty-two the commitment scores for the relationships between each actor and target for each of the seven years is given. These results are discussed under headings for each actor nation. In Tables one through three more general data analysis results are given.

Table one provides the results of a test of commitment consistency for each actor between 1968 and 1974. The results suggest that the international military commitment patterns of each actor nation did not vary greatly between 1968 and 1974. This reflects a situation where nations with high or low commitment relations in 1968 tended to maintain those relations at about the same relative level in 1974. This finding of commitment consistency in the relative positions of the actor-target dyads tends to support the conclusion of some other analysts that international commitment relationships generally do not change radically. One possible inference from this finding which Russett has reached is that "alliances and alignments of various sorts...are rooted in longterm influences and in environmental factors over which politics does have some control, but only over the passage of substantial periods of time" (Russett, 1972:115), and that recognition of this condition can permit analysts to view long term international system trends from macroscopic perspectives. Such perspectives, according to Russett, may have "crucial policy implications." By reducing decision-maker alarm at coups and changes in governments and making them aware of the overall "gross stabilities" of international politics, tendencies toward intervention may be reduced.

The consistency of commitment relationships were not, however, exactly the same for all of the actors. West German behavior patterns were especially consistent while French behavior showed the least consistency, indicating that less change occurred in German foreign military support policy during the period than in French policy. One possible reason

for the variation in French behavior was that Pompidou faced a somewhat different environment for French foreign policy than did de Gaulle. One French policy analyst has noted, for example, that during Pompidou's Presidency "the security, economic, and diplomatic alignments inherited from the de Gaulle era were significatly altered..." because of different foreign policy interests and less taxing foreign policy problems (Kolodziej, 1974:582-598).

TABLE I

CORRELATION RESULTS FOR COMMITMENT STABILITY: 1968, 1974

N=133

USA	r= .88	JAP	r= .86
UNK	r= .85	CHN	r= .84
GMW	r= .93	USR	r= .83
FRN	r= .79		

While this finding tells little about specific actor-target relations, it is an important finding for early warning. It suggests that analysts should watch carefully the movement of specific international military support activities because any changes in such relations identify *deviations from usual* or expected trends in the international system. Changes in military support activity can of course, imply a variety of intentions, but most important of all they may signal new international influence opportunities and vulnerabilities that should be considered domestically whether or not they are to be acted upon internationally. The finding also suggests that the usual expectation should be that current patterns of commitment activity will continue, thus providing useful information for policy implementation, short to mid-term contengency planning, and future estimating.

Another general finding is that the commitment patterns of allied nations tend to be positively correlated while the commitment of nations with a post World War II history of conflict and antagonism tend to be uncorrelated or somewhat negatively correlated. Table 2 shows the results of the intercorrelations of the index scores among the major

nations for 1974 data. In this case, the dyadic relations between the actors have been removed from the data set so that only the relations between each actor and 127 targets are accounted for. This should reduce any extreme effects that actor-ally or adversary relations might have on the results.

The table shows that the Atlantic Alliance nations tend to support militarily the same nations. The intercorrelations for these actors range from a low of r= .40 to a high of r= .67. Japan has somewhat similar ties to those of the United States, United Kingdom, and China which probably reflects the Asian orientation of each of these actors. The Soviet Union's commitments are inversely related with United States and United Kingdom commitments, although the relationships are not especially strong. The Soviet-Chinese correlation is positive, and the United States-Chinese correlation is r= -.03.

These results suggest that many foreign troubles will very likely affect more than one of the major nations. Analysts should note that foreign national conflict and dangers which affect one of the major members of the Atlantic Alliance are also likely to affect others in a similar way. The same conclusion can be reached for the United States and Japan and, to a lesser degree, the Soviet Union and China. The inverse relationship between the United States and the Soviet Union--although not very strong suggests the possibility of "dual commitments" where the United States and the Soviet Union--or some other adversaries--may be allied to opposing and potentially conflicting pawns. More study including case analyses of the individual commitment ties between countries is needed to determine the degree to which such relationships exist and are important policy considerations. The notation of "dual commitments" can be useful for early warning by indicating prior to the outbreak of troubles, the locations of most likely threat spreading networks.

TABLE 2

MAJOR NATION MILITARY COMMITMENT INTERCORRELATIONS

1974 N = 127 (Actors not included as cases)

	USA	UNK	GMW	JAP	FRN	CHN	USR
USA							
UNK	.48						
GMW	.45	.55					
JAP	.41	.20	-.02				
FRN	.40	.41	.67	.04			
CHN	-.03	.14	.06	.18	-.07		
USR	-.17	-.11	-.03	.05	-.03	.20	

Analysis of the data have also shown that some of the component variables of the commitment index are better "predictors" of the commitment scores than others. As shown in Table Three the variable-- Policy Support Actions--was the most consistent "best predictor" of the overall commitment scores and Arms Transfers was the least consistent. This suggests that a considerable amount of information about military commitment linkages can be obtained from watching only Policy Support Statements. Furthermore since the data for this variable--as well as some of the other variables in the index--are especially easy to collect on a daily basis, the commitment indicator can be updated for reliable monitoring on a current rather than annual basis.

TABLE 3

CORRELATION BETWEEN COMPOSITE INDICATOR AND COMPONENTS, 1974

	TREATY	ARMS	POLICIES	TROOPS	TRADE	AIDS
USA	.65	.62	.75	.56	.61	.48
UNK	.74	.44	.75	.46	.77	.32
CHINA	.38	.45	.72	.31	.40	.66
GMW	.86	.59	.92	--	.80	.51
USR	.63	.50	.76	.59	.67	.65
JAP	.89	.27	.90	--	.88	.55
FRN	.59	.42	.72	.65	.78	.42

While these general findings are useful for describing some basic features of international military commitments, the results of the country-by-country commitment rankings for each actor over the seven year period are most important for defense early warning analysis. The charting of the status and changing status of specific commitment relationships can provide insight into who is commited to whom and the tendency of such relationships to be maintained or transformed over time. While the projection of commitment rank positions into the future is not the same as prediction, it can be useful for warning, planning, and future estimating.

In Tables four through 52 the international commitment rankings for United States, United Kingdom, France, West Germany, Japan, Soviet Union, and China to 134 target nations are provided. Several observations about these data results can be stated, but first some explanation of the tables and their contents is needed. The scores can be though of as a continuum of ranked commitment values with the zero location signifying the mean average amount of commitment from the actor nation to all of the target nations for the particular year of the data set. The more positive a score, the stronger the commitment relationship. Negative scores merely signify a position below the mean

average of all of the scores, and the more negative a score the weaker the relationship.

Each table describes, therefore, the distribution of actor-target commitment scores--in standardized units-- for each of the seven years. The scores are not probability statements or predictions of the likelihood that a nation will actually come to the military defense of a target nation in a period of high threat, crisis, or war, although some analysts do consider images of commitment to be predictions of future behavior (Schelling, 1977:53). Tests of the hypothesis that strong military commitment relationships are associated with actual military support in crises and war are needed, however, if such statements are to be empirically verified. The scores do show, nevertheless, the relative strength of the dyadic commitment linkages for the actors and targets over a seven year period. Projections of these data into the future with regression or other trend analyses have not been conducted for lack of enough independent data points. With the collection of a longer time span of data such projections can be made. A brief review of some of the most interesting descriptions in the tables for each of the actors is given below.

UNITED STATES. As already noted, the overall military commitment patterns of the actor nations including the United States were very similar in 1968 to the patterns in 1974. As shown in Tables four through ten, there were some adjustments in the rank positions of target nations over the years, but no major system transformation occurred in American commitment relationships. The tables also show a distinct range of American commitments. At the top of the list of index scores for each year is a group of nations that received a large amount of American military support. At the other end is a group of nations which had either very little or no military support(as defined in the study) from the United States. For almost every year all NATO, SEATO, ANZUS, and Rio Pact members as well as nations with which the United States had bi-lateral defense agreements ranked above the mean aveage. Israel--a non-treaty nation--ranked consistently near the top of American commitment relationships. The nations at the end of the list were mostly African and communist nations.

The index was sensitive to changes in American commitment relationships. South Vietnam, for example, ranked at the top of United States military commitments for the years 1968 through 1972, but in 1973 it was replaced by West Germany, and in 1974 by Canada, Israel, and Japan as well as

TABLE 4

Index of United States International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (1), Aid (1), Arms Transfers, Foreign Based Troops, and Trade

South Vietnam	3.095	Trinidad-Tobago	.028	Austria	-.312	Sierra Leone	-.392
Canada	2.288	Panama	.024	Tunisia	-.312	Bulgaria	-.393
West Germany	2.255	New Zealand	.022	Barbados	-.315	Cyprus	-.393
Brazil	1.469	Venezuela	.022	Laos	-.316	Equitorial Guinea	-.393
Israel	1.469	Ecuador	.019	Senegal	-.316	Malawi	-.393
Great Britain	1.428	Nicaragua	.012	Cambodia	-.317	Malta	-.393
South Korea	1.089	Bolivia	.009	South Africa	-.324	Mauritania	-.393
India	1.048	Uruguay	.007	Jamaica	-.327	Mauritius	-.393
Netherlands	.896			Ethiopia	-.340	Rhodesia	-.393
Iran	.861	Indonesia	-.016	Cuba	-.342	Syria	-.393
Japan	.861	Costa Rica	-.021	Soviet Union	-.344	Togo	-.393
Italy	.808	Guatemala	-.021	Liberia	-.346		
Turkey	.778	Honduras	-.021	Afghanistan	-.353	Albania	-.394
Norway	.767	Haiti	-.032	Guinea	-.354	Botswana	-.394
Pakistan	.765	Paraguay	-.034	Sudan	-.354	Cameroun	-.394
Thailand	.757	Spain	-.068	Dahomey	-.355	Chad	-.394
Belgium	.719	Burma	-.088	Guyana	-.355	China	-.394
Luxemburg	.674	Malaysia	-.116	Mongolia	-.355	Congo	-.394
France	.650	Sweden	-.122	Nepal	-.355	Gambia	-.394
Greece	.587	Yugoslavia	-.133	Yemen	-.355	Lesotho	-.394
Portugal	.581	Saudia Arabia	-.141	Ireland	-.374	Malagasy	-.394
Philippines	.564	Switzerland	-.141	Finland	-.378	Maldive	-.394
Iceland	.561	Libya	-.173	Kuwait	-.381	Mali	-.394
Argentina	.543	Morocco	-.188	Ivory Coast	-.385	Muscat and Oman	-.394
Denmark	.534	Ghana	-.189	Uganda	-.388	Niger	-.394
Jordan	.478	Sri Lanka	-.196	Czechoslovakia	-.390	North Korea	-.394
Columbia	.476	Somalia	-.203	East Germany	-.390	North Vietnam	-.394
China, Rep. of	.436	Zaire	-.211	Kenya	-.390	Rwanda	-.394
Mexico	.303	Singapore	-.229	Rumania	-.391	South Yemen	-.394
El Salvador	.202	Nigeria	-.270	Burundi	-.392	Swaziland	-.394
Australia	.155	Algeria	-.299	Central African Rep.	-.392	Tanzania	-.394
Chile	.128	Poland	-.299	Gabon	-.392	Upper Volta	-.394
Dominican Rep.	.095	Lebanon	-.308	Hungary	-.392		
Peru	.054	Egypt	-.309	Iraq	-.392		
		Zambia	-.311				

TABLE 5

Index of United States International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

South Vietnam	3.393	Panama	.114	South Africa	-.347	Central African Rep.	-.411
Canada	2.366	Dominican Rep.	.079	Liberia	-.348	Cyprus	-.411
West Germany	2.250	Trinidad-Tobago	.079	Algeria	-.352	Hungary	-.411
Israel	1.848	New Zealand	.073	Guyana	-.353	Mauritania	-.411
United Kingdom	1.385	Ecuador	.069	Tunisia	-.353	Mauritius	-.411
Brazil	1.320	Honduras	.068	Zambia	-.355	Senegal	-.411
South Korea	1.186	Bolivia	.061	Afghanistan	-.356	Sudan	-.411
Turkey	1.173	Uruguay	.058	Guinea	-.356	Syria	-.411
Jordan	1.029	Indonesia	.046	Cambodia	-.357	Albania	-.412
Japan	.945	Costa Rica	.014	Dahomey	-.357	Botswana	-.412
China, Rep. of	.894	Guatemala	.013	Somalia	-.357	Chad	-.412
Norway	.879	Nicaragua	.009	Austria	-.363	China, Peoples Rep.	-.412
Italy	.826	Haiti	.004	Laos	-.378	Congo	-.412
Thailand	.819	Paraguay	.002	Malaysia	-.381	Equitorial Guinea	-.412
Netherlands	.803			Ireland	-.391	Gambia	-.412
France	.703	Spain	-.001	Finland	-.395	Lesotho	-.412
Greece	.668	Libya	-.025	Cuba	-.399	Malawi	-.412
Argentina	.660	Burma	-.110	Egypt	-.403	Maldive	-.412
India	.647	Yugoslavia	-.130	Kuwait	-.403	Mali	-.412
Pakistan	.616	Saudi Arabia	-.135	South Yemen	-.405	Malta	-.412
Belgium	.608	Switzerland	-.170	Ivory Coast	-.406	Mongolia	-.412
Philippines	.553	Morocco	-.181	East Germany	-.408	Muscat and Oman	-.412
Mexico	.528	Ghana	-.182	Rumania	-.408	Nepal	-.412
Portugal	.502	Zaire	-.228	Uganda	-.408	Niger	-.412
Denmark	.500	Nigeria	-.235	Cameroun	-.409	North Korea	-.412
Columbia	.497	Poland	-.235	Czechoslovakia	-.409	North Vietnam	-.412
Iceland	.473	Singapore	-.244	Kenya	-.409	Rhodesia	-.412
Luxemborg	.426	Sri Lanka (Ceylon)	-.244	Malagasy	-.409	Rwanda	-.412
Australia	.272	Barbados	-.246	Tanzania	-.409	Swaziland	-.412
Iran	.225	Lebanon	-.260	Burundi	-.410	Togo	-.412
Peru	.150	Jamaica	-.274	Gabon	-.410	Upper Volta	-.412
Chile	.149	Sweden	-.340	Iraq	-.410	Yemen	-.412
Venezuela	.142	Soviet Union	-.344	Sierra Leone	-.410		
El Salvador	.117	Ethiopia	-.345	Bulgaria	-.411		

TABLE 6

Index of United States International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

South Vietnam	3.336	Chile	.149	Ivory Coast	-.350	Sudan	-.401
Canada	2.450	Ecuador	.132	Guinea	-.359	Burma	-.402
West Germany	2.365	Nicaragua	.124	Botswana	-.360	Central African Rep.	-.402
China, Rep. of	1.939	New Zealand	.116	Somalia	-.360	Cyprus	-.402
Turkey	1.553	Panama	.106	Laos	-.368	Malawi	-.402
Israel	1.357	Bolivia	.087	Singapore	-.377	Malta	-.402
United Kingdom	1.191	Trinidad-Tobago	.064	Ireland	-.383	Mauritania	-.402
South Korea	1.167	Guatemala	.054	Finland	-.385	Mauritius	-.402
Japan	1.104	Columbia	.049	Cuba	-.386	Nepal	-.402
Pakistan	1.096	India	.049	Morocco	-.386	Senegal	-.402
Italy	.962	El Salvador	.048	Ethiopia	-.387	South Yemen	-.402
Greece	.887	Uruguay	.043	Saudi Arabia	-.390	Syria	-.402
Thailand	.881	Costa Rica	.013	Egypt	-.394	Togo	-.402
France	.735	Haiti	.001	Zaire	-.394	Chad	-.403
Cambodia	.665			Liberia	-.395	China, Peoples Rep.	-.403
Norway	.651	Paraguay	-.002	Kuwait	-.396	Congo	-.403
Belgium	.633	Nigeria	-.132	Algeria	-.397	Dahomey	-.403
Netherlands	.623	Indonesia	-.155	Guyana	-.397	Equitorial Guinea	-.403
Peru	.603	Yugoslavia	-.163	Kenya	-.398	Gambia	-.403
Portugal	.583	Malaysia	-.225	Tunisia	-.398	Lesotho	-.403
Jordan	.582	Austria	-.237	Uganda	-.398	Maldive	-.403
Australia	.517	Libya	-.274	Cameroun	-.399	Mali	-.403
Denmark	.514	Poland	-.304	Czechoslovakia	-.399	Mongolia	-.403
Iceland	.491	Switzerland	-.310	East Germany	-.399	Muscat and Oman	-.403
Luxemborg	.440	Rumania	-.311	Malagasy	-.399	Niger	-.403
Mexico	.432	Barbados	-.315	Hungary	-.400	North Korea	-.403
Philippines	.424	Sri Lanka (Ceylon)	-.315	Tanzania	-.400	North Vietnam	-.403
Brazil	.395	Zambia	-.315	Afghanistan	-.401	Rhodesia	-.403
Argentina	.364	Lebanon	-.321	Albania	-.401	Rwanda	-.403
Honduras	.287	Sweden	-.327	Bulgaria	-.401	Swaziland	-.403
Venezuela	.260	Jamaica	-.328	Burundi	-.401	Upper Volta	-.403
Iran	.247	South Africa	-.334	Gabon	-.401	Yemen	-.403
Spain	.247	Soviet Union	-.345	Iraq	-.401		
Dominican Rep.	.182	Ghana	-.348	Sierra Leone	-.401		

TABLE 7

Index of United States International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

South Vietnam	3.148	Dominican Rep.	.142	Barbados	-.355	Bulgaria	-.395
West Germany	2.783	Ecuador	.134	Botswana	-.357	Burma	-.395
Canada	2.423	Nicaragua	.127	Dahomey	-.357	Burundi	-.395
Israel	1.752	Paraguay	.120	Laos	-.363	Chad	-.395
China, Rep. of	1.738	New Zealand	.113	Singapore	-.363	China	-.395
Turkey	1.395	Guatemala	.090	Ireland	-.377	Congo	-.395
Pakistan	1.391	Columbia	.082	Cuba	-.378	Cyprus	-.395
Japan	1.325	Bolivia	.080	Finland	-.380	Equitorial Guinea	-.395
United Kingdom	1.263	Trinidad-Tobago	.061	Soviet Union	-.380	Gambia	-.395
Greece	.908	Haiti	.043	Ethiopia	-.383	Lesotho	-.395
Thailand	.872	Norway	.025	Rhodesia	-.384	Malawi	-.395
South Korea	.825	India	.020	Libya	-.386	Mali	-.395
Italy	.812	Costa Rica	.014	Zaire	-.386	Malta	-.395
Cambodia	.735	El Salvador	.007	Kuwait	-.387	Mauritania	-.395
Belgium	.714	Uruguay	.002	Algeria	-.388	Mauritius	-.395
Netherlands	.711			Liberia	-.389	Mongolia	-.395
Peru	.703	Malaysia	-.102	Czeckoslovakia	-.391	Nepal	-.395
France	.687	Indonesia	-.170	Guyana	-.391	Niger	-.395
Portugal	.673	Nigeria	-.220	Kenya	-.391	Rhodesia	-.395
Argentina	.552	Saudia Arabia	-.258	Malagasy	-.392	Rwanda	-.395
Philippines	.531	Austria	-.261	Tunisia	-.392	Senegal	-.395
Denmark	.488	Lebanon	-.286	Uganda	-.392	Somalia	-.395
Australia	.464	Ivory Coast	-.311	Cameroun	-.393	South Yemen	-.395
Iceland	.438	Rumania	-.314	East Germany	-.393	Swaziland	-.395
Luxemborg	.415	Switzerland	-.316	Hungary	-.393	Togo	-.395
Venezuela	.379	Jamaica	-.330	Iraq	-.393	Upper Volta	-.395
Iran	.343	Sweden	-.330	Sierra Leone	-.393	Albania	-.396
Honduras	.289	South Africa	-.331	Tanzania	-.393	Maldive	-.396
Mexico	.282	Morocco	-.338	Afghanistan	-.394	Muscat and Oman	-.396
Jordan	.216	Poland	-.344	Central African Rep.	-.394	North Korea	-.396
Spain	.201	Yugoslavia	-.344	Gabon	-.394	North Vietnam	-.396
Brazil	.193	Egypt	-.351	Guinea	-.394	Yemen	-.396
Chile	.179	Sri Lanka	-.354	Sudan	-.394		
Panama	.160	Zambia	-.354	Syria	-.394		

TABLE 8

Index of United States International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

South Vietnam	3.887	Paraguay	.099	South Africa	-.344	Tanzania	-.398
West Germany	2.864	New Zealand	.098	Morocco	-.345	Zambia	-.398
Canada	2.064	Guatemala	.079	Egypt	-.358	Afghanistan	-.399
Japan	1.637	Nicaragua	.076	Dahomey	-.363	Burma	-.399
Thailand	1.514	Bolivia	.071	Malta	-.363	Burundi	-.399
Israel	1.305	Columbia	.066	Nepal	-.363	Central African Rep.	-.399
Turkey	1.296	India	.042	Togo	-.363	Congo	-.399
United Kingdom	1.277	Haiti	.036	Upper Volta	-.363	Cyprus	-.399
South Korea	1.207	Dominican Rep.	.019	Laos	-.370	Guinea	-.399
Greece	1.198	Trinidad-Tobago	.017	Cuba	-.378	Mauritius	-.399
Pakistan	.976	Ecuador	.009	Ireland	-.383	Muscat and Oman	-.399
China, Rep. of	.953	Costa Rica	.008	Austria	-.384	Rhodesia	-.399
Italy	.940	Honduras	.005	Finland	-.386	Rwanda	-.399
Netherlands	.878	El Salvador	.001	Algeria	-.388	Senegal	-.399
Cambodia	.799			Ethiopia	-.388	Swaziland	-.399
Iran	.684	Uruguay	-.004	Libya	-.388	Syria	-.399
France	.668	Malaysia	-.137	Kuwait	-.390	Albania	-.400
Belgium	.647	Saudi Arabia	-.162	Ghana	-.392	Bulgaria	-.400
Mexico	.632	Sri Lanka	-.220	China, Peoples Rep.	-.394	Chad	-.400
Australia	.588	Nigeria	-.231	Liberia	-.394	Equitorial Guinea	-.400
Denmark	.543	Sweden	-.231	Czechoslovakia	-.395	Gambia	-.400
Portugal	.503	Indonesia	-.255	Zaire	-.395	Lesotho	-.400
Norway	.429	Singapore	-.257	Cameroun	-.396	Maldive	-.400
Iceland	.428	Jamaica	-.272	Guyana	-.396	Mali	-.400
Philippines	.426	Rumania	-.285	Tunisia	-.396	Malawi	-.400
Luxemborg	.401	Soviet Union	-.288	Kenya	-.397	Mauritania	-.400
Jordan	.345	Sierra Leone	-.294	Malagasy	-.397	Mongolia	-.400
Argentina	.341	Poland	-.312	Uganda	-.397	Niger	-.400
Venezuela	.335	Yugoslavia	-.315	Barbados	-.398	North Korea	-.400
Peru	.177	Bangladesh	-.316	East Germany	-.398	North Vietnam	-.400
Chile	.156	Ivory Coast	-.320	Gabon	-.398	Somalia	-.400
Spain	.128	Switzerland	-.322	Hungary	-.398	South Yemen	-.400
Panama	.127	Lebanon	-.325	Iraq	-.398	Yemen	-.400
Brazil	.125	Botswana	-.327	Sudan	-.398		

TABLE 9

Index of United States International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.236	Peru	.157	Rumania	-.292	Cameroun	-.423
South Vietnam	2.444	Panama	.149	Malaysia	-.293	East Germany	-.423
Canada	2.250	India	.120	Indonesia	-.296	Hungary	-.423
Japan	1.697	Nicaragua	.088	Switzerland	-.297	Malagasy	-.423
Israel	1.566	Saudi Arabia	.078	Jamaica	-.321	Sudan	-.423
Thailand	1.323	Guatemala	.051	Botswana	-.341	Tanzania	-.423
Greece	1.239	New Zealand	.048	Gabon	-.341	Zambia	-.423
United Kingdom	1.199	Haiti	.043	Yugoslavia	-.364	Burundi	-.424
South Korea	1.182	Dominican Rep.	.021	Algeria	-.365	Cyprus	-.424
Turkey	1.182	Ecuador	.012	Austria	-.367	Mauritius	-.424
Pakistan	1.151	Costa Rica	.008	South Africa	-.370	Muscat and Oman	-.424
Italy	.988	Honduras	.007	Lebanon	-.374	Rhodesia	-.424
Cambodia	.872	El Salvador	.005	Kuwait	-.375	Syria	-.424
China, Rep. of	.836			Ivory Coast	-.375	Afghanistan	-.425
Iran	.770	Bolivia	-.002	Tunisia	-.379	Albania	-.425
Denmark	.766	Paraguay	-.004	Kenya	-.381	Bulgaria	-.425
Belgium	.676	Trinidad-Tobago	-.021	Dahomey	-.383	Burma	-.425
France	.630	Nigeria	-.178	Malta	-.383	Central African Rep.	-.425
Netherlands	.594	Soviet Union	-.190	Togo	-.383	Congo	-.425
Mexico	.583	Laos	-.196	Nepal	-.384	Equitorial Guinea	-.425
Portugal	.526	Sierra Leone	-.213	China, Peoples Rep.	-.390	Gambia	-.425
Norway	.502	Upper Volta	-.217	Cuba	-.399	Guinea	-.425
Iceland	.423	Poland	-.232	Ireland	-.408	Lesotho	-.425
Venezuela	.423	Bangladesh	-.249	Finland	-.410	Malawi	-.425
Australia	.408	Sri Lanka (Ceylon)	-.257	Libya	-.410	Maldive	-.425
Luxemborg	.392	Senegal	-.258	Ethiopia	-.412	Mongolia	-.425
Chile	.385	Chad	-.259	Zaire	-.416	North Korea	-.425
Spain	.368	Mali	-.259	Ghana	-.418	North Vietnam	-.425
Brazil	.354	Mauritania	-.259	Liberia	-.419	Rwanda	-.425
Philippines	.336	Niger	-.259	Czechoslovakia	-.420	Somalia	-.425
Argentina	.320	Sweden	-.279	Guyana	-.421	South Yemen	-.425
Jordan	.284	Morocco	-.286	Iraq	-.422	Swaziland	-.425
Columbia	.202	Singapore	-.286	Uganda	-.422	Yemen	-.425
Uruguay	.162	Egypt	-.288	Barbados	-.423		

TABLE 10

Index of United States International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.072	Ecuador	.146	Sweden	-.302	Sudan	-.429
Canada	2.257	Columbia	.143	Switzerland	-.309	Barbados	-.430
Israel	2.220	Uruguay	.117	Zaire	-.315	Malagasy	-.430
Japan	1.745	Panama	.103	Yugoslavia	--.318	Tanzania	-.430
South Vietnam	1.560	Nicaragua	.093	Sierra Leone	-.320	Uganda	-.430
United Kingdom	1.292	Honduras	.075	Syria	-.320	Zambia	-.430
Greece	1.135	Bolivia	.060	Algeria	-.333	Bulgaria	-.431
South Korea	1.061	India	.034	Laos	-.339	Cameroun	-.431
Thailand	.976	Dominican Rep.	.023	Botswana	-.340	East Germany	-.431
Cambodia	.928	New Zealand	.011	Gabon	-.362	Guinea	-.431
Italy	.886	Costa Rica	.005	Libya	-.364	Mauritius	-.431
Turkey	.877	Egypt	.004	Ethiopia	-.365	Afghanistan	-.432
Pakistan	.764	El Salvador	.003	South Africa	-.366	Albania	-.432
Netherlands	.756			Muscat and Oman	-.367	Burma	-.432
Belgium	.747	Trinidad-Tobago	-.001	Singapore	-.374	Burundi	-.432
France	.643	Haiti	-.120	Ivory Coast	-.381	Central African Rep.	-.432
Denmark	.628	Paraguay	-.027	Tunisia	-.382	Congo	-.432
Iran	.583	Guatemala	-.040	Kenya	-.383	Dahomey	-.432
Peru	.568	Mali	-.108	Sri Lanka (Ceylon)	-.384	Equitorial Guinea	-.432
Norway	.564	Soviet Union	-.119	Malta	-.386	Gambia	-.432
Saudi Arabia	.537	Senegal	-.153	Nepal	-.386	Lesotho	-.432
Portugal	.533	Mauritania	-.154	China, Peoples Rep.	-.398	Malawi	-.432
Brazil	.532	Niger	-.154	Cuba	-.406	Maldive	-.432
Venezuela	.531	Upper Volta	-.154	Austria	-.410	Mongolia	-.432
Chile	.501	Chad	-.155	Jamaica	-.411	North Korea	-.432
Luxemborg	.470	Indonesia	-.160	Cyprus	-.413	North Vietnam	-.432
Mexico	.457	Nigeria	-.172	Ireland	-.416	Rhodesia	-.432
Iceland	.456	Poland	-.176	Finland	-.417	Rwanda	-.432
Spain	.426	Malaysia	-.182	Iraq	-.422	Somalia	-.432
China, Rep. of	.385	Bangladesh	-.190	Ghana	-.425	South Yemen	-.432
Australia	.339	Lebanon	-.219	Liberia	-.426	Swaziland	-.432
Jordan	.303	Kuwait	-.252	Guyana	-.427	Togo	-.432
Argentina	.261	Rumania	-.278	Hungary	-.427	Yemen	-.432
Philippines	.252	Morocco	-.290	Czechoslovakia	-.429		

West Germany. The commitment scores reflect the gradual withdrawal of the United States from South Vietnam, and with an additional year of data the results, of course, would be quite different. India is another example of a changed American commitment relationship. India which had a very strong American commitment in 1968 dropped to a much lower position in 1974. The Soviet data show an increased commitment toward India over the seven year period, although the increase was not an especially large one since India was of special interest to the Soviet Union throughout the period.

The American commitment to Cambodia increased clearly over the period from basically no military commitment(minor trade and aid relations with the United States) to a rather important one in 1974. The high score for Brazil in the early years was inconsistent with the somewhat lower rank position for Brazil over the entire seven year period suggesting that the Brazilian commitment was not as consistnetly high as the American commitment scores for the United Kindom, Israel, South Korea and a few other nations. The American commitment to Brazil has been, nevertheless, an important one. Brazil consistently ranks higher than other Latin American nations.

In summary then, the United States maintained numerous and widespread military commitmens between 1968 and 1974. American military commitments to its NATO partners and several other nations with and without formal defense treaties ramained strong throughout the seven year period. American commitmens to Latin American nations were based primarily upon the existence of the Rio pact, moderate trade relations, and varying degrees of major arms transfers and aid relations. The American commitment to Israel appears to have been very strong during this period--considerably stronger, in fact, than the American commitment to Spain as well as stronger than the apparent American commitment to many nations with which it has formal security treaties. Most Middle Eastern, African, and non-treaty partners in Asia were below the mean-average commitment point, suggesting that these relationships consisted primarly of moderate trade relations and either no or little other American military support relations. The results provide evidence of the locations in the world where conflict, unrest, and threatening conditions would very likely affect special decision-making situations for the United States. While this statement does not exclude the importance of other foreign areas in trouble, it does identify one important threat spreading network for the United States where military and defense considerations are especially

obvious and clearly linked to American security interests.

UNITED KINGDOM. British international military commitments did not change radically between 1968 and 1974 as shown in commitment index tables 11 through 17. The United States and West Germany had especially consistent and strong British commitments. Canada, France, and other NATO members had somewhat weaker but consistent British Commitments. A few countries--like Malta with which the British ended a defense treaty in 1971 and Libya which ended its defense agreement in 1967--but which continued to receive some military support in 1968--lost their relatively strong British commitment during the period.

The commitments of the United Kingdom tended to be quite widespread throughout the period reflecting a rather extensive military support policy. The United Kingdom maintained defense agreements with NATO,SEATO, and CENTO countries as well as with some countries outside of these pacts. The geographical focus of these commitments were first toward the Atlantic area and then they were spread throughout the globe. Latin American nation-states as a group are notably low on the British commitment scores.

It should also be pointed out that some nations would be higher on the index rankings if certain project decisions had not been made. Cyprus- which has the United Kingdom as a member of its Treaty of Guarentee, but not as a member of its Treaty of Alliance--could have been scored as a treaty partner by criteria different from those used in this study. Some analysts might also consider that the British have defense treaties with Mauritius, South Africa, or even Rhodesia since the United Kingdom does have special defense arrangements with each of these countries. If these countries had been scored differently, their rank positions as well as the overall rank scores given in the tables for the United Kingdom would have been somewhat different. As noted in the introduction, it is cases like these which need special attention and a measurement techinuque which is flexible enough to account for these relationships in more than a single way. Accordingly, tests are planned to run the data for British commitments in various configurations other than the one used for findings reported here.

The results of the analysis given here do suggest some interesting findings. While it is well known that the British have reduced greatly their foreign military posture since the end of World War II and even before, they still maintain obvious foreign military support relationships indicating that the United Kingdom is an important

TABLE 11

Index of United Kingdom International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (1), Aid Statements (1), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.614	Chile	.121	Sierra Leone	-.326	Nicaragua	-.356
United States	2.787	Thailand	.099	Czechoslovakia	-.329	Burundi	-.357
Libya	1.505	Phillipines	.094	Iraq	-.329	Cambodia	-.357
Canada	1.284	Switzerland	.092	East Germany	-.337	Dominican Republic	-.357
France	1.210	Brazil	.070	Bolivia	-.338	El Salvador	-.357
Netherlands	1.200	Spain	.053	Algeria	-.340	Senegal	-.357
Singapore	1.188	Ireland	.031	Lebanon	-.340	Central African Rep.	-.358
Belgium	1.023	Muscat and Oman	.021	Zaire	-.340	Chad	-.358
Italy	1.021	South Yemen	.011	Egypt	-.342	Dahomey	-.358
Turkey	.832			Hungary	-.342	Equitorial Africa	-.358
South Vietnam	.808	Trinidad-Tobago	-.032	Liberia	-.342	Guinea	-.358
Luxemborg	.780	Saudi Arabia	-.090	Morocco	-.342	Haiti	-.358
Denmark	.769	Venezuela	-.097	Uganda	-.342	Honduras	-.358
India	.765	Cuba	-.101	Columbia	-.343	Laos	-.358
Norway	.688	Barbados	-.105	Tunisia	-.343	North Korea	-.358
Nigeria	.671	Guyana	-.115	Uruguay	-.344	Rwanda	-.358
Iran	.635	Rhodesia	-.115	Malawi	-.346	Somalia	-.358
Australia	.616	Sudan	-.155	Bulgaria	-.350	Togo	-.358
Malaysia	.596	Peru	-.157	Burma	-.350	Yemen	-.358
Portugal	.576	Ethiopia	-.169	Ivory Coast	-.351	Albania	-.359
Greece	.517	Soviet Union	-.170	Mauritania	-.352	Botswana	-.359
Iceland	.487	Finland	-.185	Panama	-.352	Lesotho	-.359
Sweden	.486	Japan	-.205	South Korea	-.352	Malagasy	-.359
Pakistan	.462	Ghana	-.229	Afghanistan	-.354	Maldive	-.359
Zambia	.462	Jamaica	-.238	Cameroun	-.354	Mali	-.359
Malta	.398	Mauritius	-.256	China	-.354	Mongolia	-.359
Indonesia	.381	Israel	-.263	Gambia	-.354	Nepal	-.359
New Zealand	.373	Poland	-.283	Ecuador	-.355	Niger	-.359
Kuwait	.319	Cyprus/Greek	-.299	Guatemala	-.355	North Vietnam	-.359
Argentina	.316	Kenya	-.306	Paraguay	-.355	Swaziland	-.359
Jordan	.260	China, Peoples Rep.	-.313	Syria	-.355	Tanzania	-.359
Sri Lanka (Ceylon)	.174	Rumania	-.317	Congo	-.356	Upper Volta	-.359
Austria	.150	Mexico	-.322	Costa Rica	-.356		
South Africa	.135	Yugoslavia	-.324	Gabon	-.356		

TABLE 12

Index of United Kingdom International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.153	Saudi Arabia	.062	Sierra Leone	-.317	Congo	-.349
United States	2.621	Brazil	.028	Mexico	-.321	Dominican Republic	-.349
Libya	1.685	Kenya	.015	Tanzania	-.322	Gabon	-.349
Singapore	1.486			Czechoslovakia	-.324	Malagasy	-.349
Nigeria	1.485	Mauritius	-.007	Bolivia	-.326	Senegal	-.349
France	1.413	South Yemen	-.022	Zaire	-.328	Togo	-.349
Malaysia	1.206	Muscat and Oman	-.026	Algeria	-.330	Burundi	-.350
Turkey	.992	Israel	-.030	East Germany	-.332	Dahomey	-.350
Canada	.975	Jamaica	-.095	Morocco	-.332	El Salvador	-.350
Belgium	.959	Sri Lanka (Ceylon)	-.095	Guyana	-.333	Guinea	-.350
Netherlands	.900	Austria	-.101	Egypt	-.334	Honduras	-.350
Italy	.826	Trinidad-Tobago	-.105	Lebanon	-.334	Somalia	-.350
Iran	.822	Switzerland	-.106	Hungary	-.336	Albania	-.351
Denmark	.720	Uganda	-.118	Liberia	-.336	Botswana	-.351
Chile	.710	Cuba	-.124	Columbia	-.338	Cambodia	-.351
Norway	.640	South Korea	-.126	Malawi	-.339	Central African Rep.	-.351
Jordan	.619	Indonesia	-.127	Uruguay	-.339	Chad	-.351
Australia	.577	Venezuela	-.133	Barbados	-.340	Equitorial Guinea	-.351
Portugal	.523	Nepal	-.136	Ivory Coast	-.342	Haiti	-.351
Greece	.470	Soviet Union	-.150	Bulgaria	-.343	Laos	-.351
New Zealand	.425	Finland	-.163	Mauritania	-.343	Lesotho	-.351
Argentina	.421	Sudan	-.174	Burma	-.344	Maldive	-.351
Luxemborg	.418	Peru	-.176	Panama	-.344	Mali	-.351
South Africa	.351	Spain	-.180	Afghanistan	-.345	Mongolia	-.351
South Vietnam	.300	Ghana	-.184	China, Rep. of	-.345	Niger	-.351
Kuwait	.267	Ethiopia	-.189	Syria	-.345	North Korea	-.351
Thailand	.265	Japan	-.192	Cameroun	-.347	North Vietnam	-.351
Pakistan	.258	India	-.232	Costa Rica	-.347	Rhodesia	-.351
Sweden	.240	Poland	-.274	Tunisia	-.347	Rwanda	-.351
Iceland	.203	Cyprus	-.284	Ecuador	-.348	Swaziland	-.351
Malta	.154	China, Peoples Rep.	-.288	Gambia	-.348	Upper Volta	-.351
Zambia	.116	Yugoslavia	-.312	Guatemala	-.348	Yemen	-.351
Philippines	.104	Rumania	-.314	Nicaragua	-.348		
Ireland	.076	Iraq	-.315	Paraguay	-.348		

TABLE 13

Index of United Kingdom International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.692	Malta	.145	Mexico	-.324	Dominican Republic	-.347
United States	2.520	Ghana	.116	Algeria	-.326	Guatemala	-.347
France	1.293	Ireland	.102	East Germany	-.329	Nicaragua	-.347
Malaysia	1.240	Jordan	.019	Zaire	-.330	Paraguay	-.347
Argentina	1.133			Bolivia	-.331	Senegal	-.347
Nigeria	1.060	Israel	-.006	Egypt	-.331	Togo	-.347
Kenya	1.056	Saudi Arabia	-.082	Hungary	-.331	Burundi	-.348
Turkey	1.040	Switzerland	-.095	Morocco	-.332	El Salvador	-.348
Canada	1.031	Finland	-.147	Cuba	-.333	Gabon	-.348
Pakistan	.970	Soviet Union	-.148	Guyana	-.333	Guinea	-.348
Chile	.952	Sri Lanka (Ceylon)	-.149	Lebanon	-.333	Malagasy	-.348
Iran	.950	Rumania	-.151	Liberia	-.334	Yemen	-.348
Netherlands	.948	Sierra Leone	-.156	Sudan	-.334	Central African Rep.	-.349
Italy	.901	Muscat and Oman	-.160	Columbia	-.336	Chad	-.349
Belgium	.817	Ecuador	-.165	Malawi	-.337	Dahomey	-.349
South Africa	.805	Uganda	-.167	Barbados	-.338	Equitorial Guinea	-.349
Australia	.803	Peru	-.168	Bulgaria	-.338	Haiti	-.349
Singapore	.746	Japan	-.173	Uruguay	-.340	Honduras	-.349
Denmark	.734	South Korea	-.173	South Yemen	-.341	Laos	-.349
Norway	.657	Spain	-.181	China, Rep. of	-.342	Mali	-.349
Luxemborg	.510	Nepal	-.182	Ivory Coast	-.342	Niger	-.349
Portugal	.482	Kuwait	-.224	Burma	-.343	North Korea	-.349
Greece	.473	Austria	-.243	Panama	-.343	Rwanda	-.349
New Zealand	.462	Mauritius	-.247	Mauritania	-.344	Somalia	-.349
Libya	.448	Poland	-.273	Swaziland	-.344	Albania	-.350
Iceland	.436	Cyprus	-.290	Afghanistan	-.345	Cambodia	-.350
Thailand	.373	Venezuela	-.297	Ethiopia	-.345	Lesotho	-.350
South Vietnam	.338	China, Peoples Rep.	-.301	Tunisia	-.345	Maldive	-.350
India	.303	Jamaica	-.308	Cameroun	-.346	Mongolia	-.350
Sweden	.290	Yugoslavia	-.308	Costa Rica	-.346	North Vietnam	-.350
Zambia	.278	Trinidad-Tobago	-.320	Gambia	-.346	Rhodesia	-.350
Brazil	.269	Tanzania	-.322	Syria	-.346	Upper Volta	-.350
Philippines	.189	Czechoslovakia	-.323	Botswana	-.347		
Indonesia	.160	Iraq	-.323	Congo	-.347		

TABLE 14

Index of United Kingdom International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.084	Switzerland	.094	China, Peoples Rep.	-.323	Costa Rica	-.354
United States	2.385	Indonesia	.038	Trinidad-Tobago	-.326	Tunisia	-.354
South Africa	1.757	Finland	.037	Tanzania	-.330	Botswana	-.355
Iran	1.381	Libya	.026	Czechoslovakia	-.331	Congo	-.355
Pakistan	1.340	Ecuador	.023	East Germany	-.336	Dominican Republic	-.355
France	1.098			Mexico	-.336	Paraguay	-.355
Malaysia	1.045	Chile	-.000	Cuba	-.339	Senegal	-.355
India	.984	Kuwait	-.030	Guyana	-.339	Togo	-.355
Canada	.981	Saudi Arabia	-.048	Hungary	-.340	Burundi	-.356
Netherlands	.949	Israel	-.057	Lebanon	-.340	Dahomey	-.356
Italy	.921	Rhodesia	-.102	Mauritius	-.340	El Salvador	-.356
Australia	.848	Kenya	-.114	Morocco	-.341	Gabon	-.356
Singapore	.824	Japan	-.151	Sudan	-.344	Nicaragua	-.356
Belgium	.804	Swaziland	-.164	China, Republic of	-.345	Yemen	-.356
Denmark	.719	Zambia	-.169	Columbia	-.345	Cambodia	-.357
Turkey	.713	Spain	-.173	Malawi	-.345	Central African Rep.	-.357
Nigeria	.644	Soviet Union	-.185	Barbados	-.346	Chad	-.357
New Zealand	.627	Rumania	-.200	Zaire	-.346	Equitorial Guinea	-.357
Norway	.622	Algeria	-.204	Bolivia	-.347	Guinea	-.357
Jordan	.603	Sri Lanka (Ceylon)	-.204	Bulgaria	-.347	Haiti	-.357
Portugal	.534	Sierra Leone	-.207	Uruguay	-.349	Honduras	-.357
South Vietnam	.534	Egypt	-.209	Ivory Coast	-.350	Mali	-.357
Luxemborg	.480	Uganda	-.210	Panama	-.350	Niger	-.357
Greece	.463	Peru	-.211	Burma	-.351	North Korea	-.357
Argentina	.460	South Korea	-.214	Liberia	-.351	Rwanda	-.357
Iceland	.425	Afghanistan	-.225	South Yemen	-.351	Somalia	-.357
Muscat and Oman	.406	Austria	-.243	Mauritania	-.352	Albania	-.358
Malta	.314	Poland	-.286	Ethiopia	-.353	Laos	-.358
Brazil	.298	Venezuela	-.292	Gambia	-.353	Lesotho	-.358
Sweden	.287	Cyprus	-.299	Guatemala	-.353	Maldive	-.358
Thailand	.233	Yugoslavia	-.211	Malagasy	-.353	Mongolia	-.358
Philippines	.230	Jamaica	-.312	Syria	-.353	North Vietnam	-.358
Ireland	.224	Ghana	-.314	Cameroun	-.354	Upper Volta	-.358
Nepal	.148	Iraq	-.332				

TABLE 15

Index of United Kingdom International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.557	Kuwait	.135	Ghana	-.330	South Yemen	-.352
United States	2.654	Ireland	.117	Mexico	-.332	Botswana	-.353
Pakistan	2.041	Chile	.059	East Germany	-.337	Cameroun	-.353
South Africa	1.772	Finland	.034	Mauritius	-.337	El Salvador	-.353
Iran	1.425			South Korea	-.337	Gabon	-.353
Australia	1.290	Israel	-.007	China, Rep. of	-.338	Senegal	-.353
France	1.288	Malta	-.023	Guyana	-.338	Congo	-.354
Singapore	1.226	Egypt	-.053	Hungary	-.338	Dahomey	-.354
Netherlands	1.096	Rhodesia	-.069	Zaire	-.339	Honduras	-.354
Belgium	1.043	Philippines	-.107	Liberia	-.340	Malagasy	-.354
Canada	.939	Venezuela	-.112	Morocco	-.340	Nicaragua	-.354
Italy	.871	Lebanon	-.142	Sudan	-.341	Togo	-.354
Malaysia	.801	Tanzania	-.143	Uganda	-.341	Yemen	-.354
New Zealand	.749	Argentina	-.146	Columbia	-.342	Burundi	-.355
Denmark	.730	Ecuador	-.160	Malawi	-.343	Cambodia	-.355
Turkey	.725	Spain	-.162	Cuba	-.344	Central African Rep.	-.355
Norway	.697	Rumania	-.179	Barbados	-.345	Chad	-.355
India	.636	Soviet Union	-.182	Bolivia	-.346	Equitorial Guinea	-.355
Portugal	.551	Sierra Leone	-.192	Bulgaria	-.347	Guinea	-.355
Luxemborg	.485	Sri Lanka	-.194	Panama	-.347	Haiti	-.355
Greece	.472	Peru	-.198	Burma	-.349	Laos	-.355
Kenya	.453	Afghanistan	-.206	Ivory Coast	-.349	Lesotho	-.355
Iceland	.440	Austria	-.228	Jordan	-.349	Mali	-.355
Muscat and Oman	.421	Libya	-.257	Mauritania	-.349	Mongolia	-.355
South Vietnam	.374	Poland	-.280	Swaziland	-.350	Nepal	-.355
Thailand	.332	Cyprus	-.295	Syria	-.350	Niger	-.355
Philippines	.327	Zambia	-.300	Uruguay	-.350	North Korea	-.355
Sweden	.310	Jamaica	-.313	Ethiopia	-.351	Rwanda	-.355
Brazil	.307	China, Peoples Rep.	-.321	Gambia	-.351	Somalia	-.355
Indonesia	.232	Yugoslavia	-.322	Tunisia	-.351	Albania	-.356
Bangladesh	.218	Iraq	-.324	Costa Rica	-.352	Maldive	-.356
Switzerland	.215	Algeria	-.326	Dominican Rep.	-.352	North Vietnam	-.356
Saudi Arabia	.147	Czechoslovakia	-.327	Guatemala	-.352	Upper Volta	-.356
Nigeria	.140	Trinidad-Tobago	-.327	Paraguay	-.352		

TABLE 16

Index of United Kingdom International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.144	Nepal	.176	Rumania	-.348	Dominican Republic	-.369
United States	2.792	Israel	.151	Iraq	-.351	Guatemala	-.369
Pakistan	1.765	Sweden	.101	Sierra Leone	-.353	South Yemen	-.369
France	1.447	Malta	.078	Mexico	-.354	Cameroun	-.370
Australia	1.191	Ireland	.063	Trinidad-Tobago	-.354	Gambia	-.370
South Africa	1.182	Zambia	.039	Hungary	-.356	Paraguay	-.370
Iran	1.164			East Germany	-.357	Senegal	-.370
Belgium	1.145	Rhodesia	-.007	Mauritius	-.358	Congo	-.371
Netherlands	1.139	Lebanon	-.010	Morocco	-.358	El Salvador	-.371
Singapore	1.103	Tanzania	-.010	Guyana	-.359	Malagasy	-.371
Canada	1.007	Muscat and Oman	-.015	Sudan	-.359	Nicaragua	-.371
Italy	1.003	Kuwait	-.099	Zaire	-.360	Togo	-.371
New Zealand	.900	Venezuela	-.164	Columbia	-.363	Yemen	-.371
Malaysia	.831	Jamaica	-.167	Liberia	-.363	Albania	-.372
Denmark	.706	Ghana	-.171	Malawi	-.363	Burundi	-.372
Norway	.697	Indonesia	-.172	Uganda	-.363	Cambodia	-.372
Portugal	.695	Sri Lanka (Ceylon)	-.177	Upper Volta	-.363	Central African Rep.	-.372
South Vietnam	.667	South Korea	-.183	Barbados	-.364	Chad	-.372
Nigeria	.651	Afghanistan	-.184	Bolivia	-.364	Cuba	-.372
Turkey	.610	Finland	-.184	Bulgaria	-.364	Dahomey	-.372
Iceland	.595	Peru	-.188	Ivory Coast	-.365	Equitorial Guinea	-.372
Brazil	.587	Mali	-.189	Ecuador	-.367	Guinea	-.372
Japan	.585	Spain	-.199	Jordan	-.367	Haiti	-.372
Saudi Arabia	.468	Soviet Union	-.210	Mauritania	-.367	Honduras	-.372
Greece	.456	Austria	-.254	Swaziland	-.367	Laos	-.372
India	.453	Libya	-.287	Uruguay	-.367	Lesotho	-.372
Thailand	.419	Poland	-.294	Botswana	-.368	Maldive	-.372
Luxemborg	.401	Cyprus	-.309	Burma	-.368	Mongolia	-.372
Chile	.364	Argentina	-.317	Ethiopia	-.368	Niger	-.372
Kenya	.363	China, Peoples Rep.	-.323	Gabon	-.368	North Korea	-.372
Philippines	.333	Algeria	-.341	Panama	-.368	North Vietnam	-.372
Switzerland	.219	Yugoslavia	-.347	Syria	-.368	Rwanda	-.372
Bangladesh	.189	China, Rep. of	-.343	Tunisia	-.368	Somalia	-.372
Egypt	.184	Czechoslovakia	-.347	Costa Rica	-.369		

TABLE 17

Index of United Kingdom International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	3.066	Switzerland	.140	Yugoslavia	-.322	Guatemala	-.350
United States	2.659	Sweden	.102	China, Rep. of	-.324	Panama	-.350
Pakistan	1.425	Ireland	.096	Czechoslovakia	-.326	Senegal	-.350
Netherlands	1.422	India	.089	Algeria	-.329	South Yemen	-.350
France	1.323	Ecuador	.040	East Germany	-.330	Burma	-.351
Iran	1.205	Zambia	.036	Morocco	-.331	Cameroun	-.351
Belgium	1.151	Indonesia	.014	Hungary	-.334	Costa Rica	-.351
Saudi Arabia	.958			Mauritius	-.335	Nicaragua	-.351
Bangladesh	.882	Honduras	-.001	Rumania	-.335	Yemen	-.351
Australia	.876	Tanzania	-.027	Zaire	-.338	Botswana	-.352
Canada	.864	Soviet Union	-.039	Trinidad-Tobago	-.339	Congo	-.352
New Zealand	.838	Malta	-.041	Guyana	-.340	Dahomey	-.352
Muscat and Oman	.834	Ghana	-.061	Cuba	-.341	El Salvador	-.352
Nigeria	.808	Pakistan	-.108	Sudan	-.341	Malagasy	-.352
Portugal	.686	Finland	-.155	Syria	-.341	Paraguay	-.352
Egypt	.678	Sierra Leone	-.161	Sri Lanka (Ceylon)	-.342	Somalia	-.352
Singapore	.671	Mali	-.177	Columbia	-.343	Togo	-.352
Norway	.654	Niger	-.177	Barbados	-.345	Albania	-.353
Turkey	.608	Kuwait	-.180	Bulgaria	-.345	Burundi	-.353
Denmark	.606	Argentina	-.183	Gabon	-.345	Cambodia	-.353
Italy	.604	Spain	-.190	Uganda	-.345	Central African Rep.	-.353
Malaysia	.526	Jamaica	-.197	Ivory Coast	-.346	Chad	-.353
Iceland	.514	Lebanon	-.199	Malawi	-.346	Equitorial Guinea	-.353
South Vietnam	.450	South Korea	-.200	Liberia	-.348	Guinea	-.353
South Africa	.401	Mexico	-.202	Afghanistan	-.349	Haiti	-.353
Greece	.377	Peru	-.208	Dominican Rep.	-.349	Laos	-.353
Israel	.349	Jordan	-.218	Ethiopia	-.349	Lesotho	-.353
Thailand	.348	Libya	-.229	Mauritania	-.349	Maldive	-.353
Philippines	.347	Austria	-.255	North Korea	-.349	Mongolia	-.353
Luxemborg	.329	Poland	-.285	Swaziland	-.349	North Vietnam	-.353
Nepal	.303	Cyprus	-.296	Tunisia	-.349	Rhodesia	-.353
Brazil	.258	Venezuela	-.302	Uruguay	-.349	Rwanda	-.353
Kenya	.245	Iraq	-.308	Bolivia	-.350	Upper Volta	-.353
Chile	.161	China, Peoples Rep.	-.315	Gambia	-.350		

international actor and like the United States, especially vulnerable to the affects of foreign threats, crises, and conflicts. The data show that the British continued in the period examined to maintain defense treaty membership, provide military and economic aid, make policy support actions, sell major weapons systems internationally, and keep troops in a few foreign countries. These behavioral activities coupled with the fact that the United Kingdom is a major supplier and recipient of trade goods indicate that British commitment patterns are significantly large to warrant close watching.

While these findings are important, it should be remembered that an indication of a strong commitment relationship for the United Kingdom or any other actor nation is not a guarentee that the decision-makers of the nation will use military force in support of its apparent ally. British tradition especially cautions against such an interpretation. According to the British foreign policy analyst Northedge, "the traditional British response to revolutions and ideologically inspired upheavals abroad is alarm perhaps, but refusal to act unless general security is threatened, and even so, tardily." Nothedge notes further,

> The associated British respect for international law and the sanctity of treaties reflects the trader's interest in the observance of contracts and the imperialist's interest in the status quo. At the same time, there is the feeling that treaty engagements must not be too rigid if they are to command respect. One undertaking which British governments have always sought to avoid is that of defending the status quo in all particulars (Northedge, 175).

France. French military commitment patterns--given in Tables 18 through 24--like those of the other major actors did not change radically between 1968 and 1974, although more change did occur in its commitment relationships than in the commitments of the other actors. The change observed in French commitments may reflect a new President's adjustment of national foreign policy to meet the needs of France's role in a somewhat different international system (Kolodziej, 1974), but whatever the causes of French commitment policy there were some clear patterns of relationships. France maintained a consistent and very strong military support relationship with West Germany, with no indication whatever that this commitment weakened over the seven year period. It reflects--as noted in the FRENCH WHITE PAPER ON NATIONAL DEFENSE (1972)--a relationship that

TABLE 18

Index of French International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (1), Aid Statements (1), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.616	Cuba	.085	Poland	-.296	Haiti	-.327
Iraq	2.000	Pakistan	.080	Rumania	-.297	Honduras	-.327
United Kingdom	1.937	Congo	.076	Mexico	-.304	Malta	-.327
Belgium	1.689	Central African Rep.	.074	Yugoslavia	-.305	North Korea	-.327
Italy	1.231	New Zealand	.074	Venezuela	-.309	Sierra Leone	-.327
Norway	1.207	Togo	.071	Zambia	-.309	Uganda	-.327
Luxemborg	1.148	Ethiopia	.069	Czechoslovakia	-.311	Albania	-.328
United States	1.106	Thailand	.069	East Germany	-.312	Burundi	-.328
Canada	.897	Dahomey	.068	Ireland	-.312	Dominican Rep.	-.328
Netherlands	.828	Laos	.068	Bulgaria	-.314	El Salvador	-.328
Portugal	.767	South Vietnam	.068	Hungary	-.314	Gambia	-.328
Peru	.517	Afghanistan	.067	Mauritania	-.320	Malawi	-.328
Tunisia	.492	Philippines	.067	Indonesia	-.321	Mauritius	-.328
Denmark	.491	Upper Volta	.066	Syria	-.321	Mongolia	-.328
Greece	.477	Brazil	.008	Panama	-.323	Nepal	-.328
Algeria	.464			Sudan	-.323	Nicaragua	-.328
Turkey	.457	Israel	-.003	Columbia	-.325	North Vietnam	-.328
South Africa	.447	Malaysia	-.040	Cyprus	-.325	Paraguay	-.328
Iceland	.442	Switzerland	-.082	Kenya	-.325	Rhodesia	-.328
Argentina	.390	Morocco	-.090	Liberia	-.325	Rwanda	-.328
Chad	.355	Libya	-.129	Mali	-.325	Somalia	-.328
Malagasy	.275	Saudi Arabia	-.157	Sri Lanka	-.325	Trinidad	-.328
Senegal	.230	Zaire	-.160	Ecuador	-.326	Yemen	-.328
Cambodia	.220	Nigeria	-.169	Ghana	-.326	Barbados	-.329
Ivory Coast	.169	Singapore	-.179	Guinea	-.326	Botswana	-.329
Australia	.116	Spain	-.197	Jamaica	-.326	Equitorial Guinea	-.329
Cameroun	.108	Sweden	-.204	Jordan	-.326	Guyana	-.329
Iran	.107	Soviet Union	-.215	South Korea	-.326	Lesotho	-.329
Gabon	.099	Japan	-.271	Uruguay	-.326	Maldive	-.329
Egypt	.087	Austria	-.292	Bolivia	-.327	South Yemen	-.329
Lebanon	.087	China, Peoples Rep.	-.292	Burma	-.327	Swaziland	-.329
India	.086	Kuwait	-.293	China, Rep. of	-.327	Tanzania	-.329
Niger	.086	Finland	-.294	Costa Rica	-.327		
Chile	.085	Muscat and Oman	-.295	Guatemala	-.327		

TABLE 19

Index of French International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.596	Saudi Arabia	.083	Egypt	-.315	Albania	-.337
Belgium	1.832	Zaire	.078	Nigeria	-.315	Bolivia	-.337
Tunisia	1.658	Niger	.076	Yugoslavia	-.315	Burundi	-.337
United Kingdom	1.477	Chile	.075	Venezuela	-.320	Costa Rica	-.337
Italy	1.379	Pakistan	.066	Czechoslovakia	-.321	Dominican Rep.	-.337
Portugal	1.097	Peru	.066	Soviet Union	-.321	El Salvador	-.337
Greece	1.096	New Zealand	.065	Hungary	-.322	Ethiopia	-.337
United States	1.067	Central African Rep.	.064	Ireland	-.323	Gambia	-.337
Israel	.964	Congo	.064	Cuba	-.324	Guatemala	-.337
Lebanon	.956	Philippines	.062	South Korea	-.328	Guyana	-.337
Canada	.925	South Vietnam	.060	Mauritania	-.329	Jordan	-.337
Netherlands	.899	Thailand	.060	Laos	-.332	Malawi	-.337
Denmark	.519	Dahomey	.059	Liberia	-.332	Malta	-.337
Norway	.506	Upper Volta	.057	Panama	-.332	Mauritius	-.337
Iraq	.499	Afghanistan	.053	Syria	-.332	Nicaragua	-.337
Turkey	.489			Bulgaria	-.333	Rhodesia	-.337
Argentina	.479	Malaysia	-.015	North Korea	-.333	Rwanda	-.337
Iceland	.472	Morocco	-.057	Columbia	-.334	Sierra Leone	-.337
Luxemborg	.471	Switzerland	-.075	Kenya	-.334	Somalia	-.337
India	.465	Indonesia	-.132	Mali	-.334	South Yemen	-.337
Togo	.451	Singapore	-.135	Sri Lanka	-.334	Trinidad-Tobago	-.337
Algeria	.395	Spain	-.205	China, Rep. of	-.335	Uganda	-.337
Chad	.323	Sweden	-.216	Cyprus	-.335	Yemen	-.337
Libya	.308	Soviet Union	-.237	Ghana	-.335	Barbados	-.338
South Africa	.303	Japan	-.278	Guinea	-.335	Botswana	-.338
Malagasy	.293	Finland	-.301	Tanzania	-.335	Equitorial Guinea	-.338
Ivory Coast	.274	Kuwait	-.303	Uruguay	-.335	Lesotho	-.338
Cambodia	.257	Austria	-.304	Burma	-.336	Maldive	-.338
Senegal	.213	Muscat and Oman	-.304	Ecuador	-.336	Mongolia	-.338
Australia	.101	Poland	-.308	Haiti	-.336	Nepal	-.338
Brazil	.099	Rumania	-.311	Honduras	-.336	North Vietnam	-.338
Cameroun	.096	Zambia	-.311	Jamaica	-.336	Swaziland	-.338
Iran	.096	China, Peoples Rep.	-.312	Paraguay	-.336		
Gabon	.091	Mexico	-.312	Sudan	-.336		

TABLE 20

Index of French International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.789	Australia	.096	China, Peoples Rep.	-.313	Haiti	-.339
Libya	2.052	Malaysia	.095	Nigeria	-.313	Jamaica	-.339
Belgium	1.518	Niger	.072	Poland	-.313	Paraguay	-.339
Italy	1.453	New Zealand	.060	Mexico	-.318	Albania	-.340
Portugal	1.233	Congo	.059	Chile	-.321	Bolivia	-.340
Greece	1.147	Dahomey	.057	Zambia	-.321	Burundi	-.340
United States	1.046	South Vietnam	.056	East Germany	-.322	Costa Rica	-.340
Chad	1.044	Philippines	.055	Czechoslovakia	-.323	Dominican Rep.	-.340
United Kingdom	.947	Thailand	.055	Egypt	-.323	El Salvador	-.340
Netherlands	.912	Upper Volta	.054	Venezuela	-.323	Equitorial Guinea	-.340
Tunisia	.824			Ireland	-.326	Guatemala	-.340
India	.657	Iran	-.012	Cuba	-.327	Guyana	-.340
Canada	.580	Columbia	-.035	Hungary	-.327	Honduras	-.340
Denmark	.560	Ecuador	-.039	Bulgaria	-.328	Malawi	-.340
Lebanon	.547	Soviet Union	-.053	Panama	-.332	Malta	-.340
Norway	.546	Switzerland	-.087	South Korea	-.332	Mauritius	-.340
Turkey	.532	Afghanistan	-.104	Liberia	-.333	Nicaragua	-.340
Iceland	.514	Jordan	-.104	Mauritania	-.323	North Vietnam	-.340
Luxemborg	.513	Rwanda	-.104	Singapore	-.334	Rhodesia	-.340
Togo	.442	Cambodia	-.105	Syria	-.334	Sierra Leone	-.340
Spain	.414	Saudi Arabia	-.152	Ghana	-.337	Somalia	-.340
Pakistan	.358	Argentina	-.156	Guinea	-.337	South Yemen	-.340
Gabon	.333	Peru	-.180	Laos	-.337	Trinidad-Tobago	-.340
Cameroun	.326	Indonesia	-.183	Mali	-.337	Uganda	-.340
Ivory Coast	.300	Gambia	-.190	Cyprus	-.338	Yemen	-.340
Central African Rep.	.299	Sweden	-.219	Kenya	-.338	Barbados	-.341
Zaire	.281	Morocco	-.261	North Korea	-.338	Botswana	-.341
Israel	.269	Japan	-.276	Sri Lanka	-.338	Lesotho	-.341
Senegal	.207	Brazil	-.295	Sudan	-.338	Maldive	-.341
Algeria	.206	Kuwait	-.299	Tanzania	-.338	Mongolia	-.341
Malagasy	.188	Austria	-.305	Uruguay	-.338	Nepal	-.341
Iraq	.176	Finland	-.305	Burma	-.339	Swaziland	-.341
South Africa	.159	Muscat and Oman	-.307	China, Rep. of	-.339		
Rumania	.157	Yugoslavia	-.308	Ethiopia	-.339		

TABLE 21

Index of French International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid (2) Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.121	Niger	.091	Tunisia	-.299	Burundi	-.311
Netherlands	2.314	Congo	.087	East Germany	-.301	Cambodia	-.311
Libya	2.294	New Zealand	.084	Czechoslovakia	-.303	Costa Rica	-.311
United Kingdom	1.117	Argentina	.082	Egypt	-.304	Dominican Rep.	-.311
Italy	1.091	Dahomey	.082	Hungary	-.304	El Salvador	-.311
Portugal	.988	South Vietnam	.082	Mexico	-.304	Equitorial Guinea	-.311
Chad	.909	Philippines	.081	Ireland	-.305	Ethiopia	-.311
Belgium	.871	Thailand	.080	Bulgaria	-.306	Gambia	-.311
Gabon	.764	Upper Volta	.080	Zambia	-.306	Guatemala	-.311
Greece	.752	Columbia	.072	Cuba	-.307	Guyana	-.311
United States	.750			Liberia	-.307	Haiti	-.311
Pakistan	.702	Soviet Union	-.036	South Korea	-.307	Honduras	-.311
Canada	.575	Jordan	-.072	Indonesia	-.308	Jamaica	-.311
Denmark	.564	Rwanda	-.072	Mauritania	-.308	Laos	-.311
Norway	.559	Venezuela	-.112	Mali	-.309	Lesotho	-.311
Turkey	.554	Chile	-.114	Singapore	-.309	Malawi	-.311
Iceland	.545	Peru	-.118	Sudan	-.309	Maldive	-.311
Luxemborg	.545	Yugoslavia	-.121	Syria	-.309	Malta	-.311
Togo	.511	Switzerland	-.205	China, Rep. of	-.310	Mauritius	-.311
India	.505	Algeria	-.259	Cyprus	-.310	Mongolia	-.311
Zaire	.455	Sweden	-.263	Ghana	-.310	Nepal	-.311
Spain	.418	Morocco	-.280	Guinea	-.310	Nicaragua	-.311
Cameroun	.333	Japan	-.281	Kenya	-.310	North Vietnam	-.311
Israel	.333	Saudi Arabia	-.283	North Korea	-.310	Paraguay	-.311
Lebanon	.330	Iraq	-.286	Panama	-.310	Sierra Leone	-.311
Central African Rep.	.323	Nigeria	-.288	Rhodesia	-.310	Somalia	-.311
South Africa	.278	Brazil	-.290	Sri Lanka	-.310	South Yemen	-.311
Malaysia	.267	Muscat and Oman	-.291	Uruguay	-.310	Swaziland	-.311
Ecuador	.261	Kuwait	-.293	Afghanistan	-.311	Tanzania	-.311
Rumania	.179	Iran	-.294	Albania	-.311	Trinidad-Tobago	-.311
Malagasy	.166	Austria	-.295	Barbados	-.311	Uganda	-.311
Senegal	.152	China, Peoples Rep.	-.298	Bolivia	-.311	Yemen	-.311
Ivory Coast	.123	Finland	-.298	Botswana	-.311		
Australia	.096	Poland	-.298	Burma	-.311		

TABLE 22

Index of French International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid (2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.453	Congo	.086	China, Peoples Rep.	-.295	Afghanistan	-.315
Chad	1.504	Niger	.086	Muscat and Oman	-.297	Burma	-.315
Libya	1.306	Dahomey	.082	Hungary	-.298	Burundi	-.315
United Kingdom	1.208	Thailand	.082	India	-.298	Cambodia	-.315
United States	1.177	Togo	.082	Czechoslovakia	-.299	Costa Rica	-.315
Belgium	1.175	Philippines	.080	Egypt	-.301	El Salvador	-.315
Italy	1.138	South Vietnam	.080	Mexico	-.303	Guatemala	-.315
Greece	.981	Algeria	.014	Zambia	-.305	Guyana	-.315
Turkey	.961			Mauritania	-.307	Honduras	-.315
South Africa	.847	Soviet Union	-.009	Peru	-.308	Jamaica	-.315
Netherlands	.793	Saudi Arabia	-.015	Singapore	-.308	Laos	-.315
Spain	.734	Poland	-.056	Bulgaria	-.309	Mauritius	-.315
Portugal	.649	Yugoslavia	-.057	Columbia	-.309	Nepal	-.315
Brazil	.633	Tunisia	-.060	Indonesia	-.309	Paraguay	-.315
Venezuela	.599	Argentina	-.062	Liberia	-.309	Sierra Leone	-.315
Gabon	.557	Switzerland	-.063	Panama	-.309	Sri Lanka	-.315
Canada	.458	Israel	-.068	Mali	-.310	Trinidad-Tobago	-.315
Denmark	.439	Ireland	-.075	South Korea	-.310	Yemen	-.315
Malagasy	.436	Chile	-.078	Syria	-.310	Albania	-.316
Norway	.431	Malaysia	-.079	Cuba	-.311	Bangladesh	-.316
Iceland	.396	Ecuador	-.089	China, Rep. of	-.312	Barbados	-.316
Luxemborg	.395	Jordan	-.090	Guinea	-.312	Bolivia	-.316
Lebanon	.375	Nicaragua	-.091	North Korea	-.312	Botswana	-.316
Cameroun	.331	Rwanda	-.091	Uruguay	-.312	Equitorial Guinea	-.316
Pakistan	.306	Sweden	-.202	Cyprus	-.313	Gambia	-.316
Central African Rep.	.305	Japan	-.239	Kenya	-.313	Lesotho	-.316
Upper Volta	.303	Morocco	-.252	Rhodesia	-.313	Malawi	-.316
Senegal	.198	Kuwait	-.261	Sudan	-.313	Maldive	-.316
Rumania	.162	Nigeria	-.261	Dominican Rep.	-.314	Mongolia	-.316
Ivory Coast	.150	Iraq	-.265	Ethiopia	-.314	North Vietnam	-.316
Zaire	.149	Austria	-.275	Ghana	-.314	Somalia	-.316
Uganda	.135	Iran	-.275	Haiti	-.314	South Yemen	-.316
Australia	.116	Finland	-.284	Malta	-.314	Swaziland	-.316
New Zealand	.087	East Germany	-.287	Tanzania	-.314		

TABLE 23

Index of French International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2),Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.492	Mali	.224	Rumania	-.320	Panama	-.346
Belgium	1.414	Peru	.141	Israel	-.325	Tanzania	-.346
United States	1.342	Kuwait	.093	India	-.327	Afghanistan	-.347
Italy	1.329	Australia	.085	Malaysia	-.328	Bolivia	-.347
United Kingdom	1.276	Argentina	.080	East Germany	-.330	Burma	-.347
Netherlands	1.010	Gabon	.074	Hungary	-.332	Cambodia	-.347
Chad	.923	Ireland	.073	Czechoslovakia	-.333	El Salvador	-.347
Upper Volta	.898	Cameroun	.072	Venezuela	-.333	Gambia	-.347
Greece	.846	New Zealand	.056	Mexico	-.334	Guyana	-.347
Turkey	.828	Algeria	.053	Zambia	-.336	Haiti	-.347
Uganda	.819	Philippines	.049	Indonesia	-.337	Honduras	-.347
Senegal	.710	Togo	.049	Singapore	-.338	Jamaica	-.347
Brazil	.702	Central African Rep.	.048	North Korea	-.340	Jordan	-.347
Niger	.621	Thailand	.048	Syria	-.340	Malawi	-.347
Dahomey	.616	Soviet Union	.031	China, Republic of	-.341	Paraguay	-.347
Luxemborg	.606			Columbia	-.341	Sierra Leone	-.347
Lebanon	.555	Poland	-.023	Liberia	-.341	Trinidad-Tobago	-.347
Libya	.455	Nicaragua	-.064	South Korea	-.341	Yemen	-.347
Malagasy	.440	North Vietnam	-.064.	Bulgaria	-.342	Albania	-.348
Spain	.428	Switzerland	-.075	Muscat and Oman	-.342	Bangladesh	-.348
Mauritania	.425	Morocco	-.078	Laos	-.343	Barbados	-.348
Saudi Arabia	.416	China, Peoples Rep.	-.126	Sri Lanka (Ceylon)	-.343	Botswana	-.348
Canada	.385	Egypt	-.129	Sudan	-.343	Burundi	-.348
Norway	.374	Zaire	-.134	Cuba	-.344	Equitorial Guinea	-.348
Denmark	.368	Ecuador	-.146	Cyprus/Greek	-.344	Lesotho	-.348
Portugal	.359	Ghana	-.146	Uruguay	-.344	Maldive	-.348
Congo	.338	Sweden	-.240	Costa Rica	-.346	Mongolia	-.348
Pakistan	.333	Japan	-.255	Dominican Republic	-.346	Nepal	-.348
South Vietnam	.329	Iraq	-.294	Ethiopia	-.346	Rhodesia	-.348
Iceland	.325	Nigeria	-.298	Guatemala	-.346	Rwanda	-.348
Ivory Coast	.318	Iran	-.299	Guinea	-.346	Somalia	-.348
South Africa	.294	Austria	-.304	Kenya	-.346	South Yemen	-.348
Tunisia	.285	Yugoslavia	-.312	Malta	-.346	Swaziland	-.348
Chile	.260	Finland	-.317	Mauritius	-.346		

TABLE 24

Index of French International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

West Germany	4.461	Gabon	.084	Austria	-.312	Uruguay	-.343
Greece	2.077	Soviet Union	.080	Finland	-.317	Afghanistan	-.344
Saudi Arabia	1.514	Australia	.079	Yugoslavia	-.319	Burma	-.344
United States	1.351	Cameroun	.069	Rumania	-.323	Burundi	-.344
Belgium	1.250	Togo	.055	Venezuela	-.328	Cameroun	-.344
Italy	1.172	Thailand	.054	India	-.329	Costa Rica	-.344
Kuwait	1.126	Argentina	.053	Malaysia	-.329	Gambia	-.344
Netherlands	1.057	Philippines	.052	Mexico	-.330	Guyana	-.344
United Kingdom	.926	Central African Rep.	.050	East Germany	-.331	Haiti	-.344
Chad	.799	Israel	.029	Czechoslovakia	-.333	Honduras	-.344
Libya	.776	North Vietnam	.002	Hungary	-.333	Jamaica	-.344
Upper Volta	.744	Iraq	.000	Indonesia	-.334	Nicaragua	-.344
Egypt	.627			Muscat and Oman	-.335	Paraguay	-.344
Turkey	.612	Lebanon	-.014	Zambia	-.335	Rwanda	-.344
Luxemborg	.590	Algeria	-.030	Singapore	-.336	Sierra Leone	-.344
Niger	.571	Iran	-.030	North Korea	-.337	Tanzania	-.344
Canada	.467	Peru	-.038	Bulgaria	-.338	Trinidad-Tobago	-.344
Denmark	.447	Ireland	-.075	Laos	-.338	Yemen	-.344
Portugal	.442	Switzerland	-.091	China, Republic of	-.339	Albania	-.345
Norway	.441	Tunisia	-.091	Columbia	-.339	Bangladesh	-.345
Iceland	.410	Poland	-.131	Cuba	-.339	Barbados	-.345
Dahomey	.397	Morocco	-.157	South Korea	-.339	Botswana	-.345
Mauritania	.308	Syria	-.160	Sudan	-.340	Equitorial Guinea	-.345
Uganda	.257	Jordan	-.170	Liberia	-.341	Lesotho	-.345
Ivory Coast	.247	Brazil	-.173	Kenya	-.342	Malawi	-.345
Congo	.232	China, Peoples Rep.	-.196	Panama	-.342	Maldive	-.345
Malagasy	.232	Zaire	-.204	South Yemen	-.342	Mongolia	-.345
New Zealand	.230	Ghana	-.216	Sri Lanka (Ceylon)	-.342	Rhodesia	-.345
South Vietnam	.222	El Salvador	-.217	Bolivia	-.343	Somalia	-.345
Spain	.190	Guatemala	-.217	Cyprus/Greek	-.343	Swaziland	-.345
Mali	.179	Nepal	-.218	Dominican Republic	-.343		
Pakistan	.179	Sweden	-.247	Ethiopia	-.343		
Chile	.171	Japan	-.256	Guinea	-.343		
Ecuador	.164	Nigeria	-.279	Malta	-.343		
Senegal	.116	South Africa	-.307	Mauritius	-.343		

is essential "for balance and peace in Europe."

The United States and the United Kingdom also ranked consistently high on French commitments. Again this finding parallels what the French noted in their 1972 White Paper--"the maintenance of traditional relations of alliance and friendship with the United States remains a basic factor in our policy as does the future of the Western world to which we belong. Close bonds with the United Kingdom are natural and in the profound interest of both the French and British peoples."

The White paper also noted that French defense policy had three goals. The first was the direct protection of French national security, the second was the defense of Europe, and the third was the protection of nations in more distant regions. The report explained...

> ...it is necessary for us to participate in (sic) security in Europe and around Europe, particularly in the Mediterranean. Even if we put aside for a moment the future of the European ideology, this second goal is derived largely from the first one (defense of France) because it would be illusory to claim to ensure the security of our territory without being interested in the realities which surround it. Some nations can base their defense on neutrality. This is not the case for France. Our geographic and strategic location on the edge of the European continent is such that we are necessarily involved in the situation on the continent as well as on the seas.
>
> ...defense has local and regional goals. It also has more distant goals. Of course, these goals do not claim to cover the whole world. This would be an absurd exaggeration which would tend to put even the notion of defense in doubt.
>
> However, we must protect the remote territories which throughout the world show their desire to remain under French sovereignty. We must also face the commitments which we made to the countries of French-speaking Africa and Madagascar, countries formed by our culture and our laws. For several of them, our support still seems to be a condition for their independence. In other words, we must be able to assert, even outside the Western world to which we belong, our economic and cultural influence. This influence, which is expressed by

> our interests and which can give rise to obligations, is one element of our national purpose (1972:11).

The commitment rankings provide insight into what the French themselves have called a "hierarchy on defense goals." Several Western European nations had commitment scores that were very high (West Germany, United Kingdom, Greece, Belgium, etc.). Other Western European, African, and Middle Eastern countries had scores well above the mean average for all targets. These commitments reflect French membership in a number of defense organizations including NATO, SEATO, the Defense Council for Equatorial Africa, and a regional defense pact of central African countries as well as the French policy of transfering major arms systems to other nations.

Reference to the index scores also shows at least one of the reasons why there was a lower degree of association for French commitments between 1968 and 1974 than for the other actors. Some of the countries that changed positions over the years were recipients of periodic rather than regular transfers of major weapons systems and not members of French security arrangements. Iraq, Tunisia, Saudi Arabia, Kuwait, and Peru are examples of such countries. France had a weak military support relationship with these countries, although other non-military relationships based on conditions such as French dependence on foreign resources may account in part for some of the changes in French military policy. Thus while Saudia Arabia and Kuwait ranked high in 1974, their overall positions for the seven years of data were not so impressive and this suggests that the several European as well as certain African countries--especially Chad--which had consistently high French commitment scores had more meaningful military relationships with France than did Saudia Arabia and Kuwait for the period examined. More study is needed, however, to determine whether or not the changes in French commitment patterns stabilized in 1975 and beyond as well as to answer questions about the relationship between certain types of military support activity--like arms transfers--and resource dependence.

WEST GERMANY. West German international military commitment relationships were more consistent between 1968 and 1974 than were the commitments of any of the other actor nations. The strongest of these commitments--as shown in Tables 25 through 31--were directed toward other members of the Atlantic Alliance. The United States was consistently at the top of West German commitments. No other nation outside the

TABLE 25

Index of West Germany International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

United States	3.052	Tunisia	-.101	Malaysia	-.264	Dominican Republic	-.278
Netherlands	2.423	Afghanistan	-.105	Liberia	-.265	Equitorial Guinea	-.278
Italy	2.277	Senegal	-.106	Zaire	-.266	Guinea	-.278
Belgium	2.215	Togo	-.107	Ecuador	-.267	Jamaica	-.278
Norway	2.212	Somalia	-.108	South Korea	-.267	North Korea	-.278
United Kingdom	2.197	Malagasy	-.109	El Salvador	-.268	Albania	-.279
France	2.052	South Yemen	-.109	Iraq	-.268	Barbados	-.279
Turkey	1.457	Libya	-.164	Guatemala	-.269	Botswana	-.279
Luxemborg	1.352	Japan	-.166	Lebanon	-.269	Burundi	-.279
Canada	1.159	South Africa	-.173	New Zealand	-.269	Central African Rep.	-.279
Greece	.955	Soviet Union	-.178	Sudan	-.269	Chad	-.279
Portugal	.930	Yugoslavia	-.191	Honduras	-.270	Dahomey	-.279
Denmark	.881	Brazil	-.199	Cameroun	-.272	East Germany	-.279
Iceland	.722	Finland	-.206	Kenya	-.272	Gambia	-.279
Pakistan	.430	Australia	-.216	Nicaragua	-.272	Guyana	-.279
Israel	.267	Czechoslovakia	-.228	Singapore	-.272	Haiti	-.279
Switzerland	.256	Saudi Arabia	-.228	Panama	-.273	Laos	-.279
South Vietnam	.235	Poland	-.232	Costa Rica	-.274	Lesotho	-.279
Sweden	.174	Chile	-.233	Cyprus/Greek	-.274	Malawi	-.279
Austria	.167	Mexico	-.240	Bolivia	-.275	Maldive	-.279
Iran	.147	Algeria	-.247	Congo	-.275	Mali	-.279
India	.098	Hungary	-.251	Ethiopia	-.275	Malta	-.279
Sri Lanka (Ceylon)	.068	Muscat and Oman	-.253	Rhodesia	-.275	Mauritius	-.279
Jordan	.065	Philippines	-.255	Syria	-.275	Mongolia	-.279
Spain	.011	Bulgaria	-.257	Uruguay	-.275	Nepal	-.279
		Columbia	-.257	Burma	-.276	Niger	-.279
Rumania	-.057	Thailand	-.258	Gabon	-.276	North Vietnam	-.279
China, Peoples Rep.	-.062	Ireland	-.259	Paraguay	-.276	Rwanda	-.279
Argentina	-.064	Nigeria	-.259	Sierra Leone	-.276	Swaziland	-.279
Venezuela	-.074	Zambia	-.259	Uganda	-.276	Tanzania	-.279
Peru	-.077	China, Republic of	-.263	Cambodia	-.277	Upper Volta	-.279
Indonesia	-.084	Egypt	-.263	Cuba	-.277	Yemen	-.279
Morocco	-.094	Kuwait	-.263	Mauritania	-.277		
Ghana	-.098	Ivory Coast	-.264	Trinidad-Tobago	-.277		

TABLE 26

Index of West Germany International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

United States	2.710	Peru	-.132	Malaysia	-.236	Dominican Rep.	-.252
Netherlands	2.169	Morocco	-.147	Liberia	-.238	Guinea	-.252
Italy	2.087	Finland	-.155	Ghana	-.240	Jamaica	-.252
United Kingdom	1.736	Tunisia	-.158	Zaire	-.240	Trinidad-Tobago	-.252
Greece	1.734	Afghanistan	-.162	New Zealand	-.241	Cambodia	-.253
Norway	1.702	Malagasy	-.162	South Korea	-.241	Dahomey	-.253
Portugal	1.615	Senegal	-.162	Ecuador	-.242	Guyana	-.253
Israel	1.561	South Vietnam	-.163	El Salvador	-.242	Malta	-.253
Belgium	1.532	Togo	-.163	Lebanon	-.243	Malawi	-.253
Turkey	1.183	South Yemen	-.164	Singapore	-.243	Albania	-.254
France	1.112	Somalia	-.165	Iraq	-.244	Barbados	-.254
Canada	.902	Yemen	-.165	Panama	-.244	Botswana	-.254
Denmark	.892	Australia	-.180	Cameroun	-.245	Burundi	-.254
Argentina	.843	Czechoslovakia	-.185	Guatemala	-.245	Central African Rep.	-.254
Iceland	.706	Chile	-.198	Sudan	-.245	Chad	-.254
Luxemborg	.700	Poland	-.202	Honduras	-.246	East Germany	-.254
Brazil	.274	Algeria	-.211	Kenya	-.246	Equitorial Guinea	-.254
Saudi Arabia	.228	China, Peoples Rep.	-.211	Uruguay	-.247	Gambia	-.254
Switzerland	.189	Mexico	-.213	Bolivia	-.248	Haiti	-.254
Sweden	.076	Venezuela	-.215	Burma	-.248	Laos	-.254
Austria	.067	Hungary	-.220	Costa Rica	-.248	Lesotho	-.254
Yugoslavia	.041	Indonesia	-.222	Cyprus	-.248	Maldive	-.254
Pakistan	.038	Zambia	-.227	North Korea	-.248	Mali	-.254
Iran	.005	Columbia	-.229	Syria	-.248	Mauritius	-.254
		Nigeria	-.229	Congo	-.249	Mongolia	-.254
India	-.044	Ireland	-.231	Nicaragua	-.249	Nepal	-.254
Sri Lanka	-.070	Thailand	-.231	Tanzania	-.249	Niger	-.254
Jordan	-.074	Egypt	-.233	Cuba	-.250	North Vietnam	-.254
Spain	-.105	Philippines	-.233	Ethiopia	-.250	Rhodesia	-.254
Japan	-.111	Bulgaria	-.234	Gabon	-.250	Rwanda	-.254
Rumania	-.111	Ivory Coast	-.234	Mauritania	-.251	Swaziland	-.254
Soviet Union	-.123	Muscat and Oman	-.234	Paraguay	-.251	Upper Volta	-.254
South Africa	-.125	China, Rep. of	-.236	Sierra Leone	-.251		
Libya	-.128	Kuwait	-.236	Uganda	-.251		

TABLE 27

Index of West Germany International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	2.512	Afghanistan	-.031	Muscat and Oman	-.263	El Salvador	-.276
United Kingdom	2.446	Togo	-.031	Zaire	-.265	Guinea	-.276
Turkey	2.010	Malagasy	-.032	Ghana	-.266	Guyana	-.276
France	1.904	Senegal	-.032	Iraq	-.267	Malta	-.276
Netherlands	1.685	Sierra Leone	-.032	New Zealand	-.267	Niger	-.276
Greece	1.637	South Vietnam	-.033	Singapore	-.267	Trinidad-Tobago	-.276
Portugal	1.612	Somalia	-.034	South Korea	-.267	Albania	-.277
Italy	1.566	South Yemen	-.034	Lebanon	-.269	Barbados	-.277
Belgium	1.480	Yemen	-.034	Cameroun	-.270	Botswana	-.277
Canada	1.113	Japan	-.139	Ecuador	-.270	Burundi	-.277
Argentina	1.060	Spain	-.159	Guatemala	-.270	Cambodia	-.277
Norway	.889	South Africa	-.168	Kenya	-.270	Chad	-.277
Denmark	.829	Soviet Union	-.181	Panama	-.270	East Germany	-.277
Iceland	.771	Libya	-.188	Sudan	-.270	Equitorial Guinea	-.277
Luxemborg	.765	Finland	-.191	Costa Rica	-.271	Gambia	-.277
Jordan	.453	Czechoslovakia	-.216	Uruguay	-.271	Haiti	-.277
Iran	.438	Australia	-.219	Cyprus/Greek	-.272	Laos	-.277
Yugoslavia	.322	Poland	-.226	Cuba	-.273	Lesotho	-.277
Brazil	.202	Chile	-.233	Ethiopia	-.273	Maldive	-.277
Saudi Arabia	.158	Hungary	-.242	Honduras	-.273	Malawi	-.277
Switzerland	.103	China, Peoples Rep.	-.245	Nicaragua	-.273	Mali	-.277
Rumania	.010	Nigeria	-.245	Syria	-.273	Mauritius	-.277
		Algeria	-.246	Tanzania	-.273	Mongolia	-.277
Austria	-.001	Venezuela	-.247	Bolivia	-.274	Nepal	-.277
Israel	-.002	Mexico	-.248	Burma	-.274	North Vietnam	-.277
India	-.006	Indonesia	-.253	Congo	-.274	Rhodesia	-.277
Peru	-.007	Columbia	-.254	Gabon	-.274	Rwanda	-.277
Sweden	-.007	Liberia	-.258	Dominican Republic	-.275	Swaziland	-.277
Egypt	-.012	Zambia	-.258	Jamaica	-.275	Upper Volta	-.277
Pakistan	-.015	Ireland	-.259	Mauritania	-.275		
Thailand	-.018	China, Republic of	-.260	North Korea	-.275		
Philippines	-.019	Malaysia	-.260	Paraguay	-.275		
Morocco	-.020	Bulgaria	-.261	Uganda	-.275		
Tunisia	-.028	Ivory Coast	-.263	Central African Rep.	-.276		
Sri Lanka (Ceylon)	-.030	Kuwait	-.263	Dahomey	-.276		

TABLE 28

Index of West Germany International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	2.648	Soviet Union	-.151	Ghana	-.232	Senegal	-.239
Turkey	2.637	Brazil	-.161	New Zealand	-.232	Togo	-.239
United Kingdom	2.595	Libya	-.162	Panama	-.232	Trinidad-Tobago	-.239
Italy	2.084	Finland	-.164	Ecuador	-.233	Albania	-.240
France	1.873	Iran	-.165	El Salvador	-.233	Burundi	-.240
Netherlands	1.755	Czechoslovakia	-.174	Tunisia	-.234	Central African Rep.	-.240
Belgium	1.536	Poland	-.193	Guatemala	-.234	Chad	-.240
Denmark	.955	Saudi Arabia	-.195	Kenya	-.234	Guyana	-.240
Norway	.925	Algeria	-.197	Cameroun	-.235	Haiti	-.240
Canada	,907	Nigeria	-.198	Costa Rica	-.235	Malawi	-.240
Greece	.889	Hungary	-.203	Sudan	-.235	Mali	-.240
Portugal	.855	Israel	-.208	Syria	-.235	Mauritius	-.240
Iceland	.821	Chile	-.209	Cyprus/Greek	-.236	Nepal	-.240
Luxemborg	.816	Venezuela	-.211	Uruguay	-.236	Niger	-.240
Yugoslavia	.518	India	-.213	Afghanistan	-.237	Rwanda	-.240
Peru	.228	Mexico	-.218	Burma	-.237	Somalia	-.240
Columbia	.204	Liberia	-.215	Honduras	-.237	South Vietnam	-.240
Rumania	.126	China, Peoples Rep.	-.216	Nicaragua	-.237	South Yemen	-.240
Argentina	.125	Indonesia	-.219	Tanzania	-.237	Barbados	-.241
Switzerland	.118	China, Republic of.	-.221	Bolivia	-.238	Botswana	-.241
Egypt	.098	Ireland	-.223	Congo	-.238	Cambodia	-.241
Philippines	.098	Muscat and Oman	-.225	Cuba	-.238	East Germany	-.241
Thailand	.096	Bulgaria	-.226	Ethiopia	-.238	Equitorial Guinea	-.241
Sierra Leone	.084	Kuwait	-.226	Gabon	-.238	Gambia	-.241
Jordan	.083	Malaysia	-.226	Malagasy	-.238	Laos	-.241
Malta	.083	Pakistan	-.227	Sri Lanka (Ceylon)	-.238	Lesotho	-.241
Yemen	.082	Iraq	-.228	Uganda	-.238	Maldive	-.241
Austria	.033	Morocco	-.228	Dahomey	-.239	Mongolia	-.241
Sweden	.000	Ivory Coast	-.229	Dominican Republic	-.239	North Vietnam	-.241
		Singapore	-.229	Guinea	-.239	Rhodesia	-.241
Australia	-.033	Zaire	-.230	Jamaica	-.239	Swaziland	-.241
Japan	-.106	Lebanon	-.231	Mauritania	-.239	Upper Volta	-.241
Spain	-.130	South Korea	-.231	North Korea	-.239		
South Africa	-.146	Zambia	-.231	Paraguay	-.239		

TABLE 29

Index of West Germany International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	3.044	South Africa	-.168	El Salvador	-.244	South Vietnam	-.250
Italy	2.099	Finland	-.175	Ghana	-.244	Trinidad-Tobago	-.250
Belgium	2.065	Libya	-.180	Iraq	-.244	Yemen	-.250
France	1.974	Poland	-.181	Tunisia	-.244	Albania	-.251
United Kingdom	1.798	Czechoslovakia	-.191	Guatemala	-.245	Bangladesh	-.251
Netherlands	1.750	Australia	-.197	Kenya	-.245	Barbados	-.251
Turkey	1.388	Argentina	-.204	Cameroun	-.246	Botswana	-.251
Denmark	.945	Algeria	-.205	Costa Rica	-.246	Burundi	-.251
Norway	.907	Saudi Arabia	-.205	Sudan	-.246	Cambodia	-.251
Brazil	.903	Hungary	-.208	Syria	-.246	Central African Rep.	-.251
Canada	.897	Nigeria	-.211	Honduras	-.247	Chad	-.251
Greece	.887	Israel	-.219	Tanzania	-.247	Cyprus/Greek	-.251
Portugal	.850	Venezuela	-.220	Uruguay	-.247	East Germany	-.251
Peru	.828	India	-.222	Afghanistan	-.248	Equitorial Guinea	-.251
Iceland	.816	Mexico	-.223	Ethiopia	-.248	Gambia	-.251
Luxemborg	.811	China, Peoples Rep.	-.226	Gabon	-.248	Guyana	-.251
Iran	.351	Chile	-.228	Nicaragua	-.248	Haitia	-.251
Columbia	.298	Ireland	-.230	Paraguay	-.248	Laos	-.251
Ecuador	.286	China, Republic of	-.231	Bolivia	-.249	Lesotho	-.251
Rumania	.280	Indonesia	-.233	Burma	-.249	Malawi	-.251
Philippines	.244	Bulgaria	-.235	Congo	-.249	Maldive	-.251
Thailand	.243	Liberia	-.236	Cuba	-.249	Mali	-.251
Egypt	.241	Singapore	-.236	Dominican Republic	-.249	Mauritius	-.251
Jordan	.232	Ivory Coast	-.238	Jamaica	-.249	Mongolia	-.251
Sierra Leone	.232	Kuwait	-.238	Malagasy	-.249	Muscat and Oman	-.251
Malta	.231	Malaysia	-.238	Senegal	-.249	Nepal	-.251
Switzerland	.106	Morocco	-.238	Sri Lanka (Ceylon)	-.249	North Vietnam	-.251
Austria	.039	Lebanon	-.242	Togo	-.249	Rhodesia	-.251
		New Zealand	-.242	Uganda	-.249	Rwanda	-.251
Sweden	-.106	South Korea	-.242	Dahomey	-.250	Somalia	-.251
Japan	-.104	Zaire	-.242	Guinea	-.250	South Yemen	-.251
Spain	-.124	Pakistan	-.243	Mauritania	-.250	Swaziland	-.251
Yugoslavia	-.140	Panama	-.243	Niger	-.250	Upper Volta	-.251
Soviet Union	-.146	Zambia	-.243	North Korea	-.250		

TABLE 30

Index of West Germany International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	3.405	South Vietnam	.045	Morocco	-.251	Sierra Leone	-.263
Belgium	2.523	Upper Volta	.045	Philippines	-.251	Togo	-.263
Netherlands	2.451	Austria	.023	Kuwait	-.252	Trinidad-Tobago	-.263
United Kingdom	2.045			Egypt	-.252	Albania	-.264
France	1.876	Sweden	-.026	Zaire	-.253	Bangladesh	-.264
Italy	1.549	Japan	-.104	New Zealand	-.254	Barbados	-.264
Turkey	1.429	Spain	-.125	El Salvador	-.258	Botswana	-.264
Norway	.826	Soviet Union	-.135	Iraq	-.258	Burma	-.264
Luxemborg	.818	Yugoslavia	-.148	Syria	-.258	Cambodia	-.264
Brazil	.815	Poland	-.167	Cameroun	-.259	Central African Rep.	-.264
Canada	.808	South Africa	-.168	Costa Rica	-.259	East Germany	-.264
Greece	.806	Finland	-.190	Panama	-.259	Equitorial Guinea	-.264
Portugal	.770	Libya	-.195	Cyprus/Greek	-.260	Gambia	-.264
Iceland	.733	Czechoslovakia	-.202	Gabon	-.260	Guinea	-.264
Denmark	.436	Saudi Arabia	-.207	Guatemala	-.260	Guyana	-.264
Nigeria	.429	Algeria	-.208	Sudan	-.260	Haiti	-.264
Lebanon	.380	Rumania	-.213	Tunisia	-.260	Laos	-.264
Iran	.152	Australia	-.215	Uruguay	-.260	Lesotho	-.264
Argentina	.102	Hungary	-.217	Honduras	-.261	Malawi	-.264
Switzerland	.094	Israel	-.231	Nicaragua	-.261	Maldive	-.264
Venezuela	.089	China, Peoples Rep.	-.234	North Korea	-.261	Mauritius	-.264
Peru	.076	China, Republic of	-.234	Paraguay	-.261	Mongolia	-.264
Zambia	.071	Mexico	-.235	Afghanistan	-.262	Muscat and Oman	-.264
Ghana	.069	India	-.238	Bolivia	-.262	Nepal	-.264
Ecuador	.068	Liberia	-.240	Congo	-.262	Rhodesia	-.264
Pakistan	.053	Ireland	-.241	Cuba	-.262	Rwanda	-.264
Kenya	.051	Indonesia	-.242	Dominican Republic	-.262	Somalia	-.264
Tanzania	.049	Chile	-.246	Ethiopia	-.262	South Yemen	-.264
Malta	.046	Malaysia	-.246	Sri Lanka (Ceylon)	-.262	Swaziland	-.264
Mauritania	.046	Bulgaria	-.247	Uganda	-.262	Yemen	-.264
Senegal	.046	Singapore	-.247	Burma	-.263		
Chad	.045	Columbia	-.248	Dahomey	-.263		
Mali	.045	Ivory Coast	-.250	Jamaica	-.263		
Niger	.045	South Korea	-.250	Jordan	-.263		
North Vietnam	.045	Thailand	-.250	Malagasy	-.263		

TABLE 31

Index of West Germany International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

United States	3.497	North Vietnam	.022	Columbia	-.257	Malta	-.273
Netherlands	3.068	South Vietnam	.022	Liberia	-.257	Muscat and Oman	-.273
Belgium	2.133	Upper Volta	.022	South Korea	-.257	Sierra Leone	-.273
France	1.833	East Germany	.012	Morocco	-.258	Togo	-.273
United Kingdom	1.653	Austria	.016	Thailand	-.258	Trinidad-Tobago	-.273
Italy	1.646			Philippines	-.261	Uganda	-.273
Turkey	1.604	Sweden	-.016	Syria	-.261	Albania	-.274
Greece	1.488	Soviet Union	-.103	Zaire	-.261	Burma	-.274
Norway	1.217	Japan	-.132	Ivory Coast	-.262	Dahomey	-.274
Luxemborg	.809	Spain	-.133	New Zealand	-.264	Guinea	-.274
Denmark	.727	Iran	-.144	Tunisia	-.265	Guyana	-.274
Canada	.712	Saudi Arabia	-.147	Panama	-.266	Jamaica	-.274
Portugal	.675	South Africa	-.156	Ecuador	-.267	Mauritius	-.274
Iceland	.634	Libya	-.164	Gabon	-.268	Yemen	-.274
Nigeria	.417	Poland	-.168	Guatemala	-.268	Barbados	-.275
Lebanon	.340	Algeria	-.189	Cameroun	-.269	Botswana	-.275
Tanzania	.322	Finland	-.195	Costa Rica	-.269	Burundi	-.275
Brazil	.156	Australia	-.211	Cuba	-.269	Cambodia	-.275
Yugoslavia	.152	Czechoslovakia	-.215	El Salvador	-.269	Central African Rep.	-.275
Switzerland	.074	Rumania	-.215	North Korea	-.269	Equitorial Guinea	-.275
Argentina	.069	Hungary	-.218	Sudan	-.270	Gambia	-.275
Venezuela	.063	Iraq	-.238	Bangladesh	-.271	Haiti	-.275
India	.049	Israel	-.239	Nicaragua	-.271	Laos	-.275
Zambia	.045	Mexico	-.239	Bolivia	-.272	Lesotho	-.275
Ghana	.040	China, Peoples Rep.	-.241	Cyprus	-.272	Malawi	-.275
Egypt	.037	Indonesia	-.247	Honduras	-.272	Maldive	-.275
Ethiopia	.034	Kuwait	-.247	Paraguay	-.272	Mongolia	-.275
Pakistan	.033	Chile	-.250	Sri Lanka	-.272	Nepal	-.275
Kenya	.030	Ireland	-.250	Uruguay	-.272	Rhodesia	-.275
Senegal	.024	Malaysia	-.252	Afghanistan	-.273	Rwanda	-.275
Mauritania	.023	China, Rep. of	-.253	Congo	-.273	Somalia	-.275
Chad	.022	Bulgaria	-.254	Dominican Rep.	-.273	South Yemen	-.275
Mali	.022	Singapore	-.255	Jordan	-.273	Swaziland	-.275
Niger	.022	Peru	-.256	Malagasy	-.273		

Atlantic Alliance received consistently strong West German military support for the period of the study indicating that Germany's military commitment relationships were more focused on a single geo-political region than any of its major nation allies. As with Japan, a principal reason for this finding probably is that Germany continues to be affected by the consequences of World War II and the defense arrangements concerning Germany made after the war. Another reason also may be Germany's historical interest in European security and political affairs.

While there were no major changes in West German commitment activity between 1968 and 1974, there were some interesting changes in the rank locations of a few countries. Israel, for example, which did receive important West German military support in the early years of the data sets dropped significantly in the later years, apparently a signal of a shift in West Germany's Middle Eastern policy. The improvement in West German relations with Eastern European nations during this period can be noted in the movement of East Germany from its bottom position during most of the period to a higher one in 1974. The location on the rank lists of other Eastern European nations like the Soviet Union and Poland remained relatively constant. None of the scores for the Eastern European nations or any of the countries near or below the mean average West German commitment score are significantly important to warrant special attention. They merely reflect West German trade relations.

For West Germany, then, the results indicate a nation with a highly focused military support activity toward members of the Atlantic Alliance and very little active and consistent support outside of that area during the period 1968 through 1974. Yet as Goldsborough noted in a recent FOREIGN AFFAIRS article (April 1976), "the German strength is such that Chancellor Schmidt could say recently that 'apart from the United States there is no country in the world that need give us complexes'." Whether or not West Germany will use its strength to become more involved in other nation's defense plans is important. As with Japan, West Germany is a major international economic actor which has many reasons to be concerned with conflict and trouble in foreign areas. While the data analyzed in this study do not show a tendency toward significantly increased military support activity in the international system, other analyses have suggested that West Germany and Japan are likely candidates for increased international military activity. The watching of West German military activity should, therefore, be conducted for early warning. Any increase in

such activity will be a major change in the behavior patterns of the period 1968 through 1974.

JAPAN. The analysis of the data for Japan's international military commitments--given in Tables 32 through 38--provided some important findings for the study. First, the very high commitment scores for Japanese-American relations for each of the seven years of data confirm what others already have noted about this generally close and supportive tie--the relationship is "by far the most important element in Japan's defense policy" (Ellingworth, 1972). Thus, while there is now considerable interest in the future of Japanese-American relations because of changes in American foreign policy as well as many other environmental factors affecting both countries, there is no indication in the index scores that during the period 1968 through 1974 Japan was either moving away from its close military relationship with the United States or that some other country was replacing the United States as Japan's number one military partner. Furthermore, the commitment tables for the United States tend to support this conclusion. Japan's commitment rank increased relative to other American military commitments between 1968 and 1974.

Second, the data also suggest that Japan is not very much involved in providing military support to other international system members. The United States accounts for most of the variation in Japanese foreign support activity. A few primarily Asian nations also rank high on the commitment listings, but most nations are shown to be quite similar in that they received little support from Japan. South Korea, South Vietnam, and Indonesia did receive special military attention from Japan, but even the positions of these countries were interrupted by nations that priodically received major arms transfers from Japan (e.g., Zaire in 1974, Sweden in 1971, and Venezuela in 1968).

The results of the analysis for Japan appear to support the generally held notion that Japanese post World War II foreign policy has been oriented toward the maintenance of its alliance with the United States and the advancement of its foreign trade relationships. Whether or not Japanese foreign policy including its military relations will change is, however, an important question (Nish, 1974 and Hirasawa, 1975), and indicators for watching for trends toward such change are needed. The careful monitoring of Japan's foreign military support activity can provide defense analysts with information that can be useful for early warning. Any major increase or shift in the direction of Japanese military

TABLE 32

Index of Japan International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.561	Brazil	-.091	Columbia	-.130	Trinidad-Tobago	-.135
Venezuela	1.817	New Zealand	-.091	Finland	-.130	Venezuela	-.135
Indonesia	1.413	Norway	-.091	Kenya	-.130	Burundi	-.136
South Vietnam	.654	Pakistan	-.095	Nigeria	-.130	Central African Rep.	-.136
Philippines	.640	Zambia	-.095	Syria	-.130	Chad	-.136
Thailand	.569	Italy	-.101	Bulgaria	-.131	Dahomey	-.136
South Korea	.324	Belgium	-.106	Ethiopia	-.131	Gambia	-.136
Malaysia	.262	Luxemborg	-.106	Lebanon	-.131	Iceland	-.136
India	.259	Sweden	-.106	Libya	-.131	Malawi	-.136
Mexico	.222	Greece	-.110	Austria	-.132	Mali	-.136
Singapore	.220	Argentina	-.116	Czechoslovakia	-.132	Mauritius	-.136
West Germany	.189	Panama	-.117	Honduras	-.132	Mongolia	-.136
Australia	.186	Iraq	-.120	Ireland	-.132	Niger	-.136
Burma	.167	Denmark	-.121	Morocco	-.132	Rwanda	-.136
Egypt	.162	Spain	-.121	Portugal	-.132	Somalia	-.136
Cambodia	.161	Nicaragua	-.122	Afghanistan	-.133	Tunisia	-.136
Laos	.156	Ecuador	-.123	Costa Rica	-.133	Upper Volta	-.136
Tanzania	.154	North Korea	-.123	Dominican Republic	-.133	Uruguay	-.136
Canada	.107	Ghana	-.124	Ivory Coast	-.133	Yemen	-.136
Iran	.049	Muscat and Oman	-.124	Algeria	-.134	Albania	-.137
Saudi Arabia	.030	Sudan	-.124	Cyprus/Greek	-.134	Barbados	-.137
Soviet Union	.019	Poland	-.125	Jamaica	-.134	Botswana	-.137
China, Republic of	.014	Guatemala	-.125	Jordan	-.134	Equitorial Guinea	-.137
United Kingdom	.014	Turkey	-.125	Sierra Leone	-.134	Gabon	-.137
South Africa	.004	Cuba	-.128	Cameroun	-.135	Guinea	-.137
		East Germany	-.128	Congo	-.135	Guyana	-.137
China, Peoples Rep.	-.004	Rumania	-.128	Haiti	-.135	Lesotho	-.137
Liberia	-.026	Sri Lanka (Ceylon)	-.128	Hungary	-.135	Malagasy	-.137
Kuwait	-.043	Uganda	-.128	Mauritania	-.135	Maldive	-.137
Netherlands	-.079	Yugoslavia	-.128	Nepal	-.135	Malta	-.137
Peru	-.082	Zaire	-.128	Paraguay	-.135	Swaziland	-.137
France	-.083	Bolivia	-.129	Rhodesia	-.135	South Yemen	-.137
Switzerland	-.085	El Salvador	-.129	Senegal	-.135		
Chile	-.088	Israel	-.129	Togo	-.135		

TABLE 33

Index of Japan International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.562	Greece	-.086	Kenya	-.120	Togo	-.125
Venezuela	1.828	Argentina	-.088	Portugal	-.120	Burundi	-.126
Indonesia	1.288	Belgium	-.089	Tanzania	-.120	Central African Rep.	-.126
South Korea	1.169	Sweden	-.098	Austria	-.121	Chad	-.126
India	.816	Panama	-.102	Ethiopia	-.121	Dahomey	-.126
South Vietnam	.476	Spain	-.103	Honduras	-.121	Gabon	-.126
Thailand	.424	Norway	-.105	Iraq	-.121	Gambia	-.126
Mexico	.364	Denmark	-.111	Lebanon	-.121	Iceland	-.126
Pakistan	.331	Mexico	-.111	Libya	-.121	Malawi	-.126
Australia	.222	Zaire	-.112	Swaziland	-.121	Mali	-.126
Canada	.107	Ecuador	-.113	Yugoslavia	-.121	Malta	-.126
Iran	.071	Muscat and Oman	-.113	Bulgaria	-.122	Mauritania	-.126
Singapore	.065	Ghana	-.114	Costa Rica	-.122	Mauritius	-.126
West Germany	.043	Columbia	-.115	Czechoslovakia	-.122	Mongolia	-.126
China, Republic of	.033	North Korea	-.115	Dominican Republic	-.122	Nepal	-.126
Soviet Union	.021	Poland	-.115	Morocco	-.122	Niger	-.126
Saudi Arabia	.020	Burma	-.116	Ireland	-.123	Rwanda	-.126
United Kingdom	.011	Egypt	-.116	Ivory Coast	-.123	Senegal	-.126
China, Peoples Rep.	.000	Guatemala	-.117	Sierra Leone	-.123	Somalia	-.126
		Sri Lanka (Ceylon)	-.117	Syria	-.123	Upper Volta	-.126
South Africa	-.010	Sudan	-.117	Afghanistan	-.124	Uruguay	-.126
Malaysia	-.016	Finland	-.118	Guyana	-.124	Yemen	-.126
Liberia	-.021	Nicaragua	-.118	Jordan	-.124	Albania	-.127
Kuwait	-.049	Nigeria	-.118	North Vietnam	-.124	Barbados	-.127
Singapore	-.050	Uganda	-.118	Trinidad-Tobago	-.124	Botswana	-.127
Zambia	-.064	East Germany	-.119	Cameroun	-.125	Equitorial Guinea	-.127
Netherlands	-.071	El Salvador	-.119	Congo	-.125	Guinea	-.127
Brazil	-.072	Israel	-.119	Cyprus/Greek	-.125	Lesotho	-.127
France	-.072	Rumania	-.119	Haiti	-.125	Luxemborg	-.127
Switzerland	-.073	South Yemen	-.119	Hungary	-.125	Maldive	-.127
Peru	-.075	Turkey	-.119	Jamaica	-.125	Rhodesia	-.127
Italy	-.081	Algeria	-.120	Laos	-.125	Tunisia	-.127
New Zealand	-.081	Bolivia	-.120	Malagasy	-.125		
Chile	-.082	Cambodia	-.120	Paraguay	-.125		

TABLE 34

Index of Japan International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.548	Italy	-.079	Turkey	-.124	Congo	-.130
South Korea	1.091	Zambia	-.079	Uganda	-.124	Dahomey	-.130
Indonesia	1.035	Greece	-.080	Yugoslavia	-.124	Haiti	-.130
Pakistan	.574	France	-.081	Austria	-.125	Iceland	-.130
South Vietnam	.569	New Zealand	-.088	Dominican Republic	-.125	Malawi	-.130
Cambodia	.545	Argentina	-.091	Libya	-.125	Mali	-.130
Philippines	.365	Chile	-.092	Nicaragua	-.125	Mauritania	-.130
Thailand	.309	Belgium	-.094	South Yemen	-.125	Mauritius	-.130
Singapore	.288	Norway	-.096	Tanzania	-.125	Paraguay	-.130
India	.286	Sweden	-.101	Bulgaria	-.126	Senegal	-.130
Peru	.249	Spain	-.106	Ethiopia	-.126	Somalia	-.130
Mexico	.246	Cuba	-.107	Lebanon	-.126	Togo	-.130
Burma	.215	Venezuela	-.108	Morocco	-.126	Upper Volta	-.130
Kenya	.214	Panama	-.110	Rumania	-.126	Uruguay	-.130
Laos	.208	Ecuador	-.113	Swaziland	-.126	Yemen	-.130
Nepal	.208	Denmark	-.116	Syria	-.126	Albania	-.131
Maldive	.207	Columbia	-.118	Algeria	-.126	Barbados	-.131
Australia	.202	Zaire	-.118	Czechoslovakia	-.126	Botswana	-.131
Canada	.108	Nigeria	-.119	Ireland	-.126	Burundi	-.131
Iran	.057	Muscat and Oman	-.120	Ivory Coast	-.126	Central African Rep.	-.131
West Germany	.056	Finland	-.121	Afghanistan	-.128	Equitorial Guinea	-.131
China, Republic of	.056	Ghana	-.121	Honduras	-.128	Gabon	-.131
United Kingdom	.009	Poland	-.121	Sierra Leone	-.128	Gambia	-.131
China, Peoples Rep.	.001	North Korea	-.122	Trinidad-Tobago	-.128	Guinea	-.131
Soviet Union	.001	Uruguay	-.122	Cameroun	-.129	Lesotho	-.131
		Bolivia	-.123	Cyprus/Greek	-.129	Luxemborg	-.131
Saudi Arabia	-.010	East Germany	-.123	Guyana	-.129	Malta	-.131
South Africa	-.024	El Salvador	-.123	Hungary	-.129	Mongolia	-.131
Liberia	-.032	Guatemala	-.123	Iraq	-.129	Niger	-.131
Malaysia	-.037	Israel	-.123	Jamaica	-.129	Rhodesia	-.131
Kuwait	-.067	Costa Rica	-.124	Jordan	-.129	Rwanda	-.131
Brazil	-.069	Portugal	-.124	Malagasy	-.129	Tunisia	-.131
Netherlands	-.070	Sri Lanka (Ceylon)	-.124	North Vietnam	-.129		
Switzerland	-.076	Sudan	-.124	Chad	-.130		

TABLE 35

Index of Japan International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.741	Belgium	-.103	East Germany	-.142	Malawi	-.147
Sweden	1.817	New Zealand	-.106	Ethiopia	-.142	Mauritania	-.147
South Korea	1.385	Argentina	-.107	Ireland	-.142	Mauritius	-.147
India	.911	Chile	-.107	Lebanon	-.142	Paraguay	-.147
Indonesia	.692	Greece	-.109	Rumania	-.142	Somalia	-.147
Pakistan	.526	Mexico	-.109	Sudan	-.142	Togo	-.147
South Vietnam	.524	Norway	-.112	Swaziland	-.142	Uruguay	-.147
Cambodia	.503	Panama	-.113	Turkey	-.142	Yemen	-.147
Philippines	.319	Cuba	-.122	Uganda	-.142	Albania	-.148
Thailand	.275	Zambia	-.122	Yugoslavia	-.142	Barbados	-.148
Singapore	.267	Venezuela	-.124	Bolivia	-.144	Botswana	-.148
Malaysia	.261	Spain	-.126	Bulgaria	-.144	Burundi	-.148
Australia	.212	Nigeria	-.130	Czechoslovakia	-.144	Central African Rep.	-.148
Peru	.212	Ecuador	-.132	Iraq	-.144	Chad	-.148
Burma	.187	Denmark	-.133	Morocco	-.144	Congo	-.148
Kenya	.185	Zaire	-.135	Syria	-.144	Equitorial Guinea	-.148
Laos	.177	Liberia	-.136	Tanzania	-.144	Gambia	-.148
Nepal	.177	Muscat and Oman	-.136	Afghanistan	-.145	Guinea	-.148
Canada	.126	Columbia	-.137	Ivory Coast	-.145	Lesotho	-.148
Iran	.085	Dominican Republic	-.138	Sierra Leone	-.145	Luxemborg	-.148
West Germany	.037	Ghana	-.138	South Yemen	-.145	Maldive	-.148
China, Republic of	.028	Israel	-.138	Trinidad-Tobago	-.145	Mali	-.148
		Poland	-.138	Cameroun	-.146	Malta	-.148
United Kingdom	-.044	Portugal	-.139	Cyprus/Greek	-.146	Mongolia	-.148
China, Peoples Rep.	-.017	Austria	-.140	Guyana	-.146	Niger	-.148
Saudi Arabia	-.019	Egypt	-.140	Honduras	-.146	Rhodesia	-.148
Soviet Union	-.021	El Salvador	-.140	Hungary	-.146	Rwanda	-.148
South Africa	-.039	Finland	-.140	Jamaica	-.146	Senegal	-.148
Kuwait	-.076	Guatemala	-.140	Jordan	-.146	Tunisia	-.148
Netherlands	-.080	North Korea	-.140	Malagasy	-.146	Upper Volta	-.148
Brazil	-.081	Libya	-.141	North Vietnam	-.146		
Switzerland	-.089	Nicaragua	-.141	Dahomey	-.147		
France	-.091	Sri Lanka (Ceylon)	-.141	Gabon	-.147		
Italy	-.099	Algeria	-.142	Haiti	-.147		
		Costa Rica	-.142	Iceland	-.147		

TABLE 36

Index of Japan International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.757	Belgium	-.082	Rumania	-.132	Haiti	-.138
Sweden	1.827	Greece	-.088	Bangladesh	-.133	Iceland	-.138
Malaysia	1.465	New Zealand	-.088	Egypt	-.133	Jamaica	-.138
South Korea	1.021	Panama	-.088	Lebanon	-.133	Malawi	-.138
Indonesia	.695	Turkey	-.092	Sri Lanka (Ceylon)	-.133	Mauritius	-.138
Cambodia	.471	Italy	-.093	Yugoslavia	-.133	Somalia	-.138
South Vietnam	.332	Mexico	-.096	Bolivia	-.134	Uruguay	-.138
Thailand	.261	Norway	-.109	Costa Rica	-.134	Albania	-.139
India	.245	Zambia	-.112	Ethiopia	-.134	Barbados	-.139
Australia	.224	Chile	-.113	Ireland	-.134	Botswana	-.139
Peru	.184	Venezuela	-.113	Sudan	-.134	Burundi	-.139
Laos	.166	Argentina	-.114	Afghanistan	-.135	Central African Rep.	-.139
Canada	.141	Nigeria	-.114	Bulgaria	-.135	Chad	-.139
Philippines	.128	Spain	-.114	Iraq	-.135	Congo	-.139
Singapore	.115	Cuba	-.115	Syria	-.135	Dahomey	-.139
Brazil	.093	Denmark	-.122	Uganda	-.135	Equitorial Guinea	-.139
Iran	.085	Muscat and Oman	-.123	Algeria	-.136	Gambia	-.139
West Germany	.061	North Korea	-.123	Czechoslovakia	-.136	Guinea	-.139
China, Republic of	.048	Poland	-.123	Ivory Coast	-.136	Lesotho	-.139
United Kingdom	.044	Columbia	-.125	Morocco	-.136	Luxemborg	-.139
Pakistan	.034	Ecuador	-.126	Swaziland	-.136	Malagasy	-.139
Burma	.021	Israel	-.127	Tanzania	-.136	Maldive	-.139
Kenya	.020	Austria	-.128	Trinidad-Tobago	-.136	Mali	-.139
Nepal	.014	Finland	-.128	Cameroun	-.137	Malta	-.139
North Vietnam	.014	Dominican Republic	-.129	Cyprus/Greek	-.137	Mongolia	-.139
Saudi Arabia	.002	Liberia	-.129	Guyana	-.137	Niger	-.139
		Portugal	-.129	Honduras	-.137	Paraguay	-.139
China, Peoples Rep.	-.003	Zaire	-.130	Hungary	-.137	Rhodesia	-.139
Soviet Union	-.003	El Salvador	-.131	Jordan	-.137	Rwanda	-.139
South Africa	-.044	Nicaragua	-.131	Mauritania	-.137	Senegal	-.139
Kuwait	-.056	East Germany	-.132	Sierra Leone	-.137	Togo	-.139
France	-.067	Ghana	-.132	South Yemen	-.137	Tunisia	-.139
Netherlands	-.070	Guatemala	-.132	Yemen	-.137	Upper Volta	-.139
Switzerland	-.076	Libya	-.132	Gabon	-.138		

TABLE 37

Index of Japan International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	6.123	Italy	-.081	Yugoslavia	-.131	Trinidad-Tobago	-.136
South Korea	1.112	Belgium	-.083	Czechoslovakia	-.132	Uruguay	-.136
North Vietnam	1.104	Norway	-.090	Lebanon	-.132	Yemen	-.136
South Vietnam	.759	Greece	-.093	Nicaragua	-.132	Congo	-.137
Indonesia	.689	Mexico	-.094	Sri Lanka (Ceylon)	-.132	Dahomey	-.137
West Germany	.469	Argentina	-.098	Algeria	-.133	Gabon	-.137
Thailand	.322	Sweden	-.105	Bulgaria	-.133	Haiti	-.137
Australia	.306	Zambia	-.105	East Germany	-.133	Malawi	-.137
India	.303	Nigeria	-.107	Ethiopia	-.133	Mauritius	-.137
Iran	.267	Chile	-.109	Ireland	-.133	Nepal	-.137
Peru	.252	Spain	-.109	Iraq	-.133	Paraguay	-.137
United Kingdom	.240	Cuba	-.111	Liberia	-.133	Albania	-.138
China, Peoples Rep.	.230	Denmark	-.115	Somalia	-.133	Barbados	-.138
Cambodia	.218	Pakistan	-.115	Tanzania	-.133	Botswana	-.138
Soviet Union	.187	Venezuela	-.117	Bolivia	-.134	Burundi	-.138
Philippines	.176	North Korea	-.122	Costa Rica	-.134	Central African Rep.	-.138
Canada	.148	Poland	-.122	Dominican Republic	-.134	Chad	-.138
Brazil	.140	Portugal	-.122	Ivory Coast	-.134	Equitorial Guinea	-.138
France	.124	Muscat and Oman	-.123	Morocco	-.134	Gambia	-.138
China, Republic of	.102	Turkey	-.123	Afghanistan	-.135	Guinea	-.138
Bangladesh	.047	Libya	-.124	Iceland	-.135	Lesotho	-.138
Egypt	.045	Austria	-.125	Mauritanius	-.135	Luxemborg	-.138
Syria	.042	Columbia	-.125	Uganda	-.135	Maldive	-.138
Laos	.040	Finland	-.125	Cameroun	-.136	Mali	-.138
Saudi Arabia	.030	Israel	-.125	Cyprus/Greek	-.136	Malta	-.138
		Zaire	-.126	Guyana	-.136	Mongolia	-.138
Malaysia	-.022	Burma	-.128	Honduras	-.136	Niger	-.138
Singapore	-.029	Ghana	-.128	Hungary	-.136	Rhodesia	-.138
South Africa	-.031	Ecuador	-.129	Jamaica	-.136	Rwanda	-.138
Kuwait	-.067	Kenya	-.129	Jordan	-.136	Senegal	-.138
Switzerland	-.070	Rumania	-.129	Malagasy	-.136	Togo	-.138
Netherlands	-.073	Sudan	-.130	Sierra Leone	-.136	Tunisia	-.138
New Zealand	-.073	El Salvador	-.131	South Yemen	-.136	Upper Volta	-.138
Panama	-.080	Guatemala	-.131	Swaziland	-.136		

TABLE 38

Index of Japan International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

United States	5.934	Netherlands	-.079	Guatemala	-.157	Gabon	-.163
Zaire	1.784	Panama	-.095	Bolivia	-.158	Guyana	-.163
South Korea	.970	Italy	-.105	Bulgaria	-.158	Malawi	-.163
North Vietnam	.873	New Zealand	-.105	East Germany	-.158	Mauritius	-.163
South Vietnam	.731	Switzerland	-.109	El Salvador	-.158	Nepal	-.163
Indonesia	.683	Nigeria	-.115	Lebanon	-.158	Paraguay	-.163
Peru	.607	Belgium	-.116	Sri Lanka (Ceylon)	-.158	Senegal	-.163
Soviet Union	.447	Argentina	-.119	Costa Rica	-.159	Sierra Leone	-.163
Egypt	.443	Cuba	-.121	Czechoslovakia	-.159	Uruguay	-.163
Saudi Arabia	.380	Libya	-.124	Morocco	-.159	Albania	-.164
Iran	.371	Sweden	-.125	Nicaragua	-.159	Barbados	-.164
West Germany	.367	Norway	-.127	Sudan	-.159	Botswana	-.164
Brazil	.268	Greece	-.129	Tanzania	-.159	Burundi	-.164
Thailand	.241	Chile	-.133	Afghanistan	-.160	Chad	-.164
Australia	.240	Spain	-.134	Dominican Republic	-.160	Central African Rep.	-.164
China, Peoples Rep.	.204	Venezuela	-.135	Ethiopia	-.160	Congo	-.164
United Kingdom	.145	Muscan and Oman	-.136	Ireland	-.160	Cuba	-.164
Syria	.136	Zambia	-.136	Hungary	-.161	Dahomey	-.164
Cambodia	.131	North Korea	-.140	Ivory Coast	-.161	Equitorial Guinea	-.164
Canada	.121	Denmark	-.143	Jordan	-.161	Gambia	-.164
Philippines	.119	Pakistan	-.144	Liberia	-.161	Guinea	-.164
Malaysia	.097	Poland	-.144	Mauritania	-.161	Lesotho	-.164
France	.073	Turkey	-.148	Cameroun	-.162	Luxemborg	-.164
India	.067	Rumania	-.149	Honduras	-.162	Maldive	-.164
China, Republic of	.034	Portugal	-.150	Iceland	-.162	Mali	-.164
Iraq	.029	Columbia	-.151	Jamaica	-.162	Malta	-.164
Mexico	.024	Algeria	-.152	Malagasy	-.162	Mongolia	-.164
		Finland	-.153	Somalia	-.162	Niger	-.164
Kuwait	-.003	Yugoslavia	-.153	South Yemen	-.162	Rwanda	-.164
Burma	-.010	Austria	-.154	Swaziland	-.162	Rhodesia	-.164
Bangladesh	-.011	Israel	-.154	Trinidad-Tobago	-.162	Togo	-.164
Laos	-.016	Ecuador	-.155	Uganda	-.162	Tunisia	-.164
Singapore	-.030	Ghana	-.156	Yemen	-.162	Upper Volta	-.164
South Africa	-.048	Kenya	-.156	Cyprus/Greek	-.163		

support activity--based on Japan's recent past behavior--would indeed signal a major change in its foreign defense posture.

Finally, these results also point out the need for developing indicators of threat spreading potential that represent situations other than military commitment. Japan is an active member of the international system with widespread economic and political interests, but it does not have a recent history as a major military actor. Indicators sensitive to non-military factors are important in the contemporary international system where for many countries national attributes--measured by economic wealth and global economic transactions--do not necessarily correlate strongly with foreign military activity and where non-military activities are, in any case, important to the stability of the international system.

SOVIET UNION. The results for the Soviet Union are provided in Tables 39 through 45. The data analysis shows that the Soviet Union had fewer strong military commitments than the United States, but that they were equally widespread geographically. Over the seven year period the Soviets had major military commitments with nations in Eastern Europe, the Middle East, Latin America, and Asia, and lesser but evident commitments to a few countries in Africa.

The Soviet Union throughout the period of the analysis had very strong and consistent commitment relationships with East Germany, other Eastern European nations, and North Vietnam. The Soviet commitment to Syria strengthened over the period. The data analysis also shows a consistently strong Soviet commitment to Egypt, but if data had been available for 1975 and the first nine months of 1976 for this analysis, the commitment scores for Egypt presumably would have dropped significantly. Soviet commitments to India and Iraq appeared to have increased between 1968 and 1974, while Soviet commitments to Cuba, Mongolia, North Korea, and Finland remained consistent. The Soviet Union reduced or ended its military support activity to Iran, Pakistan, and Cambodia during the period.

In addition to these results several other findings from the analysis of the Soviet data can be noted. First, these results when compared to those of the Western actors and especially the United States indicate the problem of "dual commitments." If the nations at the top of the Soviet commitment listings are compared with the major commitments of the United States several situations where the United States was tied militarily to one side of a troubled area

and the Soviet Union to the other are indicated. Dual commitment situations exist in Europe, the Middle East, Latin America, and Asia. The only area which did not show up was Africa--which, indeed, raises another question.

There is no evidence in the data analysis of a potential United States Soviet confrontation in southern Africa. One problem is, of course, that the 1974 data did not include southern African regions that had not as yet become independent nation-states. A much more difficult research problem is, however, that southern Africa is in fact an area where United States-Soviet confrontation generally was unexpected. Marcum opened a recent FOREIGN AFFAIRS article with the statement that Angola "was an improbable locus for a superpower collision..." (1976:407). As Marcum noted, one of the reasons that Secretary of State Kissinger challenged Soviet intervention in Angola was that the Soviets "never had any historical interests" there. This observation suggests that much more study is needed of possible threat spreading networks--including those which may be based on non-relational indicators.

Second, as noted above the Soviet data analysis identified clearly the problem of non nation-state actors. An early assumption in the study was that the development of commitment indicators and the collection of data for such targets would be especially difficult and a decision was made to not focus on these units for this preliminary study. A result of that decision was that non nation-state units like the PLO and the southern African liberation groups among others would not be accounted for, and as the review of the Soviet Union has shown, it was impossible to identify a southern African problem. The absence of non nation- state actors is probably most severe for analyses of the Soviet Union and China but other major actor analyses also are affected. The development of an indicator for such relationships is needed for a more complete understanding of threat spreading networks.

Third, the results for the Soviet Union indicate that its relations with Japan and West Germany improved during the seven year period. The source of the change in the commitment scores was due to improved trade relations between the Soviet Union and West Germany and not to changes in the other military indicators. Here it is important to note that the indicator Trade is most useful as a descriptor of international military commitment when it occurs with other military support activity. When it accounts for a great deal of the variation in a commitment score by itself, it is merely an indication of substantial trade relations

TABLE 39

Index of Soviet Union International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	3.660	China, Peoples Rep.	-.154	Ethipia	-.252	Lesotho	-.254
Egypt	2.900	Iraq	-.177	Ivory Coast	-.252	Liberia	-.254
North Vietnam	2.663	Morocco	-.178	Kuwait	-.252	Luxemborg	-.254
Czechoslovakia	2.552	Sudan	-.180	Libya	-.252	Malagasy	-.254
Poland	1.630	Indonesia	-.183	Mali	-.252	Malawi	-.254
Hungary	1.613	Sweden	-.186	Burma	-.253	Maldive	-.254
Bulgaria	1.355	Tunisia	-.188	Congo	-.253	Malta	-.254
Iran	1.014	Jordan	-.190	Costa Rica	-.253	Mauritania	-.254
Pakistan	.986	Somalia	-.190	El Salvador	-.253	Mauritius	-.254
India	.948	Guyana	-.191	Kenya	-.253	Mexico	-.254
Rumania	.892	Uruguay	-.191	Portugal	-.253	Muscat and Oman	-.254
Syria	.716	United States	-.209	Saudi Arabia	-.253	Nepal	-.254
Cambodia	.675	Belgium	-.212	Thailand	-.253	Nicaragua	-.254
North Korea	.579	Canada	-.214	Uganda	-.253	Niger	-.254
Finland	.568	Netherlands	-.217	Barbados	-.254	Panama	-.254
Mongolia	.562	Afghanistan	-.227	Bolivia	-.254	Paraguay	-.254
Cuba	.467	Turkey	-.232	Botswana	-.254	Peru	-.254
Albania	.378	Greece	-.235	Burundi	-.254	Philippines	-.254
South Yemen	.242	Denmark	-.236	Central African Rep.	-.254	Rhodesia	-.254
Nigeria	.235	Norway	-.237	Chad	-.254	Rwanda	-.254
Yemen	.222	Singapore	-.237	Chile	-.254	Senegal	-.254
Algeria	.136	Australia	-.238	China, Republic of	-.254	Sierra Leone	-.254
Tanzania	.035	Switzerland	-.239	Dahomey	-.254	South Africa	-.254
		Spain	-.240	Dominican Republic	-.254	South Korea	-.254
Japan	-.021	Sri Lanka	-.242	Equitorial Guinea	-.254	South Vietnam	-.254
United Kingdom	-.023	Argentina	-.245	Gabon	-.254	Swaziland	-.254
West Germany	-.044	Iceland	-.246	Gambia	-.254	Togo	-.254
Brazil	-.051	Ecuador	-.247	Guatemala	-.254	Trinidad-Tobago	-.254
Italy	-.084	Lebanon	-.249	Guinea	-.254	Upper Volta	-.254
France	-.090	New Zealand	-.250	Haiti	-.254	Venezuela	-.254
Yugoslavia	-.101	Cameroun	-.251	Honduras	-.254	Zaire	-.254
Ghana	-.122	Cyprus/Greek	-.251	Israel	-.254	Zambia	-.254
Malaysia	-.140	Ireland	-.251	Jamaica	-.254		
Austria	-.144	Columbia	-.252	Laos	-.254		

TABLE 40

Index of Soviet Union International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	4.167	Morocco	-.161	Ecuador	-.257	Honduras	-.259
Czechoslovakia	3.129	Sudan	-.169	Ethiopia	-.257	Israel	-.259
Egypt	2.982	Lebanon	-.172	Ireland	-.257	Jamaica	-.259
Poland	1.917	Tunisia	-.173	Kuwait	-.257	Laos	-.259
Hungary	1.767	Cambodia	-.176	Libya	-.257	Lesotho	-.259
North Vietnam	1.602	Congo	-.176	Mali	-.257	Liberia	-.259
Bulgaria	1.428	Somalia	-.176	Costa Rica	-.258	Luxemborg	-.259
Pakistan	1.233	South Africa	-.176	Ivory Coast	-.258	Malagasy	-.259
Rumania	1.144	Uruguay	-.176	Kenya	-.258	Malawi	-.259
India	1.037	Sweden	-.178	Saudi Arabia	-.258	Maldive	-.259
Syria	1.002	United States	-.203	Sierra Leone	-.258	Malta	-.259
South Yemen	.707	Austria	-.213	Thailand	-.258	Mauritania	-.259
Mongolia	.659	Netherlands	-.217	Togo	-.258	Mauritius	-.259
North Korea	.604	Belgium	-.222	Uganda	-.258	Mexico	-.259
Finland	.587	Afghanistan	-.235	Zambia	-.258	Muscat and Oman	-.259
Cuba	.466	Greece	-.238	Albania	-.259	Nepal	-.259
Jordan	.466	China, Peoples Rep.	-.239	Barbados	-.259	Nicaragua	-.259
Nigeria	.341	Singapore	-.240	Bolivia	-.259	Niger	-.259
Iran	.169	Switzerland	-.240	Botswana	-.259	Panama	-.259
Tanzania	.101	Australia	-.241	Burundi	-.259	Paraguay	-.259
Brazil	.009	Denmark	-.241	Central African Rep.	-.259	Philippines	-.259
Iraq	.004	Norway	-.246	Chad	-.259	Portugal	-.259
		Argentina	-.248	Chile	-.259	Rhodesia	-.259
West Germany	-.005	Spain	-.250	China, Rep. of	-.259	Rwanda	-.259
Yemen	-.012	Sri Lanka	-.251	Dahomey	-.259	Senegal	-.259
Japan	-.013	Canada	-.252	Dominican Rep.	-.259	South Korea	-.259
United Kingdom	-.022	Iceland	-.252	El Salvador	-.259	South Vietnam	-.259
Italy	-.077	Ghana	-.253	Equitorial Guinea	-.259	Swaziland	-.259
Peru	-.094	Indonesia	-.253	Gabon	-.259	Trinidad-Tobago	-.259
France	-.098	New Zealand	-.254	Gambia	-.259	Upper Volta	-.259
Yugoslavia	-.131	Cameroun	-.255	Guatemala	-.259	Venezuela	-.259
Algeria	-.135	Cyprus	-.255	Guinea	-.259	Zaire	-.259
Malaysia	-.148	Columbia	-.256	Guyana	-.259		
Turkey	-.155	Burma	-.257	Haiti	-.259		

TABLE 41

Index of Soviet Union International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	4.189	Lebanon	-.140	Thailand	-.240	China, Rep. of	-.244
Czechoslovakia	3.384	Libya	-.142	Kuwait	-.241	Dahomey	-.244
Egypt	3.053	Tunisia	-.143	Saudi Arabia	-.241	Dominican Rep.	-.244
Hungary	1.652	Bolivia	-.145	Burma	-.242	El Salvador	-.244
Poland	1.617	Congo	-.145	Costa Rica	-.242	Equitorial Guinea	-.244
Syria	1.404	Guinea	-.145	Ireland	-.242	Gabon	-.244
North Vietnam	1.365	Philippines	-.145	Mali	-.242	Guatemala	-.244
Bulgaria	1.158	South Africa	-.145	Togo	-.242	Haiti	-.244
Rumania	.999	Uruguay	-.145	Uganda	-.242	Honduras	-.244
Finland	.692	Sweden	-.155	Yemen	-.242	Jamaica	-.244
Pakistan	.546	Cambodia	-.161	Ecuador	-.243	Lesotho	-.244
North Korea	.541	Laos	-.161	Ethiopia	-.243	Luxemborg	-.244
Cuba	.537	United States	-.182	Gambia	-.243	Malagasy	-.244
Nigeria	.529	Austria	-.193	Guyana	-.243	Malawi	-.244
India	.524	Belgium	-.203	Israel	-.243	Maldive	-.244
Mongolia	.503	Canada	-.209	Ivory Coast	-.243	Mauritius	-.244
Jordan	.466	Netherlands	-.212	Kenya	-.243	Mexico	-.244
South Yemen	.255	Australia	-.219	Liberia	-.243	Muscat and Oman	-.244
Peru	.233	Switzerland	-.219	Malta	-.243	Nepal	-.244
Japan	.009	Afghanistan	-.222	Mauritania	-.243	Nicaragua	-.244
		Greece	-.222	Portugal	-.243	Niger	-.244
West Germany	-.006	Sudan	-.222	Senegal	-.243	Panama	-.244
United Kingdom	-.008	Denmark	-.224	Sierra Leone	-.243	Paraguay	-.244
Iran	-.029	Singapore	-.225	Somalia	-.243	Rhodesia	-.244
Iraq	-.029	Ghana	-.226	Tanzania	-.243	Rwanda	-.244
Brazil	-.039	Norway	-.226	Zambia	-.243	South Korea	-.244
Italy	-.060	Argentina	-.234	Albania	-.244	South Vietnam	-.244
China, Peoples Rep.	-.063	New Zealand	-.235	Barbados	-.244	Swaziland	-.244
France	-.095	Indonesia	-.236	Botswana	-.244	Trinidad-Tobago	-.244
Algeria	-.102	Iceland	-.237	Burundi	-.244	Upper Volta	-.244
Yugoslavia	-.108	Sri Lanka	-.237	Cameroun	-.244	Venezuela	-.244
Turkey	-.124	Columbia	-.239	Central African Rep.	-.244	Zaire	-.244
Morocco	-.131	Spain	-.239	Chad	-.244		
Malaysia	-.138	Cyprus	-.240	Chile	-.244		

TABLE 42

Index of Soviet Union International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	4.091	France	-.112	Ivory Coast	-.256	Jamaica	-.261
Egypt	2.958	Turkey	-.135	Cyprus	-.257	Japan	-.261
Czechoslovakia	2.612	Brazil	-.147	Ireland	-.259	Kenya	-.261
India	2.036	Indonesia	-.156	Kuwait	-.259	Lesotho	-.261
Poland	1.872	Jordan	-.162	Saudi Arabia	-.259	Liberia	-.261
Hungary	1.641	Malta	-.162	Somalia	-.259	Luxemborg	-.261
North Vietnam	1.265	Philippines	-.162	Thailand	-.259	Malagasy	-.261
Finland	1.250	South Africa	-.162	Burma	-.260	Malawi	-.261
Bulgaria	1.137	Sri Lanka	-.162	Cameroun	-.260	Mauritania	-.261
Syria	.974	Sweden	-.190	Ecuador	-.260	Mexico	-.261
Mongolia	.966	Ethiopia	-.193	Maldive	-.260	Muscat and Oman	-.261
Rumania	.955	Cambodia	-.194	Mali	-.260	Nepal	-.261
North Korea	.871	Laos	-.194	Mauritius	-.260	Nicaragua	-.261
Lebanon	.705	United States	-.195	Tanzania	-.260	Niger	-.261
Congo	.534	Austria	-.211	Yemen	-.260	Panama	-.261
Peru	.467	Belgium	-.214	Albania	-.261	Paraguay	-.261
Cuba	.314	Canada	-.220	Barbados	-.261	Portugal	-.261
South Yemen	.286	Netherlands	-.230	Botswana	-.261	Rhodesia	-.261
China, Peoples Rep.	.121	Sudan	-.230	Burma	-.261	Rwanda	-.261
Algeria	.047	Ghana	-.233	Central African Rep.	-.261	Senegal	-.261
Guinea	.004	Australia	-.240	Chad	-.261	Sierra Leone	-.261
		Switzerland	-.240	China, Rep. of	-.261	South Vietnam	-.261
South Korea	-.010	Norway	-.241	Costa Rica	-.261	Swaziland	-.261
West Germany	-.020	Afghanistan	-.242	Dahomey	-.261	Togo	-.261
Iraq	-.041	Denmark	-.243	Dominican Rep.	-.261	Trinidad-Tobago	-.261
Morocco	-.050	Iran	-.243	El Salvador	-.261	Tunisia	-.261
United Kingdom	-.054	Malaysia	-.245	Equitorial Guinea	-.261	Uganda	-.261
Bolivia	-.063	Greece	-.247	Gabon	-.261	Upper Volta	-.261
Nigeria	-.076	Singapore	-.247	Gambia	-.261	Uruguay	-.261
Pakistan	-.078	Argentina	-.251	Guatemala	-.261	Venezuela	-.261
Italy	-.090	New Zealand	-.253	Guyana	-.261	Zaire	-.261
Libya	-.092	Columbia	-.254	Haiti	-.261	Zambia	-.261
Chile	-.095	Iceland	-.254	Honduras	-.261		
Yugoslavia	-.102	Spain	-.255	Israel	-.261		

TABLE 43

Index of Soviet Union International Military Commitments to 134 Target Nations: 1972
Average Standard Scords for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	3.727	Bolivia	-.103	Somalia	-.248	Burma	-.254
Egypt	3.246	Yugoslavia	-.104	Cyprus	-.250	Central African Rep.	-.254
Syria	2.133	Italy	-.110	Saudi Arabia	-.250	Chad	-.254
Czechoslovakia	1.957	Brazil	-.156	Tunisia	-.250	China	-.254
North Vietnam	1.893	Indonesia	-.173	Guyana	-.251	Dahomey	-.254
Hungary	1.600	Maldive	-.174	Thailand	-.251	Dominican Rep.	-.254
India	1.545	Canada	-.177	Ethiopia	-.252	Equitorial Guinea	-.254
Poland	1.495	Malta	-.177	Ireland	-.252	Gabon	-.254
North Korea	1.199	Philippines	-.178	Kuwait	-.252	Guatemala	-.254
Bulgaria	1.104	Cambodia	-.193	Venezuela	-.252	Haiti	-.254
Finland	.944	Laos	-.193	Burma	-.253	Honduras	-.254
Rumania	.766	Sweden	-.195	Cameroun	-.253	Israel	-.254
Mongolia	.731	Austria	-.204	Costa Rica	-.253	Jamaica	-.254
Iraq	.714	Belgium	-.206	Ecuador	-.253	Lesotho	-.254
Cuba	.493	Iran	-.208	El Salvador	-.253	Luxemborg	-.254
Bangladesh	.269	Turkey	-.215	Gambia	-.253	Malagasy	-.254
Peru	.261	Ghana	-.220	Kenya	-.253	Malawi	-.254
Lebanon	.209	Netherlands	-.221	Jordan	-.253	Maldive	-.254
China, Peoples Rep.	.175	Switzerland	-.229	Liberia	-.253	Mali	-.254
Chile	.169	Sudan	-.234	Mauritius	-.253	Mauritania	-.254
Congo	.067	Australia	-.237	Mexico	-.253	Muscat and Oman	-.254
West Germany	.028	Denmark	-.238	Portugal	-.253	Nepal	-.254
Japan	.013	Spain	-.239	Rwanda	-.253	Nicaragua	-.254
		Afghanistan	-.241	Senegal	-.253	Niger	-.254
Pakistan	-.033	Norway	-.242	Sierra	-.253	Panama	-.254
Libya	-.039	Argentina	-.244	South Africa	-.253	Paraguay	-.254
Guinea	-.042	Ivory Coast	-.244	Tanzania	-.253	Rhodesia	-.254
United Kingdom	-.053	Malaysia	-.244	Togo	-.253	South Korea	-.254
Algeria	-.082	New Zealand	-.244	Uganda	-.253	South Vietnam	-.254
United States	-.088	Columbia	-.246	Uruguay	-.253	Swaziland	-.254
Morocco	-.091	Greece	-.246	Zambia	-.253	Trinidad	-.254
South Yemen	-.093	Singapore	-.246	Albania	-.254	Upper Volta	-.254
Nigeria	-.094	Yemen	-.246	Barbados	-.254	Zaire	-.254
France	-.098	Iceland	-.247	Botswana	-.254		

TABLE 44

Index of Soviet Union International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	3.739	Guinea	-.124	Philippines	-.246	Israel	-.252
Egypt	2.847	Jordan	-.150	Yemen	-.247	Jamaica	-.252
Syria	2.720	Uruguay	-.162	Columbia	-.248	Kenya	-.252
Czechoslovakia	1.929	Pakistan	-.169	Cyprus/Greek	-.248	Lesotho	-.252
North Vietnam	1.824	Sri Lanka (Ceylon)	-.172	South Yemen	-.249	Liberia	-.252
Hungary	1.686	Indonesia	-.173	Guyana	-.250	Luxemborg	-.252
Poland	1.673	Belgium	-.175	Ireland	-.250	Malagasy	-.252
India	1.628	Bolivia	-.175	Ivory Coast	-.250	Malawi	-.252
Bulgaria	1.258	Laos	-.175	Burma	-.251	Maldive	-.252
Iraq	1.107	Malta	-.175	Cameroun	-.251	Mali	-.252
Rumania	.852	Canada	-.187	Ethiopia	-.251	Mauritania	-.252
Mongolia	.710	Sweden	-.189	Mauritius	-.251	Mexico	-.252
Finland	.575	Saudi Arabia	-.196	Tanzania	-.251	Muscat and Oman	-.252
North Korea	.533	Sudan	-.196	Thailand	-.251	Nepal	-.252
Cuba	.377	Tunisia	-.198	Venezuela	-.251	Nicaragua	-.252
Bangladesh	.296	Kuwait	-.199	Albania	-.252	Niger	-.252
Chile	.159	Australia	-.200	Barbados	-.252	Nigeria	-.252
West Germany	.136	Austria	-.207	Botswana	-.252	Panama	-.252
Peru	.110	Netherlands	-.212	Burundi	-.252	Paraguay	-.252
Somalia	.109	Iran	-.218	Cambodia	-.252	Portugal	-.252
Japan	.052	Turkey	-.218	Central African Rep.	-.252	Rhodesia	-.252
United States	.041	Brazil	-.219	Chad	-.252	Rwanda	-.252
China, Peoples Rep.	.008	Switzerland	-.221	China, Republic of	-.252	Senegal	-.252
		Denmark	-.227	Congo	-.252	Sierra Leone	-.252
Lebanon	-.018	Malaysia	-.230	Dahomey	-.252	South Africa	-.252
Morocco	-.033	Venezuela	-.234	Dominican Republic	-.252	South Korea	-.252
Algeria	-.035	Greece	-.235	Ecuador	-.252	South Vietnam	-.252
Costa Rica	-.047	Singapore	-.235	El Salvador	-.252	Swaziland	-.252
United Kingdom	-.050	Norway	-.239	Equitorial Guinea	-.252	Togo	-.252
France	-.051	Spain	-.239	Gabon	-.252	Trinidad-Tobago	-.252
Uganda	-.076	Afghanistan	-.240	Gambia	-.252	Upper Volta	-.252
Yugoslavia	-.082	New Zealand	-.242	Guatemala	-.252	Zaire	-.252
Italy	-.096	Ghana	-.244	Haiti	-.252	Zambia	-.252
Libya	-.109	Iceland	-.246	Honduras	-.252		

TABLE 45

Index of Soviet Union International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements(2), Aid Statements(2), Arms Transfers, Foreign Based Troops, and Trade

East Germany	3.471	Jordan	-.149	Sri Lanka (Ceylon)	-.265	Gambia	-.270
Syria	3.095	Belgium	-.159	Columbia	-.266	Guinea	-.270
Egypt	2.148	China, Peoples Rep.	-.159	Phillipines	-.266	Guatemala	-.270
Czechoslovakia	1.857	Sweden	-.171	Thailand	-.266	Haiti	-.270
Poland	1.621	Portugal	-.182	South Yemen	-.267	Honduras	-.270
India	1.618	Laos	-.183	Cameroun	-.268	Israel	-.270
Hungary	1.543	Nigeria	-.183	Ethiopia	-.268	Jamaica	-.270
North Vietnam	1.515	Morocco	-.196	Guyana	-.268	Lesotho	-.270
Bulgaria	1.233	Austria	-.197	Ivory Coast	-.268	Liberia	-.270
Iraq	1.184	Netherlands	-.200	Malta	-.268	Luxemborg	-.270
Cuba	.857	Saudi Arabia	-.204	Tanzania	-.268	Malagasy	-.270
Somalia	.842	Sudan	-.204	Burma	-.269	Malawi	-.270
Rumania	.828	Tunisia	-.205	Burundi	-.269	Maldive	-.270
Libya	.713	Kuwait	-.208	Congo	-.269	Mali	-.270
Finland	.709	Yemen	-.209	Costa Rica	-.269	Mauritania	-.270
Mongolia	.608	Iran	-.223	Dahomey	-.269	Mauritius	-.270
Uganda	.567	Australia	-.224	Kenya	-.269	Mexico	-.270
North Korea	.506	Switzerland	-.224	Senegal	-.269	Muscat and Oman	-.270
West Germany	.273	Malaysia	-.238	South Africa	-.269	Nepal	-.270
Bangladesh	.260	Turkey	-.240	Togo	-.269	Nicaragua	-.270
Peru	.240	Denmark	-.242	Venezuela	-.269	Niger	-.270
Japan	.160	Brazil	-.244	Albania	-.270	Panama	-.270
Yugoslavia	.078	Greece	-.245	Barbados	-.270	Paraguay	-.270
Chile	.055	Spain	-.245	Bolivia	-.270	Rhodesia	-.270
Uruguay	.045	Singapore	-.248	Botswana	-.270	Rwanda	-.270
Pakistan	.003	Norway	-.251	Cambodia	-.270	Sierra Leone	-.270
		New Zealand	-.255	Central African Rep.	-.270	South Korea	-.270
Italy	-.028	Afghanistan	-.258	Chad	-.270	South Vietnam	-.270
France	-.054	Ghana	-.258	China, Republic of	-.270	Swaziland	-.270
Lebanon	-.058	Iceland	-.258	Dominican Republic	-.270	Trinidad-Tobago	-.270
United Kingdom	-.072	Canada	-.260	Ecuador	-.270	Upper Volta	-.270
Argentina	-.075	Indonesia	-.262	El Salvador	-.270	Zaire	-.270
Algeria	-.096	Ireland	-.262	Equitorial Guinea	-.270	Zambia	-.270
United States	-.097	Cyprus/Greek	-.265	Gabon	-.270		

and not a significant military relationship. Further study is planned to determine how levels of significant commitment can be labeled with modifications to the analytical procedure described in this report.

CHINA AND CONCLUSION. The results for China are given in Tables 46 through 52. Since the discussion of these results requires special attention some conclusions about the data analysis for all of the countries will be summarized with the review of the China analysis. First, it is clear that the indicator did identify for China a few strong military commitments to others which were primarily located in Asia. China had important and consistent commitment ties with North Korea, North Vietnam, Pakistan, and Laos throughout the seven year period. Tanzania and other countries ranked high periodically as recipients of Chinese military support, but the strength of these relationships appeared in the data analysis to be inconsistent. Other interesting findings were that neither Albania nor the Soviet Union --as might be expected--scored very high on the indicator for the period of the analysis. For this analysis the Soviet Union was not considered to be a treaty partner of China. If data had been collected for earlier years when the Soviet Union and China cooperated directly in defense matters as well as during the period of highly advertised Albanian-Chinese ideological agreement, it is likely that both the Soviet Union and Albania would have ranked much higher on Chinese commitments.

Second, the variable trade had an especially large impact on the Chinese data analysis as it did in some of the other analyses. The primary reason for this impact for the China case was that there was not much public evidence in the data collected of substantial Chinese foreign military support. For the countries examined in this study, only Japan had less evidence of military commitment activity. This finding suggests that the Chinese, when compard to the other major actors examined, are relatively minor suppliers of direct military aid to other nation-states. The Chinese, therefore, are probably far less vulnerable to foreign area conflict than the United States, Western European actors, or the Soviet Union. China --at least militarily--appeared to be a very isolated nation during the period 1968 through 1974.

Third, trade has had a great deal of influence on the Chinese commitment scores. Again the note of caution is that when trade alone accounts for most or all of the variation in a target nation's commitment score then the results for that nation indicate an aspect of an international economic

TABLE 46

Index of China International Military Commitments to 133 Target Nations: 1968
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	5.236	Iraq	-.097	Tunisia	-.148	Iceland	-.152
North Korea	2.068	Kuwait	-.098	Yugoslavia	-.148	India	-.152
Japan	1.301	Tanzania	-.102	Argentina	-.149	Israel	-.152
Pakistan	1.217	Finland	-.103	Dahomey	-.149	Jamaica	-.152
Syria	.793	Hungary	-.103	Mauritius	-.149	Lebanon	-.152
Rumania	.564	Algeria	-.106	Turkey	-.149	Lesotho	-.152
West Germany	.543	Morocco	-.108	Burma	-.150	Luxemborg	-.152
Canada	.333	Austria	-.109	Chile	-.150	Malagasy	-.152
Zambia	.306	Nigeria	-.116	Liberia	-.150	Malawi	-.152
Cambodia	.279	Norway	-.121	Brazil	-.151	Maldive	-.152
Singapore	.276	Libya	-.123	Cameroun	-.151	Mexico	-.152
United Kingdom	.240	Denmark	-.127	Chad	-.151	Muscat and Oman	-.152
France	.223	Afghanistan	-.128	Gabon	-.151	Nepal	-.152
Australia	.180	Uganda	-.131	Ivory Coast	-.151	Nicaragua	-.152
Albania	.171	New Zealand	-.136	Venezuela	-.151	Panama	-.152
Cuba	.171	Kenya	-.138	Barbados	-.152	Paraguay	-.152
Malaysia	.163	Senegal	-.139	Bolivia	-.152	Philippines	-.152
Italy	.130	Bulgaria	-.140	Botswana	-.152	Portugal	-.152
Czechoslovakia	.128	Jordan	-.140	Burundi	-.152	Rhodesia	-.152
Egypt	.109	Peru	-.142	Central African Rep.	-.152	Rwanda	-.152
Mali	.085	Ethiopia	-.144	China, Republic of	-.152	Saudi Arabia	-.152
Congo	.076	Iran	-.144	Columbia	-.152	South Africa	-.152
Laos	.072	Mauritania	-.144	Costa Rica	-.152	South Korea	-.152
Yemen	.072	Ghana	-.146	Cyprus/Greek	-.152	South Vietnam	-.152
Sri Lanka (Ceylon)	.038	South Yemen	-.146	Dominican Republic	-.152	Soviet Union	-.152
East Germany	.016	Ireland	-.147	Ecuador	-.152	Swaziland	-.152
		Mongolia	-.147	El Salvador	-.152	Thailand	-.152
Poland	-.008	Niger	-.147	Equitorial Guinea	-.152	Tunisia	-.152
Netherlands	-.021	Sierra Leone	-.147	Gambia	-.152	United States	-.152
Sweden	-.041	Spain	-.147	Greece	-.152	Upper Volta	-.152
Switzerland	-.059	Togo	-.147	Guatemala	-.152	Uruguay	-.152
Indonesia	-.062	Guinea	-.148	Guyana	-.152	Zaire	-.152
Belgium	-.068	Malta	-.148	Haiti	-.152		
Sudan	-.072	Somalia	-.148	Honduras	-.152		

TABLE 47

Index of China International Military Commitments to 133 Target Nations: 1969
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	4.391	Sweden	-.095	Yugoslavia	-.162	Guatemala	-.166
North Korea	2.030	Belgium	-.097	Argentina	-.163	Guinea	-.166
Syria	1.835	Hungary	-.102	Dahomey	-.163	Haiti	-.166
Japan	1.356	Iraq	-.109	Gambia	-.163	Honduras	-.166
Pakistan	1.304	Kuwait	-.112	Mauritius	-.163	Iceland	-.166
Tanzania	1.251	Algeria	-.118	Niger	-.163	Israel	-.166
Zambia	.694	Nigeria	-.123	Somalia	-.163	Jamaica	-.166
West Germany	.435	Morocco	-.129	Chad	-.164	Lesotho	-.166
United Kingdom	.369	Libya	-.134	India	-.164	Liberia	-.166
Rumania	.285	Austria	-.135	Ivory Coast	-.164	Luxemborg	-.166
Singapore	.276	Finland	-.135	Barbados	-.165	Malagasy	-.166
Czechoslovakia	.232	Lebanon	-.140	Burma	-.165	Malawi	-.166
Australia	.226	Norway	-.141	Chile	-.165	Maldive	-.166
Canada	.189	Afghanistan	-.142	Columbia	-.165	Mexico	-.166
Egypt	.158	Denmark	-.143	Ecuador	-.165	Muscat and Oman	-.166
Albania	.130	Senegal	-.152	Gabon	-.165	Nepal	-.166
Cuba	.130	Ghana	-.154	Greece	-.165	Nicaragua	-.166
Cambodia	.129	Jordan	-.154	Guyana	-.165	Panama	-.166
Italy	.119	New Zealand	-.155	Paraguay	-.165	Philippines	-.166
France	.116	Bulgaria	-.156	Portugal	-.165	Rhodesia	-.166
Mali	.115	Kenya	-.156	Turkey	-.165	Rwanda	-.166
Congo	.111	Mauritania	-.156	Upper Volta	-.165	Saudi Arabia	-.166
Laos	.108	South Yemen	-.156	Bolivia	-.166	South Africa	-.166
Yemen	.107	Peru	-.157	Botswana	-.166	South Korea	-.166
Malaysia	.049	Uganda	-.157	Brazil	-.166	South Vietnam	-.166
Sri Lanka (Ceylon)	.041	Sierra Leone	-.158	Burundi	-.166	Swaziland	-.166
		Ethiopia	-.160	Cameroun	-.166	Thailand	-.166
East Germany	-.017	Ireland	-.160	Central African Republic	-.166	Trinidad-Tobago	-.166
Soviet Union	-.032	Venezuela	-.160	China, Republic of	-.166	Tunisia	-.166
Netherlands	-.051	Iran	-.161	Costa Rica	-.166	United States	-.166
Poland	-.067	Malta	-.161	Cyprus/Greek	-.166	Uruguay	-.166
Indonesia	-.074	Mongolia	-.161	Dominican Republic	-.166	Zaire	-.166
Sudan	-.087	Spain	-.161	El Salvador	-.166		
Switzerland	-.089	Togo	-.162	Equitorial Guinea	-.166		

TABLE 48

Index of China, Peoples Republic International Military Commitments to 133 Target Nations: 1970
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	4.757	Switzerland	-.094	Venezuela	-.167	Guyana	-.170
Pakistan	3.352	Sudan	-.100	Brazil	-.168	Haiti	-.170
North Korea	2.587	Hungary	-.102	Chad	-.168	Honduras	-.170
Japan	1.498	Belgium	-.103	Ivory Coast	-.168	Iceland	-.170
Tanzania	.766	Indonesia	-.117	Malta	-.168	India	-.170
Zambia	.743	Iraq	-.120	Mauritania	-.168	Israel	-.170
Rumania	.700	Kuwait	-.123	Mauritius	-.168	Jamaica	-.170
Albania	.414	Algeria	-.129	Somalia	-.168	Lesotho	-.170
West Germany	.337	Finland	-.132	Spain	-.168	Luxemborg	-.170
Laos	.220	Morocco	-.134	Togo	-.168	Malagasy	-.170
United Kingdom	.201	Norway	-.134	Turkey	-.168	Malawi	-.170
Australia	.176	Austria	-.135	Barbados	-.169	Maldive	-.170
Czechoslovakia	.158	Libya	-.139	Dahomey	-.169	Mexico	-.170
Canada	.157	Denmark	-.144	Paraguay	-.169	Muscat and Oman	-.170
France	.126	Nigeria	-.150	Upper Volta	-.169	Nepal	-.170
Singapore	.101	Lebanon	-.152	Afghanistan	-.170	Nicaragua	-.170
Egypt	.083	Ghana	-.155	Bolivia	-.170	Panama	-.170
Cuba	.073	Senegal	-.157	Botswana	-.170	Philippines	-.170
Italy	.064	Yugoslavia	-.157	Burma	-.170	Portugal	-.170
Malaysia	.024	New Zealand	-.158	Burundi	-.170	Rhodesia	-.170
Mali	.010	Iran	-.159	Cameroun	-.170	Rwanda	-.170
Sri Lanka (Ceylon)	.006	South Yemen	-.159	Central African Rep.	-.170	Saudi Arabia	-.170
Congo	.002	Kenya	-.161	Chile	-.170	South Africa	-.170
Yemen	.002	Jordan	-.162	China, Republic of	-.170	South Korea	-.170
Cambodia	.000	Uganda	-.163	Columbia	-.170	South Vietnam	-.170
Guinea	.000	Ethiopia	-.164	Costa Rica	-.170	Swaziland	-.170
Peru	.000	Argentina	-.165	Cyprus/Greek	-.170	Thailand	-.170
		Sierra Leone	-.166	Dominican Republic	-.170	Trinidad-Tobago	-.170
East Germany	-.018	Bulgaria	-.167	Ecuador	-.170	Tunisia	-.170
Netherlands	-.060	Gambia	-.167	El Salvador	-.170	United States	-.170
Poland	-.072	Ireland	-.167	Equitorial Guinea	-.170	Uruguay	-.170
Soviet Union	-.080	Liberia	-.167	Gabon	-.170	Zaire	-.170
Sweden	-.090	Mongolia	-.167	Greece	-.170		
Syria	-.090	Niger	-.167	Guatemala	-.170		

TABLE 49

Index of China, Peoples Republic International Military Commitments to 133 Target Nations: 1971
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	4.173	Hungary	-.101	Gambia	-.176	El Salvador	-.180
Pakistan	3.629	Switzerland	-.121	Mongolia	-.176	Equitorial Guinea	-.180
North Korea	2.573	Indonesia	-.130	Sierra Leone	-.176	Gabon	-.180
Laos	1.847	Algeria	-.139	Liberia	-.177	Guatemala	-.180
Japan	1.503	Belgium	-.139	Niger	-.177	Guyana	-.180
Rumania	.688	Finland	-.139	Somalia	-.177	Honduras	-.180
Zambia	.665	Iraq	-.143	Spain	-.177	Iceland	-.180
Tanzania	.489	Kuwait	-.146	Venezuela	-.177	India	-.180
Albania	.385	Morocco	-.146	Barbados	-.178	Ivory Coast	-.180
Peru	.374	Syria	-.152	Chad	-.178	Jamaica	-.180
Canada	.261	Austria	-.154	Dahomey	-.178	Lesotho	-.180
West Germany	.251	Bulgaria	-.156	Israel	-.178	Luxemborg	-.180
Cambodia	.196	Norway	-.157	Malta	-.178	Malagasy	-.180
Congo	.166	Denmark	-.158	Mauritania	-.178	Malawi	-.180
France	.157	Ghana	-.161	Mauritius	-.178	Maldive	-.180
Soviet Union	.099	Iran	-.161	Philippines	-.178	Muscat and Oman	-.180
Sudan	.086	Burma	-.162	Togo	-.178	Nepal	-.180
United Kingdom	.083	Lebanon	-.166	Ecuador	-.179	Nicaragua	-.180
Singapore	.069	Argentina	-.167	Greece	-.179	Panama	-.180
Cuba	.046	New Zealand	-.167	Haiti	-.179	Portugal	-.180
Italy	.041	Kenya	-.169	Paraguay	-.179	Rhodesia	-.180
		Yugoslavia	-.169	Tunisia	-.179	Rwanda	-.180
Ethiopia	-.066	Libya	-.170	Afghanistan	-.180	Saudi Arabia	-.180
Sri Lanka (Ceylon)	-.010	Senegal	-.170	Bolivia	-.180	South Africa	-.180
Guinea	-.011	South Yemen	-.170	Bostwana	-.180	Soutj Korea	-.180
East Germany	-.030	Mexico	-.172	Brazil	-.180	South Vietnam	-.180
Malaysia	-.036	United States	-.172	Burundi	-.180	Swaziland	-.180
Nigeria	-.039	Mali	-.173	Central African Rep.	-.180	Thailand	-.180
Australia	-.054	Ireland	-.174	Chile	-.180	Trinidad-Tobago	-.180
Egypt	-.068	Jordan	-.174	China, Republic of	-.180	Upper Volta	-.180
Czechoslovakia	-.073	Uganda	-.174	Columbia	-.180	Uruguay	-.180
Poland	-.073	Turkey	-.175	Costa Rica	-.180	Zaire	-.180
Netherlands	-.089	Yemen	-.175	Cyprus/Greek	-.180		
Sweden	-.093	Cameroun	-.176	Dominican Republic	-.180		

TABLE 50

Index of China, Peoples Republic International Military Commitments to 134 Target Nations: 1972
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	4.385	Nigeria	-.083	South Yemen	-.185	Columbia	-.194
North Korea	2.400	Brazil	-.088	Jordan	-.187	Costa Rica	-.194
Sudan	1.820	Sweden	-.097	Yemen	-.187	Dahomey	-.194
Laos	1.603	Poland	-.100	Barbados	-.188	Dominican Republic	-.194
Japan	1.558	Czechoslovakia	-.108	Gambia	-.188	El Salvador	-.194
Pakistan	1.420	Hungary	-.113	Mauritania	-.188	Equitorial Guinea	-.194
Tanzania	1.113	Netherlands	-.116	Afghanistan	-.189	Gabon	-.194
Sri Lanka (Ceylon)	.749	Iran	-.120	Cameroun	-.190	Guatemala	-.194
Rumania	.563	Lebanon	-.122	Guyana	-.190	Honduras	-.194
Peru	.496	Senegal	-.123	Ireland	-.190	India	-.194
Zambia	.464	Australia	-.126	Israel	-.190	Ivory Coast	-.194
Canada	.315	Nepal	-.134	Sierra Leone	-.190	Jamaica	-.194
Albania	.301	Switzerland	-.136	Uganda	-.190	Lesotho	-.194
West Germany	.225	Belgium	-.142	Mongolia	-.191	Luxemborg	-.194
Soviet Union	.191	Indonesia	-.151	Niger	-.191	Malagasy	-.194
Malta	.173	Norway	-.154	Somalia	-.191	Malawi	-.194
Congo	.112	Finland	-.155	Chad	-.192	Maldive	-.194
Malaysia	.063	Austria	-.161	Cyprus/Greek	-.192	Mali	-.194
United Kingdom	.057	Turkey	-.163	Greece	-.192	Muscat and Oman	-.194
Italy	.049	Bangladesh	-.164	Iceland	-.192	Nicaragua	-.194
France	.048	Kuwait	-.164	Liberia	-.192	Panama	-.194
Cambodia	.047	Denmark	-.165	Libya	-.192	Portugal	-.194
Chile	.019	Morocco	-.165	Tunisia	-.192	Rhodesia	-.194
Singapore	.011	Yugoslavia	-.166	Upper Volta	-.192	Rwanda	-.194
		Iraq	-.169	Venezuela	-.192	Saudi Araboa	-.194
Algeria	-.005	Philippines	-.169	Ecuador	-.193	South Africa	-.194
Cuba	-.005	Burma	-.170	Haiti	-.193	South Korea	-.194
Syria	-.027	Ghana	-.174	Paraguay	-.193	South Vietnam	-.194
Ethiopia	-.038	Spain	-.174	Togo	-.193	Swaziland	-.194
Mauritius	-.039	Argentina	-.177	Bolivia	-.194	Thailand	-.194
Guinea	-.041	New Zealand	-.178	Botswana	-.194	Trinidad-Tobago	-.194
United States	-.046	Mexico	-.180	Burundi	-.194	Uruguay	-.194
East Germany	-.049	Bulgaria	-.183	Central African Republic	-.194	Zaire	-.194
Egypt	-.056	Kenya	-.183	China, Republic of	-.194		

TABLE 51

Index of China, Peoples Republic International Military Commitments to 134 Target Nations: 1973
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	4.529	Albania	-.091	Kenya	-.184	Ecuador	-.194
North Korea	2.405	Cuba	-.091	South Yemen	-.188	El Salvador	-.194
Pakistan	2.358	East Germany	-.104	Uganda	-.188	Equitorial Guinea	-.194
Laos	1.568	Netherlands	-.115	Jordan	-.189	Gabon	-.194
Japan	1.549	Senegal	-.115	Yemen	-.189	Guatemala	-.194
Sudan	1.428	Lebanon	-.116	Congo	-.190	Guinea	-.194
Tanzania	.984	Brazil	-.127	Liberia	-.190	Haiti	-.194
Peru	.513	Sweden	-.127	Mali	-.190	Honduras	-.194
United States	.487	Nepal	-.129	Venezuela	-.190	India	-.194
Malta	.320	Nigeria	-.129	Dahomey	-.191	Israel	-.194
Rumania	.312	Switzerland	-.135	Gambia	-.191	Ivory Coast	-.194
Sri Lanka (Ceylon)	.229	Belgium	-.136	Greece	-.191	Jamaica	-.194
Malaysia	.214	Yugoslavia	-.136	Ireland	-.191	Lesotho	-.194
West Germany	.201	Hungary	-.138	Tunisia	-.191	Libya	-.194
Sierra Leone	.174	Poland	-.138	Guyana	-.192	Luxemborg	-.194
Syria	.139	Kuwait	-.151	Mauritania	-.192	Malagasy	-.194
Zambia	.126	Indonesia	-.157	Mongolia	-.192	Malawi	-.194
Canada	.111	Morocco	-.158	Niger	-.192	Maldive	-.194
United Kingdom	.082	Mexico	-.162	Togo	-.192	Muscat and Oman	-.194
Cambodia	.064	Iraq	-.163	Barbados	-.193	Nicaragua	-.194
Algeria	.045	Turkey	-.163	Burundi	-.193	Panama	-.194
Ethiopia	.040	Norway	-.167	Chad	-.193	Paraguay	-.194
Cameroun	.036	Austria	-.168	Iceland	-.193	Portugal	-.194
Mauritius	.033	Philippines	-.170	Upper Volta	-.193	Rhodesia	-.194
Chile	.032	Finland	-.171	Afghanistan	-.194	Rwanda	-.194
Singapore	.032	Spain	-.173	Bangladesh	-.194	Saudi Arabia	-.194
Soviet Union	.032	New Zealand	-.174	Bolivia	-.194	South Africa	-.194
Zaire	.030	Burma	-.175	Botswana	-.194	South Korea	-.194
Australia	.003	Denmark	-.175	Central African Republic	-.194	South Vietnam	-.194
		Iran	-.178	China, Republic of	-.194	Swaziland	-.194
France	-.001	Argentina	-.179	Columbia	-.194	Thailand	-.194
Egypt	-.019	Bulgaria	-.181	Costa Rica	-.194	Trinidad-Tobago	-.194
Italy	-.027	Ghana	-.182	Cyprus/Greek	-.194	Uruguay	-.194
Czechoslovakia	-.060	Somalia	-.183	Dominican Republic	-.194		

TABLE 52

Index of China, Peoples Republic International Military Commitments to 134 Target Nations: 1974
Average Standard Scores for Six Commitment Variables
Treaty, Policy Statements (2), Aid Statements (2), Arms Transfers, Foreign Based Troops, and Trade

North Vietnam	3.306	Indonesia	-.096	Jordan	-.165	El Salvador	-.171
North Korea	2.140	Albania	-.105	Yemen	-.165	Equitorial Guinea	-.171
Pakistan	2.104	Cuba	-.105	South Yemen	-.166	Gabon	-.171
Laos	1.765	East Germany	-.114	Venezuela	-.166	Guatemala	-.171
Japan	1.721	Sweden	-.117	Congo	-.168	Guinea	-.171
Tanzania	1.181	Switzerland	-.122	Uganda	-.168	Haiti	-.171
Malta	.821	Kuwait	-.124	Dahomey	-.169	Honduras	-.171
Sudan	.699	Sri Lanka (Ceylon)	-.126	Greece	-.169	Iceland	-.171
United States	.360	Norway	-.128	Ireland	-.169	India	-.171
Sierra Leone	.338	Belgium	-.129	Liberia	-.169	Israel	-.171
Syria	.303	Brazil	-.129	Mali	-.169	Ivory Coast	-.171
Malaysia	.268	Czechoslovakia	-.131	Chad	-.170	Jamaica	-.171
Chile	.192	Poland	-.136	Gambia	-.170	Lesotho	-.171
West Germany	.166	Hungary	-.137	Mauritius	-.170	Luxemborg	-.171
Peru	.150	Mexico	-.142	Mongolia	-.170	Malagasy	-.171
Zambia	.145	New Zealand	-.142	Niger	-.170	Malawi	-.171
Algeria	.138	Argentina	-.144	Thailiand	-.170	Maldive	-.171
Cameroun	.131	Iraq	-.146	Togo	-.170	Muscat and Oman	-.171
Mauritius	.124	Libya	-.147	Tunisia	-.170	Nicaragua	-.171
Zaire	.123	Denmark	-.149	Upper Volta	-.170	Nigeria	-.171
Canada	.121	Ghana	-.149	Afghanistan	-.171	Panama	-.171
Egypt	.082	Morocco	-.149	Bangladesh	-.171	Paraguay	-.171
Australia	.080	Finland	-.150	Barbados	-.171	Portugal	-.171
Lebanon	.057	Iran	-.151	Bolivia	-.171	Rhodesia	-.171
France	.011	Philippines	-.151	Botswana	-.171	Rumania	-.171
Singapore	.009	Burma	-.154	Burundi	-.171	Rwanda	-.171
United Kingdom	.001	Spain	-.155	Cambodia	-.171	Saudi Arabia	-.171
		Austria	-.159	Central African Republic	-.171	South Africa	-.171
Soviet Union	-.022	Turkey	-.159	China, Republic of	-.171	South Korea	-.171
Senegal	-.042	Somalia	-.160	Columbia	-.171	South Vietnam	-.171
Italy	-.054	Ethiopia	-.161	Costa Rica	-.171	Swaziland	-.171
Nepal	-.063	Kenya	-.162	Cyprus/Greek	-.171	Trinidad-Tobago	-.171
Netherlands	-.088	Bulgaria	-.163	Dominican Republic	-.171	Uruguay	-.171
Yugoslavia	-.088	Guyana	-.165	Ecuador	-.171		

dimension and not a military support one. Trade is important in the measurement of international military commitment only when it occurs with other military support activities. An interesting note for China on this point is the relatively high position on the lists of certain major trading nations such as Japan and West Germany, and the significantly improved position of the United States after 1971.

Fourth, the data, as already discussed, do not include non nation-state actors. This may be especially important for the analysis of Chinese military support activity, and more study is needed to develop indicators of "non-traditional" military support activities.

Fifth, whether or not the sources of data were adequate for highly precise analyses of military support activity is an important question that needs further investigation. If the Chinese tend to supply their allies in more clandestine ways than the other nations, then this is not a major problem for this analysis since one of the study's basic assumptions was that military support activity must be very public if it is to have a committing effect on the providers of support. If, however, the data collection was incomplete then this would pose a major problem in the analysis for countries for which data were especially difficult to obtain. Whether or not this condition did exist and, if so, what effect it had on the results is unknown. Further study of this problem is warranted. It should also be pointed out, however, that if the data used are thought to be inadequate, defense agencies using the technique of analysis can use their own more complete data sources.

Sixth, a related concern is that some may feel that the variables used in the analysis discussed here were inadequate. It should be clear to the reader that other operational definitions than those used in this study might be applied by others. Arms transfers, for example, might include small arms and ammunition as well as the transfer of major weapons systems, and they might be accounted for in dollars rather than types of major systems transferred. Again, these are questions for further research, but it should be noted that the technique of analysis discussed is highly flexible and open to optional uses. More rigorous statistical or mathematical methods can be used to manipulate the data. Variables can be added too or deleted from the index, they can be weighted, and they can be simulated. Tests such as these should be included in the further analysis of commitment identification and measurement. During the coming year a follow-up study will pay considerable attention to these problems.

Seventh, included in the follow-up study will be analyses of the relationships between military support activity and a number of other international behavior and national attribute variables. Some testing already has been conducted on propositions about such relationships and the findings suggest that considerable insight about military support activity and commitment can be gained from such analyses.

REFERENCES

Complete references for the citations listed in the paper can be found in the Technical Report entitled ANNOTATED REFERENCES FOR THE INTERNATIONAL MILITARY COMMITMENT STUDY (Martin, October 1976)

INTERNATIONAL MILITARY COMMITMENT CODEBOOK AND DATA SOURCES GUIDE

The international military commitment data bank was created primarily to measure the military commitment patterns of seven actor nations--the United States, United Kingdom, France, West Germany, Japan, Soviet Union, and China--to 135 target nations, and secondarily to examine some hypotheses about the relationship between major nations' military commitments and certain of their foreign policy behaviors and selected national attributes of the target nations such as their size and military capability. Data have been collected for a total of 33 analytical variables for each of the seven years, 1968 through 1974. There are, therefore, a total of 49 separate data sets included in the international military commitment data bank--one each for each actor for each year.

The arrangement of the data matrix is the following. For each actor nation for each year of data there are 133 or 134 targets (Bangladesh was added to the collection in 1972) and 41 analytical and procedural variables. The data matrix for each set is then: rows = targets or cases (133 or 134), and columns = variables (33 analytical and eight procedural). The variables, their operational definitions, and data sources are given below.

CARD IMAGE FORMAT (41 Variables on Two Cards)

Card 1 Col. 1-3. ACTOR. The seven actor nations are the United States, United Kingdom, France, West Germany, Japan, Soviet Union, and China.

Card 1, Col. 4-6. TARGET. The target nations are:

Afghanistan
Albania
Algeria
Argentina
Australia
Austria
Bangladesh
Barbados
Belgium
Bolivia
Botswana
Brazil
Bulgaria
Burma
Burundi
Cambodia
Cameroun
Canada
Central African Rep.
Chad
Chile
China, Peoples Rep.
China, Rep. of
Columbia
Congo
Costa Rica
Cuba
Cyprus
Czechoslovakia
Dahomey
Denmark
Dominican Republic
Ecuador
El Salvador
Equitorial Guinea
(Fernando Po)
Ethiopia
Finland
France
Gabon
Gambia
Germany/ Dem. Rep.
Germany/ Fed. Rep.
Ghana
Greece
Guatemala
Guinea
Guyana
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Ivory Coast
Jamaica
Japan
Jordan
Kenya
Korea/North
Korea/South
Kuwait
Laos
Lebanon
Lesotho
Liberia
Libya
Luxembourg
Malagasy
Malawi
Malaysia
Maldive
Mali
Malta
Mauritius
Mauritania
Mexico
Mongolia
Morocco
Muscat and Oman
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Rhodesia
Rumania
Rwanda
Saudi Arabia
Senegal
Sierra Leone
Singapore
Somalia
South Africa
South Yemen
Soviet Union
Spain
Sri Lanka (Ceylon)
Sudan
Swaziland
Sweden
Switzerland
Syria
Tanzania
Thailand
Togo
Trinidad-Tobago
Tunisia
Turkey
Uganda
UAR (Egypt)
United Kingdom
United States
Upper Volta
Uruguay
Venezuela
Vietnam/South
Vietnam/North
Yemen
Yugoslavia
Zaire
Zambia

Card 1, Col. 7-10

DATE. The years of the data sets are 1968, 1969, 1970, 1971, 1972, 1973, and 1974.

Card 1, Col. 11

DEFENSE TREATY. Defense Treaty is defined as a formal multilateral or bilateral security agreement in force during the year of the data set where the actor is obligated in writing to at least consider, under certain conditions of military threat, intervention with military force on behalf of the target nation. Not included are arms transfer, basing, training, or other similar agreements.

The user should reference the treaties listed for each country since some relationships listed in the data sets such as the British ties with South Africa, Mauritius, Cyprus, Rhodesia--are not considered in this study to be equivalent to defense treaties. The index methodology does permit the user to modify the data set as desired, and different interpretations of the data can be accounted for.

The main sources for the treaty data were editions of TREATIES AND ALLIANCES OF THE WORLD (1968,1974) and the MILITARY BALANCE (1968-1975). Other references included: GLOBAL DEFENSE (1969), TREATIES IN FORCE (1968-1974), Parry and Hopkins (1970), Dupuy and Blanchard (1972), AFRICAN CONTEMPORARY RECORD (1966-1974), and Kulski (1973).

Card 1, Col. 12,13

POLICY SUPPORT ACTIONS (1). Policy Support Actions (1) are defined as either publicly made declarations of support for maintaining the national security and defense of another nation or the event of active participation in joint military exercises. Either type of action is considered indicative of an interest and implied intention to support militarily the target nation.

Data have been collected on the frequency of such actions from the major commiting nation to each target nation for the year of the data set and the previous two years. Three years of data are aggregated together to obtain an effective coverage for the occur-

rence of such events. Analysis of policy support behavior has shown that decision-makers do not often take such actions nor do such acts occur in any regular time pattern. An indicator of such commitment behavior must span, therefore, a relatively long period of time. The data for this variable have been collected from THE NEW YORK TIMES (WEIS, 1966-1974) and DEADLINE DATA ON WORLD AFFAIRS (1966-1974).

The WEIS data were selected from event descriptions included under WEIS categories 002, 041, 042, 051, 053, 054, and 072. DEADLINE DATA was used to supplement the WEIS data for extensive global coverage.

Card 1
Col. 14,15 — ARMS TRANSFERS. Arms Transfers are defined as the number of different types of major weapons systems ordered during a two year time period as recorded in the annual editions of the MILITARY BALANCE and the SIPRI YEARBOOK OF WORLD ARMAMENTS AND DISARMAMENTS. For other arms transfer definitions, see below.

Card 1,
Col. 16,17 — POLICY SUPPORT ACTIONS (2). Policy Support Actions (2) is defined like Policy Support Actions (1) except that data from the TIMES OF LONDON are also included. Data from the TIMES OF LONDON are included in the data sets for this variable from 1969 to 1974. The source of these data is again the WEIS project.*

Card 1,
Col. 18,19 — AID ACTIONS (1). Aid Actions are defined as publicly made announcements of military or economic aid transactions, agreements, promises, or anticipated offers. As with Policy Support Actions the frequency of such actions over a three year period as reported in open sources has been collected. For this variable the data have been taken from the NEW YORK TIMES (WEIS) and DEADLINE DATA. The relevant WEIS categories are 052, 071, 072, 073, 081, 082.

Card 1,
Col. 20-25 — TROOP DEPLOYMENT. The definition for this variable is the number of deployed troops of the actor nation in the target nation as

reported in open sources. The main source for these data was the MILITARY BALANCE. Other sources such as the AFRICAN CONTEMPORARY RECORD (1968-1974) were used to provide additional data when the MILITARY BALANCE did not specify actual numbers of troops. In a few cases, where foreign troop deployment was registered, but no information on the number of troops could be obtained, an arbitrary number of 100 was given.

Card 1, Col. 26-32 — TOTAL TRADE. The definition for Total Trade is the total amount of both exports and imports between the actor and target in dollars for the year of the data set. The International Monetary Fund publication--THE DIRECTION OF TRADE--was the main data source.

Supplementary data sources included YEARBOOK OF INTERNAITONAL TRADE STATISTICS (1973,1975) CHINA: A REASSESSMENT OF THE ECONOMY (1975), and the PEOPLE'S REPUBLIC OF CHINA: INTERNATIONAL TRADE HANDBOOK (1974).

Card 1, Col. 33,34 — AID ACTIONS (2). Aid Actions (2) is defined similarly to Aid Actions (1) except that data from the TIMES OF LONDON (WEIS) are included for the period 1969 to 1974.

Card 1, Col. 35,36 — CONSULTATION: This variable is taken directly from the WEIS data for the event-category, Consult (003). The variable accounts for international visits of high decision-making officials between the actor and target nations. The data are from the NEW YORK TIMES.

Card 1, Col. 37-39 — COOPERATIVE BEHAVIOR: This variable was taken directly from the WEIS data for the event categories Yield, Approve, Promise, Grant, Reward, Agree, Request, and Propose. It is an indicator of the amount of cooperative behavior directed from the actor to the target nation. The data are from the NEW YORK TIMES.

Card 1, Col. 40-42 — CONFLICTUAL BEHAVIOR. This variable was taken directly from the WEIS data for the event categories Reject, Accuse, Protest, Deny, Demand, Warn, Seize, and Force. It is an

indicator of the amount of conflictual behavior directed from the actor to the target nation during the year of the data set. The data are from the NEW YORK TIMES.

Card 1, Col. 43-45 — TOTAL BEHAVIOR. This variable was taken directly from the WEIS data for all of the WEIS events. It is an indicator of the total amount of high political behavior directed from the actor to the target nation for the year of the data set. The data are from the NEW YORK TIMES.

Card 1, Col. 46-52 — SIPRI ARMS TRANSFERS. These data are from the worksheets of arms transfer data collected by the Stockholm International Peace Research Institute. They are in thousands of 1968 constant dollars.

Card 1, Col. 53-59 — POPULATION. These data are the population size of the target nation in thousands. The data are from the ACDA publications WORLD MILITARY EXPENDITURES AND ARMS TRADE 1963-1973, and WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS 1965 - 1974.

Card 1, Col. 60-67 — AREA. These data are for the geographic size of the target nation in thousands of square kilometers. The data source is the STATESMAN YEARBOOK.

Card 1, Col. 68-74 — GROSS NATIONAL PRODUCT, In Millions of Current Dollars. These data were collected from ACDA publications (1975,1976).

Card 1, Col. 75-78 — GROSS NATIONAL PRODUCT PER CAPITA, in Constant 1972 Dollars. These data were collected from ACDA publications (1975,1976).

Card 1, Col. 79-80 — CARD NUMBER IDENTIFICATION.

Card 2, Col. 1-3 — ACTOR. Actor identification.

Card 2, Col. 4-6 — TARGET. Target identification.

Card 2, Col. 7-10. — DATE. Year of data set.

Card 2, Col. 11-14	GROSS NATIONAL PRODUCT PER CAPITA, current dollars. Data source is ACDA (1975,1976).
Card 2, Col. 11-14	POLICY SUPPORT ACTIONS (3). This variable accounts for the number of Policy Support Actions for only the year of the data set. Data sources are the NEW YORK TIMES, TIMES OF LONDON (1969-1974), and DEADLINE DATA.
Card 2, Col. 18-20	AID ACTIONS (3). This variable accounts for the number of Aid Actions for only the year of the data set. Data sources are the NEW YORK TIMES, TIMES OF LONDON, and DEADLINE DATA.
Card 2, Col. 21-26	MILITARY EXPENDITURES, millions of current dollars. The source for this variable was ACDA (1975,1976)
Card 2, Col. 27-31	MILITARY EXPENDITURES, millions of constant 1972 dollars. The source for this variable was ACDA (1975,1976).
Card 2, Col. 32-36	MILITARY EXPENDITURES AS A PERCENTAGE OF GROSS NATIONAL PRODUCT. The source for this variable was ACDA (1975,1976).
Card 2, Col. 37-43	GROSS NATIONAL PRODUCT, millions of constant 1972 dollars. The source for this variable was ACDA (1975,1976).
Card 2, Col. 44-47	ARMED FORCES, in thousands. The source for this variable was ACDA (1975,1976).
Card 2, Col. 48-52	MILITARY EXPENDITURES PER ARMED FORCES PERSONNEL, constant 1972 dollars. The source for this variable was ACDA (1975,1976)
Card 2, Col. 53-54	ARMED FORCES PER 1000 POPULATION. The source for this variable was ACDA (1975,1976).
Card 2, Col. 55-58	ARMS RECEIVED FROM ACTOR TO TARGET; CUMULATIVE 1964-1973, millions of current dollars. The source for this variable is ACDA (1975, 1976).
Card 2, Col. 59-62	TOTAL ARMS RECEIVED FROM ALL ACTORS (7): CUMULATIVE 1964-1973, millions of current dollars. The source for this variable is

ACDA (1975,1976).

Card 2, Col. 63-66 — TOTAL ARMS EXPORTS FROM TARGET, millions of current dollars. The source for this variable is ACDA (1975,1976).

Card 2, Col. 67-70 — TOTAL ARMS EXPORTS FROM TARGET, millions of constant 1972 dollars. The source for this variable is ACDA (1975,1976).

Card 2, Col. 71-74 — TOTAL ARMS IMPORTS INTO TARGET, millions of current dollars. The source for this variable is ACDA (1975,1976).

Card 2, Col. 75-78 — TOTAL ARMS IMPORTS TO COUNTRY, millions of constant 1972 dollars. The source for this variable is ACDA (1975,1976).

Card 2, Col. 79,80 — CARD IDENTIFICATION: 02

*Examination of the data for the Policy Support Actions and Aid Action variables have provided the following information. The total number of unique actions (not reported in other sources) recorded for 1966-1974 (less the TIMES OF LONDON) for the NEW YORK TIMES equals 2972 or 94% of the total. For DEADLINE DATA it equals 196 or 6%. When the TIMES OF LONDON is added for the period 1969-1974, then the breakdown for this period is NYT = 1983 or 66%, TOL = 796 or 29%. DD = 133 or 5%. For the United Kingdom the TIMES OF LONDON accounted for 68% of its total recorded actions between 1969 and 1974. For the United States the NEW YORK TIMES accounted for 82% of its total actions for the period. These results suggest the possibility of some source bias which may need further investigation. Overall, however, the data analysis showed very high consistency between the commitment analysis results for 1968 and 1974 suggesting that the distribution of actions recorded was not greatly different when the NEW YORK TIMES and DEADLINE DATA were used alone or with the TIMES OF LONDON as a supplement.

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