SOCIAL SCIENCE INFORMATION & DOCUMENTATION - TIME FOR A STATE OF THE ART?[*]

By Hans-Christoph Hobohm

When I was working on a chapter for the UNESCO World Social Science Report (Hobohm 1999) on the topic "Social Science Information and Documentation" being a conscientious information professional I did extensive searches on the topic of social science information needs and behaviour in most relevant information systems. The more I progressed the more I could not believe the results thinking that I did some mistakes in the information retrieval. The databases like LISA, ISA or even Social Science Citation Index did not give any recent references to my subject. Finally I contacted the persons of whom I knew they had worked in the area: Maurice Line, Michael Brittain and Arnaud Marks. They confirmed my research skills which was reassuring on the one hand but on the other I started to worry about the situation of the social science information field. Since the investigations known as the "Bath studies" undertaken by Maurice Line and others, there has been very little new research or even replication of the former studies in the field (Maurice Line and Patricia Layzell Ward will report on that in the current session[1]). Therefore, in a possible State of the Art one could state that there are no new findings since 1970 and would turn to other business. But what really matters is not the mere lack of subsequent studies but the poor practical consequences drawn from the Bath studies. As Maurice Line will ask himself in the next paper: "what was done about it? (...) Nothing, except that the studies were widely cited for a long time. (...) The citations were made by academics; but (...) the research was intended as a basis for action, especially by producers of secondary tools." (Line 1999)

The Bath studies

In fact the main studies on social science information behaviour in the 70s revealed that social scientists do not use formal information tools like bibliographies or reference databases, but rather rely on personal

---

[*] Paper presented at the 65th IFLA Council and General Conference, Bangkok, August 20-28, 1999

[1] Unfortunately I could not convince Arnaud Marks, the former chair of ICSSD, to come and Michael Brittain would have liked to but is currently on the other side of the world. Catherine Saugy, actual chair of ICSSD unfortunately did not answer my invitation to join us today.

recommendations, browsing in journals, and citations found in other publications (often referred to as citation chaining) (Line 1971, 1980). They rely on monograph as well as on periodical literature, but their own citations refer to a large extent to primary data. Social scientists often use literature outside their own discipline (exceptions: psychology and economics) with the consequence that one may not always find relevant resources in just one database or information system. The data used by the social sciences does not always come from social science research, but is mainly taken from other contexts not indexed in social sciences information systems. Unlike the other broad scientific areas, social science information is not only used by researchers, but also by practitioners.

Generally, less than 10% of both scientists and social scientists make regular use of formal information resources such as databases in even a mediated way, although in the beginnings of the online information era it was observed that social scientists were more frequent database users than natural scientists (Stoan 1991; Hurych 1986). In contrast, humanities are generally reported in the few empirical studies to be heavy library users, but they use formal secondary services even less because they prefer browsing in open stacks arranged by subject classification (Stoan 1991, 244-6). Since some of the social sciences are fairly close to the humanities (e.g. history or political science), this is also an important element for them. Even scholars who have been trained in information retrieval techniques, or who are given more convenient access to the databases, continue to show the same information-seeking behaviour (Stoan 1991, 254).

The Bath studies made clear that social scientists do not work as systematically as the information producers suppose. Bibliographers and reference librarians seem to overestimate their impact or even their possible support for social science research. They are too far away from the invisible college of informal contacts and non-systematic flow of information. Social science librarians - more than librarians working for other disciplines should be aware that for their clients they are only one information resource among others.

The world "after Bath"

When Stephen Roberts stated clearly 1980 in the *Encyclopedia of Library and Information Science*: "...that the present resources data base is not designed with the real interests of the social sciences or social scientists in mind" (Roberts 1980, 73), one might still re-subscribe to this assertion about twenty years later. Most databases and information systems - even the newer ones based on internet technology - do not really have the user in mind but only the amount of data to be treated. And he also writes:

The involvement of social scientists in their own information activities has been an implicit one (albeit at a low level); if every thing it shows a substantial contrast to the scientific, technological, and medical fields, where researcher and practitioner involvement in information activities has been far greater and more profitable. (Roberts 1980, 92)

Another general review article about ten years later still points out:

The academic social sciences are not at the leading edge of information dissemination technology for reasons such as: costs; interdisciplinary structure; imprecise terminology and fuzzy-edged concepts of the subject areas; and the possibly poor prospects for return on investment. (Preschel/Woods 1989, 282)

The information world has changed dramatically "after Bath". The seventieth and eighties mainly saw the development and spread of big databases. Online information systems were at first considered as big magic boxes where you can get all relevant information just by pressing the button. This has turned out to be an illusion. Several studies revealed the limited effectiveness of online retrieval systems, and most of the studies on computer retrieval performance have been undertaken in natural sciences where conceptual and terminological problems are far less than in social sciences.

So one can say that social sciences have a twofold problem with information systems: the rigid methods of the computer with regard to storing and retrieving information, and the fuzzy object and informal scientific behaviour of the scholars. Information retrieval is inherently uncertain and incomplete because on the input side you never really know for which circumstances a document indexed will find a future use, and on the output side - the moment of information retrieval - you do not know which context has produced documents you will find. And necessarily it has been different in most of the aspects, not only in terms of the date of creation. And finally there is the indexing process itself which is problematic regardless if it has been done by a human in intellectual indexing or by a machine in automatic indexing. This holds particularly true for the more hermeneutic or narrative disciplines: it seems obvious that indexing will not reproduce an exact counterpart of the original document.

Scholars generally build up their own information collection, with a great variety of material from conference papers to photocopied articles, pre-prints, research reports, books and general reference materials. Several studies on information behaviour indicate that the information-seeking process always starts from the personal collection. Especially for the social sciences and humanities scholar it is

considered the most important source of information. The reason for this is the convenience of use and the high degree of specialisation sometimes reached by social scientists. They consider their institutional libraries only as last resort for more expensive or seldom used material.

This, in fact, coincides with a definition of traditional library services as available to a potential user 'just in case' of need. More modern library concepts follow the new management trend of delivering their service 'just in time', no longer relying on not foreseeable potential use, but rather on actual needs. Of course, this paradigm change (as it is felt in the library world) has become possible mainly through the existence of information and communication technology and elaborate co-operation models for resource sharing and delivering by libraries. The most timely information resource for the scholar will remain his own collection. But with increased accessibility of resources on the Web, one may speculate that the library will lose importance and that even personal collections will change when Internet services become more reliable.

New conceptions in information science and practice

Already the above mentioned aspect would propose a new look at social science information needs and behaviour. But there are still three other areas which heavily suggest a re-investigation. The Bath studies were based to a large extent on bibliometric and scientometric methodology. Bibliometrics had to face severe criticism from time to time. Often it was considered to be too positivistic a method, exaggerating only one aspect of the scientific communication process and being founded on a far too small empirical basis. In fact, this criticism does not apply to the Bath studies as they used a very sophisticated methodology seldom encountered afterwards. Mostly recent bibliometric studies rely on the big databases and among them on the Citation Indexes from ISI. With the amount of data increasing in the databases some new ideas have been developed in bibliometrics for social sciences. The concept of cognitive mapping, for example, has been put forth for social science applications by French researchers mainly in order to find new navigation tools for database retrieval (Meter/Turner 1994). One may speculate that since the 70ies bibliometric methodology as well as its empirical basis have advanced to such an extent that a repetition of at least some aspects of the Bath studies might generate new insights into the information and publication behaviour of social scientists in the 90ies. But this is not the only methodological element that might have changed since then.

Systems design and information science in general have discussed several new concepts which try to overcome some of the problems with the first very rigid

database and information retrieval systems which perhaps are the reasons why scientists do not use formal information systems. In contrast to the database producers information scientists have perhaps learned from studies such as INFROSS that the information seeking process is not always as simple as thought before. Discovering the importance of informal information channels information science reconsidered the concept of the user and proposed to enlarge the perspective of "information behaviour" to its context in the real world. They discovered the user as a living and working person indeed. Whereas early information science mainly followed the structuralist approach of a simple sender-receiver model in the communication and information transmission process newer studies more and more integrate the world of the user in their reflections (cf. Vakkari et al. 1997). This has been interpreted as a radical change if not a completely new paradigm under which it might also be interesting to reconsider social science information behaviour.

With the advent of the new information technologies it often has been stated that the information infrastructure as well as the information production has undergone radical change too. In several aspects scholars have taken over some roles formerly held by the information professionals. Cataloguing, for example, is supposed to be done by the authors themselves when they are producing the "metadata" for their electronic publications. Mainly in Science disciplines some scholarly societies or associations have created their own repositories of electronic documents which may replace traditional libraries. When we are considering the forces of internet technology mainly as one of a "communication machine" we see that they meet most of the informal information needs and procedures which are even more important for humanities and social science scholars. They allow to give access to the above mentioned private scholarly collections which are now more and more digitised and consequently placed on of each social scientist's web-site. It is obvious that not only the information behaviour has changed since the 70ies but also the research methodology and its instruments.

World-wide socio-economic implications

Both Myoung Wilson's and Ma Wengfeng's & Wang Liqing's papers yet address another argument for a re-evaluation of Social Science Information & Documentation but on another scale. Both papers pinpoint indirectly the reason for a certain loss of interest in these sort of studies in some countries and they raise arguments for them at the same time. In the light of their arguments it would be worth carrying out an in-depth study to reveal the amount of economic loss resulting from sub-optimal information infrastructures in the social sciences especially for and in developing countries. Very much like Myoung Wilson also

Kishida and Matsui (1997) observed a net correlation between the social sciences production and the wealth of a nation (in terms of the GDP) but they also state a general concentration of the titles mentioned in the IBSS in very few countries. This has been described in depth by Michael Brittain who called one of the characteristics of the social sciences their parochialism. Sometimes it is even national policy not to allow users from outside the country to access the information resources because they are considered national property and one fears to give away valuable advantages over other nations. In view of the developing gulf between the information rich and the information poor nations some countries decide to close down their information highways. This, of course, increases the problem of the social sciences which are even more confined to provincialism although international co-operation would nowadays be more necessary than ever.

The problem is even bigger when the indigenous information resources in the developing countries are not well known and most of the information seeking behaviour is aimed at foreign secondary services for the social sciences (Tyagi 1994). What is felt as a distorted information flow on a world-wide scale is perceived as an even more serious drawback in the area of applied social sciences for practitioners working in developing countries. When national social science documentation centres in the non-western world have problems to access essential information how could one think that social workers based in the villages or in the socially deprived city areas of the developing countries might have access to information relevant to them. When one talks about social and cultural differences between the areas in the world this aspect of the big informational differences is one of the most critical problems in the social sciences world-wide: important knowledge may be present in some information sources over the world but the mainstream information flow is western, non-applied and too expensive anyway. In general, one can state that networking, co-operation and international collaboration have decreased after a period of euphoria - APINESS for instance or even ICSSD are not seen as the potential partners for interregional or international efforts supporting the social sciences information flow down to those who really need them. Not only on the academic level of reconsidering the Bath studies but also under world-wide social and economic aspects there is a need for new endeavours in social science information.

References:

Brittain, J. Michael: Cultural boundaries of the social sciences in the 1990s; new policies for documentation, information and knowledge creation. - In: International Social Science Journal, 41 (1989), 105-114

Hobohm, Hans-Christoph: Social Science Information & Documentation. - In: World Social Science Report, Paris: UNESCO, 1999, 172-181

Hurych, Jitka: After Bath: Scientists, social scientists, and humanists in the context of online searching. - In: Journal of academic librarianship, 12 (1986), pp. 158-165

Kishida, Kazuaki; Matsui, Sachiko: International publication patterns in social sciences: a quantitative analysis of the IBSS file. - In: Scientometrics, 40 (1997) 277-298

Layzell Ward, Patricia: Capitalizing on Past Investment. Why We Need Studies of Social Science Literature Again. - Paper presented at the 65th IFLA Conference in Bangkok, August 1999

Line, Maurice B.: The Information Uses and Needs of Social Scientists: An Overview of INFROSS. - In: ASLIB Proceedings, 23 (1971), 412-434

Line, Maurice: Social Science Information - the Poor Relation. - Paper presented at the 65th IFLA Conference in Bangkok, August 1999

Ma Wengfeng & Wang Liqing: Toward Twenty First Century: Research of Social Science Information Services of University Libraries in China. - Paper presented at the 65th IFLA Conference in Bangkok, August 1999

Meter, Karl van; Turner, William A.: Cognitive Mapping: The German FORIS Database and Sociological Abstract's Aids Research. - In: Informations- und Wissensverarbeitung in den Sozialwissenschaften, ed. by H. Best et al. - Opladen: Westdeutscher Verlag, 1994, 257-274

Preschel, Barbara M.; Woods, Lawrence J.: Social Science Information. - In: Annual Review of Information Science and Technology, 24 (1989) 267-292

Roberts, Stephen Andrew: Social Science Libraries and Collections. - In: Encyclopedia of Library and Information Science, ed. by. A.Kent et al., vol. 28, New York etc.: Dekker, 1980, S. 60-94

Stoan, Stephen K.: Research and Information Retrieval Among Academic Researchers: Implications for Library Instruction. - In: Library Trends, 39 (1991), 238-258

Tyagi, Krishan G.: Information Sources in Social Sciences. - INSPEL, 28 (1994) pp.405-415

Vakkari, Pertti; Savolainen, Reijo; Dervin, Brenda (Eds.): Information Seeking in Context. - London: Taylor Graham, 1997

Wilson, Myoung C.: Evolution of social science Information Sources in Asia: the South Korean Case. - Paper presented at the 65th IFLA Conference in Bangkok, August 1999

Hans-Christoph Hobohm
University of Applied Sciences Potsdam
Friedrich-Ebert-Str. 4
D-14467 Potsdam
Germany
hobohm@fh-potsdam.de
Fax: ++49-331 5801599

Social sciences were not widely applied. Over the past few years, however, taking into consideration the relationship that local people have with forest lands has become one of the major concerns of forest managers. One of the first interrogations a social scientist may have would be about the nature of his interlocutors: Who are the individuals that are involved in forest management and where are they? This knowledge about the 'object' is not something which is given a priori. It can only be established little by little as the investigator reveals the relations between all the different agents involved. The remaining sections will describe the state-of-the-art information- and knowledge-management practices and technologies (along with their constituents) in use in the construction sector. From the Cambridge English Corpus. This special issue presents the state-of-the-art in methods for robust natural language processing and understanding. From the Cambridge English Corpus. In this section we briefly look at how state-of-the-art agent-oriented methodologies deal with the environment. From the Cambridge English Corpus. The study revealed an appalling level of ignorance on the part of board mem