SOCIOMETRY AND PUBLIC POLICY-MAKING
AN ESSAY ON THE LIMITED ROLE OF SOCIOLOGICAL
KNOWLEDGE IN SHAPING PUBLIC POLICIES

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INTRODUCTION

Ever since the creation of the social sciences as a distinct orientation within the scientific community, the relation between these sciences - particularly sociology - and social change has been subject to continuous debate. And it seems as though the discussion about the use of sociological knowledge to help change the world has increased in scope and intensity. It has become almost impossible to keep up with the insatiable flow of articles and books on the policy-relevancy of sociology during the last ten years. The reasons are numerous.

The general underlying attitude seems to be that sociology is not only applicable to the analysis of public policy-making, but should also be applied to decision-making in public affairs.

At the same time, however, there is a growing awareness that applied studies seldom result in policy-recommendations, or in recommendations that are simply not used by the public policy-making bodies, thus leading to an atmosphere of reproach, disappointment and estrangement. Most discussions about this state of affairs deal with the shortcomings of sociology and public policy-making relations, instead of coming to grips with the fundamental issues at stake. One of the main problems is the degree of governability of societal processes as Van Lier (1980:9) recently put it. Such a study could be called the sociology of intervention and should have a wider scope than is usual in policy sciences.

It should look at problems concerning the limits of steermanship of the social sciences, especially in a period of widely-felt recognition of the trouble that governments run into. It is this problem that raises the question of the quest for control (Van Gunsteren, 1976).

However, most discussions about the role of sociology in policy-making centre around topics such as:

- the conditions under which policy-makers normally operate
- the type of research method or the selection of theoretical orientation by the social researcher (for instance, the debate about knowledge for understanding versus knowledge for action)
- the difference in culture, language and frame of reference between social researchers and policy-makers
- deficiencies in the state of art in sociology (to the effect that policy-makers do not attach much prestige and authority to sociological knowledge, in contrast to economic analyses for instance)
- the lack of an adequate organizational structure as a meeting place of social sciences and policy.
It is to be hoped that apart from general reflections more empirical research in these fields will be conducted.

The object of this essay, however, is to inquire into the position as such of sociological knowledge, in the decision-making process that policy-making essentially is. My suggestion is that the widely accepted misconception about the process of transformation of applied research into policy-action is largely to blame for the disappointing record of the utilization of social sciences in policy-making. I hope to be able to demonstrate that, in general, sociologists tend to overestimate the impact of scientific knowledge in shaping public policy and to underestimate the role of conscious or unconscious ignorance and of politics in the very same transformation process of knowledge into action.

My analysis will focus on the primordial question of delineating receptiveness of public policy for social sciences, i.e. sociological knowledge. These reflections will be restricted to the immediate interaction between both units, and will leave aside the more general and diffuse utilization of sociological research findings that in a more indirect way influence strategic decision-makers. In an open, pluralistic society, these indirect lines of communication between the sources of new knowledge and the centres of policy-making are highly significant.

Decision-making is mainly studied at the level of the individual actor or small group. Therefore, to get some basic idea, my analysis begins with individual decision-making. This is not to suggest that there is a similarity between individual and societal actors (Etzioni, 1968), but is meant to open the eyes to the intricacies of the application of knowledge and non-knowledge in the decision-making process. After reviewing some of the basic approaches in the literature on decision-making strategies in public policies, we present our main argument about the primacy of politics in the transformation process of sociological knowledge into action.
Human beings as decision-makers are information-utilizers. A basic question one must ask is: How does an individual use the information at his disposal in order to arrive at "adequate" decisions, especially decisions that entail serious consequences? Are there certain ways of arriving at the best solutions?¹

Probably, most of the work done by social scientists in this field consists of developing normative, prescriptive models that start with the assumption of the rationality of a person's decisions and then developing procedures according to which researchers think rational persons should make their decisions. A very fine example of such an approach is to be found in Janis and Mann (1977:11) who mention seven "ideal" procedural criteria for attaining the decision maker's objectives:

1. thoroughly canvasses a wide range of alternative courses of action;
2. surveys the full range of objectives to be fulfilled and the values implicated by the choice;
3. carefully weighs whatever he knows about the costs and risks of negative consequences, as well as the positive consequences, that could flow from each alternative;
4. intensively searches for new information relevant to further evaluation of the alternatives;
5. correctly assimilates and takes account of any new information or expert judgment to which he is exposed, even when the information or judgment does not support the course of action he initially prefers;
6. re-examines the positive and negative consequences of all known alternatives, including those originally regarded as unacceptable, before making a final choice;
7. makes detailed provisions for implementing or executing the chosen course of action, with special attention to contingency plans that might be required if various known risks were to materialize.

Janis and Mann's working assumption is "that failure to meet any of these seven criteria when a person is making a fundamental decision constitutes a defect in the decision-making process" (p. 11). Deviations of this model of "vigilant information processes" are called miscalculations or defective decision-making, although the authors state that they see man not as a cold fish but as a warm-blooded mammal, not as a rational calculator always wanting to work out the best solution but as a reluctant decision-maker.

¹ The next paragraphs draw heavily - and I have to admit rather freely - on Wagenaar (1977).
More and more the conviction has gained ground that this rational approach to human decision-making is based on a normative intellectual model that is not without heuristic value, but that has scarcely anything to say about the real process of decision-making. An increasing flow of empirical research inquiring what people actually do when they make decisions rather than using the yardstick of rationality, have come to the conclusion that individuals basically have to act within a context of limitations.

To begin with, human beings are only able to absorb limited amounts of information simultaneously. The rational decision-maker also has an impossible task to cope with information overload. But apart from these sheer limitations of a physical and psychological nature, there are other limitations that are at the core of decision and information as such. To mention only two aspects of it:

The limited time horizon in decision-making. The consequences of a decision and the corresponding activities are incalculable, particularly on a long-term basis. The interconnections between the infinite number of variables are too complicated to be adequately interpreted beforehand. That is to say, any decision is, to a considerable extent, a shot in the dark.

Then there is the cognitive complexity involved in any essential decision. The many aspects of a decision are so intricate in terms of costs and benefits, of long-term and short-term effects, in measurable and immeasurable consequences, in adequacy and inadequacy of information that is essentially impossible to gather all the various facets under one denominator. The selection of alternatives is essentially hampered by the lack of objective standards for appraising different courses of action on a comparative basis.

These are some reasons why rationality is limited by the very nature of decision-making. For the same reason some people say that the making of a decision is more of an art than a pure calculation.

This short introduction into limited rationality already raises the question: If it is not pure rationality that guides human decision-makers' behaviour, what then are individuals actually doing when they make decisions?

In order to solve the problem of coping with the misery of having to make critical decisions, people have a wide range of patterns, procedures and methods at their disposal that are daily applied depending on the situational context. By way of illustration, I will indicate some of these patterns that people consciously or - as a rule - unconsciously
use to come to terms with decisional conflicts, or "tricks" as Wagenaar (1977) calls them in his fascinating work that deals with many more patterns of decision-making behaviour than can be mentioned here.

"Satisficing", a concept originally introduced by H.A. Simon, is our first illustration. According to the model of rational behaviour, selecting a course of action with the highest pay-off requires the estimation of the comparative value of every alternative in terms of expected costs and benefits. In the foregoing we have already seen the insuperable burden of information overload and entanglement of the numerous variables involved in decisional dilemmas. Simon has pointed out that people do not generally follow an optimizing or maximizing approach, but try to reach a satisfactory, suboptimizing solution; one which, consequently, provides a relatively satisfactory realization of the actor's values. In other words, he looks for a course of action that he considers "good enough". This satisficing strategy, according to Simon, fits the limited information-processing capabilities of human beings. It is characterized by the consideration of only a limited number of objectives and of alternative routes to achieve these objectives, the testing of the alternatives as it comes to the actor's attention, and a rough estimation of minimal cost-benefit ratios.

A second "trick" to cope with decisional dilemmas with an overload of conflicting information, is rationalization. In a lot of cases, a satisficing decision is the one that can be best defended (Wagenaar, 1977: 44-49). People often make decisions on account of their subjective estimation of the acceptability by others of the arguments involved. This pattern is not necessarily at the cost of scientific or rational reasoning. In fact, almost any decision can - if needed - be supported by drawing on different facts, but more generally by giving different interpretations as a result of different theories and perspectives.

This tendency towards choices on the basis of tenability of arguments can take place before or after the actual decision, or both. It poses no problem to an actor to find in all cases justifications for the adequacy of that particular decision (which does not exclude otherwise rational calculations before the decision). Under the rational model, in order to evaluate the outcome of a decision one would need to take into consideration all the effects of all the consequences. In practice, a decision-maker gives subjective ratings, that are to a great extent socially induced. A famous example illustrates this principle. Ehrlich (quoted in Wagenaar, 1977) has shown that most automobile advertisements are read by people who have just bought a new car, and not by those who
are planning to buy a new one. The need for information seems to be greater after the acquisition than before. But the striving towards justification afterwards affects a person's deliberations even before taking the decision. If an individual has no dependable way of objectively assessing the success of a course of action after the decision, how can we expect him to test the implications of a specific course of action before he makes it? One way to cope with this dilemma is to take into account beforehand the various paths of justifiability of his decision vis à vis other people, even before anybody asks for it. He anticipates and specifies the reactions of others on his decision, even when the evaluators are completely imagined. "Truth" does not always result in the best decision or the best solution. It would be all too easy to classify this pattern of social behaviour under the heading of weighing up all known alternatives in terms of costs and risks of negative consequences. In this way, every decision can be reasoned as being a rational one.

A final illustration of the way people cope with the dilemma of making a vital decision is to avoid making it by procrastinating or by inventing additional reasons for ignoring the worrisome situation. Janis and Mann (1977) call this reluctant behaviour "defensive avoidance".

Looking back at our argument so far, it is clear that my position is to start from descriptive and explanatory variables in decision-making rather than to start from reducing actors to hunters of alternatives within the means-end calculus. For sociologists, one problem is the claim of universalism of the different decision-making strategies, independent of any socio-political configuration. One of the main questions is under which socio-political conditions the one or other strategy is likely to prevail, independent of the personal aptitude of the individual.

A second consideration concerns the emphasis on knowledge and information as the vital variables in the understanding of the decision-making process. However, it is not only knowledge that guides human behaviour, but also the lack of knowledge (Kruithof, 1977). I would say that plain ignorance is as much a determining factor in human decision-making as is information. Reality forces us to recognize that ignorance is omnipresent in the daily affairs of any human being, and apparently so in our modern differentiated society.

The significance of ignorance lies in its relevancy for the social construction of reality by individuals and groups. Ignorance affects the
individual's interpretation of his situation, he is a victim of the existence of ignorance as an essential component of social life. But to a certain extent people are also aware of the existence of ignorance, including their own, which they use to organize and control their social environment and the social life of their fellow-men. Although in daily practice knowledge and ignorance are intensively interwoven, individuals and groups generally tend to present themselves as people who know.

The suggestion I want to make here is that ignorance is an essential variable in human decision behaviour. To study individual actors from the point of view of their ignorance processing capacity as well as their ignorance controlling capacity may be as valuable as the traditional approaches through information processing. I refer here to the interesting, explorative analysis of ignorance and social behaviour by Kruithof (1977), one of the few studies in this field.

My argument so far has been that the role of knowledge in the social behaviour of individual actors is limited, as evidenced by an overwhelming number of experimental findings. Saying this means that decision-makers are not only in need of a strategy of utilization of knowledge, but of a strategy of utilization of ignorance as well.

Sociologists tend to underestimate the role of ignorance in human behaviour and in human relations, which might be a reflection of the intellectual's position in society. Intellectuals are preoccupied with knowledge. Moreover, they are led as a rule by the idea that mankind moves towards progress by the diffusion of scientific knowledge (Van Lier, 1980:4)². This attitude is well exemplified by a recent statement made by one of the leading Dutch sociologists: "Modernization as an indispensable element of the development process is according to a generally

² It goes without saying that the relationship between social sciences and policy-making will basically depend on a much more encompassing attitude about the belief in progress. Several decades ago Van Lier (1956:10) stated that to him most intellectuals had already lost their certainty of belief in progress but continued to behave as if they still believed in the old conception. Their old belief is replaced by an attitude of hope, sometimes against their better judgement. Without an element of hope, says Van Lier, any possibility of improving society by planned intervention would be absurd. How this tendency will develop, is uncertain. Since the fifties criticism with regard to the social function of science has vastly increased, including attacks on science as such as an asocial undertaking (Boers, 1980). Also, the question arises whether the masses have changed their belief or acceptance of progress during the last decades, which has affected societal consensus about the credibility of science.
accepted definition the systematic application of ever expanding scientific knowledge to all realms of societal life" (Breman, 1980). In spite of the fact that nowadays science is under heavy attack with respect to its objectivity as well as to its "blessings" for society (see, for instance, Boers, 1980), social scientists continue to attach great value to science as a supplier of knowledge to solve societal problems in a rational way, be it by "traditional" types of social research or by renewed, fashionable methods like action-research. In my opinion, it would be worthwhile to complement and counterbalance the social scientists' perspective on knowledge, by a sociology of ignorance.

\[3\] J.C. Breman at the seminar on Research in the social sciences and policies for development cooperation, The Hague, November 1980.
Undoubtedly, there is a certain analogy between the decision-making process of individuals (or small groups) and of societal actors, e.g. policy-makers. The differences, however, may be equally great, dependent as decision-makers are on the situational context. According to Etzioni (1968: 252) "macro-decision-makers" differ from individual ones as follows: They are internally more differentiated, they can make use of larger amounts of knowledge and more sophisticated decision-making technology, and their process of decision-making is more institutionalized and organized. This differing social context adds fundamentally to the complexity of public policy-making, which can be ignored all too easily. Moreover, as Etzioni suggests in a provocative passage (1968: 139), "to a greater extent than individuals, societal actors can function for long periods of time with little empirically valid social knowledge". The greater capacity, real or perceived, to alter their environments is one of the reasons why the reality-testing of public decision-makers is particularly limited.

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4 Not all research is fully aware of the significance of this difference. For instance, in "Decision-making" (1977) Janis and Mann present interchangeable studies of psychological processes in decision-making that refer to individuals as well to societal actors.
In the meantime, mutual declarations of "love" between policy-makers and the academic world are not exceptional. At first sight a close relationship between these two parties would seem to be all but promising: governments want to make policies that are based on scientific knowledge as much as possible, and the social sciences want to serve society. However, reality is different and harder. Many authors studying this relationship ascertain that sociological research has so far not contributed very much to the making of public policies. Undoubtedly there is an element of fashion, of "bon ton", in this discussion. Much application of sociology is probably hidden away in the dark, because it is not being interpreted as having been applied for one reason or another, because the effect is of an indirect nature, or because policy-makers simply apply sociological knowledge without even knowing, let alone acknowledging that they were applying it, or because application is piecemeal or intermittent. Complaining about the lack of policy relevance appears to be part of the state of the arts in sociology. Whatever the element of fashion in the discussion, there is the unmistakable fact that sociological research findings are not made much use of in government agencies. And when it comes to real business, the mutual admiration diminishes and gives way to the harsh realities of daily life. A striking example was given by a spokesman of the Dutch Directorate-General for International Cooperation at a seminar on social science research and policy-making in development cooperation who said: "Research is of only a marginal account in our policy-making" and "researchers ought not to overrate their own role in policy-making". Disillusion or realism? Many factors related to this discussion and illustrated in the introduction of this essay do not, in my opinion, get to the heart of the matter. The notion of what policy-making is or ought to be is essential for an adequate understanding of the potential and actual role of social science knowledge in public policies which inevitably raises the question of the place of politics in policy.

4.1 What is public policy-making?

Generally, and unfortunately, sociologists in their capacity as researchers are not familiar with policy-making structures and processes.

5 W.M. Floor at the same seminar as mentioned under 3.
They have no personal or intimate knowledge of the daily affairs of policy-makers, nor do they sufficiently appreciate the exacting task of being a policy-maker, whom they often consider, not without contempt, as opportunistic shortsighted actors. But lack of familiarity is not likely to be the major variable in explaining the unhappy relationship between social science and public policy. The more important point is what the prevailing notion is about the essence of policy-making. Many a sociologist advocates, often unwittingly, a method of making policy. That is, as Scott & Shore (1980:63) state, when they speak of using sociology in policy-making to enlighten, to provide ideas and information, or to evaluate or further understanding of policy and so on, they presuppose the existence of a method for conducting public affairs, which grant these functions to sociology.

The most common idea of sociologists about the process of public decision-making is probably the one concerning the rational method. They presuppose a commitment to rationality and scientific procedures. This approach entails a specification of objectives and values as a prerequisite for empirical analyses of policy alternatives. Policy is determined by an analysis of means and ends whereby all relevant alternatives are exhaustively surveyed in a comprehensive way, based on scientific information and expertise.

The approach is best illustrated by the procedure one presumably has to follow if he is willing to implement a programme rationally, as stated by Scott & Shore (1980:70).

Initially, he would want (1) to determine what the problem is. Anticipating the necessity for using methods and techniques of social science research in this and other facets of the policy-making process, it would be necessary (2) to define the problem clearly and precisely. The next step would be (3) to clarify the goals, values and objectives of the social policies to be developed to deal with this problem.

One would want (4) to organize these in a hierarchical fashion reflecting prevailing notions about how to attack the problem and how to arrive at overall priorities. Next, the policy analyst would (5) list all the possible ways of achieving these goals and (6) make an inventory of the full range of consequences that might reasonably be expected to follow from each of the possible alternatives he has conceived. These, in turn, would be (7) ranked along a continuum from the most to the least preferred outcomes (8).

Estimates would then be made of financial and manpower resources likely to be available to accomplish the objectives sought, and some determination would be made of the probable (9) costs associated with each of the possible courses of action. A (10) procedure would then be instituted to bring all this information together at the time and place that a decision must be made, so that the policy-maker would be in a position to compare the costs and probable consequences of each proposed policy with the overall goals and to select the most realistic and most effective alter-
native leading to the preferred set of consequences. Once agreement was reached, the policy-maker would then draw further on the sociologist's skills for such aids as supplying information necessary for the (11) implementation of policy and (12) evaluating a policy's success. Such information, particularly that gained through evaluation research, would then (13) be fed back into the policy process so that action could be taken to correct unanticipated problems and to improve overall effectiveness.

The idea behind this procedure is that it will lead to situations that maximize the positive and minimize the negative. However, empirical evidence has shown that this approach has little reality value and simply cannot be implemented. We refer to the analogy about the position of information and scientific knowledge as only very adequate explanations of individual behaviour. There is no denying that the approach of the rational method may have unquestionable heuristic value, but pushing the reduction too far from the context has rendered it ahistorical, asosiological and apolitical. For partly similar criticism on the phenomenon of modern planning in the developing countries see Caiden & Wildavsky (1974) and Van Dusseldorp (1975).

For a more realistic approach that considers the dependency of the relationships with the environment as a major variable, one has to turn to the incremental conception developed by Lindblom and his associates. This "art of muddling through" is viewed as being commonly followed. The strategy of "incrementalism" which implies that policy-makers do not follow a comprehensive procedure to arrive at decisions, contains a number of elements that are claimed to be more relevant for understanding what is actually taking place in policy bodies. Basically only marginal decisions are made which only differ to a limited degree from existing policies. Decision-makers investigate only a limited number of alternatives that consider only a limited number of impacts. Only a few means are considered and objectives are adjusted to the available means, rather than adjusting means to goals. Problems are weighed in a neverending series of formulation and reformulation; there is no one decision and no final problem solving. Analysis and evaluation are geared to alleviate concrete problematic situations rather than to arrive at hitherto unrealized goals. Consensus about all possible values is not actively pursued and often develops only after a decision is made; analysis and evaluations are undertaken by all groups concerned which means that the strategy of incrementalism is essentially a disjointed process.
Among critics of government policies this often evokes images of opportunism and aimlessness. However, these are exactly the characteristics of incrementalist policies that are actually followed in an effective and workable way in pluralistic societies.

Etzioni (1968) looked for an alternative model that would challenge both rationalism and incrementalism and which is supposed to have a greater descriptive, analytical as well as normative value. In order to avoid the pitfalls of utopianism of the rationalistic model and the conservatism of the incrementalistic approach, he designed a "mixed scanning" strategy that is presented as a realistic as well as a transforming model. The essential thesis in Etzioni's approach is that decision-makers differentiate fundamental decisions from bit decisions. When the incrementalists say that an actor chooses between drastic decisions and bit decisions in favour of the last ones, Etzioni suggests that

a) most incremental decisions specify or anticipate fundamental decisions and
b) the cumulative value of the incrementalist decision is greatly affected by the underlying fundamental decisions (Etzioni, 1968:289).

For this strategy a programme of instructions is presented (p. 286-288), which will not be specified here.

It is not my intention to discuss the respective merits of the rationalistic, the incrementalist or the mixed scanning approach. It remains an open question whether systematic, empirical evidence is in support of either one or the other of these strategies, while recognizing the extreme difficulties of thoroughly evaluating and assessing decision-making processes. The dominant sociological question is, under which socio-political conditions taking into account the decision-maker's societal capacities, may one expect the prevalence or the greater effectiveness of the one above the other?

Our concern at the moment is: What does the notion of policy mean for the position of scientific knowledge in policy-making?

In the rational decision-making approach to public policy, a very central role is attributed to dependence on scientific information for arriving at rational public decisions. Lack of success in the realm of public policy is primarily relegated to a lack of development or utilization of theories and findings of modern science, including the social sciences. Many a sociologist considers this approach as the appropriate principle, if there is to be room for sociology in public affairs. Many sociologists explicitly or implicitly advocate the rational model, because it provides the best procedures of making use of sociological knowledge.
The incrementalistic approach basically limits the role of social scientists to a very great extent. The reason being that it is characterized by an endless series of comparisons with the existing situations which hinder the utilization of scientific knowledge other than the immediately instrumental, and is even active in eliminating or bypassing available scientific information. Generally, the "muddling through" strategy is denounced by sociologists by saying that it leads to irrational and ad-hoc public policies that create more problems than they solve. Neither does it provide adequate clues to the application of sociological knowledge, nor does it link up with the scientific belief of rational theory-formation and fact-finding in social research as such. Etzioni's mixed scanning strategy follows an intermediate position. Although this eminent social scientist in his major work "The Active Society" does not spell out the specific role of social science knowledge, one can safely say that he attaches substantial value to fundamental criticism and challenge by societal subunits that are relatively immune from societal pressure. Their task is to review the "community-of-assumptions" and challenge them when they are in danger of becoming detached from reality. In this context, Etzioni shows a particular concern for the continually growing inequality of knowledge within modern societies and between societies.

It is to be expected that most sociologists, when becoming acquainted with public policies, will find themselves in situations that very much resemble the analysis put forward by Lindblom et al. Etzioni who maintains that the number and role of fundamental decisions are greater than incrementalists believe, also eagerly admits that incremental decisions are more common. And even: "Democracies must accept a relative degree of incrementalism .... because of their greater need to gain support for new decisions from many and conflicting sub-societies, a need which reduces their capacity to follow a long-run plan" (Etzioni, 1968:294).

There is no logic in expecting that there is such a thing as an immediate link between scientific knowledge and its application in actual policy-making, moreover, it is not very likely that there ever will be. In the following paragraph we will elaborate on the role of social science knowledge in an incremental decision-making situation, the most common context experienced by sociologists as we have suggested. Our focus will be the essential role of politics in public decision-making.
4.2 Knowledge and policy: the primacy of politics

If it is not scientific knowledge or information that gives the clue to the making of a public decision, then how will it be made? Irrationally, at random? In order to get as concrete an exposition of our argument as possible, we borrow a very fine example from Scott & Shore (1980:136), where the first author analyses in detail some of his personal experiences of public policy-relevant research on the subject of blindness in the U.S.A. In particular we will refer to the author's struggle concerning the definition of the problem's definition. As we have seen in a rationalistic approach it is a prerequisite that a clear definition of the problem is formulated. However, most of the time this is not what actually happens. The situations that confront public policy-makers are more often than not multiple, conflicting, and inherently indistinct. Transforming the interpretation of these ambiguous situations into clear problem formulations, is not purely a technical activity. Nevertheless, decisions are made.

In this context it is worthwhile quoting Scott's own words at length, because his analysis of applied social research is exceptionally accurate for an account of applied social research. Another reason for this long quotation is that, at first sight, the problem of blindness seems to be quite simple and should not present insurmountable difficulties for making acceptable and workable policy solutions.

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6 This part of the study is deliberately limited to the process of generation of policies. There is no immediate link between generation and implementation, since it poses questions about the nature of regulations, the obedience of organizations and individuals, the handling of authority and resources (vide Van Gunsteren, 1976). It is my estimation that the role of scientific knowledge in the interval from generation to implementation is as vulnerable as in the phase of policy formulation. Therefore, the notion of "applied sociology" as if instant relevance would be derived from it for policy implementation is to be contended. The term policy-relevant research or application-oriented knowledge would be more appropriate. Using the term applied sociology might raise false expectations of getting concrete and workable directives from the social sciences.
Several years ago, Scott was asked to do a study on blindness and services for the blind in American society. The author continues:

The purpose of this study was to investigate the effectiveness of services for the blind in the United States with the objective of making recommendations for changing the system of delivery of services for the blind and for reallocating resources to the different types of service programs. A major difficulty encountered in trying to meet this mandate was to determine what "the problem" of blindness is. The author soon learned that while severe visual impairment is a condition that affects a million or more citizens in our country today and that most agree that lack of sight is a problem, the term "blindness" itself gives no indication of what this problem is. Is the condition of blindness a matter of physical disability or of social stigma? Is it a health problem or a problem of poverty? In view of the fact that nearly two-thirds of all people classed as blind are 65 years of age or older, is blindness a problem of visual loss or merely a facet of the normal aging process? Is it a physical problem involving an inability to relate to the distant environment directly? Is it a psychological problem of personality, or is it a sociological problem of interpersonal interaction between those who cannot see and those who can? One obvious answer is that it is all of these things and more, but this response does not suffice for the purpose of evaluating the adequacy of existing programs and recommending new ones. To approach the situation from a planning point of view it is necessary to know clearly, plainly and in advance what "the problem" is; yet, this is not something that is inherent in the situation or condition as such.

Without any doubt, the problem is all of these things simultaneously. Most situations simply lack sufficient clarity of definition. Sociological input cannot "solve" this phenomenon of multiplicity of interpretation concerning such problematic situations. An equally false illusion, fairly common amongst problem-oriented researchers, is the expectation of a solution from comprehensive, interdisciplinary research. An illusion because such a manoeuvre merely pushes the problem away to a new forum that has the same handicap. The interdisciplinary approach is known to be plagued by the very same problem for which it is supposed to be designed: finding a common ground for problem-definition (Lekanne dit Deprez, 1976). Even if interdisciplinary research manages to find scientific entries to promising interlinkages - which is seldom the case -, it remains fundamentally unsuited and incapable of transforming the ambiguities of public policy dilemmas into neatly delineated scientific networks and vice versa. Endeavours to attack policy problems with an interdisciplinary approach will certainly make for clarification of the several dimensions to be theoretically tackled in a problem situation. This might prove to be a precious advantage, but the same act may increase awareness of the distance between scientific activity and policy practice.
From the start, the scientific method of public decision-making is severely handicapped by the inherent lack of clarity on what the problem in question is.

Of course, decision-making will proceed, but not on the basis of defining the problem from scientific perspectives only.

Suppose that the nature of the problem is agreed upon - which in the incrementalistic view of policy, is not an unconditional prerequisite for a decision-making procedure - then the next stage is to arrive at an operationalisation of the definition that is efficient and administratively workable. Without such a specification, no socio-economic calculations or narrowly defined research can be done that will consider the implications of the several alternatives. And as with the definition of the problem, also in this "stage" in the decision-making process there is no neat, simple way of logically discovering what is the best solution of optimalisation. It is true that interdisciplinary research may incorporate different aspects of a problem (sociological, economic, psychological, etc.), it can never represent the different socio-political interests involved.

Scott & Shore (1980:138-140), in a very precise way, illustrate this phenomenon with the already mentioned study of blindness.

Many years ago it was decided that because blind people must purchase special services and have unusual expenses, some form of pension for the blind was required. In order to make preliminary decisions about the costs and administration of such a system, or to consider the possible alternatives, an estimate of the number of potential candidates was necessary, yet, no accurate estimate could be developed until clear criteria were established to decide whether or not a person was "blind". Thus, rationality dictated that there must be an explicit, precise definition of this term.

The problem in constructing a workable administrative definition of blindness was the decision as to whose point of view to adopt; there was no single definition that was "the most accurate" or "the best" one to accept. The standard of cost suggested one kind of definition; the standard of adequacy of services a second; the standard of practical administration a third, and the standard of personal well-being of recipients of services a fourth. Moreover, what was a rational definition from any one of these points of view - say that of cost - often appeared to be irrational from some or all of the other points of view involved.

The first definition of blindness that was considered was strictly in accordance with the dictionary meaning of that term, i.e. the total and complete inability to see. But at least two problems would have arisen if this definition had been adopted. First, it would have excluded from eligibility for service a substantial number of people who are severely visually impaired but who nevertheless possess some small amount of vision (...).

The second problem was brought about by the fact that total blindness is a rare event in the American population; by this definition
the population eligible for blindness services would probably not have exceeded 50,000 people. Therefore, it would have been prohibitively expensive to develop an entire national system of services for such a small population (...).

Thus, the question arose as to where along the continuum of sight the line should be drawn. Administrative considerations dictated that the line must be drawn in such a way as to ensure that the procedures for determining if someone fell within the definition would be simple to administer. Cost and administrative considerations dictated that it be drawn in such a manner as to produce a population in need that would be large enough to justify creating a national system of services, but not so large as to strain severely the government's social service budget. Social service considerations dictated a line that would include all persons functionally restricted because of visual loss. Although the interests were rational, they were sometimes in conflict.

Once the decision was made to draw a line that defined blindness, a further difficulty developed (...). In the population of people regarded as "blind" by the adopted legal definition, a majority possess a considerable amount of usable vision and experience problems vastly different and often less complex than the problems of those who cannot see at all (...). The dividing line between the sighted and the blind was made largely for economic and administrative reasons: it was believed that this definition would guarantee a population of people large enough to justify federal investment in developing a national system of services. Yet, ever since its adoption, at national conventions of workers for the blind, in professional journals dealing with blindness and among the growing number of blind liberation groups, there have been recurrent discussions about the absurdity of this definition from a social and psychological point of view.

This example of the study on blindness shows very clearly that a problem, neither in its definition nor in its operationalisation, is not given, but has to be constructed. Behind any definition of a societal problem is always the question of who is going to be served by this selection or combinations of selections of the many interpretations of a problem and who are not. The safe and workable scientific method that can logically offer solutions and ready-made alternatives, does not exist. Nevertheless, decisions are made in public policy bodies, with or without social science expertise, and the question arises as to how policy decisions are arrived at if it is not scientific inputs that give ultimate clues to the solution of a decisional conflict. What is decided and who is doing the deciding?

For an answer, we have to start by admitting that in decisional dilemmas of importance the freedom of policy alternatives is greatly restricted. Making a policy is not just scanning a series of open-ended alternative courses of action. The decisional situation is embedded in a structural context that shapes the realistic possibilities of the several paths that can be followed. But first and foremost, there is no societal, nor intra-policy consensus about the ultimate and short-term objectives, which
denies the possibility of one problem-defining perspective or one problem-solving operationalisation.

If there is no superior choice that can be defined by logical standards, what then is an effective choice, or in the words of Simon a decision that is "satisficing"?

The answer to this question has already been given in the example about blindness as a social policy problem: "satisficing" solutions come about by the interactions of groups and individuals involved in and affected by certain policy areas, including the governmental policy-making bodies themselves within their intra-organizational setting. It is they who deliver the multiple inputs of definitions. And since it is exceptional to find these different definitions corresponding with each other, consensus about what the situation is and about the course to be taken springs from the usual political mechanisms: the confrontation of powerful and less powerful groups, the politics of coalition, the capture of the definition of the situation and its imposition on others by a process of negotiation, and the like. In other words, conception and definition of a problem - and all subsequent steps necessary to arrive at a policy formulation - reflects what is politically feasible and workable.

Here we will not follow the many steps that have to be developed before any concrete policy action can be started. The above analysis of the different notions of policy - without pretending to be complete - already reveals the long and complicated way to be covered from problem operationalisation to policy formulation.

It will not change the crucial finding of our analysis: Between the results of new or already available scientific research and the generation and formulation of policy measures always lies a political decision, or rather a series of intervening political decisions. As Etzioni (1968: 303) puts it: a societal decision-maker may choose to ignore facts, but - by definition - he cannot ignore power. The argument advanced here is of an elementary nature: sociological research findings and their relevancy for policy formulation are always subject to political definitions, which in a pluralistic setting is a give-and-take process. It belongs to the policy-making process as such; it is part and parcel of it.

One can also put it the other way around: in the policy-making process, sociological research itself becomes a political resource, one amongst many other inputs. This is so because of the very act of transferring scientific procedures to the real-life situations of practical policy

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7 A lot of literature on the utilization of knowledge for public purposes suffers from underexposure of the dimension of power. Research-based findings, if they do not take into account the existing relations of power and cooperation, will remain ineffective.
intervention in a societal context. Most of the time, social scientists provide a posteriori insights, which leaves the future wide open if one sticks to a voluntaristic perspective, the heart of policy-making. But even if a social scientist is more predictive, he will have to model his "recommendations" in ceteris-paribus terms, which is only one path in the daily jungle of policy-making.

This feature of knowledge is an element of the nature of the science production system itself. But the impact of scientific knowledge in the political arena does not depend exclusively on the intrinsic qualities of science. The effectiveness of knowledge is determined not only by the strength of its evidence but also by the relative prestige positions of the disciplinary fields involved, the resources the social scientist can mobilize, the adviser's position relative to the acknowledged knowledge-producing units, the weight of the communication network of the social scientist involved and so on.

It is these considerations that make many a study about the impact of policy-oriented research in the social sciences so disappointing (for instance, Van de Vail, 1980). The receptiveness of policy-making bodies to sociological knowledge is much more determined by the terms of the relationship between the researchers and the other parties involved in a policy decision, rather than by "paradigms" and other intrinsic qualities of the social research process.
5 DISCUSSION

The foregoing analysis may be helpful in understanding the actual lack of utilization of social science knowledge in public policies. At the same time, the analysis adds to our understanding that this state of affairs is not of a temporary, passing nature that only requires more intensive and serious efforts on the part of the social sciences towards rationalizing the policy-making process and environment as many a sociologist might think. It is essential in the relations between social science and policy. There is no way out.

The tenor of this analysis is not to be interpreted in the sense that social science research oriented towards policy issues is a useless undertaking, a view that would only lead to ruthless pessimism. My argument is not to be interpreted as a plea for ad-hoc policies. In this respect I do not endorse Lindblom’s position, who makes his incrementalist approach not merely as the more realistic one, but also as the right and best strategy towards solving policy problems as they arise. The value of our analysis has to be found in a sharper delineation of the problematic relationship between social science and public policy than is generally pursued, in order to be able to define the limits of the capacity of penetration of social science knowledge. After this delineation, the argument is more open - within the essential limitations of its potential impact - to reconsider the possibilities of improving policy-oriented social science research. The line is drawn, but it remains a main responsibility for sociology to increase, if not the acceptability, the accessibility of public policy in context and consequences for rational discussion that leads to conscious committal (see Van Lier, 1980:19). Or, as Etzioni (1968:300) states, the mixed-scanning strategy "generates demands for some scanning of the unfamiliar and for occasional reviews of alternatives excluded by the prevailing community-of-assumptions and refuses to sanction adjustment of the ends to the means".

This attitude, however, demands a lot of imagination and scrutiny on the part of the sociologist, as much in his capacity as a speaking citizen as a social researcher. Moreover, our analysis has shown that information on a scientific basis may reduce uncertainties concerning specific aspects of a decisional situation, while adding to the same process of decision-making.

Finally, the argument needs two more brief clarifications that if elaborated may cast new light on the interconnection of social science
knowledge in public policy.
The first clarification refers to the suggestion contained in our analysis so far that public policies mainly and ultimately are to be considered as a product of the political configurations to date. A major challenge to this view, however, is that government policies are only slightly determined by partisan politics in accordance with Lindblom's term, but probably as much or even more by the prevailing socio-economic factors (Aquina, 1978). These small margins of public policy refer to the almost philosophical question of planned versus unplanned change and the limits of human intervention in societal processes.
The notion of utilization is a second aspect that needs clarification. Generally, utilization of social science knowledge is seen by many a sociologist as the direct evidence of use in actual policy-making. However, if one looks at relevance in terms of policy courses of action under the decisive impact of political configurations, then the deliberate neglect or bypassing of available scientific research findings for political, or any other reasons is equally part of the receptiveness complex as is direct utilization. Not using information, not seeing the relevance of available knowledge, the imposition of ignorance on others and so on is as vital a part of the decision-making process as is "normal" utilization. Non-utilization is not to be interpreted as resistance to innovations or recommendations only, but as part of the whole system of knowledge processing.
Unfortunately, most sociologists withdraw from the scene the moment they have presented their findings and recommendations, if any. The transformation of their work into a political resource does not, as a rule, form part of the direct experiences of the social scientist. The sociologist who sees himself as a "problem solver" might have a distorted image of his position, and consequently of his potential contribution. In the same vein, the concept of social engineering might be misleading.

After so many ill-fated social research programmes that were supposed to be policy-relevant, the need for applied sociology as such is to be questioned. More theory-oriented research is needed as well about the transformation conditions and transformation processes of social knowledge into policy-making. This essay is meant to be a contribution to this awareness, in accordance with Kurt Lewin's admonition that nothing is as practical as a good theory.
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