**Title:** Threat Recognition and Analysis: The Annual Report, 1973-74

**Author(s):**
- Richard Smith Beal
- George H. Ramsey, Jr.
- Gary A. Hill

**Performing Organization Name and Address:**
Department of International Relations
University of Southern California
University Park, Los Angeles, CA 90007

**Contract or Grant Number:**
ARPA #2518
N0014-67-A-0269-0029

**Report Date:**
August, 1974

**Number of Pages:**
14

**Security Classification:**
Unclassified

**Distribution Statement:**
"Approved for public release; distribution unlimited."

**Key Words:**
Threat, Threat Recognition, Nigeria, Biafra, Cybernetics, Simulation, Bibliography, Information Processing, Situational Threat.

**Abstract:**
See following page.
ABSTRACT

The purpose of this Annual Report is to give potential users of TRaA material an overview of the purposes of the Threat Recognition and Analysis Project and to review the technical reports produced by associates of the project. Together with the "Semi-Annual Report" (TRaA Technical Paper #14) the Annual Report synopizes the work of the project during its pilot year of research. As Technical Papers Nos. 11, 12 and 13 are reviewed in Beal (1974a) they are not included in this report. The new work includes Ramsey's "Techniques for Monitoring Threat: The Nigeria-Biafra Case" (TRaA Technical Report #17) which is a demonstration test case of a methodology for analyzing threat processes. The study demonstrates the need for incorporating procedures for recognizing domestic disturbances which may eventually constitute international crises. The second paper reviewed is Beal's "Cybernetic Analysis of a Simulated International Threat System" (TRaA Technical Report #15). This report deals in some detail with the cybernetic principles and procedures to be used in a man-machine simulation of an international threat system. The theoretical and methodological base for this study is established by combining cybernetics and event data with simulation procedures to construct and analyze a synthetic international future inlaid with situational threats. The final report discussed is Hill's description of BIBLIO and BIBCAI (TRaA Technical Report #16). These are high speed, TRSO-like software packages designed for efficient entry, storage and retrieval of bibliographic data.

Copies of all TRaA Technical Reports can be secured from the Defense Documentation Center or from: Ms. Nancy Fahy, TRaA executive secretary, WDC 301, University of Southern California, College Park, Los Angeles, Calif. 90007.
Threat Recognition and Analysis:
The Annual Report, 1973-74

Richard Smith Beal
George H. Ramsey, Jr.
Gary A. III

International Relations Research Institute
School of International Relations
University of Southern California
August, 1974

TR&A Technical Report #18
Threat Recognition and Analysis Project

"Approved for public release; Distribution Unlimited." Reproduction in whole or in part is permitted for any purpose of the United States Government. This research was sponsored by the Organizational Effectiveness Research Programs, Office of Naval Research (Code 452), under ARPA Contract No. #2518, N00014-67-A-0269-0029; HR 177-952.
ABSTRACT

The purpose of this Annual Report is to give potential users of TR&A material an overview of the purposes of the Threat Recognition and Analysis Project and to review the technical reports produced by associates of the project. Together with the "Semi-Annual Report" (TR&A Technical Paper #14) the Annual Report synopsizes the work of the project during its pilot year of research. As Technical Papers Nos. 11, 12 and 13 are reviewed in Beal (1974a) they are not included in this report. The new work includes Ramsey's "Techniques for Monitoring Threat: The Nigeria-Biafra Case" (TR&A Technical Report #17) which is a demonstration test case of a methodology for analyzing threat processes. The study demonstrates the need for incorporating procedures for recognizing domestic disturbances which may eventually constitute international crises. The second paper reviewed is Beal's "Cybernetic Analysis of a Simulated International Threat System" (TR&A Technical Report #15). This report deals in some detail with the cybernetic principles and procedures to be used in a man-machine simulation of an international threat system. The theoretical and methodological base for this study is established by combining cybernetics and event data with simulation procedures to construct and analyze a synthetic international future inlaid with situational threats. The final report discussed is Hill's description of BIBLIO and BSCAN (TR&A Technical Report #16). These are high speed, TSO-like software packages designed for efficient entry, storage and retrieval of bibliographic data.

Copies of all TR&A Technical Reports can be secured from the Defense Documentation Center or from: Ms. Nancy Fahy, TR&A Executive Secretary, VKC 301, University of Southern California, College Park, Los Angeles, Calif. 90007.
Introduction

Threat Recognition and Analysis (TR&A) is an inquiry designed to broaden the national security concept to cover new international dangers which are initially nonmilitary in character. The task is to expand the "legitimate claims of national security" to encompass situations which may threaten U.S. security but which do not necessarily involve the movement of troops along our borders, or our allies. To accomplish this task, the concept "threat" must be redefined to reference more than an enemy's hardware, strategic policy, manpower, or ideological motivation. TR&A exists to explore how national security can be meaningfully reconceived to include nonmilitary conditions under a rubric of "situational threats."

Maxwell Taylor has recently called for exactly this type of expansion. He argues that the national security should be expanded to include under its aegis a wider range of potentially threatening international and national phenomena.

In the present environment, our valuables are exposed not only to the traditional threats of military power but also to many dangers of nonmilitary character and origin. At home we perceive a growing trend toward factionalism which undermines our national unity. Abroad there are ample warnings of the dire consequences to be expected from continued population growth--international rivalries over scarce resources; natural disasters from poverty, famine, drought, and flood; stalemated or declining standards of living; popular discontent with government, political turbulence, and the overthrow of weak governments... To marshal our resources for this purpose (i.e., of preserving and fostering an environment for free societies to exist), we must design a national security program broad enough to include provisions for all significant dangers, foreign and domestic. (Taylor, 1974: 577-578)
Despite Taylor's preoccupation with the changing character of the military component of an expanded national security program, he is "fully convinced that the most formidable threats to this nation are in the nonmilitary field." Taylor, as well as many others, singles out the present energy crisis as a prime example of a serious threat to the national security.

Oil, a major element in the energy crisis, became a weapon of political influence in the recent fourth Middle East war. The Arab oil embargo policy, directed primarily at Western Europe, Japan and the United States, was designed to pressure the major oil-consuming states into new policies toward the Middle East. The immediate consequences of an oil cutback and the threat of a sustained oil embargo brought real pressure against the Northern Hemisphere to assume a more pro-Arab stance. The ultimate Arab objective was to isolate diplomatically the United States' position of nearly unconditional support of Israel. It was a bold political strategy; it required, and for the most part received, intra-Arab cooperation and unity of purpose during the October War and throughout the months of political maneuvering to follow. The key element in the Arab strategy was to force Western Europe and Japan into an energy pinch where they could be dealt with unilaterally, where the differences in their national energy needs would be exaggerated, and where they would in turn press for a change or modification in the United States' pro-Israeli stance to accommodate Arab demands for such a change in return for lifting the embargo. Thus, the Arab oil policy threatened the very core of the Western post-World War II alliance, the political core.

The manipulation of oil for political purposes is the classical prototype of a nonmilitary threat. It is also representative of the recent changes in the character of the international system which suggest the need for a new understanding of threatening behavior under an expanded national security program. King Faisal of Saudi Arabia indicated his willingness to use oil as a weapon against Israel even before the October hostilities. So it was not surprising that shortly after the outbreak of the conflict the Arab states announced monthly cutbacks in oil exports, and within days Abu Dhabi, Algeria, Bahrain, Dubai, Kuwait, Libya, Qatar and Saudi Arabia cut off oil supplies to the United States altogether. But the real impact was felt in Europe and Japan, and consequently the real pressure on Washington to change its position toward the Middle East was from Tokyo, Bonn, London and Paris. But this was a new trick for the Arabs. Oil as an instrument of political influence had been unsuccessful in 1956 when the Suez Canal was blocked, and equally unprofitable in 1967. But by October,
1973 the international system had changed. The time was ripe. The nature of international interdependency had shifted significantly. Economically the oil-consuming nations had few energy alternatives of their own when the oil was denied them. The United States simply could not afford to supply Europe the oil it needed as the U.S. had successfully done in 1956, and to a lesser degree in 1967. The oil-producers held the upper hand, and enjoyed a higher degree of Arab unity than they had in the past. The Arab position was not always unanimous as the October 16th meeting of oil producers would attest. Nevertheless, they benefitted from splitting up members of the Western alliance, encouraging dissension, intra-alliance conflict and unilateral responses. Sheikh Yamani, Saudi Arabia's Petroleum Minister, frequently represented the collective interests of the oil-producing Arab states, and there was sufficient solidarity of purpose to enable him to be firm with the oil-consumers about what constituted a legitimate response to the oil embargo and warned them against any "bloc" action against the Arabs. Politically, the basic relationship between the East and the West had altered significantly, opening the way for new Arab initiatives. In this respect, some Middle East watchers have maintained that Sadat is convinced that while antagonisms between the East and the West have been good for Israel in the past, detente between the poles will be to Egypt's advantage in the future. (Sheehan, 1973; Griffith, 1974) The mixture of oil and better trained troops constituted a good enough arsenal, and changes in the international system suggested it was an opportune time to cross the Suez Canal to regain that which had been lost.

Oil and the energy crisis are dramatic examples of new situational threats, but they are in no way the only examples. The present international system appears to be in such a state of flux and transition that the old notions of what could disrupt the system seem curiously out-dated. Under the old view, the Suez Canal crisis, the Korean War, Berlin, Cuba, etc. were all expressions, in one way or the other, of Cold War antagonisms. The models of international order for the past two decades anticipated tension between the power poles and relative harmony within the camps. Today however, such a view seems terribly naive and misleading. Detente bespeaks a new relationship between the superpowers, while dissenion within the poles is more common.

The "Year of Europe, 1973" may be remember not for the reasons originally anticipated but because of the new European crisis. In the words of France's Foreign Minister Michel Jobert, a crisis brought about through humiliation;
it is a "crisis of confidence, a crisis of will and a crisis of lucidity." (Goldsborough, 1974: 538) In a year that was supposedly reserved to matters of real import, namely European affairs, Europe felt snubbed by the United States and the Soviet Union on their way to detente and SALT; she was upstaged by the Nixon-Kissinger links with China; she was humiliated by the Arabs over the oil shortages, -- in a word, tough Europe was "shaken-down" by tiny Persian Gulf sheikdoms; and perhaps most damaging of all, she discovered that years of political conciliation and attempted unification did not "spill-over" into an agreement on sharing oil supplies when the region was faced with a legitimate, universal challenge. In a time of real need it was obvious that everyone was on his own. (Laqueur, 1974) Chancellor Brandt called on the European Community to share their scarce oil supplies and jointly shoulder the burden of the hardship; President Pompidou countered with a request for the adoption of a more pro-Arab policy, making it very clear France was not going to share everyone else's misfortune. U.S.-European relations became seriously strained, indeed politically threatened; Kissinger spelled-out the Washington response by rejecting the idea that Europe's identity could be measured by its distance from the United States as some Europeans had argued. At a press conference on March 21, 1974 Kissinger elaborated the U.S. position.

In terms of substance, there has been, in our judgment, too much of a tendency to seek European identity in opposition to the United States. And there, again, let me make clear: We do not insist, or indeed, believe it desirable, that Europe agree with every American policy. We do not oppose -- indeed, we think it is desirable-- that Europe can take, and does take, its own independent decisions, even if sometimes they disagree with us.

But when the definition of European identity on the part of some countries is the differentiation from, and in some cases opposition to, the United States -- when that becomes the characteristic of identity -- then the United States is concerned, and then the tendencies that we have attempted to describe become operative.

As far as the United States is concerned, we still believe that the nations of the Atlantic area must be able to find an expression of some of their common purposes. In this process, they, of
course, will want to define how much unity they want, and how much diversity they can stand. There are perfectly legitimate questions to be raised.

But we have to overcome this legalistic, somewhat doctrinaire, jurisdictional dispute.

And, secondly, we believe that it is not conducive to healthy Atlantic relations to seek European identity essentially in opposition to the United States.

In addition, we have been concerned by the deliberate policy of some individual countries that seemed to us to have taken a hostile turn in various areas -- but no purpose would be served by going into those. (Kissinger, 1974: 3-4)

A serious row in the Western alliance would constitute a situational threat of major importance to the entire international system. Tremors in the various alliance structures in the world, in East-West relations, in Sino-Soviet affairs, in the Asian triangle of China, India and Japan, in the delicate Middle East truce, in Indochina, in the southern perimeter of the NATO alliance, are all concerns and constitute, potentially at any rate, threats to international security. Ambitious revolutions in Latin America, upheavals in the Philippines and Southeast Asia, and turmoil in Africa likewise are potentially disruptive. Problems over development, the world food crisis, trade policies, natural resource scarcities, currency instability, international terrorism, world poverty, and the problems posed by new technologies may be meaningfully incorporated into a rubric of potential situational threats.

Today, the very ability of governments to govern, to maintain control is being challenged. In numerous industrialized nations serious internal calamities are encountered revealing that governments are curiously incapable of providing the basic services and security demanded by the people. Governments are, with increasing regularity, accused of taking more and more from the people, and returning less and less. There are other factors besides governments' apparent inability to govern which threaten the nation-state. Regionalism and integration are probably long range challenges, but of a more immediate character, Raymond Vernon has formally raised the question of whether, in the face of giant multinational corporations, nation-states can even be expected to persist. (Vernon, 1971)
But clearly, some of these issues are more important to watch than others. Some topics command greater immediate attention today and less in the future, and vice versa. The critical question is of course how to decide which of the many potentially threatening situations should be watched closely and which should not. The need is to economize the focus and to decide on the most probable areas of danger, dislocation and disruption. Once the issue and location is settled on, the next problem is to determine how the situation can be monitored. What methods exist, or can be devised, to measure the dynamics of the situation to determine if it is leading to a state of ruin. TR&A addresses itself to these basic questions.

The essential inquiry of all TR&A research is to identify and analyze systemic, national and regional interaction processes which are, or can, erode over time. Erosion, breakdown, deterioration, decline, ruin, etc. are all assumed to be processes, rather than singular, non-recurring events, and they are traceable. Conceptually, TR&A's paramount concern is with change over time; its business is to trace change. The focus of the project is to monitor sequential interactional change which portends disruption and danger. The purpose is designed to identify change sequences of impending disorder and chaos. These change sequences are threatening whenever the anticipated consequences of a transition from one situation to another are unacceptable, disruptive of the system or dangerous to the "essential" elements of the system itself. Unacceptable, disruptive, dangerous to the essential elements of the system have no fixed definitions. They vary with the system, time, circumstance and people. And most importantly, they should be free to vary concurrently with these changing conditions. The analytic task is to give definition to the general conditions where change sequences threaten these variables.

Review of the Technical Reports

The first set of tasks for TR&A was to review the literature on threat outside of the military field, to commence a reconceptualization effort of the threat notion to accommodate an expanded national security umbrella, and to explore empirically the nature of international commitments and their relationship to an enlarged threat concept. Technical Papers Nos. 11, 12 and 13, already reviewed in the "Semi-Annual Report", cover these areas. (Beal, 1974a) These papers contribute to the overall TR&A argument that (1) threat has been underemployed as a concept
in international relations research; (2) when it has served to guide research its meaning was either too rough and undifferentiated to make meaningful distinctions on the one hand, or too narrowly defined to be generalizable; and, (3) threat could be elevated to a more important status in international research by ascribing to it an expanded, though controlled, definition.

The second set of tasks was to conduct a demonstration study of a situational threat where the outcome was known to be ruinous, to explore the possibility of using event data in the construction of an artificial international threat system, and to finalize the software for a high speed, user-oriented system for bibliographic entry, storage and retrieval. Technical Reports 15, 15 and 17 cover these areas.

Nigeria-Biafra: A Demonstration Test Case

This report presents a prototype methodology for monitoring threat processes generated by the internal disintegration of national social systems. The study emphasizes the importance of incorporating into the foreign policy sensory apparatus systematic, continuous procedures for monitoring and evaluating pre-violent indicators of deterioration and dissolution within national societies. The argument is developed that such general procedures for recognizing serious domestic disturbance are necessary in order to provide early warnings of potentially threatening international situations.

The problem of developing such a technique is seen as a twofold one: (1) what specific type of data provide indicators of social system states that are reliable, informative, and minimally costly in acquisition time and effort; and (2) what monitoring technique best affords the analyst the opportunity to identify crucial change patterns suggesting deterioration of the system under observation.

The Nigeria-Biafra situation was selected as a test case for the development of the monitoring technique because: (1) the mutual perception of threat by the parties involved constituted one of the basic processes which propelled the vital social systems within Nigerian society toward an eventual outcome of disintegration and civil violence; and (2) the situation provides a dramatic, historical demonstration of the international implications of serious domestic upheaval.
The approach to the formulation of domestic threat indicator data developed in the study is grounded in the premise that the published record of public declarations of complaint and anxiety about specific social conditions and governmental activity constitutes a valuable social barometer. Moreover, the report suggests that by applying a systematic technique for identifying fluctuation, or levels and rates of change in these indicator readings, the analyst may sharpen his eye for identifying and recognizing the early manifestations of an evolving crisis.

In order to explore this notion, several major Nigerian newspapers were content analyzed for items containing expressions of complaint, anxiety or concern over the occurrence of a threatening event, the worsening of a condition or the undesirable conduct of a major political, social or ethnic group. These items were coded in terms of: (1) their source (i.e., from what sector or group did the expression emanate); (2) whether the complaint was directed or undirected (i.e., whether a reference was made as to who was believed responsible for the undesirable condition); and 3) what issue was referenced.

The report offers the initial conclusion that the analysis of such expressive indicator data does provide a general warning of the acceleration of the processes of internal disintegration, but the caveat is offered that further examination of specific threshold levels, and of other domestic situations which may reveal similar patterns is necessary before the inference suggested by this prototype are treated with confidence. The findings of this study strongly suggest, however, that the method developed constitutes an important addition to the inventory of global monitoring techniques which contribute to the effective management of a nation's foreign affairs in an era of complexity, uncertainty, and interdependence.

A Simulated International Threat System Principles and Procedures

"Cybernetic Analysis of a Simulated International Threat System" is a statement of the principles and procedures governing the design, construction, execution and analysis of a simulated international threat system. These principles and procedures address themselves to: (1) the application of cybernetics to threat research specifically, and international relations research generally; (2) the research utility of an expanded notion of threat, namely
"situational threat"; and, (3) the use of event data in the simulation of synthetic international futures. The approach adopted to explore these issues is to ask experimental subjects in a simulated context to monitor, and where possible, control a synthetic international threat system. The central question is to determine if subjects can recognize situational threats in an international event stream, and if so, how do they act to avert a potentially ruinous state of affairs. A description of the simulated future, known as TRASS (for Threat Recognition and Analysis Simulated System) is provided and the relation between cybernetic notions of control and self-regulation and simulated futures is discussed. The argument is advanced that cybernetics and systems analysis techniques are particularly well suited to the analysis of complex systems which are constantly changing.

**BIBLIO AND BSCAN**

BIBLIO and BSCAN are the two programs utilized for the input, storage and retrieval of bibliographic reference material. In general terms these programs represent a capability for an in-house reference system which is easily learned, operates at high-speed and incorporates design features to safeguard against the proliferation of user error. In technical terms these programs feature software which is highly interactive and TSO-like (Time Sharing Option). Both programs operate on a series of commands which permit the user to request the system to perform various operations on the bibliographic data. The principal feature of these programs however, is the manner in which they facilitate the recording and tracing of resource material through the use of subfiles and a relatively unstructured input format for the bibliographic data.

Regarding the subfiles, both BIBLIO and BSCAN are designed for simultaneous operation on a number of subfiles. These subfiles may be structured on the basis of general research topics or they may be structured around individual users. This permits users to maintain a subfile for personal use reflecting special research interests while at the same time affording access to references on a wider range of research topics. This same rule applies to bibliographic entry—multiple users may enter data on both their personal subfiles and on those subfiles reserved for more general project-wide usage.

As for data entry and retrieval, these programs are essentially unstructured, the format being left to the user's discretion. The structure that does exist reflects
certain conventions adopted for standardization of the reference citations. The important point is that users may structure the format of their subfiles according to their own needs.

The purpose of this paper is to explain the use of these programs and illustrate their specific application. The paper is divided into two sections. The first section discusses the general design of the program BIBLIO and specifies the exact procedures for its use. The second section mirrors the first except that here the discussion centers on the program BSCAN.

Summary

In summary, the research accomplishments of the first year include: (1) a wide-ranging literature review of threat outside its military context; (2) a reconceptualization of the threat notion; (3) an exploration of international commitment and its relationship to the enlarged concept of threat; (4) demonstration of a pilot study of a situational threat whose outcome is already known and considered ruinous; (5) exploration of the use of event data on the construction of an artificial international threat system; (6) development of a high speed user-oriented reference system for bibliographic entry, storage and retrieval. These accomplishments undergird the research objectives of the second year -- namely to continue the examination of threat situations in international affairs particularly where those situations emerge from the expanding network of dependencies and vulnerabilities in the international system.
SELECTED BIBLIOGRAPHY

BEAL, RICHARD SMITH (1974a)  

BEAL, RICHARD SMITH (1974b)  

BEAL, RICHARD SMITH; RAMSEY, GEORGE H., JR.; and, HILL, GARY A. (1974)  

GOLDSBOROUGH, JAMES O. (1974)  

GRIFFITH, WILLIAM E. (1974)  


KISSINGER, HENRY A. (1974)  
"Secretary Kissinger on Atlantic Alliance, SALT, USSR." Department of State, Office of Media Services NEWS RELEASE, March 21, 1974.

LAQUEUR, WALTER (1974)  

MARTIN, WAYNE R. (1974)  
McCLELLAND, CHARLES A. (1972)

McCLELLAND, CHARLES A. (1973)

"Threat Situations: A Search for a Controlled Definition." Threat Recognition and Analysis Project, TR&A Technical Paper No. 12, University of Southern California, Mimeo.

RAISEY, GEORGE H. (1974a)

RAISEY, GEORGE H. (1974b)

SHEEHAN, EDMUND R.F. (1973)
"Sadats War." NEW YORK TIMES MAGAZINE, November 18, 1974.

TAYLOR, MAXWELL D. (1974)

VERNON, RAYMOND (1971)