THE GAP BETWEEN KNOWLEDGE AND POLICY: DISCREPANT ATTITUDES AND SUBVERSIVE ACTION

Karin Dagmar KNORR

Research Memorandum No. 131
December 1977

Institute for the Study of Social Change,
University of California, Berkeley, USA

and

Institute for Advanced Studies,
Vienna, Austria

S u m m a r y

Drawing upon interview data obtained from government officials and social scientists with respect to utilization of social science knowledge in policy making the present paper shows substantial misconceptions on the part of both parties involved in matters related to the satisfaction of their mutual interests through contract research, to the degree and kind of criticism on the part of governement officials, and to utilization of research. In connection with these results the producer client model in terms of which contract research is predominantly understood was found inadequate, and aspects of an alternative logic of utilization which takes into account the subversiveness of both social scientists and governement officials in their mutual interaction are sketched out.

Z u s a m m e n f a s s u n g

An Hand von Interviewdaten aus einer Befragung von Entscheidungsträgern und Sozialwissenschaftlern zum Thema Kontraktforschung und zur Verwertung dieser Forschungen werden schwerwiegende Diskrepanzen in den wechselseitigen Einschätzungen beider Parteien zur Wahrnehmung ihrer jeweiligen Interessen duch die Forschung, zur Verwertungsweise des Projektes und zur Kritik der Entscheidungsträger an dem Projekt ausgewiesen. Im Zusammenhang mit diesen Resultaten wird das vorwiegend zur Erklärung herangezogene Produzenten-Klientenmodell der Interaktion zwischen Wissenschaft und Praxis kritisiert; ebenso werden Aspekte einer alternativen Logik der Verwertung sozialwissenschaftlicher Forschung, die der festgestellten Subversivität Rechnung trägt, aufgezeigt und zur Interpretation herangezogen.

Table of contents

The Gap between Knowledge and Policy: Discrepant Attitudes and Subversive Action [1]

1. The Gap between Knowledge and Political Action

The "gap" between knowledge and political action [2] has long been a topic of discussion for social scientists. Depending upon the theoretical perspective adopted it has been associated with a conflict of norms and values between scientific and political institutions, [3] with different organizational forms underlying bureaucratic and professional patterns of activity, [4] or with the difference between "power" as characteristic of

---

[1] I am heavily indebted to Paul F.Lazarsfeld and H.G. Zilian for their help in designing the study and for their comments on an earlier draft of this paper. I also want to thank Donald Pelz for his suggestions and criticism, and the Institute for the Study of Social Change, University of California, Berkeley, which facilitated the writing of this paper.

[2] Many of Lazarsfeld's writings address the issue of the gap. See among others Lazarsfeld, Paul F., and Reitz, Jeffrey G., An Introduction to Applied Sociology (New York: Elsevier, 1975), esp. ch. V, and "Über die Brauchbarkeit der Soziologie", in Rosenmayr, Leopold and Höllinger, Sigurd (eds.), Soziologie, Forschung in Österreich (Wien: Verlag Hermann Böhlaus Nachf., 1969), esp. p. 27.

[3] See Merton, Robert K., Social Theory and Social Structure (New York: The Free Press, 1968), chs. XVII - XX. See also Cournand, André and Meyer, Michael, "The Scientists Code", Minerva, XVI, 1 (Spring 1976), pp. 79 - 96. The ethical question of the scientists' concern about the application of their work is described by Shils, Edward, The Intellectuals and the Powers and other Essays (Chicago: The University of Chicago Press, 1972), esp. II.7 - II.1o.

[4] See Scott, Richard W., "Professionals in Bureaucracy Areas of Conflict", in Vollmer, Howard M. and Mills, Donald L. (eds), Professionalization (Englewood Cliffs: Prentice Hall, 1966), pp. 265 - 275; Kornhauser, William, Scientists in Industry: Conflict and Accomodation (Berkeley: University of California Press, 1962)

political systems and "knowledge" as characteristic of science. [5] The work of these as well as of other authors [6] implies that the difficulties of establishing smooth relationships between the political and the scientific field derive from the different organizing principles of the subsystems involved. The most recent attempts to specify some of these principles are by Luhman and Bourdieu [7]. Accordingly, Luhman conceives of the scientific system as governed by the control mechanism (Steuerungsmedium)of "truth" as opposed to the mechanisms of "power" and "money" ascribed to the political and economic system respectively. The scientific system is characterized by predominantly cognitive principles which operate towards eliminating deficiencies of knowledge and information. "Truth", in contrast to

---

[5] See Price, Derek K.de Solla, The Scientific Estate (Cambridge, Mass.: Bolknap, 1965).

[6] See Ben David, Joseph, The Scientists's Role in Society (Englewood Cliffs:Prenctice Hall, 1971); Krauch, Helmut, Die organisierte Forschung (Berlin: Luchterhand, 197o); Krysmanski, Hans Jürgen, Soziales System und Wissenschaft (Düsseldorf: Bertelsman Universitätsverlag, 1972); Weinberg,Alvin M., Reflections on Big Science (Cambridge, Mass.: The M.I.T. Press, 1968); Weiss, Caroll, "Improving the Linkage between Social Research and Public Policy", paper delivered at the Vienna Roundtable on the Market of Policy Research, Vienna, October 1975.

[7] See Luhmann,Niklas, "Selbststeuerung der Wissenschaft", in Luhmann, Niklas (ed.), Soziologische Aufklärung (Opladen: Westdeutscher Verlag, 1971), pp. 232-252; Bourdieu, Pierre, "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason", Social Science Information,XIV, 6 (Winter 1975), pp. 19-47.

"power", is not a zero-sum resource.In other words, there is no constant sum of truth in the sense that the knowledge-claims of one scientist must necessarily conflict with those of others in the area. This implies that there are no structural constraints which prevent cooperation in science, as opposed to the political system. Luhmann's approach suggests a contrast between cognitive (scientific) and strategical (political) action from which we can derive some of the problems alluded to when we talk about the "gap". [8] However, I have argued elsewhere that scientific research is not primarily a cognitive undertaking. [9] On the contrary, it involves

---

[8] It is characteristic of strategic-tactical argumentation unlike cognitive argumentation, that meaning is transferred at two levels concomitantly:on the level of explicit content of what is said and on the level of the implicit meaning the message has in the tactical policy of the sender for realizing his interests. "Political" deciphering must primarily address the second level; political appropriate answers must be given on the basis of a correct understanding of the implicit meaning of the message in the senders strategy.

[9] See Knorr, Karin D., "Producing and Reproducing Knowledge: Descriptive or Constructive? Toward a Model of Research Production", Social Science Information, XVI, 6 (Winter 1977, pp.669-696), and "The Research Process: Tinkering toward Success or Approximation of Truth? Prelude to a Theory of Scientific Practice", Theory and Society (forthcoming 1978)

all the dimensions of an agonistic practice[10] we commonly attribute to more apparently social and competetive systems. Bourdieu's theory of scientific agents sheds light on some of the characteristics of this practice. According to Bourdieu, the scientific field is the locus of a competitive struggle for the monopoly of scientific credit - a credit that is at the same time scientific competence and social authority. The individual scientist's position in the field defines the moves he is apt to make, and consequently also his attitude towards political decision-making bodies. With this approach the gap between knowledge and practical action must be associated with the quasi-economical investments made by scientists and decision makers in fields which determine those investments. Investments once made will orient future action toward symbolic returns, such as gaining an impact on the "scriptures"

---

[10] It might be possible to construct the difference between the political and scientific system as a difference between an antagonistic system based upon oppositional conflict and an agonistic system based upon generalized, abstracted and competitive conflict. The term "agonistic" was introduced into the area by Latour, Bruno and Woolgar, Stephen, The Production of Facts in a Biological Laboratory (London: Sage Publ.,1978), ch. IV.

of a field [11] or advancing in a political career. Given investments and the predominant impact of a field or "system" as stressed by both Luhman and Bourdieu, what would we expect the interaction between social scientists involved in contract research and government agencies which finance this research to look like? Will potential conflicts be resolved through mutual adaptation proportional to the pressure that is exerted by the parties involved (such as economic pressure on the part of government agents and "reputational" pressure on the part of well-recognized scientists)? [12]

Traditionally, the above question was couched in terms of dysfunctional problems of adaptation which arise in accordance with a consumer-client model of the interaction between policy makers and social scientists. [13]

---

[11] The "Scriptures" of the field are the authoritative writings which orient scientific research through processes of perception and categorization. These writings consist mainly of the recent literature on a topic rather than of the accepted textbook-knowledge. See my "Producing and Reproducing Knowledge: Descriptive or Constructive", op.cit., for a more detailed analysis of the phenomenon.

[12] Examples of problems of adaptation are found for instance in Lazarsfeld, P., and Reitz, J., op.cit., ch. VI or in Merton, R., op.cit., esp. ch. XIX. Garfinkel adds a new dimension - he sketches different modes of rationality which are said to hold in scientific and everydaylife and which correspond to different exigencies in both contexts. See Garfinkel, Harold, Studies in Ethonomethodology (Englewood Cliffs: Prentice Hall, 1967), ch. VIII.

[13] Such a model is presupposed for instance in Lazarsfeld's analyses of utilization of social science knowledge. See Lazarsfeld, P. and Reitz, J., op.cit., pp. 41-43, and the use of the notion "client" throughout the book and in his "Über die Brauchbarkeit der Soziologie", op.cit.

In the present context, the focus is shifted to a model that emphasizes the actual practice of production in the respective scientific and political field. If this practice determines external arrangements, we would expect a certain amount of subversiveness to rule the scene of mutual interaction. In other words, we would expect the investments made in the respective field to assume priority over interests promoted by an "external" party (such as the government sponsor for the social scientist), a priority which is covered-up by protective strategies. In order to establish the thesis we have to show that scientists and decision makers succeed in utilizing the project according to their own interests to an extent unanticipated by the respective partners. The gap between knowledge and political action exists; the data which follow suggest that it might not exist to the disadvantage of both parties.

2. Method and Data

The present paper seeks to illustrate the degree of subversiveness as enhanced by the exigencies of the political and scientific field by drawing from 7o face-to-face interviews done in 1974 with medium level decision makers in Austrian federal and municipal government agencies (all located in Vienna) who were directly involved with contract research. The persons identified constitute a more or less complete set of government contractors in the city of Vienna, where

more than 5o% of Austrian social science government contract research is financed. [14] The study included only government officials who had financed at least one finished project in a social science discipline in the years preceding 1974. The distribution of projects over disciplines is as follows: sociology (51%), economics (24%), educational sciences (13,5%), urban and regional planning (4,5%), political sciences (4,5%) and others (2,5%). The frequency of projects classified as sociological reflects the predominance of social research and opinion surveys in government contract research. This should be kept in mind when reading the following analysis.

Responses from government officials are contrasted with data obtained from a survey of 628 Austrian social scientists done in 1973/74 which included a set of questions equivalent to those that had been asked to

---

[14] Since there are no files of the universe of government officials who finance social research, the respondents were identified by means of a snowball-procedure, which cannot claim statistical representativity. However, cross-checks made with social scientists and financial authorities suggest that most of the respective population is included in the respondents.

the decision makers. The questions analyzed here refer to the "most recent finished research project" in which the scientist was involved. Needless to say, the same definition of "social science" which centers around the disciplines mentioned above (including psychology, contemporary history and business administration) was used for both groups of respondents. [15] The population of social scientists analyzed for the present purpose excludes those researchers who had not done a contract research project during the respective years.

The present paper relies on both responses to open ended questions recorded on tape and answers given to standardized formulations. In accord with the goal of the present paper, researchers and decision-makers were asked to indicate the intended audience of their research and financing efforts, the scientific and other interest they realized in the project, the criticism they associated with various aspects of the research,

---

[15] The responses by government sponsors and social scientists do not refer to the same projects, but have been collected as independent average opinions of the corresponding subsystem. The comparison of the opinions is based upon the assumption that there is no systematic bias as far as the selection of projects described on the part of the sponsors and social scientists is concerned. Since both groups of respondents represent the universe (of governement sponsors and social scientists), and since the response-rate varied between 78% and 90% (personal interviews!), there is no reason for assuming such a bias.

and the degree of actual and perceived utilization of research results. The data illustrate the alleged subversiveness by showing how both parties profit from the exchange mainly in terms of their own interests, and how this remains hidden to both of them. To highlight the discrepancies, answers from decision makers and social scientists are juxtaposed in the respective tables.

3. Symptoms of the Gap: Intended Audience of Research Projects on the Part of Scientists and Political Decision Makers

Table 1 shows the resulting distribution of answers by social scientists and financing government officials to a question as to the audience for which the results of the project were primarily intended on the part of the researcher. The question was introduced as a measure of the actual compliance of researchers with government officials' demands, given that the latter - in a government financed contract project - would certainly want themselves or the financing authority to be the main addressee of the project outcomes.[16] By

---

[16] This holds even if the scientist is granted the right of "secondary" utilization of results in the form of a scientific paper or a popular non-fiction book. We are not talking here about sponsored basic research but about problem-oriented contract research.

confronting government officials with an equivalent question, it is learned to which degree government officials actually perceived this to be the case in the most recent social science project financed by them. As the table indicates, less than half of the scientists, but more than three quarters of the political officials hold the financing organization to be the main addressee of the study. Conversely, 18,5% of the scientists indicate that they intended the results primarily for the scientists of the respective speciality, but only 5% of the government officials had the same impression when confronted with the project report (see table I, page 11).

Interesting to note, not one of the government officials, yet about 1/5 of the scientists refer to the general public as of primary interest. As expected, social scientists working within universities are less inclined to accept political decision makers as their major reference group, even if financed by them in order to solve a practical problem. And while they seem more oriented toward the general public than non-academic researchers, they are less

TABLE I

Intended Audience of Contract Research Results According to Social Scientists and Sponsoring Government Officials

Main intended audience of project results	Reported by social scientists % Respondents (N=259)	Reported by governement off. % Respondents (N=67)
The scientific community of the respective speciality	18.5	5.o
The political decision makers or financing government agency	44.o	76.9
The general public	2o.1	o.o
The groups concerned by the study	17.4	18.1

NOTE: The wording of the question to the scientists was as follows: "What target group did you mainly intend to address with your results?" The respondents had the choice to indicate one of the categories mentioned in the table. With government officials, answers were measured on a 1oo point scale which was dichotomized at a cutting point of 5o for the present purpose.

interested in those actually concerned by a study. [17]

4. Interests Realized in Contract Research According to Scientists and Government Officials

The above results can be refined by examining the answers of social scientists and government officials as to the perceived degree to which 1) scientific interests of the social scientists, 2) their eventual social policy interests and 3) concrete interests of the financing authority have been realized in a project. Again, we presuppose that political authorities financing a contract project will intend their cognitive and utilization interests to primarily guide the research - which is not the same as saying that the researcher has to accept the financing authorities' definition of the problem. It is interesting to note from table 2, that a majority of government officials apparently do feel that their interests were primarily taken into account in the project (approximately 7o%

---

[17] Since the table is not included for reasons of space let me indicate some of the figures: In academic settings, 24% of the social scientists hold the scientific community to be their major audience, as compared to 11% in nonacademic settings. The general public is cited by 23.3% in academic institutions, as compared to 15,6% in other research organizations, and 15,3% of academic scientists list those concerned by a study as primary reference group, in contrast to 2o,2% of scientists in non-academic research. See Knorr, Karin D., Haller, Max, Zehetner, Wolfgang, Zilian, Hans-Georg, and Lazarsfeld, Paul F., Struktur und Verwertung sozialwissenschaftlicher Forschung in Österreich (Research Memorandum: Institute for Advanced Studies, Vienna 1975)

say their interests have been realized to more than 5o%); and it is no less interesting to find that on the average only 34% of the social scientists (i.e. less than half of the percentage of government officials) say they actually did give the financing authority's interests such priorities (see table II, page 14).

More striking perhaps is the fact that about one third of the social scientists (31,8%) admittedly did not realize any interests of the financing organization in that project - yet on the average only 9% of the contracting agency's officials say the project did not meet any of their intentions. In accordance with this, more than 8o% of the government officials believe that purely scientific interests granted to social scientists did not dominate in the project (i.e. have been realized to less than 5o%) - a percentage which contrasts with the slightly more than 5o% of social scientists who did not give scientific interests their priority. In general, both groups seemingly "over-estimate" the realization of their own respective interests. Or, if we concede that both groups have a sound

TABLE II

Realization of Different Interests on the Part of Social Scientists in a Contract Research Project as Claimed by Social Scientists and Perceived by Sponsoring Government Officials

Interests on the part of of social scientists % Realized	Reported by social scientists % Respondents (N=240)	Perceived by government officials % Respondents (N=67)
Scientific interests of the social scientists		
0	14.2	22.4
1-49	40.6	58.3
50-99	31.0	16.3
100	14.2	3.0
Social policy interests of the social scientists		
0	48.5	48.5
1-49	39.7	43.9
50-99	10.5	7.6
100	1.3	0.0
Concrete interests of the financing government agency		
0	31.8	9.1
1-49	33.9	21.0
5-99	29.3	54.7
100	5.0	15.2

NOTE: The wording of the question to the social scientists was as follows: "To which extent could scientific or other interests be realized in this project? The respondent was asked to distribute 100% on the alternatives included in the table and on the alternative "Interests of the respective financing government agency as reinterpreted by you." The last alternative was excluded in the questionnaire addressing government officials; consequently, the data are not reported. The percentages are summarized here such as to keep extreme answers (0% and 100%) separate.

knowledge of what they actually gained from the project, one would have to say that the degree of subversiveness on the part of scientists in actually using the money for a realization of their own interests goes largely unnoticed on the part of government officials as does the degree to which the latter succeed in using the project to meet their intentions. Both groups are most in agreement when evaluating the realization of interests which are of no direct concern to either one of them, i.e. when estimating social policy interests. Here, almost half the social scientists as well as half the government officials do not see any social policy interests realized in the project - which reveals something about the nature of the problems dealt with in government contract research and about the fact that there will be no subversiveness once the interests of none of the parties are at stake in a given area.

TABLE III

Realization of Different Interests in a Contract Research Project by Social Scientists in Academic and Non-Academic Settings

Interests on the part of social scientists % Realized	Reported by social scientists in academic settings % Respondents (N=142)	Reported by social scientists in non-academic settings % Respondents (N=98)
Scientific interests of the social scientists		
below 50%	46.1	67.4
5o - 100%	53.9	32.6
Concrete interests of the financing government agency		
below 50%	71.6	57.2
50 - 100%	28.4	42.8

Table 3 confirms university researchers to be much less inclined to give priority to the concrete interests of government agencies and to have a higher probability to transform project designs according to their own scientific interests. However, it should be noted that even in the case of non-academic research more than 5o% of the researchers do not give government authorities' interests a priority (realization of interests less than 5o%).

5. Anticipated and Actual Criticism of Social Science Results

Our results so far have allowed us to illustrate the gap between the perceptions of members of the political and scientific system with respect to their actual points of contact and interconnection. Furthermore, we have seen an obvious success on the part of scientists and decision makers in adapting a piece of research for their own intended audience and interests, a fact that goes largely unnoticed. The following tables address the question as to what social scientists actually know about policy makers' evaluation and utilization of their results. We asked the social scientists as to what irritated them most with respect to the government agency's reading of their report, and we asked government officials as to what they and their superiors

(if any) criticized most heavily in the report[18]. As table 4 indicates, the amount of criticism on the part of government officials is in general underestimated rather heavily by social scientists. Furthermore, aspects criticized most often by government officials do not match those aspects for which most criticism is anticipated by the scientists (see table IV, page 19).

Table IV testifies to a substantial lack of feedback about the kind and extent of criticism project reports attract from government officials. For example, less than 1o% of the social scientists fear that their results might offer nothing new to their government sponsors, yet more than 4o% of the sponsors actually criticize (and hence claim) that the project report did not offer anything new to them. Or, only approximately 1o% of the social scientists anticipate that the results might involve political difficulties for the

---

[18] Both groups of respondents were given an identical set of alternatives from which they could choose, and in both cases there was one additional item specific to the group which is not analyzed here.

TABLE IV

Government Officials' Criticism of Final Project Reports and Criticism Anticipated by Social Scientists

Kind of criticism	Anticipated by social scientists % Repondents (N=24o)	Made by government officials % Respondents (N=67)
Results offer nothing new	8.9	43.1
Results are not concrete enough	26.o	51.1
Results contradict the expectation and opinion of government officials	15.6	36.7
Results are not in accordance with previous expert-reports	6.3	38.5
Results might involve political difficulties	1o.9	63.o
Results are too difficult to understand because of jargon	2o.3	36.2

NOTE: The wording of the question to the social scientists was as follows: "Please think of the final project report. What kind of criticism on the part of government officials have you been mainly concerned with when writing the report?" Respondents were asked to indicate all categories which applied. The question to the government officials ran: "Please think once more of the final project report. What did you or those mentioned below (referring to supervisors or others not analyzed here) criticize it for?"

sponsors,but more than 6o% of the government officials actually criticize the political inadequacy of results. Some aspects of the project are of primary concern to social scientists for their aptness of attracting criticism - like the fear that the results might not be "concrete" enough. Even there, the government officials criticizing this aspect outnumber to a large extent the percentage of scientists concerned with this criticism.The last aspect is, however, one of the rare cases which occupy about the same rank (as measured by the highest number of respondents citing it) in both populations.

In general, the different weight given to single items in the respective population and the social scientists' underestimation of the amount of criticism suggests not only a lack of information on the part of the latter, but also indicates different standards of evaluation. As an example, many social scientists might consciously neglect political difficulties implied by their results while adhering to criteria imposed by their field and interests. The social scientists' general underestimation of criticism suggests that government officials do not communicate their critical reactions to the scientists. We will find this underestimation confirmed when we compare

the perceived (on the part of social scientists) and actually reported (on the part of government officials) utilization of social science knowledge.

6. Utilization of Social Science Results: What Social Scientists Believe and What Policy Makers Actually Do

If responses of government officials can be trusted - and in order to make sure that they can be, standardized questions were supplemented by open ended questions designed to allow us to learn "what actually happened" [19] - there is only a minor degree of absolute non-utilization of social science results. On the other hand, in any type of utilization explored, the percentage of social scientists who perceive their results as being 'wasted', since never used, always remained above 60%. As implied previously, social scientists do not know much about the extent to which their results are being utilized. In a mutually sustained consumer-client definition of

---

[19] An extensive analysis of open ended questions addressing the problem of instrumental versus legitimating use of social science results is found in Knorr, Karin D., "Policy Maker's Use of Social Science Knowledge: Symbolic or Instrumental," in Weiss, Caroll (ed.), Social Research in Public Policy Making (New York: D.C.Heath Comp., 1976), and research memo of the Institute for Advanced Studies.

the situation, the relationship ends when the report is delivered to the financing agency. In addition, utilization on the part of the "client" will involve further processing of social science results in the political field. In other words, social science results will provide part of the basic material which is selected and transformed in the process of producing political decisions. This kind of utilization will be hardly visible to the social scientists, however. What emerges from a political mode of production in a political field is no longer a purely (and recognizably) scientific fact. Nor will government officials nessesarily tend to emphasize the scientific origin of the hybrid, given that they need to highlight and legitimate their own competence and efficiency. [2o]

[2o] Lazarsfeld once pointed out that the capacity to work out and generate decisions is the most cherished competence of which governement officials pride themselves. One cannot expect that decision makers will let it happen that decisions are made by social scientists, as the technocratic model of society would have it. Rather, they will use the scientist's fact and incorporate it into a product which bears their own mark, or that of their agency. See Lazarsfeld, P., op.cit., p. 25.

TABLE V

Extent of Non-Utilization of Social Science Research Results as Reported by Government Sponsors and Social Scientists.

No utilization in terms of:	Reported by government sponsors % Respondents (N=58)	Perceived by social scientists % Respondents (N=2o2)
Translation into significant practical action (1)	37.9	6o.3
Basic information and support for measures and programs intended (2)	14.3	6o.2
Sponsoring of further research (4)	38.2	7o.8
Invitation of the scientists for advising or consulting purposes (5)	46.4	79.8

NOTE: The wording of the question to the government sponsors was as follows: "How were the results of the project utilized in the following respects?" The respondent was provided with the categories included in the table. Social scientists were asked: "As far as you know, how did the governemnt sponsor utilize the results? Please indicate all categories that apply." Since positive answers were further elaborated in the questionnaire in a way irrelevant for the present context, the table gives the figures for definite non-utilization in both cases.

Table V shows that utilization is most underestimated in the case of "basic information and support for measures and programs intended," a category that suggests further processing at a"decision-preparatory" [21] stage of the political production process. It is important to note that the first 3 kinds of utilization listed in table V as well as the last 2 items do correlate much higher with each other than items from the first set with those of the second set. Correlations between the first three items of table V range from .65 to .71, those between the first set and the second set are between .21 and .38, and the correlation between the last two items is high again: .54. This seems to imply two alternative action strategies of potential users: social science results are either directly translated 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.

---

[21] The "decision-preparatory" role of research results in decision processes is described in detail in Knorr et.al., op. cit., ch. VIII.

Table V is confirmed by table VI, which contrasts the degree of perceived and actual change of opinion experienced by government officials in connection with project results. Agreement is highest in the case of a "very strong" - and presumably better visible - change of opinion on the part of the decision maker. Interesting to note, the percentage of government officials who claim to have undergone at least a moderate change of opinion about a problem based on project results is fairly high (approximately two thirds of the respondents), despite the critical attitude as documented in table IV. (see table VI, page 26)

The last two tables - beyond yielding some insight into the actual degree of utilization of social science results in policy - provide us with a logical equivalent to the data presented in table I and II. There I was interested in showing the degree to which social scientists succeed in unnoticedly "using" a government-financed project for their own scientific and other interests by transforming it substantially. Here I intend to show the degree of actual utilization

TABLE VI

Extent to which Government Sponsored Opinions Changed through Social Science Research Results as Reported by Government Sponsors and Perceived by Social Scientists

Degree to which opinion about the research problem changed with results	Reported by government sponsors % Respondents (N=58)	Perceived by social scientists % Respondents (N=169)
Strong or very strong change of opinion	8.6	1o.7
Change of opinion in single respects	56.9	38.7
No change of opinion	34.5	5o.6

NOTE: Government officials were asked to what degree they had changed their opinion about the problem area on account of the project results. They were provided with a 5-point Likert scale. Social scientists were asked: "Did the government sponsor change his/her opinion about the problem on account of the project?" and provided with the above categories.
In order to obtain comparable categories, scores 4 and 5 of the Likert scale (strong and very strong change of opinion) were combined in the case of government sponsors, as were categories 2 and 3.

of project results in government agencies, which apparently also goes largely unnoticed, this time by social scientists. [22] In the former case, it will be the contingencies of the scientific field which account for a certain amount of resistance and subversiveness of the scientists with a view to the interests of their government sponsors. [23] In the latter case, the reason for the scientists' underestimation of utilization may be found in the fact that the relationship between financing authority and social scientist often deliberately ends with the delivery of the report, and in the fact that government officials have a substantial interest in "re-producing" the information (under their own authorship) according to the exigencies of the political field and their concern with legitimating their activity.

---

[22] The finding that social science results are utilized by political decision makers to an unexpected degree seems to become more and more established. See for example the results of Caplan, Nathan et.al., The Use of Social Science Knowledge in Policy Decisions at the National Level (Ann Arbor, Mich.: Institute for Social Research, 1975), and Useem Michael, "State Production of Social Knowledge: Patterns in Government Financing of Academic Social Research," American Sociological Review, XXXXI, 4 (August 1976), pp. 613-629.

[23] Lazarsfeld once pointed out to me that the gap in both parties' perceptions of each other as shown by our data might be an artifact in so far as the questions we asked might be interpreted differently in both systems. As already mentioned, we tried to prevent crucial misunderstandings by supplementing the standardized question approach with open ended "talks" with the respondents. But even if there are different connotations involved in both systems (and we believe that there are depending on the notions involved), this only proves the point of basic incompatabilities of the respective action systems.

7. Discussion and Conclusion: The Producer-Client Model Reconsidered

The data presented here indicate substantial mutual misconceptions on the part of both government officials and social scientists in matters related to their interaction in virtue of contract research. Consequently, the data imply that the establishment of often long-lasting producer-client relationships and the mutual interaction and communication associated with it may accentuate rather than eliminate basic incompatibilities. Apparently, pressure such as a decision maker can exert by providing project money does not transform the exigencies of a scientific field into a structure congenial to the governement officials' interests.Instead, such pressure will lead the scientists to attempt to fulfill those exigencies while at the same time maintaining the decision makers' confidence. The latter, while displaying this confidence, indulge at the same time in heavy criticism not communicated to the researcher, and utilize the results in a manner which allows them to integrate social science knowledge into political action without changing the loyalties and decision criteria of the respective political field. It appears that both parties succeed fairly well in profiting from each other,

yet the reason for this does not seem to be mutual adaptation. Thus the scientists do not "adapt" in the sense of becoming primarily concerned with the solution of the social and practical problems at issue in the study, nor do they allow their sponsors' interests to dominate their research. And the government officials do not adopt the results they are presented with in the sense of accepting them as serious grounds for their decisions. Rather, they incorporate the results wherever they "fit" in the cycle of political production, and there is enough criticism at hand whenever such a procedure might be challenged. The misgivings entertained by government officials may well operate as a protective belt [24] which so far successfully prevented social scientists form assessing the kind and extent of utilization of their results. What we have to accept is that there is no use in deploring the existence of the gap, nor in pondering over strategies for better mutual adaptation. We need to see that both parties succeed continously in bridging the gap by using the other party's services while guided

---

[24] The notion "protective belt" is borrowed from Lakatos who used it to characterize protective strategies of the scientific community vis-a-vis moderately successfull theories or research programs. See Lakatos, Imre, "Falsification and the Methodology of Scientific Research Programs," in Lakatos, Imre and Musgrave, Alan, (eds.), Criticism and the Growth of Knowledge (Cambridge, England: Cambridge University Press, 197o), pp. 134ff.

by their own interests and while assuring the continuous functioning of the respective action systems, i.e. the scientific and political field. The problem, as posed in the literature, turns out to be misconceived. The producer-client model does not specify subversiveness as a central aspect of the exchange between social science and policy-making,nor does it suggest re-processing of social science results in the sphere of political production as a dominant form of utilization. The logic of utilization lies in what is done with social science results; the present paper is an attempt to direct the attention towards such a logic.