

SOCIAL SCIENCE INFORMATION - THE POOR RELATION*

By Maurice B. Line

Abstract: Several characteristics make the social sciences less amenable to bibliographic control than the sciences: inherent instability of the subject matter, the lack of a terminology that is common over time and across countries, strong political and national biases, low penalties for duplication of research, and an apparent lack of interest on the part of social scientists in improvement of information services. A large body of research carried out 25 years ago shed much light on the information needs and uses of social scientists and indicated means of improvement, but led to no action. In an information world radically changed by the Internet, we need to carry out new studies into information uses and needs.

Thirty years ago I initiated some research into social science information needs and services. The first study was called INFROSS - Information Requirements of the Social Sciences - and aimed to discover how social scientists, practitioners as well as researchers, used information. One of the reasons I gave when seeking funding for the research was that nearly all previous studies of information needs and use had been in the natural sciences, and I considered that there was a danger that solutions adopted for science would be applied to the social sciences, without thought for the many differences between the two broad areas of study. Let me summarize some special characteristics of the social sciences.

What makes the social sciences different?

First, there is no agreement as to what constitutes the social sciences, beyond sociology, political science and economics. Most would include social anthropology, social psychology and management; some would include education, and others history. The common thread is that the discipline is concerned with human beings interacting or acting in groups. The interaction of largely unpredictable with other largely unpredictable beings produces great scope for instability and uncertainty. Most of the social sciences are relatively young, and scarcely organized as coherent disciplines.

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There is also considerable diversity between different social sciences. Economics, one of the younger social sciences, has in econometrics a sub-discipline that is virtually a branch of mathematics, and might therefore be considered a 'hard' science (though it has to be said that most of the data fed into econometric models is very 'soft': the superstructure may be meticulously constructed, but the infrastructure is often shifting sand). Some social sciences are soft through-and-through: the probability that two social surveys carried out on the same subject in the same district within a few months of one another will agree at all closely is not high - one has only to look at political polls.

It follows that concepts and terminology are not international, or consistent over time; there is some agreement within certain regions and across similar political systems and cultures, but even then there tends to be a national bias. In consequence, subject control and access are far harder than in the sciences; by comparison, the humanities are far more amenable to control. And unlike the sciences, nearly all social scientists write in their native language (some would say in their own private language); there is no *de facto* common language. These factors together mean that it is much harder to develop satisfactory international information services.

Because of a relative lack of coherence and consistency in the social sciences, and because the subject matter is very unstable, the penalties for ignorance of previous work in supposedly similar areas are far less than in the pure or applied sciences. And while there are certainly associations (both visible and invisible) of social scientists, they are not nearly so well organized to speak with one voice. Scientists across the world can and do make their views clear, on information services as on other topics - witness the several congresses that have taken place on information problems and needs in the sciences. The net result of all this is that social scientists do not seem particularly concerned as a body about information services or deficiencies, not apparently are they organized to say or do much about it.

In any case, the market for information services is small; the total world market is quite large, but for the reasons given above international services, where they exist at all, have to be supplemented by national services. Nor is the market a rich one. This perhaps helps to explain why there are so many small indexing and abstracting services, and why almost any social scientist has to search at least three or four to obtain reasonable coverage of a topic. Very few of them do, of course, partly because it is too much trouble, partly because they do not think it matters much if they miss something.

We found out quite a lot from INFROSS about the needs and uses of social scientists in the United Kingdom - not merely researchers, but practitioners of various kinds. This knowledge was supplemented during a second research project, called DISISS - Design of Information Systems in the Social Sciences. A main part of this was a massive bibliometric analysis of citations, before it was possible to do machine analysis on large bodies of computerized data. This had two features that were in those days unique to citation studies, and are still very rare: they included references in books as well as journals, and references in lowly ranked as well as highly ranked journals. The patterns of citation revealed by the different sets of references proved to be quite different; in the light of this, and of the fact that monographs are almost as important as journals in most social sciences, it astonishes me that subsequent social science citation studies draw confident conclusions from the analysis of references restricted to journals. One finding of our studies was a very heavy dependence of subjects such as sociology on other disciplines; this clearly magnifies the problem of providing services.

What to do about it?

DISISS was intended to offer some solutions to the information problems of social scientists, and to this end it included some other studies. One of these looked at the size and growth of social science literature, and produced much illumination and some surprises. Another examined coverage and overlap of secondary services in two fields. A third evaluated two information services in social welfare. However, the most interesting for the purposes of this paper was a practical experiment concerned with the optimization of indexing and abstracting tools, e.g. achieving the best balance between frequency of issue and size. No work has, to my knowledge, been done in this area before or since. Some interesting and potentially useful conclusions were reached.

Overlapping INFROSS and DISISS, another study took place: a three-year Experimental Information Service in the Social Sciences, aimed at researchers and teachers at Bath and Bristol Universities. This showed that a personal information service given by two persons, themselves both social scientists, was not only greatly appreciated, after some initial cynicism; it achieved a far better information flow than could have been achieved in any other way.

What was done about it?

What happened as a result of all this research, which we did our best to disseminate? Nothing, except that the studies were widely cited for a long time - too long, since inevitably some of the findings went out of date as the information

scene entered a period of dramatic change. The citations were made by academics; but, as said above, the research was intended as a basis for action, especially by producers of secondary tools. Unfortunately, it proved impossible to interest them. They tended to be either rather amateur bodies running shoe-string services, which almost certainly did not cover their costs, or big publishers, who were not interested in changing so long as they were making profits; no-one seemed especially concerned to give users better services. The only real chance of change was if new and better services put existing services out of business, but the field was not lucrative enough to attract much competition.

The points I made earlier in this paper about the social sciences are still, I believe, valid. However, my fear that social science information services would follow blindly science information services was misplaced: if they had done, they would be far better than they are now.

Where to go from here?

If previous efforts at improvement failed, what can we do now? There are three stages. The first is to make a new diagnosis. The information world has changed radically since INFROSS and DISISS. It is now possible to find all sorts of interesting things on the Web, if one is prepared to risk wasting a lot of time in the process. Some things can be found with far less effort than before; for example, direct access can now be gained to many datasets, including collections of statistics and social survey information. How far can access to this poorly controlled, hit-and-miss mass of unrefereed information compensate for, or complement, the inadequate miscellany of 'organized' services? Does it merely add confusion? Whether we like it or not, the Internet exists, and we need to know what sort of uses social scientists are making of it, and if and how it is changing their information habits. We certainly need to know how their information uses, and their perceptions of their needs, have changed over the 30 years since INFROSS. Uses are not difficult to ascertain, but needs are another matter; we tried in INFROSS to take a step back from uses and ask what research each respondent was involved in, but this took us only so far, and I would now favour the use of 'softer' methodologies like focus groups in addition to questionnaires, which seem to me essential if we are to get a broad enough sample. This time the study should if possible take place in several countries, using the same methods to make comparison possible. I would also carry out more bibliometric studies, not because they tell us much about either needs nor uses (they don't), but because they reveal a lot about interdisciplinary relationships, and they are now much easier to do than they were 30 years ago.

Then we need to make renewed efforts to see that something is done about whatever problems social scientists prove to have. We could of course just leave them to muddle along, and some might feel they deserve to be so left, since they seem to have done so little to help themselves. But our job as information scientists is not to criticize people for being as they are but to design services for them. I have never been happy about trying to redesign human beings to fit information services. We might have more success trying to provide access to the Web than we have been in trying to get producers of secondary services to improve them, since - at present, anyway - fewer commercial interests are involved.

This is not the first time that a plea has been made for new studies into social science information needs and services. Previous pleas have had no success because the persons doing the pleading - and here I must include myself - were unable for various reasons (mainly pressure of work) to do much themselves, because there were few others who seemed to be interested, and because sources of funds to carry out the necessary research were not found. Let's try again to make sure that information services in the social sciences are no longer the poor relation of those in science and technology.

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