Behavioral and Social Science Research in the Department of Defense: A Framework for Management (1971)

Pages
60

Size
5 x 8

ISBN
0309019133

Advisory Committee on the Management of Behavioral Science Research in the Department of Defense; Division of Behavioral Sciences; National Research Council

Report of the
ADVISORY COMMITTEE ON THE
MANAGEMENT OF BEHAVIORAL
SCIENCE RESEARCH IN THE
DEPARTMENT OF DEFENSE
Division of Behavioral Sciences
National Research Council

Behavioral and Social Science Research in the Department of Defense

A FRAMEWORK FOR MANAGEMENT

NATIONAL ACADEMY OF SCIENCES
Washington, D.C. 1971

ISBN 0-309-01913-3

Available from

Printing and Publishing Office
National Academy of Sciences
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Library of Congress Catalog Card Number 73-611047

Printed in the United States of America

Foreword

The roots of this Advisory Committee's report can be traced to the establishment of the Advisory Committee on Government Programs in the Behavioral Sciences by the National Academy of Sciences late in 1965. Its work, supported in part by the Department of Defense, resulted in the publication of The Behavioral Sciences and the Federal Government in 1968. This report led the Department of Defense to request the Academy the following year to provide advice on how its research programs in the behavioral and social sciences could best be organized and managed. An Advisory Committee on the Management of Behavioral Science Research in the Department of Defense, under the Division of Behavioral Sciences of the National Research Council, was established in the spring of 1969 to undertake this task.

The Executive Committee of the Divison of Behavioral Sciences and the Advisory Committee were fully aware of the controversial issues embedded in the task of advising on the management of behavioral science research in the Department of Defense, as well as of the different ways in which it might be approached. In the course of our deliberations the controversies over these issues sharpened and their substance became increasingly a matter of public,

and often prickly, debate in the Congress, the academic world, and in other quarters.

By intention, different perspectives on both the critical questions to be addressed and how they should be answered were brought into the Advisory Committee through the selection of its members. Moreover, we differed in our knowledge of and our experience working in or for the Department of Defense or other national security agencies. Some of us had no past connection with the Defense Department.

The members of the Advisory Committee could have been tempted by the numerous opportunities they encountered for developing irreconcilable positions. As Chairman, consequently, I must congratulate them publicly on their determination to fashion a single framework for viewing and analyzing the cluster of difficult problems associated with the management of behavioral and social science research not only in the Department of Defense but also for the national security community as a whole. The perspective and set of guidelines offered in this report for research management on different levels of the Department of Defense have the endorsement of every member of the Advisory Committee. Moreover, every member approves of the specific recommendations we have set forth. These achievements would not have been possible, I should note, if one of our members, Michael D. Reagan, had not undertaken to draft the document that served as the basis for this report. To him we owe and are happy to acknowledge a special debt of gratitude. I must add, however, that I do not wish to give the impression that each of us necessarily subscribes fully to every shade of meaning or emphasis that can be found in this report.

We are also indebted to others. I am pleased to acknowledge the Committee's gratitude for the valuable contributions made to its work by its Executive Secretary, Albert H. Cantril, Jr., who prepared early working drafts for a report, and by Nancy I. Groves, who carried the secretarial burdens. Peter N. Gillingham, Charles M. Herzfeld, and Bromley K. Smith, as well as others, contributed advice and assistance. So, too, did members of the staff of the

Division of Behavioral Sciences: Alexander L. Clark, Vincent P. Rock, and Henry David, the Executive Secretary of the Division, who has served us well beyond the requirements of his office. I must acknowledge also the contributions made to the Advisory Committee's work through the rigorous review of an earlier draft report undertaken by the Chairman of the Division of Behavioral Sciences, Herbert A. Simon, and the members of its Executive Committee. Finally, I should note that we were fortunate in having Davis B. Bobrow, then special assistant in the Office of the Director of Defense Research and Engineering, serve as staff liaison to the Advisory Committee from the Department of Defense.

WILLIAM W. KAUFMANN
Chairman

February, 1971

ADVISORY COMMITTEE ON THE MANAGEMENT OF BEHAVIORAL SCIENCE RESEARCH IN THE DEPARTMENT OF DEFENSE

Contents

	Recommendations and Findings	xi
I	Introduction	1
II	Ground Rules	4
III	What to Manage?	9
IV	Institutional Choices	20
V	Research Planning and Implementation	27
VI	Fitting Research to Policy Needs	31
VII	Social Science Translators	36
VIII	A Foreign-Area Research Structure	38
IX	Conclusion	42

Recommendations and Findings

The Advisory Committee recommends that:

- The Department of Defense actively seek the transfer of responsibility for the support and management of foreign area research, and it should strongly endorse the creation of a government-wide institutional structure—to which it would have access and in which it would have a chance to voice its informational needs—in which this responsibility should be lodged.

- The Department of Defense give concentrated attention to the development of a first-rate in-house social and behavioral sciences capability, both for conducting pilot studies and for monitoring external research.

- The national security agencies jointly establish a task force on social and behavioral science research priorities in the area of national security policy.

- The Department of Defense makes a deliberate decision to multiply several times

over the amount of funding available to the social and behavioral sciences under the 6.3–6.5 research program levels.

■ The Department of Defense, to bring about a more effective managerial relationship between the produces and consumers of research should:

1. assign formal responsibility for research allocation and supervisory functions among the major consumer offices in the Department of Defense, such as International Security Affairs, Installation and Logistics, and Manpower and Reserve Affairs, as well as to the Advanced Research Projects Agency; or, alternatively, give each of the major consumer offices a role in requesting and sponsoring research, similar to the role performed by the services, under the oversight of the Director of Defense Research and Engineering
2. upgrade the research bureaus within the principal offices of the Secretary of Defense by giving the bureau chief a supergrade status, provided that individuals meriting this grade can be found
3. provide funds for retrospective studies in the social and behavioral sciences designed to establish the relationship, if any, between basic research and programmatically useful results
4. allocate funds for evaluative studies of on-going programs that allow for the questioning of policy assumptions and the proposal of programs alternative to those under analysis, in order to suggest how programs might be modified in the future
5. create an internal research information retrieval system designed not only to prevent the "loss" of previous research but also to compensate for the compartmentalization that exists within the Department

6. provide more precise formulations of Department of Defense research needs and work toward better anticipation of those needs, so that potential contractors for research will have adequate time for the preparation of proposals

- The Department of Defense bring to the attention of other agencies with similar needs for a policy–research interface the desirability of and opportunities for encouraging the development of applied social and behavioral scientists.

The Advisory Committee finds that:

- A national security policy process informed by first-rate research and assuring clear communication between policymakers and researchers deserves encouragement, and that to ensure the responsiveness of behavioral and social science research to the needs of the national security community, it will be necessary to achieve four objectives: (1) the improved overview and coordination of agency research programs; (2) the conduct of targeted research on specific problems of concern to the national security community as a whole; (3) the development of an effective information system; and (4) the provision of an expanded policy analysis capability at the Presidential level.

I Introduction

In the relationship of the federal government to scientific research, the role of the social and behavioral sciences has caused increasing concern in the past 3 or 4 years. This is partly a reflection of a larger problem in the government–academic relationship and partly a simple matter of growth in the volume of research in these fields supported by federal departments and agencies. Even more important, it is a result of differing expectations regarding the potential contributions of the social and behavioral sciences held by their practitioners and by government officials. At least some social scientists want recognition in such forms as greater representation on the President's Science Advisory Committee, and implicitly claim that, merely by being brought into decision-making processes more frequently and at higher levels, they will necessarily make useful contributions. Government officials, on the other hand, want the behavioral and social sciences to prove their utility, about which the greatest skepticism is, perhaps, found in agencies that have the least well-developed relationships with these sciences, as, for example, the Bureau of Public Roads or the Federal Bureau of Investigation.

The Department of Defense accounts for approximately half of the total federal funds for all research and develop-

ment. However, it does not loom nearly so large with regard to the social and behavioral sciences, accounting for only about 11 percent of federal funds for research in these disciplines in fiscal year 1970. Of the Department's total research and development budget of approximately $7.5 billion for that year, the behavioral and social science segment is approximately $37 million, or only one half of one percent. Quantitative proportions and policy significance are not, however, inevitably correlated, as a very large amount of concern over the social science research operations of the Department of Defense has recently evidenced.

The relationship between the federal government and the social sciences generally and historically, while substantial in scope, has not been altogether harmonious. The quality of the relationship has been well expressed in the title of an excellent historical account by Gene M. Lyons.* An inherently difficult relationship has had its frictions greatly exacerbated, of course, by the Vietnam war and the widespread alienation that war has caused, especially in the intellectual community. Sponsorship of scientific research by the Department of Defense, whether in the physical, biological, or social sciences, has been a major source of tension and turmoil on college and university campuses. Concern has been expressed that the source of independent criticism represented by the universities may dry up as a result of federal subvention. Further, there has recently emerged a rapidly growing concern over the scope of Department of Defense research. Specifically, it has been charged that the Department is not bound by a sufficiently narrow definition of military affairs, and is too much engaged in broad foreign policy matters that are more properly the province of the Department of State.

Even before the Vietnamese war and the reactions against it, which intensified problems of the relationship between academic researchers and government agencies,

*The Uneasy Partnership: Social Science and the Federal Government in the Twentieth Century, New York: Russell Sage Foundation, 1969.

efforts were under way from both sides to attempt to improve the fruitfulness of those relationships. One important attempt in that direction was a report entitled The Behavioral Sciences and the Federal Government, prepared by the Advisory Committee on Government Programs in the Behavioral Sciences of the National Research Council.* This Committee, chaired by Dr. Donald R. Young, examined how the knowledge and methods of the behavioral sciences could be brought to bear more effectively on the programs and policy processes of the federal government. Its recommendations focused on strengthened and improved social science staffing in government agencies; the development of research strategies in major departments and agencies; the creation of an interagency planning group headed by the Department of State to exercise continual review of research in the area of foreign affairs; greater representation of social scientists in key science policy agencies of the government; and the creation of a National Institute for Advanced Research and Public Policy "to provide a forum in the nation's capital for the full exploration of the growth and application of knowledge from all the sciences to the major issues of the society."

Subsequent to the publication of that report, the Department of Defense requested the National Academy of Sciences to address itself more specifically to the management of behavioral science research within the Department of Defense. The task was undertaken by an Advisory Committee on the Management of Behavioral Science Research in the Department of Defense, and this report is the outcome of its work.

*Washington, D.C.: National Academy of Sciences, 1968. Publ. No. 1680.

II Ground Rules

In undertaking to advise on the "management" of behavioral science research, one must make clear the level of one's response. Our Committee made two crucial assumptions very early in its discussion.

The first is that we must treat management in the broadest sense of the word. To manage is to plan, direct, coordinate, and evaluate. Such activities are not undertaken in a vacuum. They occur in a context, and an understanding of the context is the primary managerial question. Only as the total context is understood clearly can one sensibly make recommendations regarding detailed management and procedural matters. This means that we are more concerned with the scope, premises, and nature of the relationships between the Department of Defense and outside researchers and with major dimensions of the types of research supported than we are with detailed questions of, say, the "G.S." level (that is, the civil service status) of social scientists in military departments, or the exact procedures by which external research contracts are let.

As a Committee of outsiders, some of whom have had substantial working contact with the Department of Defense and others of whom have had virtually none, we do not propose to advise on internal working details. Such advice

would have required a close and intimate scrutiny of the day-to-day work of managers and scientists within the Department, which we were not in a position to undertake. We may, however, be in a better position than those in the Department to examine its relationship to the social and behavioral science research communities, which it partially supports and upon which it draws in pursuing its major goals.

Our second assumption is that national security policy, with which (like it or not) the Department of Defense is intimately and ineluctably related, has many dimensions to which the knowledge and advice potential contained within the behavioral and social sciences are relevant.

The civil–military relationship is complex, not simple.* While the rule of thumb in American constitutional doctrine is that military policy is a subordinate extension of foreign policy and that civilian authorities determine policies which it is then the obligation of the uniformed services to implement, it is an axiom of public administration and policy development that ends and means are not in fact separable. Rather, they continually interact. Thus, those charged with the "how" of policy—i.e., its implementation—will necessarily want to have an opportunity to understand fully the "what" of policy and even to make contributions to it. A good example is provided by the Office of Scientific Research and Development in World War II. Its civilian scientists, when called upon by the military to provide weapons to fit requirements as defined by the services, insisted upon being informed about all the dimensions of the problem they were called upon to solve and then often redefined the requirements as a prelude to devising appropriate weapons systems.

If the role of military power has permeated American thinking about international politics, it is equally true that political, psychological, sociological, and economic dimen-

*Some of the complexities are summarized and reviewed in Walter Millis, Arms and the State, New York: The Twentieth Century Fund, 1958.

sions of international political relations have penetrated the realm of military policy. It is when military objectives are artificially separated from political concerns (as, for example, in the late General Douglas MacArthur's desire to extend the Korean War in the name of military victory without consideration of the political dimensions of this objective) that trouble occurs. It is the Committee's conviction that to insist that military affairs be separated by an impenetrable wall from foreign policy affairs is to invite disaster. It follows that no such wall should exist between the organization charged with the nation's military security and the researchers who generate, articulate, and interpret knowledge of other nations, international problems, and United States policy ideas.

The National Security Council, established in 1947, constitutes a post-war institutionalization of the recognition developed during World War II of the inextricable relatedness of military and nonmilitary factors in national security policy. The State Department cannot perform its functions adequately without a sophisticated understanding of military developments concerning both weapon systems and strategies. Similarly, the Department of Defense cannot pursue sound military policies—that is, it cannot adequately pursue the policy implementation of goals given to it by the President—without equally intimate knowledge of the broader political context of national security developments.

Such knowledge could often be developed as well outside of the Department of Defense as inside it. Often, however, it has not been developed in fact, except as the Department has sponsored it. Hence, one of the important issues in the management of Department of Defense behavioral and social science research concerns, first, the total national security policy research context and, second, the Department's place in that context in relation to the other agencies that together constitute what may be called the national security community—namely, the Department of Defense, the Department of State, the Agency for International Development, the Arms Control and Disarmament Agency, the U.S. Information Agency, the National Security Council

staff, and the intelligence agencies. In our view, one cannot meaningfully discuss the management of Department of Defense social science research without considering the other aspects of national security policy research. This does not necessarily mean that the Department of Defense should itself be engaged in what is essentially political research, but it does mean that the Department has an interest in being assured that the required political research is done somewhere.

The aftermath of Project Camelot made it all too clear that military sponsorship of social science research pertaining to the internal politics of other nations may have adverse repercussions on American foreign policy. Yet the questions that Project Camelot addressed are "fundamental: the nature of social change, the factors of instability, the causes of violence."* While understanding of social change in different societies might be considerably enhanced by research of the kind envisioned by Project Camelot, insensitivity to the implications of its military sponsorship strongly indicates that the defense establishment's need for certain types of information does not necessarily make it the best sponsor of research designed to provide that information. The question has also been raised whether the United States government should collect this kind of information at all.

We further assume that, although the Department of Defense has requested and is supporting the work of the Advisory Committee, this report must be addressed to interested social scientists throughout the nation, as well as to the Department and other national security agencies. It is the quality, characteristics, and terms of the relationship between the Department of Defense and the outside world of social scientists at the heart of the research management question within the Department itself. And, because each party to the relationship naturally has its separate perspective, we assume it to be important that our analysis take account of the user viewpoint, as well

*Lyons, op cit, p. 169.

as that of the social science "producers." In this respect, we deal with matters not given prominence in the report of the Young Committee, whose recommendations to the government were almost exclusively answers to the implicit questions: "What can the government do for the social sciences, and what can it do to get more from the social sciences?" While we are concerned with what the Department of Defense can do in its particular sphere along these lines, we are equally concerned with the question, "What can social scientists do to make their own contributions more effective in the government, and, particularly, in the Department of Defense?"

III What to Manage?

The most important questions in research management include: Toward what kinds of problems does one direct research? What is the scope of the research? What are the major purposes and categories of the research? After these questions have been resolved, one can move to the level of choices regarding allocations of research funds among different approaches to the problems and among different types of research-performing institutions.

The Department of Defense presently divides its social science research into five substantive categories.

1. Human performance—measuring individual physiological and psychological capabilities related to military operations
2. Manpower selection and training—developing methods to improve selection, classification, training, and use of military human resources
3. Human factors engineering—designing equipment to ensure that it can be effectively, reliably, and safely used by military personnel
4. Foreign military security environments—understanding cultural, psychological, and political-military charac-

teristics of foreign defense organizations and their members and their environments. Departmental statements list three subcategories:

a. improving U.S. armed service capacities for noncombat aspects of counterinsurgency operations

b. determining costs and benefits of different U.S. military aid and advisory policies for strengthening the internal defense capacities of allied military establishments in developing countries requesting such assistance

c. developing and testing methods to clarify future U.S. security environment in terms of foreign military intentions and capabilities in military elements

5. Policy-planning studies—synthesizing and applying existing knowledge to formulate and critically evaluate some aspects of threat analysis, contingency planning, force structure needs, and hardware research and development requirements

Each of these categories may at some point be interdependent with any of the others. Thus, the problems of selection and training servicemen for overseas assignments, for example, clearly fall into both the manpower and the foreign military security-environment categories. Yet the first three (which can be subsumed under the generic heading of manpower studies) are clearly differentiable from the last two. By and large, the manpower studies use the social science discipline of psychology, while security-environments and policy-planning research relies most upon the disciplines of political science, economics, and sociology. The distribution of Department of Defense funds among these categories is very heavily weighted on the manpower side. In the fiscal year 1971 budget request, the three manpower categories totaled $35.3 million, and the last two only $9.9 million. In terms of disciplines, the Department spent $36.5 million on the social and behavioral sciences in fiscal 1969; of this total, $29.5 million were spent for psychology.

The most significant distinction among the categories of research is that foreign military security-environments

and policy-planning research is inherently politically sensitive, while manpower research is not, although it, too, has had its controversial projects. Indeed, research on man–machine relationships and "human engineering" has an Orwellian tone, but by and large a psychologist could work on problems of improving selection and training choices through psychological testing without having to confront possible conflicts between his own value system and the value system implicit in the area of research. This is less true for categories of security-environments and policy-planning studies. Regardless of questions of political sensitivity, much policy-planning research has to be done by and for the Department of Defense because it deals with issues of strategy, force structure, and budgets. The Department of Defense should not be foreclosed from undertaking such research.

Research management in these areas must, therefore, immediately concern itself with the question of possible conflict between a potential researcher's political values and the military-foreign policies represented by the activities of the Department of Defense. To put it sharply, policy-planning research for the Vietnam war is very different from research on appropriate diets for Army personnel stationed in arctic regions. Given the present climate, however, one would not be surprised to hear objections to university research on the appropriate diets for Green Beret personnel in Vietnam.

From a management viewpoint, the problems and needs of these major social science research areas differ substantially. Manpower research has long been well institutionalized in the military services. It is the Advisory Committee's understanding, moreover, that such management relationships between the consumers and producers of research are relatively satisfactory. That is to say, manpower officials in the Department of Defense have been able to define their problems in ways that researchers have been able to understand and respond to. Conversely, the researchers have made substantial contributions to the practical needs of manpower officials. Hence, there

is a considerable degree of mutual respect, and a firm foundation of economic and pragmatic justification for the manpower research programs. The user-producer relationship in the foreign area and policy-planning research has been much less happy. There is substantial evidence, as will be seen later, that users are very dissatisfied with social science contributions to the solution of policy-planning problems.

Even the very meaning of research differs in the two contexts. Human performance and manpower research is, by and large, more often quantitative and testable, approaching the modes of research in the physical sciences, while some foreign-environments inquiry and much policy-planning research are more qualitative and judgmental. Because the management problems are different in the two broad areas, and the national security policy sphere has been most strongly subjected to questioning, the Advisory Committee's focus is largely on that area.

It is also informative to divide research into different categories with respect to purpose. Most social science research aims at providing information, usually concrete and specific, on particular problems. It involves the gathering and analysis of data, as, for example, in the content analysis of propaganda broadcasts from other countires. It is research that performs, at least in some measure, an "intelligence" function. There is a second purpose of research, however, somewhat different in character from that usually pursued by scientists, whether physical or social. It seeks to provide a longer-range—and, perhaps, more speculative—perspective, removed from current operations or policy issues. Such research employs rational, knowledge-based, intellectual analysis not so much to solve present problems as to affect current decision-making by placing it in a broader or different context. The search for fundamentally new policy options is an important example of that kind of research, and a concrete illustration is provided by the RAND study of overseas bases.*

*See Bruce O. R. Smith, The RAND Corporation, Cambridge: Harvard University Press, 1966.

It should be noted that research is frequently sought, but not often found, which tests and compares policy hypotheses before they are implemented.

If research can be said to include both the development of information and the providing of perspective and conceptual thinking, it may also include a third category, defined by the use of researchers as consultants on an ad hoc, short-range basis. The policy-maker considers that he is doing "research" on his problem when he calls in an outside expert for advice regarding, say, the probable outcome of a posited alternative. (There is an important distinction here between the viewpoints of the user and the producer.) Social as well as physical scientists—certainly, those who think of themselves as basic researchers—are not likely to label consulting and advising as research, even though they might be willing to admit that good advising is based on knowledge provided by research. From the viewpoint of the Department of Defense (or any other government agency) it makes sense, however, not to employ so restrictive a conception of research. From the user perspective, research should be taken to encompass not only the development of information through data gathering and the provision of written, formal analyses but also discussion, in the form of a phone call or a 2-day visit to Washington, for example, between a policy-maker and a researcher who knows the area of the world or the type of problem with which the former is concerned.

The difference between user and producer perspectives on what constitutes research and the knowledge basis for action is well expressed in a recent comment on two general complaints about social scientists as consultants. The first is that communication is impeded because social scientists speak in a jargon incomprehensible to layment. The second—the relevant one here—is that social scientists, "When faced with a specific problem that has no ready-made conceptual answer . . . frequently retreat to the laboratory for more research and more facts. But the client would ordinarily settle for less than a scientifically adequate answer. He simply wants the consultant to apply his trained intel-

ligence, and give help based on the information on hand." Of course, there is another side to this, for it is also observed that, "When the consultant tells him he has formulated his problem in such a way that advice is impossible, too often the client retreats to his office. And often any reformulation the consultant suggests is ignored, to the detriment of communication between them." (These observations were not made by a disgruntled policy-maker. They appear in the report of the National Science Board's Special Commission on the Social Sciences, Knowledge into Action: Improving the Nation's Use of the Social Sciences.*)

A major problem concerning the scope of research, with which research managers have recently had to contend in a very disturbed context, is the question of the degree of direct relationship or relevance that it must bear to the military mission. Partly, of course, the answer to this question depends on how one defines the military mission. If it is narrowly defined as the application of physical force to international political relations, much research would be excluded as irrelevant. When broadly defined as participation in national security operations, much more research becomes directly relevant.

This question needs to be placed in the larger context of how appropriate it is for mission-oriented agencies of the national government to support basic research. A tradition of pluralism in the support of research by the federal government is of long standing and has been vigorously defended. At the time the National Science Foundation was being designed, thought was given to making it the single agency of the federal government responsible for basic research in all the sciences. However, owing to delays in the establishment of the National Science Foundation, other operating agencies (following the leadership of the Office of Naval Research) developed their own research and development programs and have since retained them. Furthermore, the policy commitment to diversification of support for scientific activities grew out of an awareness that no

*Washington: Government Printing Office, 1969, pp. 15–16.

individual or institution is competent to make all the decisions about what research and development should be supported and how support should be provided. In general, most observers of the science policy scene have been convinced that mission-oriented agencies must perform or support some basic research in their areas of interest, partly so that the pool of knowledge on which their applied research is based is maintained at an appropriate level, and partly as a way of attracting and holding a high quality in-house scientific staff. Such staffs may be structured, without necessary damage to management effectiveness, on either a mission-derived or a discipline-oriented basis, and in either a basic or applied context. Some of the current debate over whether the Department of Defense should sponsor research designed to advance a discipline seems to ignore the possibility that this might be a necessary result of mission-derived research.

On the whole, scientists have been satisfied with the situation of relying upon mission-oriented agencies for support of basic research. There are two major reasons for this: First, it gives them multiple opportunities to seek support, as compared with a situation in which all grants come from a single agency; second, they recognize the political fact of life that the Congress has not seen fit to expand the National Science Foundation's research funds at a rate commensurate with the growing demands for support in the scientific community.

Recently, however, there has been a considerable degree of alarm, especially in the universities, over the reliance of basic researchers upon Department of Defense support. It is now often suggested that all basic research, if not all academic research, be removed from the "contamination" of Department of Defense sponsorship. There is a measure of naiveté in the view that research can be neatly categorized as either basic or applied within this context. Research may be basic yet directly related to the mission of an agency, or it may be applied yet not of any particularly greater relevance to one agency's mission than to another. There are more important issues that attach to

the sponsorship of academic research by the Department of Defense. One is whether an academic institution should undertake the performance of classified research, and the current overwhelmingly dominant view in the academic world is strongly negative. A second is whether problems of national security do not deserve the attention of academic researchers simply because of the sponsoring agency.

A different and useful mode of classifying basic research supported by mission-oriented agencies is proposed by Harvey Brooks, who suggests that such research falls into three categories.

1. Fields of science in which the mission orientation admits of no clear limits to agency interest, and requirements differ in both kind and volume from those of any other component of the nation's technological community
2. Fields that are of vital importance to the agency mission, but whose importance is shared almost equally with many other agencies
3. Fields that presently show no obvious promise as sources of concepts or results for near-term agency exploitation, but that are so much in the main stream of imaginatively advancing science that they have a strong potential for ultimately significant repercussions on the programs and perspectives of the agency*

If this typology were used for the Department of Defense, research that falls in the first category should continue to be supported by the Department of Defense. Here, research on problems of human response to stress and situations of threatened death may serve as an example. The second category would include much of what is done under the headings of foreign military security environments and some of what is done in policy-planning. Such research overlaps in substance with the missions and needs of the Department of

*Harvey Brooks, The Government of Science, Cambridge: MIT Press, 1968, p. 115.

State and other operating agencies of the national security community. Research of this kind must be accessible to the Department of Defense, but all of it need not, in principle, be performed or financed by it. Until now, one reason why the Department of Defense has supported such a large share of this research is the political difficulty experienced by other agencies in obtaining appropriations comparable to those of the Department of Defense for research in these areas. It must also be said, however, that other agencies (notably the State Department) have not been nearly as alert or sympathetic to social science research on foreign affairs matters as has the Department of Defense. To the Committee it appears that to say that the Department of Defense, among the national security agencies, has had a disproportionately large share of total foreign area and international affairs research funds in recent years, is also to assert that the other agencies have had disproportionately small shares. In fiscal year 1969, for example, the Department spent $11 million in these categories, while the State Department's Office of External Research was funded at only $125,000, the U.S. Information Agency's research at $589,000, and that of the Arms Control and Disarmament Agency at $678,000.

The State Department has long faced great difficulties in securing funds for research. Many of its officers are not convinced that the social and behavioral sciences have something to offer that is both useful and not obtainable elsewhere. Until very recently, the Department of State has been singularly lacking in initiative in inquiring into the potentialities of these sciences for making significant contributions in the national security area. Until recently, it rejected the idea of accepting additional research funds offered to it on a transfer basis by the Department of Defense. In fiscal year 1971, arrangements were effected by which the State Department can contract for research with the use of Department of Defense funds.*

*See FAR Horizons, Vol. III, No. 5, September, 1970.

"This fiscal year the Department of State will expand its contract and consultant research program. The aim is to make more

The Committee believes strongly that the Department of Defense needs competition in the fields of foreign areas research and policy-planning studies in order to sharpen both the management of the effort and the quality of the end products. Knowledge is power; and, as the possessor of the most knowledge, the Department of Defense tends to be in a commanding position and, therefore, is not compelled to try to do the best possible job in analyzing and defining any situation. It is difficult for other agencies to present and argue for a different picture in the absence of knowledge even approaching that possessed by the Department of Defense.

If a better balance in social science research were the sole objective, it could, presumably, be secured by simply cutting the Department of Defense's national security affairs research funds down to a level similar to that of the other agencies. The Committee rejects this approach. We hold that more research, along with better management, is needed, not less. The sensible way to correct the long-standing imbalance is to build up the research strength of other agencies, and this we strongly recommend. The Department of Defense, of course, does not determine the allocation of research funds or their division among the relevant agencies. Consequently, when we urge the need for increased foreign area research by the Department of State and other agencies, our recommendation is addressed to them and to the appropriate committees of the Congress.

All the members of this Committee recommend a phased transfer of responsibilities and funds for foreign areas research from the Department of Defense to the Department of State and other national security agencies. However, we

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use of the special knowledge and insights to be found outside the Government in universities, nonprofit research organizations, and among private foreign affairs experts. The State Department has requested from Congress an appropriation of $350,000 for the program, up from $125,000 last year. And the Department of Defense has agreed to allocate to State $483,000 for studies in the broad field of national security of interest to both departments. The goal is a $833,000 program in fiscal year 1971."

do not agree upon a single answer to the question, "What should be done if increased funds for the other agencies are not forthcoming?" Some of us believe that the crucial requirement is that the information needs of the national security community be met. If other agencies are not equipped to meet these needs, then some of us would have the Department of Defense continue to sponsor foreign area research and policy-planning studies at present levels (even though this may be unrealistic, in the light of developing congressional attitudes) until that situation changes. Other members of the Committee, however, are convinced that the transfer of research funds to other agencies is the decisive consideration. Those who take this position would end the Department of Defense's support of this kind of research and trust that other agencies and the appropriate congressional committees would then see the necessity of assuming responsibilities for it. The assumption is that, unless the drastic step is taken, the natural inertia of the bureaucracy will serve to delay unconscionably, if not completely thwart, the transfer of responsibility that is required.

Every member of the Committee, however, agrees that the Department of Defense should actively seek the transfer of responsibility for the support and management of foreign area research. Moreover, we agree that it should strongly endorse the creation of a government-wide institutional structure—to which it would have access and in which it would have a chance to voice its informational needs—in which this responsibility should be lodged.

IV Institutional Choices

The pluralistic character of research performance in the United States is exhibited by the variety of institutions that carry out what is generically spoken of as "government research." Such research may be conducted in an internal (in-house) federal laboratory; in a federally owned facility operated under contract by a nongovernmental organization; in a private for profit corporation; in a privately-owned not-for-profit corporation, all or almost all of whose business is obtained through contract with one or more government agencies; in public or private universities, either by contracts with research centers or grants to individual faculty members; and even by independent, individual consultants.

The pluralism in research performance poses a basic question: "What balance should be struck between intramural and extramural research?" More than 85 percent of the federal government's research and development budget is currently used to purchase extramural research from the whole range of institutions just listed. About 25 percent of all research and development funded by the Department of Defense is performed intramurally, ranging

from 36 percent in the Department of the Army to 15 percent in the Department of the Air Force.

The use of extramural research performers has had advantages that are generally recognized throughout the federal government. Contracting-out avoids civil service constraints and complications; it develops private sector interests in and support for government programs; permits access to talent that the government might not otherwise be able to recruit or employ on a full-time basis; and is easier (at least in principle) to turn off, as well as on, than is an in-house laboratory.

While most research contracts are of a "hardware" nature, a strong tendency to use extramural sources for both policy research and policy advice has developed in recent years. Prominent examples in this area include studies by the RAND Corporation on a variety of strategic policy questions for the Air Force and by the Institute for Defense Analyses on behalf of the Office of the Secretary of Defense. Even congressional committees have made occasional use of policy research contracts, for example, the series of studies on foreign policy topics contracted for with university groups by the Senate Committee on Foreign Relations a few years ago.

Although extramural contractors have been widely used for all kinds of research, it is not clear whether adequate criteria exist for determining which research should be performed extramurally and which on an in-house basis.

In the hardware area, the so-called Bell Report of 1962 on government contracting for research and development expressed considerable unease, if not alarm, over the inability of contracting units to monitor their extramural research effectively, largely because they had denuded themselves of in-house capabilities. That report urged that more of the important research tasks be retained for intramural laboratories on the ground that their senior scientists would then constitute a pool of advisory experts needed to help policy makers select

extramural research teams or monitor on-going extramural work.*

The Committee has the impression that on the social science side it might be somewhat easier to follow this urging with respect to manpower than to foreign-area and policy-planning research. This may depend in part, however, on just where the research is located internally, and what kinds of personnel (policy-making or research management bureaucracy) exercise day-by-day direction of it.

One of the major recommendations of the Bell Report was for parity of salaries between governmental and non-governmental employers. Legislative developments since 1962 have made a considerable advance toward this objective. In the social sciences, however, the number of super-grade positions for senior scientists is apparently insufficient. Strong representation by the Department of Defense to the Civil Service Commission, in collaborative effort with other agencies, is in order regarding the need for high level social scientists. Even more important than salaries in enabling the government to maintain first-class intramural research establishments, in the judgment of the Bell Report, is having "significant and challenging work to do." The Department of Defense should, therefore, ensure that research problems assigned to intramural staff are such as to attract and hold first-class scientists. "No matter how heavily the Government relies on private contracting," states the Bell Report, "it should never lose a strong internal competence in research and development." This observation carries even greater weight in connection with policy-planning than with hardware. And in this area, it may be added, there is good reason for the government to be aware of what arises on both the producer and consumer sides of the research relationship.

*U.S. Bureau of the Budget, Report to the President on Government Contracting for Research and Development, Washington: Government Printing Office, 1962. (David E. Bell was then Director of the Bureau of the Budget.)

We recommend that the Department of Defense give concentrated attention to the development of a first-rate in-house social and behavioral science capability, both for conducting pilot studies and for monitoring external research.

An intramural research staff in daily contact with policy-making officials, on the one hand, and with contractor research performers, on the other, might possibly alleviate one of the most crucial of all institutional problems, that of ineffective communication between research producers and users. If intramural research staff were to be organized by assignment to policy-making offices (e.g., some to the Assistant Secretary for International Security Affairs, some to the Assistant Secretary for Manpower and Reserve Affairs), rather than located in an isolated set of rooms called a research laboratory, they could be particularly effective in a liaison capacity between policy-makers and the outside research communities.

A strong effort is needed to rethink the Department's pattern of intramural and extramural research generally. Certain criteria are immediately apparent for determining which social science work should be done inside and which outside. For example, external research is obviously inappropriate for "fire-fighting" tasks, but it is appropriate for much long-term work. Some long-term work, however, should also be done in-house, by way of maintaining the monitoring capacity of the Department's social science research staff.

Another criterion, for example, arises from the very situation of internal researchers, which makes them most unlikely to be able to escape from the constraints imposed by their positions and deal effectively with tasks calling for fundamental questioning of the assumptions of current policy. Indeed, it is dubious whether even retainer organizations—such contract research centers as the Center for Naval Analyses or the Center for Research in Social Systems, for example—are sufficiently outside the agency framework to engage in this kind of independent rethinking of accepted policy, or, if they can do it, whether they will also be eager to transmit results.

Ideally, every government department should have an "Assistant Secretary for the Questioning of Assmptions." Practically, it must be recognized that no bureaucratic organization can be expected to permit and reward the degree of self-criticism that should be generated internally. Indeed, the most penetrating criticism of national security policies and programs is often likely to come from those whose perspective would not permit them to accept Department of Defense support for their research, let alone to become employees of the Department.

This is not to say, however, that incisively critical policy-planning research can never be sponsored by the military agencies. There are, after all, many gradations of disagreement and criticism. Even internal staff are expected to alert their principals to weak spots and inadequacies in existing or proposed programs. The Department's policy-planning research should continue to include some that is performed extramurally, but personnel in the contract research centers of the universities engaged in such work have an obligation to keep Department of Defense sponsors fully informed of their own perspectives and assumptions. It is important to national security policy that, when there is a lack of consensus about the direction of policy, even among objective, competent researchers, the major divergent views should be fully developed and strongly presented to policy-making officials.

This is to say, first, that the Department of Defense needs to expose its own thinking and assumptions to outside criticism, and, in consequence, has an obligation to provide at least some outside critics with sufficient information about its assumptions to provide a basis for intelligent criticism. Second, it also means that policy-related social science researchers who are critical of United States policy should not withdraw from the task of analyzing national security policy merely because they are at odds with it or made angry by it. The appropriate institutional arrangement for critical research is probably one in which the Department contracts with an independent research institute, or a university-affiliated research

center, in such a way that it relies upon and ensures the freedom of the capability—presumably selected because it meets the highest standards of professional competence—to pick its own researchers and its own research topics. An agency in need of having its programs criticized is never in a good position to advise the potential critics on the most fruitful focus and techniques of inquiry and evaluation.

Another aspect of the institutional criteria for defense-related social and behavioral science research involves the distinction between inquiry in which the intended end product is a set of data, a descriptive statement, or a training manual, and that which focuses on categorizing, analyzing, developing, and presenting different perspectives and policy possibilities. The first types of research can often well be performed by teams in a relatively bureaucratic setting. The second may suffer from "group think" approaches and, to the extent that it does, is an appropriate area for individual research.

This suggests a related point about the institutional structure of Department of Defense research. It has already been observed that the term "research" should have a broader meaning for the Department than for academics, and that the Department should specifically think of its research as including the contributions of individual consultants. On this point, the Committee recognizes that individuals possessing specialized knowledge are, perhaps, the Department's greatest resource in the research community. Its experience with the development and use of a roster of consultants has proved beneficial. Such individuals may be called in for 2 or 3 days of consultation as problems arise in their areas of expertness. Sometimes this is for the purpose of drafting papers; sometimes for the purpose of sharing specific information and perspectives with those in policy positions. Consultation involves the application of a researcher's competence as an expert, as well as his total background, to an immediate problem rather than new research. Frequently, however, the immediate problem will inspire the consultant to do new and useful research. But, from the viewpoint of the user, it

is research. In his relationship to consultants, the research administrator's primary function is not that of receiving information from the researcher and then reinterpreting it to the policy-maker. It is, rather, that of helping the policy-maker find the individual in the research community whose background and competence are best suited to the problem at hand, and who is known for an ability to speak the policy-maker's language, as well as the occasionally arcane jargon of his own specialty.

V Research Planning and Implementation

The emphasis needed in research management on the qualities of the research effort itself should not be pursued at the expense of appropriate attention, first, to the planning of the entire research program before research is begun and, second, to the implementation of tentative findings when they emerge from the initial stages of research.

Cyril E. Black, in a recent evaluation of government-sponsored research and international studies,* states that one of his principal impressions is that "there seems to have been no government-wide effort to establish research priorities based on what is already known, what is already being done by privately supported research, and what the needs of the nation and of scholarship are." It would be wasteful in the extreme if this situation were to continue. The Committee does not believe that the Department of Defense should unilaterally determine research priorities in foreign area studies and policy-planning, as we later make clear. We hold that the Department should cooperate with the Department of State and other national security agencies in supporting problem-related studies of research

*Cyril E. Black, "Government-Sponsored Research in International Studies," World Politics, 1970.

needs and resources. Such studies would differ significantly from the survey of the behavioral and social sciences, completed in 1969,* which is concerned primarily with the needs of these disciplines for their own conceptual development. What are required are assessments of research needs and resources from the point of view of policy-makers.

We recommend that the national security agencies jointly establish a task force on social and behavioral science research priorities in the area of national security policy. Its charge would be to prepare a statement that (1) assesses the present "state of the art" in the sciences; (2) details specific research needs from a policy perspective; and (3) identifies and evaluates the intramural and extramural resources required to meet various levels of needs. This task force should be composed of both research administrators in the national security agencies who are knowledgeable on policy and nongovernmental members of the national security policy research community.†

There is, perhaps, an even greater inadequacy in government social science research than the failure to develop an adequate inventory of research needs and statement of priorities. That is the lack of realization on the part of research users that the social and behavioral sciences have developed to the point of providing more than "armchair" analyses, and require in some instances large-scale opportunities for exploratory development and experimental testing. Certain operational problems, as well as fundamental assumptions, relating to the development of an all volunteer army, it would appear, could be effectively investigated by way of well-conceived, properly evaluated field experiments.

*Behavioral and Social Sciences Survey, National Academy of Sciences and Social Science Research Council, The Behavioral and Social Sciences: Outlook and Needs, Washington, D.C.: National Academy of Sciences, 1969.

†The Committee understands that consideration is being given to the establishment of an interagency group that could undertake the task of developing the priorities for research in the social and behavioral sciences on national security policy.

The Department of Defense divides its research program into five levels, ranging from "fundamental research" (identified as 6.1 funding) through "exploratory development" (6.2), "advance development" (6.3), and "engineering development" (6.4) to "studies and analyses" (6.5). Until very recently, funding for the behavioral and social sciences has been limited to the 6.1 and 6.2 levels. Larger sums for development and testing in the 6.3 to 6.5 categories have been unavailable. It may well be that the utility of research in these sciences has been limited because projects in the more applied areas have been thwarted by lack of support.

The idea of field testing social science hypotheses is not yet widely accepted by either researchers or policy-makers. Yet there is a sufficient number of successful examples of applied social science research on a large scale, and of the testing of social hypotheses, to make it impossible to deny the potential value of such work. One fascinating current example of the civilian side might be cited: the experimentation with a negative income tax approach to public assistance payments which is being sponsored by the Office of Economic Opportunity. Preliminary reports on the New Jersey field testing of the negative income tax approach have provided the first empirical data ever applied in a systematic way to the widely believed adage that any kind of governmental "welfare" benefit must destroy personal work incentives. Other controlled social experiments in the educational field that will serve to test hypotheses have also been planned by the Office of Economic Opportunity.

In the national security area, the methodology of social science research now permits and warrants substantial funding for such efforts as simulations of the operational environments that policy-makers may posit as constituting the range of possibilities for which the nation must be prepared. Computer-based simulation studies on a large scale are likely to be expensive. They may be used either for fundamental research or for engineering development, and it is particularly difficult in the social sciences to draw a dividing line between different stages of research and

development. But, under whatever label, they constitute a qualitatively different mode of behavioral research than is encompassed by the traditional expectations of many foreign-affairs practitioners, who believe that the social sciences can provide little or nothing beyond humanistic, individual, historical research. The limits of utility on "engineering development studies" in the behavioral and social science areas of Department of Defense research are not yet known with any precision. However, it is clear that those limits have not bee approached and that an adequate effort to develop the engineering side of behavioral and social science research has not yet been undertaken. The potential for such work is perhaps especially great in the area of manpower research (psychological testing mechanisms, for example), but it also exists in the policy-planning and foreign-area spheres.

We recommend, therefore, that the Department of Defense make a deliberate decision to multiply several times over the amount of funding available to the social and behavioral sciences under the 6.3–6.5 research program levels. In implementing this recommendation, the Department's research administrators should undertake the special task of identifying a number of promising development and testing projects in the social sciences. These projects could be selected with an eye to enhancing the value of research in the 6.1 and 6.2 categories and thus further developing the state of the art.

VI Fitting Research to Policy Needs

Published commentaries on the relationship between the federal government and the research community tend to be written by members of the latter group and thus inevitably to reflect the perspectives of research producers more strongly than those of the government officials who sponsor and use research. Some individuals, of course, embody both a professional social science background and high-level governmental experience. Many of these have exhibited (either privately or publicly) skepticism and even hostility toward extramural research. These views appear to be engendered by a sense that social science research is often irrelevant.

High-level officials, both in the Department of Defense and in the former Bureau of the Budget, believe that research should be more useful to them than it is. Nonmission-oriented basic research is considered to have lacked policy payoffs and to have constituted both a subsidy to producers and a source of difficulty and irritation with the Congress. Research producers are sometimes viewed as being more interested in furthering their academic disciplines than providing operational help to the Department of Defense. Part of this set of negative attitudes reflects an apparent failure on the part of producers to learn enough about the

problems of the research consumers to be able to design concretely applicable programmatic proposals. To its critics, much social science research has appeared to be simply fact-gathering unrelated to hypotheses, and, when used, the hypotheses seem to be those generated by their relevance to the discipline rather than to consumers of research and the Department of Defense. So run the criticisms from the user perspective—a perspective that, it must be admitted, is not as strongly represented as it should be in many panels that have commented on the relationship between researcher and policy-maker.

Obviously, these criticisms taken alone constitute a one-sided picture of the actual relationship. Research producers, too, can register valid complaints—among them, for example, the inability of many policy-makers to pose their problems in researchable terms, or their unwillingness to make an effort to understand some necessary conceptual complexities when they first encounter them. Some members of the Committee believe that the demands upon policy-makers require that sympathetic and detailed interpretation of problems be done by research administrators who have regular contact with them. All too often, however, research administrators are at lower levels in the bureaucracy, and communicate primarily with research producers. As a result, their formulation of research needs tends to reflect the propensities of the latter. Researchers voice two other major complaints. First, they maintain that some policy-makers are interested only in research that seems likely to result in desired answers. Second, and perhaps more important, they hold that policy-makers show a proclivity to impose burdensome reviews of research reports by unqualified persons and unnecessary security classifications.

The objective, now, of course, is not to assess blame, but to bridge the managerial gap between policy-makers and researchers, taking into account the criticisms from both perspectives, in order that the relationship may become more mutually beneficial. Demand and supply simply are not meeting in a usefully meaningful way today. Pro-

ducers continue to feel that they have something to offer, and consumers continue to feel that research is not but should be useful. What can be done by way of remedy?

Some positive steps have already been taken. Research funds have been allocated to operational agencies such as Systems Analysis and International Security Affairs on the assumption that these offices can better define their needs than can the Directorate of Defense Research and Engineering. The military services have been given funds with the intent that they offer research proposals for competitive bidding by the research community, and systems analysis has instituted training programs for in-house research and analysis. These modest steps are to the good, but they are not sufficient. Additional measures, we believe, would help.

In order to bring about a more effective managerial relationship between the consumers of research in the Department of Defense and its producers, we recommend the following six actions:

1. Assign formal responsibility for research allocation and supervisory functions among the major consumer offices in the Department of Defense, such as International Security Affairs, Installations and Logistics, and Manpower and Reserve Affairs, as well as to the Advanced Research Projects Agency; or, alternatively, give each of the major consumer offices a role in requesting and sponsoring research, similar to the role performed by the services, under the oversight of the Director of Defense Research and Engineering.

2. Upgrade the research bureaus within the principal officer of the Secretary of Defense by giving the bureau chief a super-grade status, provided that individuals meriting this grade can be found. Such individuals should not only understand traditional social science research but also have access to and enjoy the confidence of policy-making consumers at the level of Assistant Secretary and Deputy Assistant Secretary of Defense. If a choice has to be made, a staff person who understands the policy context and has some familiarity with research may be preferable

to one with very strong disciplinary research background but no acquaintance with or feel for policy-making.

3. Provide funds for retrospective studies in the social and behavioral sciences designed to establish the relationship, if any, between basic research and programmatically useful results.

4. Allocate funds for evaluative studies of on-going programs that allow for the questioning of policy assumptions and the proposal of programs alternative to those under analysis, in order to suggest how programs might be modified in the future.

5. Create an internal research information retrieval system designed not only to prevent the "loss" of previous research but also to compensate for the compartmentalization that exists within the Department. It would be desirable to include within such a system internal staff studies as well as external research, even though this would make the system more sensitive and highly classified.

6. Provide more precise formulations of Department of Defense research needs and work toward better anticipation of those needs, so that potential contractors for research will have adequate time for the preparation of proposals.

These are steps that the Department of Defense can take. The members of the national security research community can also contribute to improving their relationship with the security agencies. They can develop a greater willingness to participate in research seeking to determine the operational payoffs resulting from basic research in the main disciplines of the social sciences, and to help define areas of programmatic research in which results of definite operational utility to consumers could be produced. They could express greater interest than they have in the past in engaging in program evaluation as an important function, both as an aid to policy-makers and as a mechanism for training research producers with an operational bent. Continuing interchange of personnel between the Department

of Defense and the research community would be of obvious value to an improved relationship. This, however, will be understandably difficult to achieve in the present atmosphere unless it is part of a more general "in-and-out" exchange program between government agencies, on the one hand, and universities and research institutes on the other.

VII Social Science Translators

The value of such an exchange program would be doubled or tripled if in association with it there were developed university training programs looking toward the creation of a new breed of applied social scientists, or what might be called "social science engineers." Some recognition has already been given to the need for social science professionals who are not wholly "pure researchers." To some extent, schools of public administration and schools of international affairs have worked for years toward this goal by focusing their curricula to some degree on use of the social sciences in governmental program contexts. Perhaps the new programs in public policy analysis that are springing up in a number of universities will come closer to filling the need. Such programs may, however, be too general and too much a mixture of disciplines for developing applied social scientists in each of the various disciplines, as in the case of the relationship of chemical engineers to the disciplines of chemistry. Economics and psychology perhaps lead among all the social and behavioral sciences in already possessing an "engineering" dimension. They need further development in this direc-

tion, and political science and sociology have only begun to focus attention upon developing the kinds of professional competence envisioned.

Existing training programs in the universities that use the social sciences tend to assume that their graduates will occupy operating administrative positions. The personnel need the Committee has in mind is for researchers specifically attuned to operational contexts, rather than administrators. Policy-planning and evaluation, whether in the area of national security or health and eduation programs, are looming larger every day as important dimensions of the operations of government. The principal consumers of evaluative program research are unable to spend time on the formulation and definition of their research needs. Evaluative studies, therefore, frequently tend to be quite general in character and to require sympathetic and detailed interpretation. If a cadre of applied social scientists could be developed, they might perform this dual role of interpretation and operational definition of research needs. They would, as part of their training, presumably learn how to communicate both in the research language of their discipline and in the language of the policy-making user of research.

While the Department of Defense needs applied social science, it cannot be said that it has a primary responsibility for inaugurating major efforts toward the establishment of educational patterns designed to produce the required talents. It can, however, serve to stimulate and encourage such efforts.

We recommend that the Department of Defense bring to the attention of other agencies with similar needs for a policy-research interface the desirability of and opportunities for encouraging the development of applied social and behavioral scientists. The National Security Council and the Domestic Council in the Executive Office of the President—both of which must be very conscious of this need—might be appropriate sources of an interdepartmental statement on this need and the ways to fulfill it.

VIII A Foreign-Area Research Structure

We have already recommended the creation of a new institutional structure, government-wide, to which the Department of Defense would have access, which would include all the national security agencies.* We recommend also the phased transfer of Department of Defense responsibility for foreign-area research to this organization.

A critical dimension of the problem of securing effective foreign-area and policy-planning studies lies in the institutional arrangements for managing these kinds of research. Also needed are means for developing among researchers awareness of the importance of shaping their investigations so as to make them meaningful to policy-makers. This does not, of course, imply a style in research that represents an unthinking response to the bidding of policy-makers.

As an outside group, the Committee does not believe that it is in a position to prescribe detailed institutional blueprints for the effective management of foreign area and policy-planning research. We think we can, however, suggest certain principles and parameters for consideration in working out the details.

*See chapter entitled Institutional Choices, p. 20.

To ensure the responsiveness of behavioral and social science research to the needs of the national security community, it will be necessary to achieve four objectives:

1. Improved overview and coordination of agency research programs: Better means are needed for the coordination of the many social and behavioral science research programs undertaken by agencies of the national security community in order to avoid unnecessary substantive overlap, as well as to construct an overreaching framework within which specific agency programs may be formulated.

2. Conduct of targeted research on specific problems of concern to the national security community as a whole: There are many substantive needs that the national security agencies share. Examples of such needs are analyses of Soviet perspectives on the strategic arms race and the impact of the United States' involvement in Vietnam upon the attitudes of the Asian leaders. This type of research is of interest to the national security community as a whole. Moreover, frequently it must also be undertaken on short notice and with a highly specific focus that can be articulated only if the points of view of several agencies are taken into account.

3. Develop an effective information system: We referred earlier to the need for an information retrieval system that can marshal sources of relevant information both quickly and unobtrusively. Such a system would be concerned principally with unclassified information, such as social science studies of particular nations or international situations. It would be designed primarily to provide a quick retrieval capability at times when research or in-depth staff studies are precluded by the press of events.

4. Provide an expanded policy analysis capability at the Presidential level: The President and his senior advisers should have at their disposal a research and analytic capability that will permit handling issues of the utmost sensitivity, as already exists to a small but important degree in the National Security Council staff. Research on such issues

must perforce be undertaken without altering layers of bureaucracy either to their existence or to the policy alternatives being considered.

A research management structure to meet these needs would have certain identifiable characteristics. Among these is a linkage between research administrators and decision-makers sufficiently close to enable translating information needs of decision-makers into researchable questions; indicating to decision-makers when research might contribute to the resolution of their problems; interpreting research findings to decision-makers, so that they can be alerted to both the significance and limitations of findings; and ensuring that research findings reach the right decision-maker at the right time.

The research-management structure must provide both the overview responsibility and the authority to monitor agency research programs, to reduce redundancy, and to contribute a broader perspective within which agency programs can place their own work. Moreover, it must be capable of serving as final arbiter in jurisdictional disputes between agencies and of understanding research of interest to the national security community as a whole, but perhaps not particularly appropriate for any single agency to sponsor.

Of the numerous institutional alternatives that might be considered for meeting these requirements, the Committee believes that the following are most worthy of attention and careful evaluation, for each has disadvantages as well as advantages:

1. National Security Council staff: It has been suggested that the National Security Council staff be enlarged to include individuals whose function it would be to manage foreign-area research and policy-planning studies. The policy responsibility would lie with the President's National Security Adviser and his staff.

2. Interdepartmental groups within the National Security Council structure: According to this approach, the research

management function would be built into the National Security Council operating structure. Policy responsibility would rest with the five regional interdepartmental groups. These groups would be supported by a staff of demonstrated competence in both research and its administration.

3. Interagency committee within the research community: Another form of interagency grouping suggested by a subcommittee of the Defense Science Board, would consist of representatives from appropriate research programs within the national security community. They would sit on a committee under the chairmanship of either the Director of Defense Research and Engineering or the Under Secretary of State. This committee would have both policy and managerial responsibilities relating to research.

A choice among these possibilities should, we have concluded, not be recommended by the Committee. That determination is better made by officials intimately in touch with the situation, for there are matters of prudential judgment involved that would modify the application of the principles enunciated here. These principles can, however, guide the practical decision.

IX Conclusion

Research management comprises tasks on many levels. As we have already observed, only those intimately involved can speak with authority about the most desirable specific arrangements. What an outside group, such as this Committee, can best do is provide a perspective and a set of guidelines. This we have attempted to do.

Although there is bitter feeling today between the Department of Defense and some segments of the social science community, and although some tensions will always exist between policy-making users of research and outside researchers, there is, nevertheless, an on-going relationship that is potentially productive and that needs to be managed better than it is. Those who wish to see national security policy changed, as well as those who endorse present policies, can surely agree that a policy process informed by first-rate research and assuring clear communication between policy-makers and researchers deserves encouragement.

The Committee hopes that the frame of reference provided here will be conducive to such a better relationship.