

National Libraries – A Dumping Ground or a Source of National Knowledge

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Within the past year something very unusual has taken place – namely a public debate on the national library task. What actually started this debate was that some scholars were voicing their criticism of the Danish legal deposit act for failing to ensure that sufficient collection of texts from the Internet was being effected and that nothing has been done to preserve these texts for posterity. The discussion was concentrating on how to solve the question of the national library's main obligations – collection, preservation and accessibility in terms of publications on the Internet.

The initial headlines of the debate were:

- World history's greatest loss of memory
- No history of our time.

Here is a quote: „We are in the middle of exciting social changes with increasing electronic communication. As things stand at the moment, electronically stored information will either change or disappear altogether in a few years. Nobody has stored it. Whereas the printed or the written word has been preserved in libraries and archives, electronic words will have vanished within months, weeks, maybe even hours. It is a social catastrophe of the first order that for the very first time in the recent history of humanity we do not make sure that our cultural heritage is archived and preserved.”

It was pointed out that new forms of technological solutions are required in order to preserve the digital cultural heritage for posterity. Books can be stored under suitable climatic conditions and their preservation is thus under control. Digital works must be treated quite differently to ensure that digital information can be read in the future. As has been postulated in the debate:

- History is being de-magnetised.

The real challenge emerging from the debate was that the scholars regarded the libraries as depositories for information of the past. This, naturally, was a challenge for us as a national library – just listen to some quotes from the conclusion:

- A library is not the proper institution for collecting electronic media.
- The libraries have become a problem as they prevent others from tackling the task.

These views provide food for thought. It has seemed quite natural to us that the national libraries were the ones to take care of the digital cultural heritage on the Internet, just as we have for a long time been taking care of printed publications. But this view was not shared by everyone. The players involved are active researchers who are very familiar with the academic libraries. To them the national library and the national archives represent an image of dustiness and passivity – institutions which if the worst came to the worst would be an obstacle in the endeavours to solve the collection tasks in the IT society. Their opinion is quite clearly that the national library is a heavy, tradition-bound institution, and on the basis of this the debaters draw the conclusion that a new institution should be established in order to handle digital documents.

The discussion was fuelled by the fact that the Danish government, along with other Western European governments, has formulated the vision that Denmark must be among the leading IT societies, based on an ambitious programme over the years 2002-2005.

The critics are right in saying that dynamic knowledge on the net is not at the moment secured for posterity. With each day that passes, and the longer we delay starting a systematic collection, the more will be lost for posterity. There must therefore be a change in the present act on legal deposit, stating that the collection must be extended to include dynamic publications.

This is something which we have pointed out time again to our ministry before this debate started. We have therefore once again grasped the opportunity to try to convince the political system of the necessity for investing in the preservation of the digital cultural heritage, and the subject was in the spring introduced at a hearing in parliament on the preservation of the cultural heritage.

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Preservation of digital documents is a new task, but the traditional types of material have not disappeared. Thoughts on how to preserve digital documents will influence opinions on how to handle traditional media and are bound to challenge some of the traditions associated with this. The digitisation issue will set the agenda. Priorities will be necessary in order to focus on the media of the future. The answer to this is a *Dual strategy for traditional as well as digital media*.

Choosing the term dual strategy means underlining the fact that the two tasks must be seen in context. A dual strategy will ensure that it becomes possible to take care of both types of information.

The dual strategy also means that new methods must be developed for the handling of new as well as traditional media in order to manage the increasing volume of materials in future.

The dual strategy further means that the deliberations on how to handle the enormous wealth of data on the Internet are bound to have an effect on how to handle traditional medias.

Finally, the dual strategy means that the resources available for the two tasks must be looked upon contextually, in order to make sure that the media of the future has high a priority.

ELEMENTS OF THE DUAL STRATEGY FOR DIGITAL WORKS

The most important issues concern the preservation of the live net, long-time storage of digital data in actual web archives and rational methods for the handling of non-published information.

1. Ensuring the Current Production of the National Digital Cultural Heritage

A strategy must be formulated for web-archiving of all publication on the Internet with a view to making this part of the cultural heritage available in future on a par with conventional works. The dynamic cultural heritage at the Internet forms a steadily increasing part of the total production.

The present system for downloading, preservation and accessibility of static net publications must be extended to include the whole of the Internet. One method being considered is a total harvesting of the net several times a year so that you take a „snapshot” of the information presented on the net. One pressing problem is to create the legal basis for allowing access to material in the web archive as well.

2. Long-term Storage of Digital Resources

Denmark has no strategy for the long-term storage of digital data for library-related materials. It is therefore necessary to determine methods and work out a budget for long-term storage of digital data. We must ensure that web archives are durable both as regards technical matters, software and materials, which are preserved so that essential information about our present time can be re-created and made available for present research as well as for future generations.

This must be done in co-operation with libraries in other countries. As in other questions of preservation we can benefit from international experiences, but each country must build up its own expertise and work out an action plan for the determination of strategy and method for digital material in its various forms, text, image, sound, animated pictures etc.

3. Web Indexing of the Collected Works

IT technology can be exploited in making digital works accessible so that in future one may use those search methods which are already now familiar from the Internet when retrieving documents. This means that there will be no necessity for traditional cataloguing of the material collected from the Internet. It will be preserved in such a form as makes it possible to search in the works' own information and get your results that way.

In a legal deposit system it is important to maintain chronology. The Internet is developing constantly and one must therefore be able to distinguish between when net publications were downloaded from the net, in order to monitor the constant changes in texts on the Internet.

4. Rational Methods for the Handling of Non-published Digital Works

Apart from published digital works it is to be expected that other types of material for which the national libraries are normally responsible, will be made available in digital form: manuscripts and documents, maps, pictures, written music, sound and animated pictures. The speed of the process will vary within the different categories, but all production of maps is for example now taking place in digital form and photos for newspapers, reporting etc. are stored digitally by photographers and photo agencies.

How this quite enormous wealth of documents is to be organised and preserved will amongst other things depend on individual technical solutions in the different sectors. In Denmark the state archives have determined a standard which all government institutions are obliged to use for digital archiving. This is something the libraries cannot do in relation to the private sector. It is quite evident that the indexes which are created with the digital documents must be utilised when we take over these collections with a view to preserving them for posterity.

ELEMENTS OF THE DUAL STRATEGY FOR TRADITIONAL MEDIA

The continuity of the national library is its strength, because it means that people entrust the national library to carry on a hundred year tradition of preserving the cultural heritage. This continuity also presents a great image problem, because it encourages others in their conception of the library as an old dusty institution, unable to solve the tasks of the IT-world.

As mentioned earlier I expect that methods for the handling of digital information will influence the traditional area. Here, too, we are facing something quite new. The printed book is not going to disappear, but what about the photograph? Isn't that going to be replaced by the digital picture? Won't the sound tape be replaced by a digital media; won't the video give way to DVD? The digital development has already brought its influence to bear on some of the traditional tasks associated with the national library. Printed bibliographies are on their way out and indexes will disappear or emerge in the shape of full text databases.

As for the traditional media, the dual strategy should first and foremost be implemented in order to encourage increased focus on the user – thus ensuring increased accessibility for researchers as well as for the public at large.

5. Digitisation of Core Areas of the National Cultural Heritage

We have actively pointed out that access to the library's collections in digital form is a central part of the country's IT development, because the libraries can provide the content for what the IT society should make available to the citizens.

IT technology provides completely new ways of mediating existing texts. An essential part of an innovative mediation strategy is to carry out the digitisation of central parts of the cultural heritage with a view to making this available to everybody.

Our actions lines include:

- Digitisation of classical works, periodicals etc. for an electronic archive
- Digitisation of selected groups of works for study purposes
- Digitisation on demand
- Mediation projects – e-exhibitions
- Digitisation of indexes and aids for the collections.

Researchers predict that western societies will develop from information societies into knowledge societies. This means that we are not supposed just to make plain information available. We must contribute actively ourselves to society's knowledge production. High priority should be given to digitisation and to making the works available through web-based publishing.

Digitisation of existing works and enhancement of the works must be placed high on the agenda. The question of copyright must be solved in co-operation with the producers, particularly as quite a lot of material is already publicly or freely accessible.

6. New Forms of Registration Involving the User

As an example of innovative thought I should like to mention a project, „Denmark from the air”, which we are concerned with. The project is inspired by the US space organisation NASA which has been successful in involving citizens in various projects.

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In the first half of the 1900s some firms earned their living from photographing Denmark from airplanes. Afterwards they went round to private people, selling the aerial photographs of people's homes. We have succeeded in buying some of these collections including the copyrights. We are talking in terms of four million pictures which are mainly only identified by their co-ordinates. The series of pictures are organised according to the co-ordinates from the flight routes.

The aim of the project is to digitise these pictures for the Internet. Following that we will try to create local backing for using people's local knowledge to identify the pictures, i.e. names of farms, villages, churches etc. People will be able to key in the information themselves. There are aerial photos of the same localities, taken with the same co-ordinates over a fifty-year period. For historians, cultural geographers and social scientists this will be a fantastic source of documentation of the major geographical changes that have taken place in the Danish community.

This form for activation of the users or groups of citizens must become an integrated part of how to organise the various tasks. Books cannot as yet catalogue themselves, but we must be on the lookout for solutions which involve both users and producers.

7. Increased Focus on Preservation

Yet another aspect of the dual strategy is the increased focus on preservation. The essential question for all cultural institutions in this connection is:

- What must be preserved for posterity and what will be lost?
- How will the institutions be able to live up to increasing pressure from the public and increasing demands posed by the information society seen in relation to preservation needs?

As regards traditional documents the prevailing problems are associated with the deterioration of works due to the usage of acid paper, the self-destructive materials – particularly nitrate and acetate film and deterioration due to external factors, such as increased wear and tear, transport, poor storage conditions in past and present, climatic conditions, pollution etc. The problems are of such proportions that it is politically unrealistic to expect that enough money is available to make sure that everything is preserved at the same high level.

Faced with such quite immense and daunting problems, The Royal Library has presented a *Preservation Plan 2010* which takes us right up to 2010 and which includes priorities of the collections with a view to immediate attention being focused on some already highly threatened areas. A central ingredient of the preservation plan concerns continued investment in proper climatic storage conditions.

8. Conscious Decision to Become a Knowledge Resource on a Digital Platform

At the parliamentary hearing which I mentioned earlier concerning the preservation problems of the cultural institutions, the politicians showed a very keen interest and have expressed the wish for further elucidation. They were particularly concerned that the mediation and accessibility of the collections through the use of IT must form an essential part of a cultural preservation plan and parallel tasks.

And here we return to the opening statements of this paper. The politicians express the same desire as the critical researchers whom I quoted in my introduction. Both politicians and researchers want the intellectual production to be preserved for posterity, but combined with an active policy of access. It is not enough for the national library to be a passive recipient-institution with future generations as its user group. The national library must play an active part and contribute to the knowledge production of contemporary time by making available central parts of what is already collected and in such a way that it can be used as an active resource. In this process the national library must co-operate with other institutions, with scholars and with other groups of the population.

The national library has always been considered a „library of last resort”. This passive role will no longer do. I have no fully-fledged solutions, but the dual strategy is instrumental in highlighting problems and stressing that openness is a keyword for the future.

Check list for safeguarding the national library as a source of National Knowledge:

1. Collection of digital information has high priority
2. Digital information should be organised on the media's own conditions
3. Already produced data and information must be re-used

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4. IT should inspire innovative thinking in relation to traditional media
5. Focus on preservation
6. Already produced knowledge must be made available in digital form
7. The library must see itself as an active player on the Internet
8. Knowledge production must be a co-operative effort
9. The users must be involved in the organisation of information
10. The users must be involved in the establishment of digital resources.