

## **From the Manuscript to Cyber Space. The Future of Libraries as seen at the Austrian National Library**

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There is the dream of a universal library which houses every book in the world. In ancient times this dream came true in the library at Alexandria. By the way, the ANL owns the only surviving papyrus from Alexandria. The baroque period took up the dream again. In the ANL's state hall, the Emperor Charles VI is eager to achieve the fulfilment of this dream. The main library of the Roman Empire's German Nation was really a library compiled from many nations, cultures and languages. Jorge Luis Borge involved this idea in a literary sense in the library at Babel. Even Umberto Ecco dreamed this dream - albeit in an electronic context.

For 1005 years the spirit of Europe dwelt in books until the 1995 IFLA conference in Istanbul, when Professor Halman from Columbia University prophesied that 'The library as a mecca to go to will become a thing of the past. No more pilgrimage to this sanctuary of learning. The monumentality of libraries will now be reduced to the minimality of a screen. Libraries, alas, may survive only as morgues.'

The following question provoked a standing ovation from librarians in the third world: why should knowledge be acquired or foreign languages learnt when anyone can have access to entire human knowledge by simply pressing a button? We are on our way to turning into little deities of omniscience. Did these librarians really think that they would be spared the trouble of academic library development?

The Cyber manifesto by three Americans was on a similar note - the latest issue of the American dream. And Frank Oden wished he had written the last book you will ever read.

After the first shock, many librarians - male and female - have now caught this euphoric epidemic. All of them are running like fury after the latest technical innovation. An American historian complains that librarians used to be colleagues. They used to chat to historians about historical literature. Now they can only talk about computer networks and work stations. The Library of Congress is afraid that librarians are turning into sheer technicians.

Against this background, the registration of the first Austrian book into UNESCO's Memory of the World would appear as an act of pure piety, a song of farewell to the past. The book in question is the Vienna Dioscurides, a Greek manuscript written in 512 in Byzance and one of the most important pharmaceutical reference works in the field of medicine. Is what I am saying really true?

Recently the State Archivist of the United States refused to continue to record digital documents in the United States State Archive. The conclusions of a research survey conducted by the National Technology Alliance, a consortium of the United States government, industry and educational institutions were that a large part of digital information stored by the United States government had already become inaccessible and that average quality CD-Roms had become unreliable after a period of only five years.

Diana B. Marcum, president of the Council on Library and Information sources at the Library of Congress, therefore refers to a major digital crisis and together with the American Commission on preservation and access confirms that electronic media are not suitable for archival storage. Such statements serve as alarms for national libraries whose task is the

collection and storage of a country's intellectual inheritance. These alarms warn national libraries to apply new information technology and electronic media more carefully than ever before. But there is another reason too: at least since the 1848 revolution, it has always been the historic task of a library to guarantee free access to information. But what will become of these obligations when the European Union Copyright Directive is passed? This document will strictly limit the use of electronic publications, to say nothing of copying such documents for archival purposes.

What then are the consequences for a national library in the present situation? They are threefold:

1) Firstly, the predominant form of new knowledge is the fleeting transient knowledge to suit the user's requirements. Therefore digitisation for archival purposes should no longer be practised. The ETH in Zürich has confirmed that over a period of 15 years digitisation and accessibility of a document amounts to 300 times as much as the cost of a microfilm.

2) Secondly, we must avoid double loss. A loser twice over is someone who has given up conventional library working methods without the certainty of knowing that the work can be done as well by new technology from an organisational and financial point of view.

3) New technology must fulfil the tasks required of a library and not vice versa. With the aid of multi media technology, there is now competition among libraries to compile large national digital collections, to say nothing of commercialisation of the public sector. Considerations of what all this should achieve and of the expenses involved have meanwhile resulted in cutting many projects down to size or even quietly calling them off. In the heat of the digitisation debate, what has unquestionably become the greatest paradigmatic change in the history of

libraries now also obliges large libraries in particular to redefine their right of existence and the part they have to play in present day information society. In a certain sense, these libraries must be rebuilt. Fixed location and material possessions, hitherto the parameters of the classical library, now seem to be on the run. The digital library knows no limits, its utopian information technology granting access to all and everything has transformed the real library with its catalogues and collections that have been compiled over the centuries into a virtual crossroads in the digital network.

Access to all no longer implies giving priority to cataloguing sources by specialists, but rather presenting and producing a commercially interesting package. The traditional organisational structure of historical libraries is thereby also being put to the test. The traditional paradigmatic separation in libraries of object and publication according to format and medium, to say nothing of separate storage, accessibility and availability to readers by means of special collections has now become an open question.

Entering holdings of a collection in multimedial information systems for heterogeneous end consumers produces a conflict of interests between the democratic requirements of free access to information and the commercial exploitation of digital data. There is a danger of abolishing a general guarantee and right to information and culture. 'Il y va de la survie de l'idée d'accès démocratique à l'information et à la culture, ce qui est essentielle' Dominique la Hary is of the opinion that libraries have a major part to play in this debate.

The road the ANL must now take is clear. Creating possibilities of access to national information and cultural property has found international support, also at government level. Especial significance is attached to large universal libraries and their important collections. Prototype examples to follow are the project American History with 5 million Americans, as

well as the ambitious digitisation programmes at the Bibliothèque Nationale de France and the British Library.

In accordance with the recommendation of the European Union, over the past two years the ANL has taken the following steps in the construction of a digital library:

**1. The multimedial encyclopedia:** the first successful step taken by the ANL towards the digital library was the multimedial encyclopedia at the ANL in 1996. The first disc in this three-part CD-i collection deals with the history of the library architecture, literature and related thematic clusters. The second covers the major collections of the library, the third CD focusses on Martin Luther's interpretation of and commentary on the apocalyptic vision of St. John in a Bible printed in 1561. The four gigabyte production contains for instance a 3 D animation, the musical parts in stereosound film and more than 200 single images.

**2. Retroconversion of Catalogues:** A retroconversion of the card catalogues by copying and making categories could not be considered on financial grounds. A software - we call it katzoom - has now been developed at the ANL. During 1997 6 million catalogue cards were scanned and presented in internet as an image catalogue. The former card catalogues will be withdrawn from the public area during the course of 1998 and replaced by the solution offered by electronic card catalogue research.

An additional service - ordering books via email - has just been started as a pilot project. The main aim is now the conversion of the images into a machine readable text which can be consulted for research purposes. Work has started on the nominal catalogue 1501-1929, thereby enabling a further improvement in the service

### **3. Internet**

The design of the Website is based on the historical function and tradition of the library. Users are guided by original image and letter characters. The main catalogues of 6 Mill. Documents are available, the autograph catalogue of letters at the manuscript department, the sinica collections, the feminist documentation Ariadne, the Esperanto database „Trovanto,, (research language Esperanto!), our exhibitions, the illuminated history of the library and

various other items. We register daily 9 to 10.000 pageviews. Our website address:  
<http://www.onb.hc.at>

#### **4. Archival storage of electronic media**

The legal deposit law of 1981 only provides for printed publications as obligatory deposit copies. In order to avoid a gap in the archival storage of cultural heritage before appropriate legislation comes through, the ANL has asked all producers of offline media for voluntary deposit copies of their products. Our initiative was supported by the VIW, the Austrian Association for private enterprise in the field of information and has been successful. The strategy also offers valuable steps towards a legal solution. The ANL has also started to store online and is now confronted with well-known problems such as changing software, updating databases, questions of copyright and so on.

#### **5. Codices manuscripti CD 1**

The CD-Rom production of the Admont Giant Bible, a romanesque manuscript from the mid 12<sup>th</sup> century, is the first in a series of electronic facsimiles of items in the manuscript collection. In this way it has become possible to make available documents hitherto inaccessible or only partly published. High quality archive material as well as a copy from which reproductions can be made have thereby been achieved.

The documents chosen for this project should be published in full including a critical commentary and be appropriate for the medium.

Objects are selected which have not already been published in facsimile and whose poor conservational condition has restricted consultation of the original.

#### **6. From the Image to the Icon. Cataloguing European Poster Collections**

Kongress: Electronic Imaging & the Visual Arts. Florenz 23. – 28.3.1998-04-07

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The EPOC (Cataloguing European Poster Collections Project).

The project is funded by the European Commission's preparatory action for the implementation of the Raphael Programme. The project aims at setting up an inventory by creating a common network of six European museums and universities in order to bring out the quality of the art of collections of posters between 1914 and 1945. The main activities are an exhibition, a computerised catalogue of the collections to be published on CD-ROM and an interactive animation with a selection of posters to be put at the disposal of the general public.

### **7. Change of the shared union catalogue system**

In 1987 the ANL began to prepare for the National Shared Union Catalogue, which includes today 25 major academic libraries. At the moment the shared union's catalogue is being changed to ALEPH 500.

### **8. Digital picture archive**

A future project of major priority is setting up an electronic system for the archival storage of over 1 million picture documents at the ANL's portrait archives and fidei-commis library. The point of departure for the electronic archive is the digitisation of the 1,3 million catalogue cards. Within a space of six months from starting digitisation, the greatest historical picture holdings in Austria – that is to say 1,8 Mill. documents - will become electronically accessible. In addition to bibliographic basic information, there is also a need to set up a digital picture catalogue for conservational reasons to avoid consultation of valuable originals when just checking up on information.

Pending on the budget available, the project under consideration involves holdings from 100.000 to 300.000 digital pictures. An intermediate solution (i.e. within a period of 5 years) can set up a catalogue containing views and digital formula of good quality by means of which orders for copies can be placed.

The catalogue could be supplemented by thematic offers to acquire the library's list of picture holdings via Internet or CD-Rom.

What are the future implications of digitisation with regard to an academic library such as the ANL? The current hive of information can no longer be coped with by the conventional tools and methods of librarianship. The computer has become indispensable. The digital media and information networks alone have enabled a library such as the Bibliothèque Nationale de France to lay greater claims to the encyclopaedic context. The possibility of reproducing sources on one's own bat will surely increase interest in archival holdings.

Libraries and librarians have not become superfluous on account of these developments. On the contrary. As internet is ignorant of how to structure knowledge and is unable to differentiate between the type and importance of a document, specialists are needed to select, index and navigate through the sea of data.

The obligations which national libraries are to fulfil with regard to culture and the formation of cultural character are in greater demand than ever before. National libraries are a country's memory and memory is a pre-condition for culture. Libraries should participate in the cultural process by putting on exhibitions, academic events and so on.

Help for libraries and librarians in dismissing the cyber spatial nightmare is offered by the following remedies:

The transitory nature of new media.

These include the danger that pressure to realise the virtual world produces a new form of loss of memory. Nor should damage from manipulation, uniformity and unequal dissemination of knowledge be underestimated.

In future, libraries will be material and virtual locations in one, social spaces and cyberspaces. For, hightec cannot do without high touch, as John Naisbit quoted from the book he is writing during his recent visit to the ANL.

In order to master the challenge of the revolution in information, a library requires room to move, also on budgetary questions, in order to make possible prompt reaction to change.

Since 1989, the ANL and the federal museums have been administered by partial legal autonomy, a law which has lightened the work burden in the context of the present day.



By this law the ANL is entitled to acquire capital and rights by donations and sponsoring agreements.

By carrying out work on behalf of a third party

By organising exhibitions or other events

By producing and disseminating publications, reproductions and the like which are relevant to the library in order to make use of the same in their own name and thereby fulfil their allotted tasks.

Furthermore we can exploit the library's holdings free of charge and are granted the right to rent and lease rooms and property for money.

Our book sponsorship campaign is an excellent example to illustrate the importance of partial legal autonomy for libraries. The campaign has not only produced 40 million ats (approx. 1,2 million dollars) over the past eight years, but has also evolved into an indispensable marketing agent for the library by establishing contact with new social circles not normally concerned with libraries and their holdings. Our activities mostly in the frame of partial legal autonomy yield a profit of around 9 mill. ATS year, that is about 10% of our budget, morale is guaranteed by the government. The daily run of the mill in ANL has become unthinkable without partial legal competence. For the time being we see no immediate necessity in acquiring full legal autonomy in the way of so called privatisation. A global (single line) budget and full competence in staffing matters would nevertheless be of undeniable advantage