SCANDINAVIAN SOCIAL SCIENCE IN INTERNATIONAL JOURNALS

O. PERSSON*

Inforsk, Department of Sociology, Umeå University, S-901 87 Umeå, Sweden

ABSTRACT

The publication of articles by Scandinavian authors is analysed using the *Social Science Citation Index*. An online search in *SSCI* revealed a stagnation of article production from the Scandinavian countries during the late 1970s. This may be due to an increase of applied research, financed by non-traditional research councils. Economics is the discipline that produces the largest number of articles in non-Scandinavian journals. Sociology is much more oriented to a Scandinavian public. There is also a tendency that Scandinavian journals, even when they are in English, are mainly cited by other Nordic periodicals. These data suggest that measures should be taken to stimulate basic research and international diffusion of Scandinavian social science research.

INTRODUCTION

A great deal of social science research, perhaps especially in Sweden, has been initiated and financed by governmental agencies in various sectors. this sectorization principle was gradually introduced during the first half of the 1970s. According to Elzinga (1980), sectorial R&D institutions in Sweden allocated in 1975 eight times more money to research than the traditional 'basic' research councils. Criticism of sectorial research has sometimes been based on the fact that the research has a diminishing relevance for basic science. Those who make use of research results consist less and less of research colleagues within the field. Instead, sights are set on those that have power over research resources.

This sectorization of research could be assumed to affect the publication habits of social scientists. Researchers have less time to spend on writing scientific articles, and the results of sectorial research may not always maintain a sufficiently high standard to be used as the basis of intra-scientific publication. Thus, the research process is often limited to the publication of results in grey report series with a limited distribution.

Another aspect of the social sciences is that, unlike the natural sciences, they are not based on common paradigms. This lack of a common paradigm may lead to a situation in which the social scientist experiences lesser compulsion to reach out to a broad international public than his or her colleague in the natural

^{*} Dr Persson is currently working at Inforsk (the Information Research Group). The research programme includes studies of information needs and uses, informal communication, evaluation studies and bibliometrics.

sciences. The reference group is limited to colleagues with similar options, often living in the same country.

Brittain (1984) and Line (1981) were able to establish, on the basis of a large study of references in social science journals, that English-speaking social scientists very seldom cite authors from other countries. American journals have a degree of 'self-propulsion' with regard to references of 86 per cent, while the equivalent figure for journals published in Britain is 49 per cent. However, the USA has only 12 per cent of all social science journals; Britain has 6 per cent. The tendency to primarily quote material from the author's own country is thus very strong. To a certain extent, this could depend on differences between the direction of research in the different countries, and also on language barriers. Material that is published in the contact network among researchers in the country where the researcher is active.

An increase in sectorial research, a national bias and the language barrier must have important parts to play in the context of the diffusion of Scandinavian social science. In this article, I shall study the international publishing pattern in the Scandinavian countries. I have used the *Social Science Citation Index (SSCI)*, which lists approximately 2500 of the most important social science series. My basing this analysis on journal material could be criticized, since a considerable amount of social research is published in the form of monographs. However, Scandinavian researchers who publish *books* in languages other than their own are the exception rather than the rule. The journal is still the primary channel for reaching an international forum.

PRODUCTION OF ARTICLES

Seen in an international perspective, the Scandinavian production of social science articles is very small. If we count the number of Swedish articles in the *SSCI* we find that Sweden is roughly responsible for only one-half of one per cent of the world production of articles, while the equivalent figure for *Science Citation Index (SCI)* is more than one per cent (Persson, 1983). When it comes to investment in research, it is generally assumed that the Swedish share of the world's R&D costs is about one per cent. Thus, there seems to be a slight positive balance between input and output in natural science. In the social sciencists in Sweden are more locally oriented than their colleagues in other countries. It can also be the result of a stronger tendency to publish in monographs.

In order to obtain an indication of how the production of Scandinavian articles has developed, we can extract time series via a computer terminal connected to the computer-readable version of *SSCI* (Social Scisearch). Using the corporate source field articles from a given country can be identified. The articles from the respective countries can then be combined with the annual accession number ranges thereby generating a distribution of articles over time (Figure 1).

This online bibliometric exercise reveals that Sweden produces twice as many articles in English as the other Scandinavian countries. The number of articles per year increased by approximately 80 per cent in *SSCI* between 1972 and 1976, which means that the growth rate in Swedish production is slightly overrated. However, the total number of Swedish articles over the same period

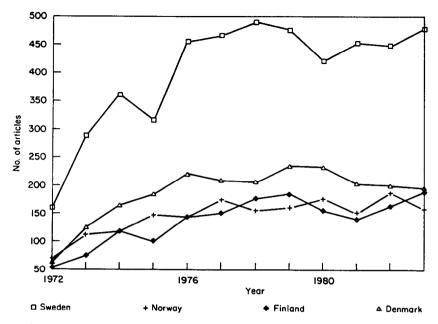


FIG. 1. Scandinavian articles in English in SSCI 1982-83 (Source: Online search in Social Scisearch)

increased by 190 per cent, which indicates that the early 1970s constituted an expansive period.

The international publication activity has remained at the same level since the mid-1970s in all Scandinavian countries. This may be connected with the increase in so-called sectorial research. There is at least a connection in time. Sectorial research has expanded rapidly since 1975. The sectorial research process often stops when the results are reported back to the research councils and there is seldom a demand to publish the results in scientific journals in order to receive new funds. If basic research had been given priority, the amount of material published internationally would probably have continued to increase.

THE PRODUCTION OF ARTICLES IN DIFFERENT FIELDS

Publication habits vary considerably from field to field. Within disciplines such as physics and chemistry, journals dominate, whereas books are the most important form of publication in the humanities. In social science and behavioural science, we can also see great variations along the lines of hard—soft disciplines. References in psychology journals refer in more than 60 per cent of cases to journal material. The equivalent figure for economics journals is 45 per cent; for sociology, 35 per cent; and for political science, 25 per cent (Line, 1981). These citation data suggest that there is also a higher level of article production in economics compared with sociology and political science.

In order to see how frequent international article publication is in the different fields, we can use the classification of journals that is appended to the printed version of *SSCI*. I have chosen five subject areas and sorted the Scandinavian material for the period 1981–83 into the respective category. *SSCI*'s Corporate Source Index was used to identify articles from each country.

Table 1 shows that the number of articles in languages other than Scandinavian is considerably higher in the field of economics than it is in the fields of business administration, political science and sociology. The difference is so striking that it cannot be explained by the numbers of researchers in the respective fields. There are barely three times the number of economists than sociologists or political scientists. A more probable explanation is that the major part of the difference could be explained by inherent characteristics of the disciplines, such as the overall publication pattern, the existence of common paradigms, the theoretical maturity of research, etc. One can also suspect that sectorial research programmes have had a stronger effect towards localism in sociology and political science than in economics.

The tendency that sociology is more locally oriented than other subjects is also reflected by the country origin of journals. Looking closer at which journals the articles appear in, we find that the number of articles in journals published outside Scandinavia is particularly small in the fields of sociology and international relations. If we subtract the articles in *Acta Sociologica*, the *Journal of Peace Research* and other Scandinavian journals, the number of articles decreases drastically. Within the fields of economics and political science, publication in Scandinavian journals is of less importance. Some people may claim that the most important thing is to get your article published in English. It should be

Journal class	No. of articles in non-Scandinavian		
	Language	Journals	
Business administration			
Sweden	19	19	
Norway	10	10	
Finland	3	3	
Denmark	3	3	
Economics			
Sweden	110	82	
Norway	55	36	
Finland	31	25	
Denmark	29	21	
Political science			
Sweden	23	23	
Norway	13	13	
Finland	5	5	
Denmark	10	10	
International relations			
Sweden	30	8	
Norway	33	3	
Finland	14	10	
Denmark	4	3	
Sociology			
Sweden	31	8	
Norway	16	4	
Finland	15	7	
Denmark	23	1	

Table 1. The number of articles in non-Scandinavian languages and non-Scandinavian journals categorized by subject 1981–83 (Source: *SSCI Corporate Source Index*)

remembered, however, that the Scandinavian journals are often far down on the rank list of journals. Acta Sociologica ranks as number 42 on impact factor in the field of sociology, the Scandinavian Journal of Economics ranks as number 64 in that field (SSCI Journal of Citation Reports, 1983).

To sum up, there are several indications that the field of economics, particularly macro-economics, is more cosmopolitan than the other fields. Economics has a considerably higher degree of reaching out towards the international research community than other disciplines both in terms of number of articles published and the internationality of journals selected for publication. If we compare the Scandinavian countries, there are few exceptions of this general tendency. The fact the Sweden has a leading position in most subjects, with almost double the number of articles compared with the others could probably be attributed to differences in the number of active researchers. One exception is the field of international relations and peace research, where the Norwegians appear to be particularly productive.

SELECTION OF JOURNALS

A common view is that the researcher sends his or her article to the most prestigious journal. If the article is refused, the article is sent to a succession of journals according to the status scale until the article is accepted. The object of the exercise is to achieve the greatest possible effect. Having an article accepted by a high-ranking publication is a measure of quality, and is at the same time a means of reaching a wider readership. This strategy of reward maximization is more a theoretical construction than an empirical fact. In a study of biochemists, Gordon (1984) showed that researchers primarily choose journals with the aim of reaching relevant readers consisting of researchers with the same specialist field. The journal's policy and editorial make-up is more relevant to the choice of journal than, for example, the effects that publication may have on the career of the individual researcher. In the field of biochemistry, there are many specialist journals that aim to facilitate the distribution of research results within strictly limited aspects of the field.

In the field of sociology, such specialized journals do not exist to the same extent. At the same time, the rejection rate in the most prestigious journals is extremely high—around 80 per cent. It is therefore not so strange that researchers seek to maxmize their publication chances and turn to publications that are less well known, published in their own country and in the researcher's own language. The results are published, but at the cost of diffusion and prestige. It is naturally a bad thing if this leads to a kind of self-censorship so that Scandinavian researchers more or less abandon the idea of sending their articles

Journals cited by Acta Sociologica	Journals that cite Acta Sociologica		
Acta Sociologica	16	Acta Sociologica	16
Am. J. Sociology	16	Sociologisk forskn	11
Am. Sociolog. Review	15	Tids f. Samfunnsforskn	6
New Left Review	9	Kölner Z. f. Soziologie	5

Table 2. Acta Sociologica's citations (Source: SSCI Journal of Citation Reports 1982-83)

to high-ranking journals such as the American Sociological Review.

In the SSCI Journal of Citation Reports, details of the different SSCI journals are listed. Here, it is possible to see how the various journals cite each other. If we particularly examine Acta Sociologica, we find that the most prestigious journals are cited most frequently after self-citations (Table 2). On the other hand, it appears to be the case that it is primarily Scandinavian journals that cite Acta Sociologica. Contributors to this publication thus cite the top-ranking journals, but their own work primarily attracts the attention of other Scandinavian journals, thus reflecting a clearly limited international spread.

CONCLUSIONS

The debate that is now in progress concerning the role of sectorial research has led to demands for a reinforcing of the position of basic research. This demand seems to be well motivated when seen in light of the data concerning international publication that we have summarized here. From the mid-1970s to the present, the production of social science articles has stagnated in all Scandinavian countries. The levelling off is particularly evident in Sweden. Only economics appears to reach out towards the international research community to any real extent. Other subjects, such as political science and sociology, are far behind. International publication seems to be the exception rather than the rule. Publishing in Scandinavian journals results in a less extensive geographical spread.

When we refer to long-term motivated research in the area of social science, it is of great importance to improve the international spread of research results. Basically, it is a question of establishing a better balance in the intellectual exchange with the surrounding world. Communication between researchers can be seen as such an exchange in which it is important both to give and to take. A one-sided dependence on knowledge input leads in the long run to relegation to the outposts of the research field, isolation from the international research community. The recommendation that can generally be made is that Scandinavian social scientists should readjust their sights—increase both height and range. It is not sufficient to publish in Scandinavian journals alone.

REFERENCES

- BRITTAIN, M. B. (1984). Internationality of the social sciences: Implications for information transfer. Journal of the American Society for Information Science, 35, 11–18.
- ELZINGA, A. (1984). Science studies in Sweden. Social Studies of Science, 10, 181-214.
- GORDON, M. D. (1984). How authors select journals: A test of the reward maximization model of submission behaviour. Social Studies of Science, 14, 27-43.
- LINE, M. B. (1981). The structure of social science literature as shown by large-scale citation analysis. Social Science Information Studies, 1, 67–87.
- SSCI Journal of Citation Reports (1982–83). Institute for Scientific Information (ISI), Philadelphia.
- PERSSON, O. (1983). Swedish knowledge import—some indicators (in Swedish). Inforsk Papers on Communication Studies, No. 18, Department of Sociology, Umeå University.