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## Policymakers' Use of Social Science Knowledge: Symbolic or Instrumental?

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### Introduction

In the literature on the utilization of social science knowledge, the concept of legitimation has long stood for the position that, decisionmakers seek research results mainly to back up convictions they already hold and decisions they have already taken. A second equally popular position defines utilization in terms of the meaning it has in natural and technological sciences: It expects political decisions to be replaced by scientifically derived objective necessities (Schelsky, 1965). Both positions seem equally extreme in their interpretation of the utilization process, and both positions are equally speculative, since hardly any data are available to support one or the other thesis.

This chapter seeks to examine both assumptions by drawing from seventy face-to-face interviews done in 1974 with medium-level decision makers employed in Austrian federal and municipal government agencies (all located in Vienna) and directly involved with contract research. Since there are no lists of the universe of government officials who fund social science projects, the study cannot claim to be representative of the population; however, extensive search processes on the part of the project team suggest that the persons identified for the sample constitute a more-or-less complete set of government contractors in the city of Vienna, where more than 50 percent of Austrian social science government contract research is financed.<sup>1</sup> The study included only government officials who had (during the last few years) financed at least one project in a social science discipline that had been finished at the time of the interviewing. The distribution of projects over disciplines was as follows: sociology, 51 percent; economics, 24 percent; educational sciences, 13.5 percent; urban and regional planning, 4.5 percent; political sciences, 4.5 percent; and others 2.5 percent. The frequency of projects classified as sociological reflects the predominance of social research and opinion surveys in government contract research. This predominance should be kept in mind when reading the analysis that follows.

The study relied on both responses to taped, open-ended questions and answers given to standardized closed-ended questions. Furthermore, responses

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from government officials were supplemented in a few cases by data from a 1973-74 survey of 628 Austrian social scientists, which included a set of questions equivalent to those that were asked of the decisionmakers. Both surveys were done as part of one larger study; hence, certain parts of the questionnaires were constructed to match each other. The same definition of "social science," which centers around the disciplines mentioned above (including psychology, contemporary history, and business administration) was used in both cases. The population of social scientists analyzed for the present purpose excludes those researchers who had not done a contract research project during the previous few years.

#### Utilization Interests of Government-Sponsored Research: Four Functions of Social Science Knowledge

In trying to categorize the diversity of purposes<sup>2</sup> for which government officials had initiated or sponsored a project, we identified four functions that social science results seemed to serve: a census function, a motivation function, an acquisition function, and a rationalization function. All functions showed different patterns of characteristics with respect to the following dimensions:

Whether the definition of data to be supplied remained with the social scientist or was provided by the sponsoring agency;

Whether the data involved were "subjective" (opinions, attitudes, intentions, and so forth) or "objective" (mostly quantitative indicators that did not rely on the single subject as a source of information);

The level of methodological and technical requirements connected with the approach;

The degree of articulation and elaboration of cognitive interests on the part of the sponsoring agency;

The degree to which utilization responsibility was centralized in one person or office as opposed to being dispersed over several hierarchical levels and positions;

The role of the research results in actual decision-making processes.

With a view to (those dimensions, the four predominant functions seemingly served by government-sponsored social science research can be described as follows:

1. The *census function* relates to all those cases in which the social scientist takes on the role of a census bureau because of a striking deficiency of the documentation and information infrastructure. In other words, the social scientist is more or less reduced to mere information-gathering activities to fill in the (mostly numeric) data blanks in specific planning and programming areas. By

implication, it follows that the cognitive interests of the sponsoring agency are articulated specifically and transmitted to the social scientist in the form of concretely defined information demands. In accordance with this pattern, the sponsoring agency sometimes supplies a ready-made questionnaire, in which case the methodological requirements of the project are very limited and center around a knowledge of interviewing procedures. The information gained is utilized by feeding it into a decision-establishing process or by simply distributing the documentation obtained to those who are concerned or interested. As an example, think of internationally standardized statistics on every educational science project done in a country—a set of information gathered, with slight variations, every year.

2. The *motivation function*<sup>1</sup> refers to the hypothesis that the social sciences in postindustrial societies take on the task of helping to motivate members of society to fulfill certain system requirements. By finding out motivating expectations, attitudes, and values, the social scientist assists in designing strategies and plans in such a way as to make the outcomes acceptable and attractive to society members. To show what we mean, let us cite a few lines from one of our respondents who described the project he initiated:

... we are doing traffic planning, and there it obviously is one of our greatest problems to find out how the potential user of the traffic system acts in relation to that system, how attractive traffic systems have to be in order to be accepted.... It is mainly the motivations of the users of different traffic systems which we want to get to know, and which we would like to take into account in the planning of those traffic systems, in order so to say to plan in accordance with the market, or in order to be able to control the behavior of the traffic participants through offering those traffic systems that seem to be viable for the city.

The following respondent's remarks illustrate that such utilization goals often constitute the exclusive interest in social science results on the part of government sponsors:

... [the goal of the sponsoring agency was] ... to establish a needs-oriented sponsoring program, focusing especially on surveys. Surveys of behavior patterns of the population, effects of planning measures taken, opinion polls as far as the degree of satisfaction with apartments, lodgings, is concerned, opinion polls on the degree of satisfaction with pedestrian regions. . . .

There are several characteristic features of such projects. They are usually done by sociologists, psychologists, or political or educational scientists, who are allowed to determine the concrete definition of the desired information. Methodological requirements vary with the approach adopted, but they are typically not too high as far as the sponsoring agency's demands are concerned.

The sponsoring official wants to get out of the project at least some orientation or structuring of a complex problem area that he often does not know much about. The results are mainly utilized by being "softly" introduced into decision-preparation processes according to their perceived validity; they are almost never just "applied" as they stand. Utilization responsibility is typically difficult to localize because it is spread over several hierarchical levels and positions in the government bureaucracy, finally, it should be noted that nearly 50 percent of the projects described here belong to the motivation function—a fact that may tell us something about both the ubiquity of the problems underlying this function and the adequacy of the social sciences for handling some as opposed to oilier problems.

3. The intentions underlying the third or *acquisition function* are in a way very similar to those covered by the motivation function. However, there is one special feature that warrants separate treatment of the projects relevant here: the typically direct translation of research results into practical measures.

To understand the goals of this kind of social science research, let us again cite one of our respondents:

All this [the project results] serves as the basic material for our acquisition policy, that is, it has to do with winning new clients and [with our] communication policy, [that is with] ways of addressing the target groups. As soon as I know what my target groups look like I can address them much better. . . .

This traditional problem area of commercial market research is related to the winning of voters, readers, voluntary helpers motivated to go to developing countries, and so forth. The definition of needed information typically remains with the sponsoring agency, which usually has (quite specific) cognitive and utilization interests: the development of a strategy that stimulates a specific response on the part of the target group. Together with the typically direct application of results, there is the fact that utilization responsibility is not dispersed over several hierarchical levels or positions, but remains with *one* person or one office. That office can be held accountable if application of the results is not successful. This is a crucial difference from all the other functions, where typically the career or position of the sponsoring official is not dependent upon the success of the research utilization strategy he adopts.

4. The term *rationalization function* has been chosen to characterize the last kind of utilization interest identified in our population. In general it can be described as an interest in increasing the planning and programming capacity of government agencies in order to deal more effectively with socioeconomic crises and impediments to growth while relying exclusively on "objective" data. In a sense the motivation function presented above can be considered as a subcategory of the present function, specializing in subjective motivations and expecta-

tions of society members. The problem areas included here range from the development of new accounting schemes to improvements in didactic technologies and prognoses of socioeconomic development trends. Economic interests predominate but do not exhaust the topics. As in the case of the motivation function, the final definition of the information sought is left to the social scientists, and utilization of results is marked by diffuse, selective inclusion in decision-preparation processes. In cases of routine prognoses based upon regular market observations, projects show some similarity to those classified under the "acquisition" heading. In contrast to the latter, the information gained is, however, usually not put into practice directly.

It is interesting to note that concentrating exclusively on factual "rationalization," without taking into account subjective motivations and expectations, creates problems when consumer interests of various groups of the population are directly involved. Some of the respondents sponsoring such projects were perfectly aware of this dysfunctionality, which is to a certain degree increased by discipline-oriented division of labor among scientists:

In a similar project in the future I would at any rate change my strategy: it seems to me essential to include the opinions of those who are hit by a planning measure, the opinions of target groups in a district and of their representatives. This has been lacking in the present study completely and now would not help any more. They [those concerned by political decisions] have to be directly confronted with it. That is, then it could be the case that goals and policies change, you have to face this, then goals and policies have to be more flexible.

Krause (1968) assumes that this requirement of flexibility of goals and policies might be the basic reason for decisionmakers' tendency to avoid participation strategies, even if anticipatory, as in the case of including subjective expectations and motivations in a rationalization project.

Table 12-1 summarizes the characteristics of the different utilization functions that social science results seem to serve. When interpreting the frequencies, keep in mind that more than one function may be served by one project and that only the predominant function has been counted. Correspondingly, the features listed characterize only the simple case in which there is only one function present. Furthermore, it should be noted that the frequencies reported are not representative for all social science *projects* initiated by government utilization interests. As an example, projects done by government-financed research units or research institutes are not included here. This omission may account for the fact that economic projects (mainly pertaining to the rationalization function) seem to be underrepresented here, while they constitute almost half of all social science projects currently done in Austria (cf. Knorr et al., 1975b). What is represented here is the distribution of interests of single government sponsors (or government agencies represented by single sponsors) who finance single social science projects because of certain utilization needs or expectations.

Table 12-1  
Utilization Functions of Social Science Results and Their Characteristics, as Derived from Reports of Government Sponsors

| Characteristic Feature  | Centrus Function<br>(N = 11)         | Motivation Function<br>(N = 30)          | Acquisition Function<br>(N = 5)     | Rationalization Function<br>(N = 19)                    |
|---|--------------------------------------|--|-------------------------------------|---|
| Level of methodical requirements                              | low                                  | low                                      | higher (precision)                  | higher (data manipulation)                              |
| Kind of data  | subjective or objective              | subjective                               | subjective                          | objective   |
| Origin of the definition of the information                   | sponsoring agency specific           | scientist                                | sponsoring agency specific          | scientist   |
| Degree of elaboration and articulation of cognitive interests | specific                             | vague                                    | specific                            | vague; in case of routine market observations, specific |
| Localization of utilization responsibility                    | dispersed                            | dispersed                                | centralized                         | dispersed   |
| Role of research results in decision processes                | decision preparatory                 | decision preparatory                     | decision consultative               | decision preparatory                                    |
| Function of research results                                  | replacing a deficient infrastructure | anticipatory motivation and legitimation | target group-oriented communication | technical rationalization of planning                   |
| Percentage of cases <sup>a</sup>                              | 17%                                  | 46%                                      | 8%                                  | 29%   |

<sup>a</sup>Five percent of the projects could not be subsumed under one of the functions isolated, mainly because there was no spelled out utilization interest.

The Role of Social Science Research Results  
In Decision-Making Processes

From the results obtained so far, we are able to differentiate four different roles social science research results are apt to play in actual decision-making processes:

1. Social science results serve as an "information base" or "ground" for actual decisions to take place. In other words, the data (especially for the census function) or arguments (especially for the motivation and rationalization functions) supplied by the social scientist enter into the preparatory stage of a decision, where they influence the final outcome of the process to various degrees. We call this the *decision-preparatory role* of social science results.

2. Instead of entering the decision-preparatory stage, social science results can be directly translated into practical measures and action strategies. As noted by Caplan (1975, p. v), it is this kind of more-or-less direct application of knowledge that social scientists strive for. In the extreme case, the original decisionmaker in charge, even with all his decision experience and capacity, becomes redundant in the face of scientifically established proposals about what to do about a problem—a situation envisaged by earlier theories of technocracy.<sup>4</sup>

In our data, project results were typically used in such a *decision-constitutive* manner only where the acquisition function is concerned. Clearly, the most enthusiastic statements in our population with regard to the usefulness of social science results refer to marketing research and advertising strategies initiated by acquisition interests:

... those scientific disciplines are on the one hand underestimated; people believe that they achieve better results when relying on their intuition. They do not realize the true character of the social sciences, that is to assist in the solution of market oriented problems.

3. There is a third way in which social science research results play a role in the activities of government administrators: as a *substitute* for the decision or problem solution that is required. By initiating, distributing, and publishing a research report, the government official in this case tries to signal to those concerned that something is being done about the problem, while proper decisions and measures that should be taken are postponed or neglected altogether. This process is what is sometimes meant when we say that the social sciences play a key role in legitimating decisionmakers' activities at the same time that they are ignored in the actual decision-making process.

4. More often, however, the fourth function of social science research results established in our data is identified with the "legitimizing" role of the social sciences: Here the social scientists' data and arguments are used selectively and often distortingly to publicly support a decision that has been taken on different grounds or that simply represents an opinion the decisionmaker already

holds. In this respect let us cite the thesis of Garfinkel (1967, p. 114) that the crucial difference between scientific and nonscientific (everyday life) rationality is the fact that in the latter case decisions are made intelligible and are legitimized only after the resolution, while in the former case the rationality of what is decided has to be established before a measure is taken. We call this the *legitimizing role* of the social sciences and cite the judgment of one of our respondents, which is marked by cynicism and resignation resulting from some experiences with this kind of social science utilization:

There is a kind of fiction in the whole thing which we will play, that policy is becoming "scientific" through research, that arguments and results from social science studies influence legislation. In reality this is not the case, because in the legislature such people are asked who are at any rate convinced they know what's going on, because one has to take seriously those who hold a chair on official committees and who speak for the record and out of the window and who bring with them all their prestige, the power of the organization from which they come, those who themselves ask for research results in order to back their arguments. But I believe it is always like this: You've got the argument, then you look for somebody to prove it for you. Then you stand up and say: Study XY shows, too, that . . . exactly as you think things are, etc.

Such a policy only superficially made scientific (Kreutz, 1970, p. 20) is, as Downey (1967) emphasizes correctly, an ideological means of domination. For a science-based policy, the *claim* of a science-based policy is substituted—a claim that is sufficient to enhance the development of the image of a modern and progressive government and at the same time to provide a means for effectively protecting and backing political action strategies.<sup>5</sup>

#### The Legitimizing Capacity of the Social Sciences

The thesis that the main function of the social sciences is legitimation is heavily represented in the literature (compare I/dclmann, 1964, 1971; Downey, 1967; Kreutz, 1970; Lécuyer, 1970; Offe, 1972; Daele and Weingart, 1974). It should be discussed in the light of the following arguments:

1. Claims made for the "scientific" basis of some measures or decisions derive their validity from a general acceptance of science as yielding objective information (not biased by personal interests) and cognitively valid information (logically consistent, of high empirical content and explanatory value). Needless to say, the current state of the social sciences allows for only very weak and limited fulfillment of both requirements. There is no consensus as to what constitutes social science "knowledge" among social scientists, and more important, there is no unquestioned acceptance of this "knowledge" on the part of clients and users of these sciences. Several of our respondents commented upon the uncertainty of social science results:

... in the social sciences one is confronted with results which one does not have to accept without question as in the case of natural sciences or in the case of technical or biological things; rather one can check or seemingly check them. One can say to oneself: just a moment, there he [the social scientist] is right, there he is not right . . . that is the case, that is not the case. One does much more evaluate critically, can evaluate critically, what one gets. . . .

2. Another—social—aspect of the social sciences, in addition to their pre-paradigmatic (Kuhn, 1970), theoretical, and methodological inadequacies, influences their legitimation capacity. The public acceptance of social "science" disciplines, especially as far as sociology and political science are concerned, has suffered from their being identified with society-critical and revolutionary movements in the recent past. One of our respondents commented:

... I believe that the student movements of the sixties did have important impact on the further development of the social sciences; especially, I think, you have now got a rather general distrust against them. . . .

About 45 percent of the actual users of social science results interviewed by us did see a direct connection between the institutionalization and current situation of the social sciences on the one hand and the student movement on the other (Knorr et al., 1975a). Must it not be considered an indicator of the legitimation deficiency of the social sciences if they did not succeed so far to make their critical activities intelligible to the general public as a genuine and legitimate interest of their own?

3. In addition to the social sciences' cognitive inadequacy and their association with politically rebellious or anarchic groups in the mind of the public, a third factor should be taken into account when trying to assess the legitimation potential of the social sciences: The social sciences deal with phenomena about which the average citizen does have an "opinion" of his own and with which he deals in his everyday activities. In addition, the fact that social science concepts are deeply rooted in our everyday language creates a situation where—contrary to the natural and technical sciences—the nonexpert feels perfectly legitimized to interpret, criticize, and dismiss the results of the expert social scientist. If this is the case—and we believe that every social scientist who ever had anything to do with the user of his or her results will know this reaction—then the legitimation capacity of the social sciences must again be called into question.

#### The Motivation Function and Problems of Legitimation in Postindustrial Societies

It is our contention that the thesis of the primarily legitimation role of social science research results has to be replaced by the thesis of the instrumental use

of social science results *for the purpose* of securing legitimacy for political decisions. It goes without saying that in the public relations work of government bureaucracies, social sciences are used to a certain degree instrumentally as a means of "ideology-planning" (Luhmann, 1969) as well as sometimes symbolically in the sense of mere claims made as to the scientific basis of the measures prescribed. The predominance of motivation problems as articulated by our respondents<sup>6</sup> and the fact of their being connected to decision-preparatory research utilization suggest that there is a special need for instrumentally applicable social science research *induced* by a growing lack of legitimation of political action. The causal chain starting with state interference and leading through a decrease in legitimation to motivation crises has been analyzed to a certain degree by current theories of postindustrial societies (cf. Offe, 1972; Habermas, 1973). According to them, there is an increasing consciousness as far as the growth of state interference with (the concrete conditions of life is concerned. With the increase in government planning and the consequent crises in socioeconomic development, traditional norms and values increasingly lose their meaning and their motivating strength without being replaced by functional equivalents. There is a growing discrepancy between the motivation capacity of our sociocultural systems (especially regarding intrinsic achievement motivation, individual property values, and the free-market ideology) and the need for motives that guarantee the continuity of societal subsystems. The loss of meaning is replaced by consumer-oriented, controlled-by-success expectations that the political system has to fulfill while threatened by a loss of legitimacy in case of failure.

It is exactly here that the use of social science research studies enters the stage: As an instrument of *anticipatory legitimation*, they are used to identify and predict the above-mentioned expectations in order to have them included in planning and programming stages from the beginning. If our thesis is correct, then vast areas of social science have taken on (the task of transplanting participation as an "early warning system" of democratic planning (Offe, 1972) from the level of communicative debate to the level of technical anticipation in order to reduce the dangers of overparticipation and organization of those concerned. At a second stage, the anticipatory legitimation function of the social sciences is continued in the form of the ideology-planning mentioned before—that is, an attempt to structure public opinion effectively with the help of market and opinion research. Both kinds of utilization subsumed here under the motivation and acquisition functions—largely outnumber the mere symbolic use of social science results. In projects corresponding to the rationalization function, subjective expectations are ignored; hence, this area of social science research can only indirectly be subsumed under what we have called anticipatory legitimation. Here, too, however, the instrumental use of social science results seems to predominate. The instrumental use we are talking about, however, refers much more to the decision-preparing than to the decision-constituting role of social science knowledge.

#### Extent of Utilization Reported

The thesis of a primarily instrumental use of social science is in accordance not only with the utilization interests inferred from the responses of government officials, but also with the judgment of Austrian social scientists who worked on government-sponsored projects during the last few years. In their opinion, the demands for "data" and for "control" (van den Daele and Weingart, 1974) largely outnumber the symbolic legitimitative utilization interests, as shown in Table 12-2.

Reports of the utilization interests of sponsors given by social scientists seem to be especially relevant to us since they are independent of the responses of the users themselves.<sup>7</sup>

Further indirect proof of the instrumental usefulness of social science results can be found in the responses of our government officials on the extent to which social science results changed their previous opinions and fulfilled their expectations (see Table 12-3). As can be seen from the table, almost three-fourths of the government sponsors considered that their expectations were widely or completely fulfilled. More important, about two-thirds of the respondents (65.5 percent) claimed to have at least slightly changed their

Table 12-2

Dominant Utilization Interest of Project Sponsoring Agency, as Reported by Social Scientists

| Dominant Interest   | Percentage of Respondents (N = 259) |
|---|-------------------------------------|
| Demand for data (decision preparatory function)                                 | 43.7                                |
| Demand for control (decision preparatory and decision constitutive functions)   | 19.0                                |
| Demand for symbolically "applicable" results (decision legitimitative function) | 11.1                                |
| long-term financing or pure sponsoring  | 26.2                                |
| Total   | 100.0                               |

Note: The wording of the question was as follows: "As far as you know, which interest predominated on the part of the financing organization?" The answer categories (1) sponsoring Without utilization interests; (2) financing of research which could in the long run become relevant for the financing organization; (3) preparation of reports and situation analyses as a basis for decisions; (4) objective support for measures and programs intended; (5) proposal of solutions and alternatives for present problems; (6) derivation of practical action-prescriptions to solve detailed problems. Categories 1 and 2 have been combined into alternative 4 of the table; categories 5 and 6 into alternative 2; and category 4 was intended as an operationalization of legitimitative interests.

Table 12-3  
Extent to which Government Sponsors' Expectations Were Fulfilled and Opinions Changed by Social Science Research Results

| Extent  | Fulfillment of Expectations (% respondents) (N = 64) | Change of Opinion (% respondents) (N = 58) |
|---|--|--|
| Expectations not fulfilled or no change of opinion  | 1.6  | 34.5                                       |
| Expectations only moderately fulfilled or slight change of opinion                                  | 6.2  | 22.4                                       |
| Expectations fulfilled to a medium degree or medium change of opinion                               | 18.8   | 34.5                                       |
| Expectations widely to completely fulfilled or strong to very strong change of opinion <sup>3</sup> | 73.4   | 8.6  |
| Total   | 100.0  | 100.0                                      |

Note: The wording of the questions was as follows: "To what extent did the researchers fulfill—as far as you know—the expectations of the following persons with respect to the project?" One category referring to the respondent himself ("your personal expectations as to the project") was provided. The second question ran: "To what extent did the below mentioned change (their opinion about the problem on account of the project results)?" Again, there was one answer category ("you yourself") referring to the respondent. In both cases, answers were to be given on five-point Likert scales.

<sup>3</sup>It is interesting to compare the percentage of respondents whose expectations were widely or completely fulfilled (73.4 percent!) with the percentage that strongly or very strongly changed their opinion about the problem on the basis of the research results (8.6 percent!). The discrepancy suggests that expectations for social science research results are, from the very beginning, not too high.

opinion about the problem on the basis of the results of the social science project; somewhat more than one-third claim a medium degree of opinion change. It seems plausible that results that change the opinion of a client also influence the planning and decision process in a problem area in which he is involved. Let us look at the extent of self-reported use of social science results by government sponsors, as shown in Table 12-4. If responses of government sponsors can be believed—and depictions of utilization in the open-ended questions give the impression that they can—there is only a minor degree of nonutilization of results; indirect utilization of results as an information base or information support predominates, however. It is important to note that the first three kinds of utilization listed in Table 12-5 as well as the last two items correlate much more highly with each other than items from the first set with those of the second set. These data seem to imply two alternative action strategies of potential users: Social science results are *either* directly translated

Table 12-4  
Extent of Utilization of Social Science Research Results, as Reported by Government Sponsors

| Kind of Utilization   | Extent of Utilization (%) |                    |                       |       | (A <sup>1</sup> ) |
|---|---------------------------|--------------------|-----------------------|-------|-------------------|
|   | Not at All                | Slight or Moderate | Strong or Very Strong | Total |                   |
| Translation into significant practical action                   | 37.9                      | 37.9               | 24.1                  | 100   | (58)              |
| Information base and support for measures and programs intended | 14.3                      | 26.8               | 59.0                  | 100   | (56)              |
| Distribution of results within the organization of the sponsor  | 15.3                      | 45.7               | 39.0                  | 100   | (59)              |
| Sponsoring of further research                                  | 38.2                      | 9.1                | 52.7                  | 100   | (55)              |
| Invitation of the scientist for advising or consulting purposes | 46.4                      | 23.2               | 30.3                  | 100   | (56)              |
| Other   | 82.0                      | 10.0               | 8.0                   | 100   | (50)              |

Note: The wording of the question was as follows: "How much were the results of the project utilized in the following respects?" The respondent was provided with the categories included in the table and was supposed to answer on a five-point Likert scale running from "not at all" to "very strongly."

into practical measures *and* used as information support *and* made known in the organization in question, *or* they lead mainly to the sponsoring of further research and to further consulting of the scientist. If one assumes that direct translation into practical measures will be accompanied by decision-preparatory uses and internal publicity, but not vice versa, approximately 23 percent of the projects<sup>8</sup> were utilized in the latter sense but not "directly" applied. This percentage can be interpreted as an indicator of the potential extent of mere legitimate use of social science research results (or of a form of utilization in which mere symbolic use cannot be excluded) if one is willing to concede that the category "information base and support" allows for both post hoc rationalizations of decisions already taken and ex ante improvements of the understanding of a problem area before the actual measure is taken.

#### The Role of the Visibility of Consequences

Given the predominance of instrumental uses of social science results presented by us and backed by our data (and those of Caplan, 1975), the question arises as to why this use seems to be either ignored or replaced by too high or too low

**Table 12-5**  
**Intercorrelations among Types of Utilization of Social Science Results, as Reported by Government Sponsors**

|  | Translation into Significant Practical Action | Information Base and Support for Measures and Programs | Distribution of Results within the Organization of the Sponsor | Sponsoring of Further Research | Invitation of the Scientist to Advise or Consult |
|--|---|--|--|--------------------------------|--|
| Translation into significant practical action                  |   |  |  |                                |  |
| Information base and support for measures and programs         | .71   |  |  |                                |  |
| Distribution of results within the organization of the sponsor | .65   | .69  |  |                                |  |
| Sponsoring of further research                                 | .36   | .38  | .30  |                                |  |
| Invitation of the scientist to advise or consult               | .31   | .32  | .21  | .54                            |  |

Statistic = Pearson's *r*.

expectations. One of the main reasons is probably related to the *low visibility* of decision-preparatory utilization at issue here as against decision-constitutive and decision-legislative utilization forms. It is obvious that a direct translation of research results into practical measures should be highly visible; the same holds for primarily symbolic utilization since it virtually consists in a *public* appeal to the scientific basis of what is proposed. There are several reasons why much less is known about research utilization in the decision-preparatory stage.

1. The relationship between the social scientist and the decisionmaker often ends with the delivery of the report. This leaves the social scientist largely ignorant of the evaluation or further utilization of his results. As an example, social scientists seem to vastly underestimate the extent to which government sponsors are critical of the results they get (cf. Knorret al., 1975a).

2. A second reason seems to be that hard and visible facts about the inclusion of social science research results in a planning, programming, or decision-establishing process are difficult to establish even if there is continued communication between the researcher and the decisionmaker. In much scientific writing, in spite of the requirement of citation, it proves to be rather difficult to identify the origin of arguments or the extent to which one author had an influence on another.

3. A third reason for the low visibility of the decision-preparatory function of social science research results may lie in the fact that decisionmakers do have a second problem of legitimation (see our earlier discussion of this role of the social sciences): They have to prove their own activity, technical competence, and intellectual achievements in front of higher hierarchical levels and in front of the public. This requirement implies that the decisionmaker will tend to document his *own* decision capacity with the help of social science results in a way in which his own brilliance can no longer be differentiated from that of the social scientist. Lazarsfeld (e.g., 1969) has commented upon decisionmakers' fear of a loss or underestimation of their most valued attribute: their talent and skill in evaluating a situation correctly and in finding quick problem solutions.

#### Technical and Discursive Utilization of Social Science Results

In addition to the low visibility of decision-preparatory utilization, a second reason might account for the frequent disappointment with regard to the use of social science knowledge. The current definition of what constitutes "utilization" of social science results follows the engineering model taken from the natural and technological sciences in which "technical" applications do not create any basic difficulties (compare Weiss, 1975b; Caplan 1975, p. v). Suffice it to say here that the cognitive and methodological inadequacy of the social sciences—if nothing else does at present preclude them from providing hard and solid bases for decisions. What is discredited here is a primarily decision-constitutive role for social science results. This must not, however, be equated with the thesis that social science results are hardly ever or not at all used instrumentally. The social-technological or engineering model of the social sciences has long been debated and has usually been confronted with an "emancipatory" or "enlightening" model (e.g., Strasser, 1975). If one accepts the latter, one would have to replace the picture of a technical translation of research results into practical measures by a "discursive" (*dixkursiv*) concept that takes into account the fact that social science results by their nature require further rational processing on the part of the political decisionmaker. It should prove more fruitful to find out which accompanying measures within the scientific and political systems might be adequate for this kind of discursive utilization than to search for the disconnection between the production and utilization of results, which currently seems to predominate.

Let us summarize this chapter by saying that the thesis of a primarily symbolic utilization of social science results—insofar as it refers to post hoc legitimations of decisions already taken—is not supported by our data nor by theoretical considerations. This finding does not mean that there is no symbolic use of social science results, but rather that instrumental utilization (with

legitimiatiw or motivating purposes) currently predominates. However, this kind of instrumental utilization does *not* follow the pattern of technical implementations of results established in the natural or technological sciences. Rather, the main area of utilization consists of an *indirect* (bound to undergo further decision processes), *diffuse* (taken into account to various degrees and at different positions), *difficult to localize* utilization responsibility (distributed over various decision levels), and possibly *delayed discursive processing* of the results in the stage of program development and decision preparation. The low visibility of this kind of utilization and the far too high expectations contribute to the popularity of the thesis that little utilization takes place. Its plausibility should be reexamined in the light of the present data and arguments.

#### Notes

1. Exact figures are not available at present.
2. The analysis presented in this and the following paragraph is based upon two general open-ended questions about how the sponsored project came about, how the project results were finally utilized, and whether this utilization was in accordance with original expectations. In the context of those general questions, a series of more detailed questions was asked of the respondent: What kind of interests played an essential role in initiating the project and what expectations did those supporting the project have; to what degree were expectations made clear to the researchers, or how specific were the demands made upon the researchers; how could the results of the project in fact be utilized; are there any practical measures that were taken on the basis of the project that would not have been taken otherwise; if yes, what were the effects; and similar questions.
3. The concept "motivation" function has been chosen in analogy to (the motivation crisis described by Habermas (1973, pp. 106ff.) as one of the characteristic problems of late capitalism.
4. For such a theory of technocracy, the politician of our time is "not a decisionmaker or governor, but an analyzing, constructing, planning, realizing person. Policy in the sense of a normative consolidation of intentions is factually lost in this area" (Schelsky, 1965; translation by the author of this chapter).
5. We did not attempt to derive precise quantitative indicators for the various kinds of utilization presented here from the answers to our open-ended questions since the questionnaire included standardized, quantity-oriented questions for most of the "qualitative" topics (parts of the results of which will be presented later on). "Qualitative" answers were used mainly for deriving classifications, as background information to facilitate interpretations, and for discovering "grounded" theory.
6. This holds especially if a more narrow definition of *social sciences* excluding economics is applied.

7. Responses by government sponsors and social scientists did not refer to the same projects, but have been collected as independent opinions of the corresponding subsystems. The comparison of the opinions is based upon the assumption that there are no systematic biases in the selection of projects described by the sponsors and social scientists is concerned.

8. This follows if one subtracts from the 37.9 percent of project results not directly translated into practical measures the 14.3 percent of projects that are also not used as an information base or the 15.3 percent of project results not internally distributed.

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