

SERIALS ARCHIVING AND THE CONTINUITY OF KNOWLEDGE

A CAUTIOUS REVOLUTION: THE PRESENT AND FUTURE OF SERIALS IN GERMAN ACADEMIC LIBRARIES

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This paper focuses on periodicals because they form by far the larger part of serials literature. It is the part which has presented many problems in the past and will present many more in the future: just think of the task of archiving them to preserve the continuity of knowledge.

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Present

Acquisitions

Looking, firstly, at the present situation and at the acquisition of journals, not much has changed in essence over the past ten years. German libraries are trying to maintain their subscriptions to the paper editions of periodicals whilst selecting at least a few from the numerous new ones still published every year on paper. In addition, some periodicals and newspapers are purchased on CD-ROM. This is not done for archiving purposes but for effective searching in the few remaining years before that technology becomes obsolete.

At the moment the German libraries which subscribe to electronic journals from the Internet are mainly those which are designated 'central collections' for scientific and medical literature.

Many libraries still lack the technological infrastructure to offer electronic journals to their users. Even the Bavarian State Library, proud of housing a periodical collection which in Europe is second only to that of the British Library, will not have its local area network in operation before 1997. Similar situations may be found in many other libraries in Germany whose buildings were rebuilt in the 1950s and 60s.

The need to set up co-operative acquisition schemes is now much more urgent than in the years of economic prosperity in Germany and such schemes are designed for current use as well as archiving for the future.

Firstly, they may be found at the local level. In Munich, for instance, the Bavarian State Library collects only a few basic periodicals in the fields of technology and agriculture because they are the speciality of the Library of the Munich University of Technology.

Within the federal structure of Germany the Länder (regions) are responsible for nearly all cultural affairs. Therefore the next

level of co-operation is regional. Many Länder are now thinking about creating periodical collections distributed among the region's research libraries according to subject. The only scheme really functioning at the moment is that in North Rhine-Westphalia. It has been in operation for several years and is being continuously reviewed.

The ultimate guarantee for adequate provision of research literature at national level is the system of special collections distributed among about 40 co-operating libraries which was introduced by the Deutsche Forschungsgemeinschaft (German Research Association) in 1949. Its subsequent redevelopment led to the foundation of two Central Libraries, one for Medicine in Cologne and one for Technology, and its associated sciences, in Hanover. The ultimate aim of this programme is that at least one copy of relevant research literature published outside Germany can be purchased with the financial support of the Deutsche Forschungsgemeinschaft, a body funded jointly by the Federal Government and the Länder. Nowadays the most important feature of this system is that its funding has not been cut. Therefore a copy of each major book or periodical published abroad can still be purchased by at least one German library. Interlibrary loan and photocopies then help to distribute the contents of this single copy. The medium of the publications may be paper, microfilm or fiche, and, from 1994 onward, CD-ROM, but electronic journals are not yet included on a large scale because of the licensing difficulties.

German librarians hope that this strategy will also work in the future, i.e. that enough funding will be available to keep at least one copy of each relevant foreign publication for archiving. The equivalent German publications have to be purchased by the respective libraries from their own funds.

At the moment, of course, more than one library in Germany can still afford to subscribe to the main foreign periodicals. However the trend to freeze and then to reduce the budgets started in 1993 has gained momentum every year since. In 1996 the cuts range from 5% at the Bavarian State Library to about 40% in some libraries in Northern Germany. As usual,

antiquarian and monograph acquisitions will be reduced first, but then a new wave of cancellations will deeply affect the periodicals sector.

Bibliographical control

Nowadays current journal holdings are entered on local OPACs, whilst conversion of older card catalogues is a task which many German libraries still have to face. The Bavarian State Library started the recataloguing of its journal holdings back in the 70s, and can now offer an almost complete catalogue of about 120,000 titles, nearly 40,000 of them current. It can be accessed via the telephone network and the Internet.

At the next level, Germany has several regional electronic union catalogues. In line with the federal structure of the country some of them are restricted to the holdings of one federal state, e.g. Bavaria. Others are the result of the co-operation between several federal states, and in Northern Germany the Dutch PICA-System is the first step towards international co-operation.

In addition, there is a single German union catalogue for periodicals called 'Zeitschriftendatenbank (ZDB)', which is the responsibility of The German Library Institute (Deutsches Bibliotheksinstitut, DBI) in Berlin. This institute is one of the very few national institutions in the German library sector which is supported by both the Federal Government and the federal states. Unfortunately this periodicals database is not yet complete, because some states, among them Bavaria, joined very late.

Access

Journal holdings may be accessed locally in reading rooms and by restricted circulation or by copying in accordance with the fair use regulations of the German copyright law. Several libraries are now offering express mail or fax services.

The same principles apply to the regional and national levels where the collections funded by the Deutsche Forschungsgemeinschaft function as libraries of last resort. There is, however, no single source in Germany comparable to the

British Library Document Supply Centre. Consequently, we do not have the German equivalents of the 'Patent Express' or 'Inside Science' and 'Inside Social Sciences and Humanities'.

Archiving

The archiving of journals is still done in the traditional way. Most libraries have the paper issues of the journals bound to form volumes which they store in their stacks or sometimes in a remote central storage library. This method may seem old-fashioned but it is still cheaper than electronic storage, the difficulties of which are not so easy to overcome according to a joint study of the American 'Commission on Preservation and Access' and 'The Research Libraries Group'.¹

Future

There are now heated debates in Germany about how to stop the decline of the economy. The backwardness in the field of electronics and information has been identified as one of the causes of this crisis with Germany trying to compete with the electronically more advanced countries like the USA, the UK and France. They have either stronger federal support and widely spread private sponsoring for their electronic future, like the USA, or a central structure in which it is easy to concentrate monies in an effective way, like the UK and France. In an effort to reduce the electronic gap the Federal Government will be financing its new programme, called 'Information as a Source for Innovation', with DM1.9 billion within the next four years. The main aim of this programme is to improve the competitiveness of the German economy by providing access to the full text of all kinds of literature at every computer. A part of the sum will be spent on electronic publishing projects with German publishers. Another part is to support electronic equipment and digitisation programmes in libraries, and especially in two of them. The first of these is the Deutsche Bibliothek in Frankfurt/Main and Leipzig which is the German depository library and the only library which is completely financed by the Federal Government. The

second is the State Library in Berlin which belongs to the Foundation of Prussian Cultural Heritage and is partly funded by the Federal Government.

Nearly all federal states have started their own on-line initiatives. In 'Bavaria online' the libraries have definitely been overlooked as information providers. At the moment only their online catalogues are accessible on this system. The Bavarian State Library is now putting forward projects which might be included in the initiative at a later date, including the scanning of copyright-free books and journals of Bavarian interest, as well as the digitisation of Bavarian official publications.

Several programmes supported by the Deutsche Forschungsgemeinschaft are relevant to the needs of the research libraries, especially in fields such as security of networks, intelligent information retrieval systems, navigation in and visualisation of large amounts of information; new document server systems and new ways of controlling digital documents on the Internet.

A project called TIBQUICK 2000, funded by the Federal Government, will enhance the ability of the Central Library for Technology in Hanover to access and store electronic documents.

Counter-productive to all these efforts are the cuts in the libraries' regular budgets, for acquisitions and salaries. As most German libraries do not have global budgets which are the rule in the UK, they cannot react in a flexible way. The background to these shrinking resources is twofold: firstly, lack of money, but secondly, the belief of the politicians that libraries now need less funding and staff because 'everything is going electronic and can be privatised'. This way of thinking is very dangerous for the future of libraries because more than 95 percent of the information relevant to research libraries is still produced on paper, including the periodicals. For many years to come the electronic media will supplement, not supplant, the traditional ones. Therefore libraries cannot simply shift personnel away from the 'old-fashioned' handling of books to the electronic front. Moreover, not every senior cataloguer can be transformed into a specialist in electronics.

Acquisitions

In 1997 some subscription agents will offer access to electronic versions of print-on-paper periodicals and also to electronic-only journals. This will be a convenient way of handling licensing issues. However, after a pilot phase which is free of charge, there are doubts whether many German libraries will be able to afford the additional 10 or even 25 percent of the print subscription fees charged for the parallel electronic versions since this would double or more than treble the average annual inflation rate.

Initially the electronic journals without print alternative will be made available by the special libraries supported by the Deutsche Forschungsgemeinschaft. As more and more fields within the sciences build up their electronic information systems, more libraries will have to buy licences for those users who cannot afford their own direct access to the electronic sources and still need the library as an intermediary.

Bibliographical control

Rules for the cataloguing of CD-ROMs and other physical electronic media have been developed and items can be found in the electronic catalogues. These rules now need to be extended to the recording of electronic journals - a rather difficult task. Together with eight Dutch and five German libraries, the State and University Library in Göttingen is participating in PICA's WebDOC Project, which, among other activities, is establishing a union catalogue of electronic documents, including electronic journals, which can be retrieved from local servers.

In 1993 the Federal Government and the Deutsche Forschungsgemeinschaft launched a project called DBV-OSI II to facilitate searches in the German regional electronic union catalogues, the Zeitschriftendatenbank, PICA, and other major databases. The main aims are to connect these different systems and to implement a single search mask and retrieval language. This will also help to find journals and their articles much more easily.

Access

In addition to the traditional way of directly copying articles they will, in the major libraries at least, be scanned for faster service by electronic copying and transmission via the net. Of course, these scanned articles may not be stored awaiting the next request, as this would be an infringement of German copyright law. Nevertheless, this new method will improve the copying services offered by libraries. It will be integrated into existing services, such as the Bavarian Document Delivery Service, or it will help to create new services, such as JASON, based on the periodical holdings in North Rhine-Westphalia, or DBI-FIRST using ten German and two foreign libraries as its sources.

Still to be launched is SUBITO, an initiative founded and funded by the Federal Government and the federal states. It will combine searching, ordering and delivery of documents via the Internet from and to the PC on the desk of the researcher.

Archiving

Current paper journals will not be digitised for archival purposes by libraries as long as this is more expensive than storing the original. Copyright regulations will also prevent the libraries from doing so. But digitisation may be a way of preserving the contents of journals printed on acidic paper which is now becoming brittle. Given the low use of these old periodicals, however, microfilming will prove to be the more economical way to archive this kind of material. These films may be digitised later, if necessary, using the latest technology and leaping over many obsolescent electronic storage systems. Alas, though the problem has been brought to the attention of the politicians, no funding has so far been allocated for this purpose.

Future archiving of electronic journals will have to be an international co-operative task. There is no doubt, that it must be done by libraries. History has proved that no paper archive of a publishing house lasted for a long time, nor will electronic ones.

It will be necessary to create international standards for the storage of digitised

information. In Germany the Deutsche Bibliothek in Frankfurt/Main and Leipzig will take the lead as soon as the legal deposit law is extended to cover electronic media.²

Notwithstanding this background, it will only work if the scientific bodies publishing their research results in an electronic format are really historically-minded. This means that they deposit every relevant version of their research, even if it is being continuously updated in open discussion groups or the like.

As a result of the federal structure of Germany there are many centres for the collection of legal deposit materials, e.g. for Bavaria at the Bavarian State Library in Munich. All these centres should use the same storage technology, open to the same methods for the future migration of complete systems, as is to be installed at the Deutsche Bibliothek.

Once the copyright issues have been solved, other electronic texts could be stored in the same way because it will be useful, for example, to offer an electronic journal on more than one server throughout the world. In any case, the expensive electronic storage facilities and the expert librarians to run them will be concentrated in a few large libraries in Germany - involving a difficult selection process in a country where opinions in the federal states are so divergent and the funds available for such a new task are so few.

Conclusion

Research libraries in Germany are struggling hard to cope with the additional challenges of an electronic future which will focus on the

serials. It will be concentrated in the sciences with their need for fast information, whereas the humanities will stay mainly paper-orientated.

The public and especially the politicians must be convinced that libraries need more support in the future to be able to preserve the continuity of knowledge as part of the cultural heritage of mankind. The librarians will remain the guarantors for the selection of the really relevant information and for its integrity. They have to guarantee free access to information even for those who cannot afford PCs of their own, or do not know how to handle electronic equipment.

What is more, the politicians will be needed to shape a peaceful environment for the continuity of knowledge. Information on electronic media is much more volatile and vulnerable than that on paper. It can be read only when electricity is not cut off, which has been the case in every war, and is still the daily experience of millions living in the developing countries. Let us hope, therefore for a peaceful and prosperous future as the prerequisite for the continuity of knowledge.

References

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