
The Use and Value of Social Science Data for Government and Public Administration

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It is a particular honour and privilege for me to speak to an audience of international experts on the occasion of this meeting on the "Value of Research Data for Government and Business". My paper is not to be interpreted as an invitation to create new theories on the social benefits of science nor is it a study based on a variety of empiric material and interviews. It is rather a kind of qualitative case study relating your scientific work to practical problems. It also represents my personal view of the problems on hand.

A proper picture of the use and value of social science data for government and administration can be painted only if the use of social research results for politics as a whole is considered. In the Federal Republic of Germany there has been a long tradition of debating that subject in detail, a debate which is still going on. Numerous political statements have been made to the effect that political advisors and decision-makers need social science research results, above all scientific evidence in the form of facts and figures. I am quoting three examples of such statements made by different political groups at different times:

"If it has been possible to start relevant research work earlier, some of the labour market problems confronting us today might have been tackled in a better way. At that time it might

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have been possible to take early measures to alleviate labour market problems. Today the problems are pressing and we sometimes have to take measures which seem appropriate at the time." (From a 1967 statement by the Free Democratic Party on labour market research)

"A foresighted policy must be based on sufficiently meaningful advance information such as the medium and long-term labour market estimates and projections of labour statistics. We must support in particular the adjustment of the labour market to industrial and technological developments through labour market and occupational research." (From a 1969 statement of the Social Democratic Party)

"Above all I expect the social sciences to help us imagine future developments and, instead of merely issuing increasingly resigned warnings against the risks of technology, finally to attempt to identify the opportunities for shaping the social and economic structures of our technology-based society. I hope that social scientists will use their imagination and take up the burning issues of today, thus maybe abandoning their common self-centred approach." (Federal Research Minister Dr. Heinz Riesenhuber at the Berlin Science Centre for Social Research on November 15, 1982)

These three quotations reflect the prevailing expectations concerning the contribution of the social sciences to politics and the value of their results for government and administration. The social sciences are expected to make proposals for the organization of social and economic structures and to provide data for the perception, analysis and understanding of an increasingly complex social and economic reality. In a lecture held in Bonn in October 1987, Professor Kurt Biedenkopf, who has been involved in political practice for decades, described the contribution of social science as follows:

"Policy-makers, like those who are concerned with the rational design of a component of society such as industrial enterprises, need scientific advice. A political approach can only be rational if the assumptions on which political action is based correspond to the real-life situation. Political experience gained from previous action is not enough to guarantee such correspondence. Society is constantly changing due to the application of the rapidly growing scientific and technological knowledge, the ever increasing prosperity, the rapid development of man's options for life in our industrial world and due to the change of orientation and priorities regarded as a change of values. Therefore the experience gained with former realities is no longer valid.

Politics is supposed to adjust social institutions, standards and conditions to the changed reality. This requires a reliable analysis of the changes that have occurred. Political reproduction of former realities entails a waste of resources and a loss of authority and legitimation just as much as action based on improper assumptions about present realities. A rational policy, i.e. action which pursues a particular goal and relates to reality, must exploit all opportunities to perceive reality and identify its prevailing patterns. This implies that it must be open to a critical evaluation of methods, to an objective, unbiased, i.e. scientific counselling. Such counselling is a prerequisite for rational policy-making."

The extent to which social science counselling has been used and valued in the Federal Republic of Germany has varied during the past few decades.

After the collapse of the Third Reich in 1945 and during the development of a democratic structure for the Federal Republic of Germany from 1949 onwards, social science developed simultaneously

with the Economic Miracle up to 1960, without hardly any relations evolving between the two. The rediscovered opportunities of empiric social science research for commercial market and public opinion surveys on the one hand and for scientific and political purposes on the other hand were seized and unbiased use was made of research results, in particular quantitative social research. Everyone was happy about the newly created or rediscovered instruments of opinion-polling and scientific statistics, the results of which were in most cases used in daily work without any further consideration, and put to the records as rapidly as they had been produced. This is the reason why a large part of the documented results of empiric social research of these early years do no longer exist today or are virtually not available: Comparative or secondary analyses, longitudinal studies or panels gained acceptance only very slowly.

In the now almost legendary 1960s a dramatic change occurred. Not only was a scientific debate prompted by the Frankfurt School, which at times took the form of a social movement between 1968 and 1970, but also a new general understanding of the significance of empiric social research emerged. This phase is characterized by the importance of social science as an instrument for analysis and soon also for planning and control. A rapidly changing society which was increasingly influenced by science and technology attempted to analyse and understand itself as well as to make plans for the future and avoid major risks by using social science research. As a result, too much was expected of social science, which, compared with numerous other scientific social science, was still a young discipline. From the mid-1970s onwards a realistic, matter-of-fact view of the possibilities of social science was gaining ground, and this view still prevails today. The words of Kurt Biedenkopf which I have quoted reflect these realistic expectations vis-à-vis social science, which is an indispensable instrument for counselling and which can provide the knowledge and criteria necessary for a proper evaluation of an increasingly complex reality but which is not able to furnish solutions to existing problems.

It should also be mentioned that the dramatic revival in social science in the Federal Republic of Germany in the 1960s not only prompted a dynamic growth of this academic discipline but also led to the establishment of numerous institutions which are the keystone of today's social science infrastructure in our country. I am referring to the foundation of the central archives for empiric social research (Zentralarchiv für Empirische Sozialforschung) in Cologne under Professor Erwin Scheuch in 1960, the establishment of the Berlin Science Centre for Social Research (Wissenschaftszentrum Berlin für Sozialforschung) in 1969 – which was initiated by members of the German Bundestag and backed by all parliamentary parties of that time – the foundation of the Centre for Polling, Methods and Analyses (Zentrum für Umfragen, Methoden und Analysen) in Mannheim initiated by Professor Rudolf Wildenmann as well as the foundation of the Social Science Information Centre (Informationszentrum Sozialwissenschaften) in Bonn initiated by the Federal Research Ministry in the 1970s. I am also referring to the considerations and concepts concerning the socio-economic panel in the Federal Republic of Germany which has been working for about ten years now. These institutions cooperate with the numerous sociological institutes at German universities with the aim of developing social science in the Federal Republic of Germany. Together with the well-known economic research institutes and a number of political science institutions – German Peace and Conflict Research was also given its organizational framework in 1970 – they are partners for policy-makers and administrators.

Policy-makers and administrators increasingly appreciate the availability of social science data which have been yielded by comparison of national studies or by international surveys. For that purpose,

numerous institutions in Europe have been cooperating for quite some years now within Eurobarometer, while at the international level there is cooperation within the International Social Survey Project Program (ISSP). I believe that the creation of the society of social science infrastructure institutions (GESIS, Gesellschaft Sozialwissenschaftlicher Infrastruktureinrichtungen) in the Federal Republic of Germany in 1987 has provided additional opportunities for international empiric social research cooperation, for data exchange, surveys under joint programmes and comparison with national data. I can assure you that the Federal Ministry for Research and Technology will support relevant efforts both nationally and internationally within e.g. the European Communities or OECD. Undoubtedly, this Conference is an excellent opportunity to discuss and agree on the subjects, methods and organizational forms of such an intensified cooperation.

After having reviewed these four decades of social science research and its use in the Federal Republic of Germany, we may on the whole agree with Ansgar Weymann and Matthias Wingsens, who make the following statement in their recent study on the use of sociological knowledge in education debate (Bremen 1988):

"In today's society, political decisions and measures must be carefully considered, prepared and legitimized during a public debate. This debate on the objectives, values, instruments, strategies, costs, etc., of political action includes the use of social science knowledge as a major aspect: social science data help identify the major social problems as well as social factors and causes."

Similarly, C. Weiß states the following in his introduction to the anthology "Using social science research in public policy making" (Lexington Heath, 1977).

"Thus social research may sensitize decision-makers to new issues and turn what were non-problems into policy problems... In turn, it may convert existing social problems into non-problems (e.g. marijuana use). It may drastically revise the way a society thinks about issues (e.g. acceptable rates of unemployment), the facets of the issue that are viewed as susceptible to alteration, and the alternative measures it considers. Global reorientation of this sort is not likely to be the outcome of a single study on even one specific line of enquiry. But over time and with that accumulation of evidence, such use have far-reaching implications."

Of course, all these general statements hold also true for the use of social science data in public policy and administration. I should, however, like to quote three examples illustrating the problems which occur today – maybe more clearly than in past decades – when social research data are used by policy-makers and administrators. I should also like to present the current debate on these problems from an administrator's point of view.

Public opinion research in the form of election polls now use very sophisticated methods and is a major topic of public debate in all western democracies. Many, half joking half desperate, are already speaking of the transition from democracy to "pollsterocracy": the pollsters take over power in a representative democracy or are trying out elements of such a take-over through the interplay of public opinion polls and the media. Undoubtedly, at least in the Federal Republic of Germany, public opinion polls yield significant results concerning the current views on the election prospects of the political parties represented in the Federal Länder parliaments and concerning the popularity of individual politicians. This is why such opinion polls may have an influence on existing coalitions and on the fate of individual politicians. Moreover, public opinion polls reflect the changing

priorities of public debate and thus, again together with modern mass communication, foster a permanent election-campaign atmosphere in many of our western societies. It is obvious that such influences do not create a favourable environment for the fulfillment of administrators' long-term tasks nor does it enhance an objective assessment of future development. Serious proposals have been made for interrupting public opinion polling for a certain number of weeks or months e.g. before major elections. It is quite understandable that these proposals provoked protest from the social scientists concerned as well as from the media and the public, who enjoy playing with the sometimes rapidly changing figures on the evaluation of political parties, personalities and subjects.

Informal arrangements have meanwhile been made to the effect that publication of the results of public opinion polls be stopped about one week before major elections, although the studies will continue up to the election day. In some countries it has become common practice to interview voters leaving the polling station and ask them for whom they have voted in order to obtain more exact data on the changes in voting behaviour of specific sections of the population. I personally consider this practice rather problematic, because it verges on violating the principle of secret ballot. As public opinion research on political attitudes and election behaviour should and must maintain its importance as a factor supporting change in a living democracy, we in this circle of international experts should consider seriously which developments can be identified early on and may thus be rejected.

Let me now quote a second example. We all know how important economic research is for the modern social welfare state, which aims to achieve full employment, economic growth and monetary stability. In the past decades researchers worked hard to establish a perfect data system for national economies. Theoretical economics and the empiric economic sciences developed an impressive set of indicators, which seemed to make possible accounting at the national, regional and international level. The percentage growth of the gross national product - monthly, annually or over many years - seemed to provide an objective yardstick for measuring the development of prosperity, full employment and monetary stability. It was widely believed that the economic sciences had thus been admitted to the select circle of the exact empiric sciences and a sound basis created for economic decisions to be taken by policy-makers and administrators. Each per cent up or down the scale of gross national product development usually not only prompted a new wave of public debate on economic policy but in most cases also predetermined economic policy to a considerable extent.

In the meantime, researchers and policy-makers have had to realize that this supposedly elaborate data system was incomplete at several crucial points and was thus misleading. It turned out that major social indicators such as the distribution of income and property among the population of a national economy or the development of the health and pension systems had not been taken into account when considering GNP growth. This means that considerable economic and social problems may arise without the data system reflecting them. Furthermore, healthy air, clean water and unpolluted soil were included as zero values in national accounts - a false decision whose revision requires considerable efforts and funds worldwide. Finally accounting has so far also ignored the safety and durability of goods by only considering their new acquisition. Every car accident means an increase of the gross national product as a result of the injury to persons and damage to property it causes, whereas safe driving and long-lived vehicles are not taken into account. Every large fire and every tanker accident means a marked increase of the gross national product, while safe ships and the prevention of industrial accidents are not included in national accounting. And finally it has been generally realized that the work performed in private households is not taken into account when

the gross national product is calculated. Today efforts are being made worldwide to develop new national accounting systems which also include some of these social and environmental indicators. Nevertheless, we have to ask ourselves – precisely when considering this example – whether it is not a mistake of economic and science theory to expect that complex social or economic processes can be identified and described by a data system. The question arises whether processes such as technological and social change or population and family structure developments throughout the world could not be better described by identifying changed attitudes and philosophies as the causes of such developments.

My third and final example is taken from my own field of work. For more than thirty years now there has been an intensive public opinion research concerning the acceptance of technology in the Federal Republic of Germany. Researchers like Professor Elisabeth Noell-Neumann and Professor Erwin Scheuch started relevant activities at a time when technological development was not yet a subject of public interest in the Federal Republic of Germany. At the beginning of the 1980s researchers found – to the public's surprise – that public opinion vis-à-vis technology had apparently changed completely in less than 20 years. Asked whether they considered technology rather a blessing or a curse, a question which the Allensbach Institute for Public Opinion Research posed every year, 72% of the population answered "rather a blessing" in 1966, while in 1984 this percentage had gone down to 32%. Technology was considered a curse by 8% in 1966 and by 11% in 1984. In 1966 17% answered that technology was partly a blessing and partly a curse, in 1984 this percentage was 54%. Within less than twenty years the majority of answers had changed from positive to ambivalent. This result, together with answers to similar questions and the results of technology acceptance studies in other industrialized nations, initiated a lively debate in the 1980s, which involved not only German social research but also the public media. This debate culminated in blaming a particular "hostility toward technology" on the German people and led to various profound considerations about the German nature as such and its lacking sense of reality.

In the past few years, studies have been conducted with support granted by the Federal Ministry for Research and Technology from which two conclusions can be drawn:

1. What has obviously changed is not the basic attitude towards science and technology – there are still high public expectations as numerous studies have shown. What has changed is the meaning of "blessing" and "curse" when related to technology: The majority of the German population has realized that technological development and progress cannot be qualified by such metaphysical terms. What is essential is the use to which technology is put. Qualifying technological development as partly a blessing and partly a curse is therefore the only possibility to deal with this question rationally. Therefore the change in percentages is not a sign of hostility towards technology but shows a profound understanding of the risks involved in technological development and the opportunities it presents, which must be perceived and used in a responsible manner.
2. Past efforts have shown that it is possible to compare polling data on technology acceptance in various countries, which is not self-evident in view of the semantic and interpretative problem I have just mentioned. These comparisons have, however, also shown that the process of accepting the use of technology is tied to cultural development in all industrialized societies including e.g. Japan and southern European. This cultural development is increasingly characterized by the view that technology is an option of society. Only if this cultural framework is taken into account – as repeatedly emphasized above all by Professor Scheuch – can polling data be properly interpreted

and yield useful results.

Let me conclude my report by summarizing my remarks. In the Federal Republic of Germany today, policy-makers and administrators make extensive use of social science data which have been gained by economic research, election and public opinion surveys, panel studies and by means of social indicators. Empiric social and economic research are highly valued instruments used by policy-makers and administrators when making decisions. The importance in particular of data yielded by public opinion polls is rather exaggerated than underestimated. The disillusionment which, since the beginning of the 1980s, has been replacing the former euphoria about the planning and control functions of social science research results did not limit the manifold uses of such data. I have the impression that their use has even increased due to the empiric character of these data. Gaps in the infrastructure for social science data collection and processing or methodological surveying have been closed in the past few years, partly through government action.

Today, policy-makers and administrators feel an increasing demand for a theoretical framework for understanding and making proper use of an increasing flood of well-founded social science data. Just as the natural sciences must constantly guard against the reduction of empiric research to mechanist explanations, it should not be the ambition of the empiric social sciences to adopt the mechanistic philosophy in a belated effort. The examples which I have presented to you illustrated this risk.

Socially relevant figures and facts, even when collected over a longer period of time, only represent individual structural elements and do not explain the causes nor do they identify the forces of social change. They may draw attention to the wrong priorities or lead to considerable misallocations of government resources, if they are considered or interpreted separately or gain a dynamic of their own – a danger which is always imminent when complex events are represented by apparently objective figures. In particular the experts involved in social science surveys and the interpretation of relevant data must be told over and over again that figures and data are not a substitute for reality and its evaluation but are symbols for elements of real life. If, in the future, social science data are to be efficiently used by policy-makers and administrators, the cultural and theoretical interpretation of data must keep pace with data production or even precede relevant surveys.□