




BIBLIOTEKSSTYRELSEN

Jens Thorhauge

Danish Library Policy

A selection of recent articles and papers

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Preface

The Danish National Library Authority has an international obligation which involves giving quite a number of lectures and papers on the Danish library system in English at conferences abroad and at home. A frequent and sought-after speaker is the director of the Danish National Library Authority, Jens Thorhauge. He writes most of his articles and papers in English, but it is my pleasure to check and edit these, thus gaining a firsthand knowledge of his work which encompasses a great variety of library political subjects.

The immediate reason for publishing the present selection of recent articles and papers – the majority has been written within the past year – is that Jens Thorhauge is celebrating his 25 years of service in the Danish state in spring 2002. The Danish National Library Authority would like to mark the event by the publication of this book, but another important reason is that Denmark is the object of considerable interest from abroad at the moment. The authority's contacts with the international library world are on the increase, and it has become quite obvious that a publication in English describing Danish library political thought and the Danish library system as a whole, has long been keenly missed.

The texts have been selected in such a way as to cover a broad spectrum, ranging from an introduction to the Danish library system, via a description of the Danish National Library Authority, national libraries, university and research libraries, Denmark's Electronic Research Library to public libraries, including children's libraries. Throughout, the main emphasis has been placed on strategic development perspectives.

One text dates back a bit further. That is the executive summary which Jens Thorhauge, as project manager, wrote for the study *Public Libraries and the Information Society* for the EU commission in 1996. The text – a very early description of the hybrid library – gained a central strategic importance in a number of European countries and has been translated into several languages both within and outside Europe.

Vibeke Cranfield

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Nordic Public Libraries Denmark

Facts on Denmark (2000)

Population	5 349.110
Area	43 094 km ²
GNP	33.040 USD per capita
Number of municipalities	275
Number of counties	14 + 2 metropolitan municipalities
Key figures for public libraries:	
Number of public libraries:	800
Number of loans per capita:	13.55
Budget:	Gross: 299 mil. USD Per capita: 55,9 USD

A brief history

In 1775 P.F. Suhm opened his private library of 100,000 volumes to the citizens of Copenhagen, twenty years later The Royal Library followed suit and in the provinces the first collection of books was made available to the citizens of Maribo towards the end of the eighteenth century. More collections emerged during the nineteenth century and towards the end of the century nearly every town had a library with public access – thanks to associations or enterprising citizens. The collections were rather uneven, dependent as they were on gifts, philanthropy and small incomes – and systematics was not really the operative word. In 1882 the government for the first time granted financial support to public book collections which may be characterised as the front runners of the public librari-

es as such. From the beginning of the twentieth century a rational and co-operative library structure based on systematically developed libraries was being constructed. The most important source of inspiration was the Anglo-American public library system, 'free public libraries'.

The first public library act was passed in 1920. That was also the year for the State Inspectorate of Public Libraries to be established, both events signalling a systematic effort to develop and optimise the library service. The state started to pay approximately half the expenses and a professional training programme in librarianship was introduced. County libraries became obligatory and together with the State Inspectorate they were now responsible for local library development. The Act defined the aim of the libraries as the promotion of knowledge and general information and every subsequent revision has maintained this concept right up until the latest one in 2000 which outlines the framework for the hybrid library in a networking information society.

Since 1905 The Danish Library Association has been an active and prominent operator in the field.

A historically very significant revision took place in 1964 when sustained prosperity and an explosive development in education paved the way towards a multi-media library. At this time yet another aim for the public libraries was included in the Act, namely 'cultural activity'. In 1970 a large number of smaller local authorities merged into larger units which helped to stimulate a rationalisation and professionalisation of the libraries – as well as intense library building activity.

In the 1980s the public libraries became automated. Various library system suppliers appeared on the market and right from the beginning the smaller libraries, too, chose their own library system.

In 1983 block grants replaced the state subsidy to libraries, thus placing the responsibility for the financing of the public libraries at the municipal level. In consequence of this the State Inspectorate of Public Libraries was some years later integrated with the Office of the National Librarian and renamed the Danish National Library Authority (DNLA). DNLA is responsible for the national bibliography, library development i.a. via special pools, public lending right remuneration, the compilation of statistics and advisory services to the government. Since the 60s the state subsidy pools have been spent on systematic development: To support professional library management in small libraries, to multi-media development and automation and from the mid 90s to ensure internet access for the public and the development of homepages and electronic services.

Internet access for the public became obligatory for all public libraries in 2000. Today on behalf of the government, DNLA enters into performance contracts with the county libraries which results in close interplay between government library policy and municipal library service.

In 1957 the professional library education changed from being an apprenticeship served in the library combined with a theoretical (super-structure) into a theoretical education with its own institution. Today the Royal School of Library and Information Science has gained university status, providing bachelor, master and PhD degrees as well as extensive continuing education activity.

Current status

Every municipality in Denmark must run a public library – either by themselves or in co-operation with others. The financing of the municipal library service is done via block grants which means that each individual municipal council determines the level of their particular local library service. The framework for the public libraries and their co-operation with the research libraries is determined in *Act regarding library services* which establishes the equality of status of the media and makes it obligatory currently to purchase books and other materials and provide access to the Internet. It is a basic principle in the Danish welfare society that using the library is free, including interlibrary loans which county libraries and a number of the major research libraries are obliged to provide free of charge as part of their service. Likewise the citizens may choose any library they want to use free of charge.

However, it is possible for the libraries to charge for special services such as instruction, courses and other learning activities, more extensive information searches and news surveillance.

The service offered varies considerably from library to library although the library act provides an overall framework. The free access, i.e. the right to borrow from any library in the country, does however together with the right, free of charge, to have material provided via the county libraries and larger university and academic libraries, guarantee considerable equality. The difference may be illustrated by the fact that the amount spent on public libraries per capita in the municipalities varies between DKK 70,- and 850,- (Public library statistics 2000) with a national average of DKK 450,-. On average each citizen borrows 14 units per year.

There is a long-standing tradition of co-operation and in some cases of integration particularly between smaller and larger municipalities. In cases like these the smaller municipality's library is in effect being run as a branch of the larger municipality's library service. At the turn of the millennium the co-operation structure is clearly fluctuating and moving in the direction of more library co-operations. For a country with very small municipalities one of the major challenges is in fact to make sure the running of the libraries is done on a viable basis.

The increased demands to a library system makes the 1980s model of each library its own system rather inappropriate – hence the increased co-operation in this particular field. A number of libraries in an area will cooperate on the purchase of material in order to supplement each other and will carry out interlibrary loan service to supplement the national ILL. New services is another area that encourages co-operation. The public libraries are rapidly experiencing a change of organisation: network co-operation where a group of libraries together solve a particular task, electronic ask-a-librarian-service is one example, but there are many other electronic services being produced in the libraries' networking co-operation, for example Internet guides, children's virtual library, author encyclopaedia, special information for ethnic minorities and other specific groups. And more electronic services are already on their way.

Superstructure and ILL

In the Danish public library system, the county libraries provide the primary superstructure, with the State and University Library in Århus acting as Centre for Interlibrary Loans. The State and University Library receives one of the two legal deposit copies of books and electronic works. The State and University Library also serves as superstructure for collections built for ethnic minorities.

The Royal Library in Copenhagen, based on legal deposit from 1697, is the national library of Denmark. The Act on Legal Deposit was revised in 1997 to include new media.

All major research libraries participate in the interlibrary loan co-operation according to the *Act regarding library services* as a prerequisite for receiving financial support from the government.

The county libraries in Denmark – as opposed to the situation in for example Norway – are large municipal public libraries that receive

government grants for their particular function. The county libraries are developing with tremendous speed. From being primarily concerned with the provision of materials, they are turning into advisory, competency-developing and coordinating institutions for the libraries in their service area.

The new tasks are defined in DNLA's performance contract with the county libraries. DNLA has recently introduced a competency development programme which hopefully will give all libraries a lift and the county libraries have been entrusted with educating trainers and project managers who will make their services available to the other libraries.

The National Danish Library for the Blind was established in 1924 and is today in the absolute forefront for instance as regards developing synthetic speech from digitised documents.

University and special libraries

The university libraries as well as other large research libraries are financed by the government and often integrated in their mother institution. It is nevertheless the national strategy for this sector to develop Denmark's Electronic Research Library as a co-operation between all research libraries and in the long term as the body responsible for general library resources on the net as well. Access to catalogues, subject gateways, web-resources and licensed full text databases can be found on www.deff.dk. Denmark's Electronic Research Library is managed by a steering committee, and the secretariat as well as the special grant are placed in the Danish National Library Authority.

The vision is to turn Denmark's Electronic Research Library (DEF) into a permanent organisation within which co-operation on licences and other electronic research resources may thrive. DEF has a Z39.50 portal which contains the libraries' catalogues, web resources including links collections and licence-based access to full text databases, primarily with electronic journals. DEF is moreover responsible for a number of projects involving digitisation of important Danish journals and works of particular interest in relation to research.

bibliotek.dk and other electronic services

The Danish library strategy is based on the idea of a hybrid library – where an increasing number of netbased services work in harmony with a physical library in a gradual state of flux as its role and tasks change.

The very backbone of the Danish library system is a database, named DanBib, which contains acquisitions in all Danish libraries, localisations and value-adding library cataloguing, keywords etc. The base is accessible to the public in a user-friendly version called bibliotek.dk (an English version is available on the address library.dk). bibliotek.dk contains search facilities at different levels, but more remarkable is the fact that it is also possible for any citizen to order library materials from the entire Danish stock for delivery at any library according to his/her own choice. Basically it is a bibliographical database which via a good user interface is being developed into a search and order tool for the citizens, but in reality bibliotek.dk is now being developed further into a portal which contains a number of services. A delivery service is under way, an ask-a-librarian-service has been established with chat facilities seven days a week till late and also several netguides which fulfil the information needs of different groups. We have therefore a comprehensive and all-inclusive information service - in 14 languages - which is updated locally in relation to relevant groups of ethnic minorities. Apart from this, we have a subject-oriented netguide, selecting the best web sites – a kind of qualitative search engine, in fact. There are children' netguides and many more services will follow, in fact the opportunities seem endless.

The Danish libraries also produce a database of Danish authors where all Danish living authors are portrayed, a kind of authors' encyclopaedia which can be updated continually.

bibliotek.dk is developed by the responsible authority, DNLA, in co-operation with the host, the Danish Library Centre (DBC), (a limited company owned by the Danish state and the municipalities) which is also responsible for the compilation of the Danish national bibliography. DNLA has supported and coordinated a number of library-produced services gradually being built on bibliotek.dk

National strategy for public libraries

The libraries' development in the information society has created considerable political interest in various ways. 1994 saw the publication of a

report entitled *Info-society 2000* which turned out to be quite crucial for the Danish government's implementation of ICT strategies. In the book's chapter 9 the conclusion is drawn that the libraries also in future where electronic works increasingly will replace the journal and the book, will be able to fulfil a central role in making published information available to all citizens and assist in the navigation through the ever-expanding sea of information.

Following the recommendations of the report, the minister for culture in 1995 appointed a committee who were to assess the libraries' future tasks and conditions seen in the light of the explosive growth in electronic dissemination of literature and information to research and education, trade and industry and to the citizens. The two main cultural-political objectives for this work were stated as being: ICT must support the free access to information and the libraries should fulfil a central mediation function.

The committee's report in two volumes was submitted in 1997 and contained a number of recommended initiatives for the re-definition of the libraries' role. Equality of status for the media is recommended as an obligatory provision in the new library act which means a change of the traditional library role of making books available into providing access to information in whatever media it has been stored. Secondly, the committee suggests that co-operation between libraries be based to a greater extent on economic relations rather than rules. Further, that the county library structure be changed as well as copyright legislation to the extent that it becomes more feasible to establish agreement licences in order to avoid an explosive increase in the number of rights having to be negotiated.

The committee consisted primarily of people with no particular library associations. All recommendations, except one, were unanimous. The question of user payment was the controversial one and meant that a minority of library representatives wished to uphold the traditional 'gratis' principle in the libraries, while a majority found that user payment to some extent should be introduced – for example as a charge for the loan of the new media.

Immediately after the report had been submitted, the minister for culture set the wheels in motion for preparative, legislative work and not surprisingly, the question of user payment became the most important political issue. The minister for culture maintained that core services in the libraries must remain free of charge for the citizens. Core services are defined as access to borrowing and using the library's materials – including Internet

access, but this principle is combined with the principle of the municipal libraries being allowed to request payment for special services. This means that – at a fee – the libraries may offer a variety of services ranging from express delivery of library materials to consultancy and training services to companies, public institutions and citizens such as subject and product surveillance, instruction in searching on the Internet, updating of home-pages.

The law was passed in 2000 and creates the frames for the national strategy: the libraries are hybrid. They function on the conditions of the networking society. The national search and order facility, bibliotek.dk, is the backbone of the hybrid library – and must continue to develop. Networking co-operation between libraries must be encouraged and co-operation between library, school, education and other institutions and user groups must be advanced. The goal is to integrate the library's culture and information offers more closely into the everyday lives of professional information users as well as citizens.

The development in the libraries over the past few years has in Denmark been looked at as a change of paradigm. DNLA is responsible for a number of steps taken in order to provide a technological lift in all libraries. The library structure is also adapting to the new conditions and management culture is undergoing changes just as staff competencies must be extended and new services established – free of charge as well as paid for services. The real challenge in this context is to integrate library services to a much higher degree than ever before possible, into the individual citizen's everyday life. Vital information is available just a few clicks away. It is up to the libraries to make sure that this possibility is exploited and that it makes a decisive difference in the citizens' lives.

**Written as entry for an
Encyclopedia of Library
and Information Science,
2000**

The Danish National Library Authority

Introduction

The Danish National Library Authority (Biblioteksstyrelsen) is the Danish government's central administrative and advisory body to the public libraries and the research libraries and is an independent agency under the Ministry of Culture.

Like many other Danish government institutions DNLA's administrative procedures are based on a section in the annual Finance Act which currently describes the tasks and determines the budget. In Act on library activities (passed by the Danish parliament in May 2000 and taking effect from that year) the institution is assigned a number of functions. It is an inter-disciplinary public and research library institution, entrusted with tasks which in other countries often fall to the national library, and as such can effectively be described as unique in the world. At the beginning of the 21 century, the institution sees it as its major objective to ensure the development of a national cooperative library system based on a continuous quantitative and qualitative growth in electronic services as well as the development of services in the physical library room. The institution's primary administrative task is to administrate a number of grants and pools to authors (via the Public Lending Right scheme), special libraries or projects. In 2001 DNLA has an operating budget of DKK 28.6 mil., administrates grants for subsidies and projects totalling approx. DKK 350 mil. There are 50 full-time jobs. The director of the institution is Jens Thorhauge.

The roots of the institution can be traced right back to the first Danish library act from 1920. By the late 1990s the institution's tasks are policy making and advisory in respect of the government and local authorities and also administrative, coordinating and initiating. The ideal aim of the institution is at any time to ensure the optimal exploitation of resources and the development of the cooperative Danish library service across municipal and governmental sectors. An example of this is the establish-

ment of a web-based union catalogue with free search and order facilities to 657 public and research libraries. Another example is that the administration of a project which will lead to the establishment of a national electronic library has been entrusted to DNLA.

Apart from the administration of Act on library services, the institution has no formal executive power in relation to the libraries, but runs for the most part its development tasks on the basis of grants given to projects which pursue the development of new services or as temporary strategic grants. For example, grants for the development of an internet guide and other electronic library services as well as special government grants which are intended to encourage inter-municipal co-operation, particularly between small municipalities in order to obtain sufficient volume as regards collections, services and development potential.

The public libraries are municipal institutions run on the basis of municipal means, with block grants from the government. The state does finance the library superstructure, a case in point being the county libraries which are selected municipal libraries with an integrated superstructure function. In practice this means that the government finances the purchase of special and advanced books and other media, which are likely to be less in demand, and that these purchases form part of the municipal library's collections.

The research libraries are either independent institutions under the Danish Ministry of Culture or integrated in a mother institution, typically universities and research institutions.

An advisory library council is the formal forum for the co-operation between the institution and the library service as such. The council also functions as the national bibliographic council and operates via a number of ad hoc working groups.

Among DNLA's tasks is being responsible for collecting and preparing statistical information about Danish libraries and publishing the results which appear in two separate volumes, dealing with public library statistics and research library statistics respectively. The statistics are supplemented with a comprehensive annual report on Danish library activities.

The institution further administrates the Danish public lending right scheme. PLR today has status of Danish cultural subsidy and provides an annual remuneration in respect of Danish works purchased for the public libraries.

For a number of years the institution has acted as secretariat for the distribution of grants and also for major projects, for example the Ministry of Culture's Periodicals grant, Culture Net Denmark, the literature and library committee of the Nordic Council of Ministers.

History

The present structure in DNLA goes back to 1997 when the institution changed its Danish name from Statens Bibliotekstjeneste (literally: State Library Service) to Biblioteksstyrelsen (Library Agency). The English name stayed the same as the formal framework and international relations were basically not affected by the changes in the institution.

The change was brought about following a report on the views of the institution's professional co-operative partners, which revealed a feeling of uncertainty as to the aims and operative methods of the institution. The new name put the institution on a equal footing with other Danish government agencies which under their respective appropriate ministries carry out government administrative tasks. The title of the head of the institution was changed at the same time – from national librarian to director – as is the case in other government agencies. These changes were intended to emphasise the close connection to the Ministry of Culture and in practice the policy-making tasks were given high priority. This happened in conjunction with the preliminary legislative work on a new library act, which were to establish the framework for libraries in the information society, and also at the same time as the project Denmark's Electronic Research Library was launched – both starting in 1997.

Statens Bibliotekstjeneste was the result of a merging in 1990 of two government institutions, The Office of The National Librarian (Rigsbibliotekarembetet) and The State Inspectorate of Public Libraries (Bibliotekstilsynet) which had been the central institutions for the research libraries and the public libraries respectively. The Office of the National Librarian was established in 1943 and was until 1986 an integrated part of The Royal Library, which meant that the national librarian was also the head of this library while at the same time being the ministry's advisor on the research library sector. The national librarian had no formal authority outside his own institution. In 1986 the Office of the National Librarian became an independent institution. In 1990 it merged with the State Inspectorate of Public Libraries when the public libraries changed status as purely municipal institutions and state inspection of the public libraries ceased.

Bibliotekstilsynet or Statens Bibliotekstilsyn as it was called until 1964 was established in 1920 at the same time as the first Danish library act was passed. The object was to implement the law. In practice this meant administrating annual government grants to the public libraries and to advise on collections, premises and staff and to keep a watch on whether the local authorities complied with the regulations in the library act. The institution's leader was the library director who for most of that institution's lifetime had a formal authority in relation to the public libraries.

Up until 1956 when the Royal School of Librarianship was established as an independent institution, the library director was also in charge of the librarianship training course which also started in 1920 with the first library act.

The State Inspectorate of Public Libraries has played an all-decisive role in establishing the public libraries in Denmark. In the classic building-up phase which included both concept development and practical guidance, and where a deep understanding of the importance of 'public enlightenment' was crucial, the impressive inspirational force was library director Thomas Døssing, who was in charge from 1920 to 1942. The 1964 library act played a decisive role in the transition to a public library system which also put great emphasis on the promotion of culture. It formulated a declaration of intent which has acted as a guideline for government public library policy ever since: The public libraries must further information, education and cultural activity by making available suitable materials.

The principles for acquisition of materials were termed as quality, topicality and versatility, and the purpose was to let the materials function in relation to free democratic opinion-shaping and to prevent political, religious or moral criteria having any undue influence on the purchase of library materials. The practicalities in connection with an implementation of the quality concept have provoked intense discussion in the Danish library world – over the past few years very much encouraged by publishers and authors who experience that they are selling fewer copies, particularly of the so-called 'narrow' or 'quality' fiction.

The act also made it obligatory for all municipalities to run a public library which is still a firm principle in the legislation. One of the main architects behind this act was Erik Allerslev Jensen, library director from 1960 to 1975. The most important subsequent revisions of the act took place in 1983 when the public libraries' earmarked government grants were changed into block grants, turning the public libraries into purely

municipal institutions, and later in 1993 when the county library function became government subsidised. The Act on library services 2000 introduces a comprehensive change in the frameworks for running a library.

The institution was an important professional and strategic force in the preparatory legislative work throughout its lifetime, in the implementation of the acts and through the initiation of a number of strategic measures – as well as subsidies – which have placed the Danish libraries in the world's top league as far as usage is concerned.

Present administrative model

The Danish National Library Authority has been under the jurisdiction of the Ministry of Culture since the ministry was established in 1961. Until then the institution belonged under the Ministry of Education. The aims of the institution are currently described in the annual finance act along with details of its government grant distributed on a number of tasks and accounts.

From 1995 the Danish central administration began to implement an administrative model based on contract management. According to this model, ministries enter into agreements on performance targets with institutions and agencies, typically for a four-year period. There is a close connection between the finance act and performance contracts.

DNLA has signed a performance contract with the Ministry of Culture for the period 2000-2003. Apart from that the ministry signs an annual performance contract with DNLA's director about the results which must be achieved within that period. The director has signed agreements with heads of department and a number of members of staff. The intention is to encourage the staff to enter into annual performance contracts which upon fulfilment will result in a bonus. The aim of the performance contract is generally increased efficiency and skills development, concretization of action lines, objectives and results, increased synergy effect in the interplay with the Ministry of Culture, as well as the establishment of an administrative tool for management and staff of DNLA in a project-oriented organisation.

The development of a performance contract has involved every member of staff in the institution, as everyone has been considering whether the proposed objectives were the most relevant – and whether they might

contribute with their own suggestions. The intention behind this process has been to anchor the contract to a very broad ownership amongst members of staff.

The performance contract is built around four action lines, defined as development of the advisory function, strengthening of development tasks for the libraries, maintaining and developing quality in administration as well as organisation and skills development.

Each area is divided into a number of sub-targets which will be concretized in measurable tasks.

For example, the action line concerning the development tasks for the libraries has resulted in the following demands: DNLA must

- implement Act on library services
- develop standards for electronic document delivery, choice of materials, interlibrary lending
- develop annual target and action plans for Denmark's Electronic Research Library.

Targets have been formulated for each year. Sub-targets for 2000 concerning the implementation of the library act have been laid down as

- preparation of administrative regulations such as statutory orders and guidelines
- information activities in relation to Act on library services
- signing of two-year development contracts with the county libraries
- establishment of common access to the public libraries' electronic resources
- launching of the electronic search and order facility bibliotek.dk
- formulation and launching of a special development programme for the public libraries, i.a. with a view to increasing the co-operation in relation to the libraries' technological development, building up of collections and skills development.

The last bullet will be implemented in a programme which includes i.a. call for project proposals, call for and processing of applications. The sketched administrative model comes from the Danish Ministry of Finance with the explicit purpose of streamlining the administrations. The Ministry of Culture has worked systematically to emphasise the aim

of performance contracts as being to a greater degree an improvement of the quality in the work concerning the decision-making basis for the cultural policy and a tool for coordination and steering of many institutions' work. The Danish National Library Authority has been engaged in formulating strategies, targets and performance requirements at the same time as trying to develop the organisation from a regulation-based leadership culture into value-based leadership with a corresponding development from partly hierarchically organised departments to autonomous teams.

Special administrative areas:

Public Lending Right Scheme

DNLA administrates the distribution of 150 mil. DKK, which is the annual amount granted by the Danish government for the public lending right remuneration. Denmark's first Public Lending Right scheme, the first such in the world, came into force on April 1, 1946. The present Consolidated Public Lending Right Remuneration Act no. 21 of January 2000 stipulates that Parliament each year allocates a grant in the budget for a public lending right remuneration, which is to be distributed as support to authors, translators, and others whose books are used in libraries comprised by the act.

The Act uses the term: remuneration, in Danish *afgift* or fee, and from the beginning it was indeed the purpose of the scheme to remunerate authors the alleged losses suffered by the free public lending of their works in public and school libraries. In the preamble of an amendment bill of 1991 and in the Minister's introduction of this before Parliament it was, however, underlined, that the scheme now was to be considered part of the Danish State's cultural promotion measures. This scheme supports Danish language and literature, just as other schemes support Danish theatre, visual arts or filmmaking, and the aim of the scheme can be said to be fulfilled in so far as the Danish national bibliography is annually extended by about 19,000 titles. The scheme must, though, be seen in connection with the exhaustion rules of the Copyright Act, according to which it is permitted to distribute copies of published literary and musical works to the general public through lending, including through public libraries. It can therefore be seen as an alternative to an exclusive lending right.

The scheme is statutory and the latest revision of the act took place in 1999. The new act stipulates an intricate set of rules. Entitled to remune-

ration are authors whose books are published in Danish, unless it is a translation or a reproduction, paraphrase or adaptation of foreign language books. Furthermore illustrators, pictorial artists, photographers, and composers, whose works are published independently in Denmark or are included in books, of which the author is entitled. Other contributors to such books are entitled to 2/3 of ordinary remuneration if their contributions are of major value. Translators and others, who make reproductions, paraphrases or adaptations of foreign language books into Danish, receive one third of ordinary remuneration. After the death of an entitled person, a surviving spouse or co-habitor receives half of the remuneration for his or her lifetime.

As regards the written contributions, the distribution is based on the number of pages by which a given author is represented. Fiction is awarded a few more points than non-fiction and poetry counts six times as much as prose. There is also a graduation of the payment so that the remuneration per pages decreases.

No one can claim remuneration, until he or she has registered with the PLR Office at the National Library Authority and given the necessary information about all contributions to published works and the names under which they have been published. New titles will automatically be credited to his name in the PLR database, if that name is mentioned with their registration in the National Bibliography. If not, it is the duty of the person himself to notice this and submit proof of his contribution. About 19,000 persons are registered and the annual amounts paid out vary from DKK 25,- to DKK 800,000,-.

It should be noted that in the framework of the EU Rental Directive (92/100), the Commission has stated that the present Danish PLR Act satisfies the requirements of Article 5 of that Directive. Consequently, the present PLR scheme in Denmark will not be affected by EU legislation in this field.

The Development Pool

Another administrative area is The Development Pool. A annual grant (in 2000 17 mil. DKK) is awarded for the purpose of development of the public and school libraries. DNLA calls for proposals for development projects and stipulates which action lines are eligible for support. The strategic action lines have been/are: Connection to Internet, Intermunicipal co-operation, Intelligent search robots, 'Pulling together':

Cooperation between public and school libraries, Cultural advisers/county libraries. In the recent library act the following action lines are stipulated: Development of collections in smaller libraries, Skills development within the county library framework, Management development, Projects concerning new services and types of co-operation, PR and marketing. Over the past few years development projects have largely been centred round electronic services: netguides for various target groups, creation of web based information, but also projects aiming at developing new professional roles.

The development pool has been used to improve the libraries' chances to handle the new conditions for their service and activities. In this way the government's involvement in the municipal libraries is clearly underlined.

The pool funds have been directed specifically at the libraries in the small municipalities. One of the Danish public library system's marked qualities is that it stretches out so widely, i.e. there are also well-functioning libraries in the periphery and in the small communities. Looking back on the subsidies for the smaller libraries, it becomes fairly obvious that there has been a swift development (especially in the eighties) from small collections, serviced by a not professionally trained person, to digital libraries. Today there are only a few municipalities left with a rather small local population which are served by libraries of the type mentioned above. The Development Pool has supported the process of professionalisation.

The second major development area was the online registration of the municipal libraries' collections. The grants were this time not only directed at the small libraries, but they were the basis for many small libraries succeeding in carrying out the process.

In 1996 DNLA defined a new action line: Internet in the library. Two models were applied, i.e. grants towards giving citizens access to the Internet in the library and grants towards establishing a homepage with access to searching in the library's catalogue via the Internet. Today most libraries in Denmark have their own homepage and all of them provide access to the Internet for their users and relevant instruction.

A final example of an action line is financial support to inter-municipal co-operation. This action line was decided upon out of regard for the greatly increased demands levelled at the libraries' ICT services and the move towards the extended library concept, where not only books, but all media must be made available to the citizens. Once again it is the small municipalities in particular which face financial problems. Co-

operation as regards library systems between smaller municipalities and between small and large municipalities has a great deal to offer. There is no tradition as such for inter-municipal co-operation, but it is the way forward to ensure sustainable systems. Co-operation in connection with library systems is now awarded with up till DKK 100,000,-.

About 4 mil. DKK is used every year for so-called free experiments. While the strategic action lines are instrumental in developing the libraries towards a common goal which will guarantee the population a professional and fairly homogeneous service, the free experiments act like a kind of dynamo for the development, breaking new ground and fixing new targets.

To begin with applications very much focused on technology. The idea was to put to the test exactly what information technology could be used for in the library. ICT has now become part of everyday life, and content has become the operative word.

A major project has been FINFO 2000 providing information to refugees and immigrants, and thus the libraries can be said to contribute in a positive way to the national policy for the integration of citizens.

Other projects have involved the integration of Internet sources in the libraries' catalogues or centred around children and young adults in an attempt to use children's creativity when developing the libraries' service in tune with a generation for whom the PC is just as much part of their daily lives as books, comics, football or the Barbie doll. Others are digitisation projects and projects on electronic accessibility of much requested, but worn material.

The Development Pool, together with the Literature Council and the Danish Literature Information Centre, support a new digital fiction author's encyclopaedia: Author Net.

The structure of the Internet means that national initiatives can be carried out on a decentralised basis, i.e. networking. Projects on resource distribution, target management and testing of an international standard for performance indicators show a interest in continuous quality enhancement, and in a major regional project joint electronic choice of materials and purchases is being tested.

County Libraries

A third classical administration area is the county libraries. The county libraries have played a very important part in the development of the public library system in Denmark.

Basically the county libraries have two major tasks: to act as superstructure (materials) for the libraries within a particular area and to offer professional advice to primarily smaller libraries. By acquiring literature of a more specialised and advanced nature, the county libraries made sure that this literature was available and could be borrowed via ILL, and in fact by far the majority of the Danish interlibrary loan activity is carried out by the county libraries. Through visits, advising and teaching the county libraries have also contributed to a continuous professionalisation of the public libraries. Since the 1970s the role of consultant has diminished considerably. The reason for this was that the statutory requirement that the head of a municipality's public library system must be a professional librarian, could be met by most libraries due to a great increase in the number of professionally educated librarians. However, at the beginning of the new century, a new situation has presented itself. The need for skills development in the networking society is so insistent that the role of adviser and developer is once again in demand - also by the larger libraries. The obligation to act as superstructure covering all media, combined with a veritable media explosion, makes a redefinition of the classic superstructure tasks necessary.

The county libraries have traditionally been rooted in the national administrative structure as regional libraries. The present regional structure has not changed since 1970, when 14 regions/counties were decided upon (average 300,000 inhabitants) as well as two metropolitan regions which were given status as counties. The Act on library services (2000) makes it possible to alter this state of affairs, as the minister for culture is given the authority - after consultation with the municipalities involved - to appoint those municipal libraries which are also going to act as county libraries.

The Danish county library model is integrated. It means that a municipal library is chosen to have the government financed superstructure function, which because of the integration cannot be differentiated precisely. But the county library takes on a number of tasks which from 2000 are determined in individual contracts between the municipalities in question and the state, represented by DNLA.

DNLA's role has thus changed from being a classic bureaucratic administrator of grants, based on mechanical distribution principles, into a more 'steering' institution that ensures that the county libraries' performance targets and prioritisation of tasks are optimal in relation to the needs manifesting themselves in their service area. The contracts are based on an interview round of the libraries in the area and the subsequent evaluation. The action lines are defined as the classic superstructure function, advice and skills development as well as coordination of library co-operation in the area.

The hybrid library poses the question of a re-prioritisation of the means available for the county library service. The county libraries are the driving force in the development of internet guides for various user groups for the establishment of a national author's net, for a national ask-a-librarian service etc, and the need for financing of these services puts pressure on the traditional superstructure function. The result may well be fewer county libraries and a change in the distribution of tasks. Work is going on at the moment to the effect that one or more networking libraries will be able to put in their bid for solving tasks associated with the national superstructure. This procedure is bound to become more common in the future parallel with the recurrent negotiations of performance contracts.

Interlibrary lending

The Danish library system is based on the principle of free and equal access for all to all publicly financed libraries. Some of these libraries also take part in interlibrary lending free of charge. It is the responsibility of DNLA to make sure that this traditional task of the cooperative library system is functioning.

According to the present library act, participation in the interlibrary lending procedure free of charge is the responsibility of 16 county libraries, the main loan centre – State and University Library in Århus – the Danish Library for the Blind as well as a number of government research libraries who are obliged to participate under the statutes of their grants.

Legal deposit copies form part of the interlending co-operation, as two copies of all published works must be deposited. A museum copy goes to The Royal Library and a lending copy goes to the State and University Library. Legal deposit electronic works can only be accessed in the two legal deposit libraries.

Each year DNLA publishes a list of those research libraries that take part in the interlending co-operation free of charge. The list includes all university libraries as well as about 35 research libraries with unique collections. Interlibrary lending can also be effected between other libraries, either by special agreements or by payment of a fixed price.

The Danish national bibliography, financed by the state, forms the cataloguing basis for access to the libraries' collections. DNLA is responsible for development and upkeep of the DanMarc2 format which is being used and which administrates the contract with the Danish Library Centre. DLC carries out the national bibliographic task and is a private limited company whose shares – i.e. 90% of them – are owned by the Danish local authorities and the state. By tradition a Danish mayor is president of the board, while DNLA's director is vice-president. The national bibliography is supplemented with the so-called library cataloguing which is financed by the local authorities and which consists of value-adding subject headings and annotations.

Over the past 10 years DNLA has followed a strategy of establishing a common database – DanBib - for the collections of the public libraries and the research libraries. This database is in a public version now known to users as *bibliotek.dk*. It is accessible for searching on the Internet and for ordering works to be delivered to one's own library. The development of an express service and digital delivery on demand is seen as a likely prospect in the near future.

DNLA is working on implementing a Danish Z39.50 protocol, Danzig. A number of the larger libraries' catalogues are searchable via the so-called Danish Research Library Catalogue, which is virtual. DNLA's strategy can thus be characterised as a dual strategy. Determined efforts are being directed at the development of a virtual catalogue which will be able to define searches both regionally and subjectwise, but at the same time the physical common catalogue is being developed. The idea is to develop it into a proper portal which will also provide access to other electronic library services, like for example internet guide, a nationally organised ask-a-librarian service, special information for different user groups, e.g. FINFO which is a multilingual information programme for immigrants and refugees/ethnic minorities. This dual strategy will prevail until such time as virtual common catalogues can be deemed as effective as the physical common catalogue.

Legislation

DNLA has been the professional adviser to the minister and her/his department for over 80 years of Danish national library legislation. Throughout the years the guiding legislative principle has been to ensure the access of the entire population to modern libraries. Two quite fundamental principles underpin the legislative measures. One is the concept that democracy depends upon the population as a whole having access to published information and free opinion-shaping. The other is the humanistic concept of man having a development potential which can be nourished by access to sources of knowledge and experience.

Although the main library political objectives have remained the same for many years, i.e. to further enlightenment, education and cultural activity, the conditions and the means have varied considerably. But generally speaking it would be fair to say that the tendency has moved towards professional libraries in all local authorities. In the first instance as a possibility of obtaining state funding for the establishment and administration of the public libraries, later on as primarily government funded libraries, then gradually the transition to a decentralised model, where the libraries are administrated locally, but within the framework of the library act.

However, the 2000 act has introduced a turning point, as the professional demands on the libraries are so extensive that small local authorities may find it very difficult to finance the task, which is why the objective must be a sustainable co-operation between local authorities, based on both a virtual and a real community.

Policy

The strategy for library development, which at the beginning of the 21. century is the governing principle for DNLA's work, is to set a general standard for the libraries and create a framework for their development based on ICT. The fundamental vision is the development of the hybrid library, where an increasing number of electronic services work in unison with the physical library and its particular services, and where the interplay between virtual and real services is forever vibrant.

The vision is implemented by a strategy containing four main points:

1. Upgrading of all libraries' technological basis, primarily to enable them to handle a Z39.50 standard
2. Adjustment of structure in the library co-operation, due to an altered technological standard

3. Establishment of new services – primarily electronic, but also an adjustment of the function of the traditional physical library
4. Ensuring skills development for all library staff.

Of the four strategic main points, it is particularly the adjustment of the structure that calls for a national policy, and here flexibility must be the operative word. The project Denmark's Electronic Research Library will result in the establishment of a national co-ordinating body which will ensure that relevant licenses are negotiated and agreed at the best possible terms and will be offered to all relevant parties. A development plan will also be needed at national level. At the same time it will still be possible for groups of libraries to enter into consortia, just as individual libraries are free to establish particular services.

This line of thought is likely to apply also to digitisation and registration of electronic resources. At national level, the digitisation process will be at the top of the agenda, while at the same time groups of institutions will be able to finance individual digitisation projects which have a local or special professional prioritisation.

The efficiency and quality of national electronic services will greatly influence other structural adjustments. An express aim of Denmark's Electronic Research Library is to make sure that also the small research institutions' library service is given a quality boost, which is in fact already happening.

Smaller public libraries find it generally more difficult to establish a well-functioning hybrid library environment, primarily because the users' needs vary greatly – and to a much greater extent than is the case in the research libraries.

It is DNLA's policy to support sound library systems of comparatively homogeneous quality. A means to this end is inter-municipal co-operation on public library service, providing sufficient professional diversity to ensure professional development in all areas.

New services are important. Electronic library services have already been mentioned here, and it is clearly an area which has required most resources. But the development of more traditional services is also under scrutiny. A case in point is DNLA's efforts directed at implementing a new Danish children's cultural policy. Seen in a historical perspective, DNLA has played a decisive role in the development of children's libraries, which since the 1970s have carried out a broad spectrum of children's cultural

tasks, including i.a. children's theatre. In 1999 the Danish minister for culture published a children's cultural political report which expressed two central objectives: to ensure that children were given better opportunities for developing their potential and to create a more obvious connection between home, school, societies and other institutions. The means by which to obtain these goals was closer co-operation between institutions and the demand that all cultural institutions must concentrate on what they might be able to offer the children.

DNLA has played an active part both in the wording of the report and in its implementation. Subsequently a children's cultural political council has been appointed and a proper children's cultural political action plan has been established.

So far DNLA has launched two projects in the children's cultural political sphere. One is the development of a new role or task for the libraries as children's cultural co-ordinators. The intention is to encourage co-operation and understanding between the many players that children meet every day – at school, clubs, institutions.

The other is the development of a new kind of co-operation between public and school libraries which in Denmark are separate for historical and professional reasons. The school libraries are manned by teachers, whereas the children's libraries are manned by librarians. Co-operation between these parties has to be intensified to gain the optimal effect for the children. In both these cases DNLA has defined the projects and chosen the participants between interested libraries and also assisted in working out action plans and secure regular consultations and exchange of ideas between the participants. The result will be new services to school teachers and pupils and to the cultural institutions which will be offered the opportunity of professionally coordinated networking co-operation.

**Paper presented at a seminar
in Helsinki given in honour of
the Finnish national librarian,
Esko Häkli, on the occasion of
his retirement in November
2001**

The role of national libraries in networking and knowledge sharing in the Global Village

The users and the library vision

It is an honour and a tremendous pleasure for me to be invited to share with you some thoughts on the future of national libraries. When I received the invitation to give a paper here to honour the work that Esko Häkli has done for the University Library of Helsinki, the National Library of Finland, the Nordic libraries, for Liber and the European academic library development, for IFLA and thereby the International co-operation I immediately accepted and suggested a title for my paper: The role of the national library in networking and knowledge sharing.

I was quite convinced that knowledge sharing and networking would be keywords in a paper - and the role of the national library was given as the theme or topic for the seminar. I will remain loyal to my spontaneous ideas on the essence of this lecture, but I must admit I have had to change the scope somewhat, as the basic question should not make its point of reference the library, but rather the users. If we want to know how citizens, students, researchers – I repeat citizens including children, youngsters, adults, the elderly, professional information users, students, researchers – in that priority - will be served in future libraries we should probably ask what is the national role of libraries in the future and not what is the role of the national library. Focus should always be on the end users and not on the institution. You can handle a national library service in many different ways - you might even have a distributed national library.

Any colleague could take this attitude towards the basic question – or could choose not to. But in particular a director of the Danish National

Library authority should do it – as in Denmark a wide variety of national tasks in the library field are placed not with the national library but with the Danish National Library Authority, which is a government agency and not a library, but still runs a number of library programmes and projects – so the basic questions are: what are the tasks and how do we organise them.

A huge challenge in these years is that we talk about the networking society and we organise new services on a distributed basis, yet many institutions are nearly medieval with thick and tall walls around them to protect them from the demanding world out there. How do we change the way of thinking and working in these libraries, how do we make them networking and knowledge-sharing? Basically we must have a convincing vision. Allow me to refer to a modern classic in describing the vision. In the good old days - whenever they were - you could refer to 'the classics' with only little danger of not being understood, even if 'the classics' were never completely similarly identified from one learned to another. We get more and more 'classics' and it has become increasingly impossible to agree on one canon. There is however one classical fictional character, born in the twentieth century at approximately the same time as Esko Häkli, and which I believe you all here have met. I refer to Walt Disney's Donald Duck or to be more precise to his three entrepreneurial nephews, Huey, Dewey and Loui. I don't know if my Scandinavian colleagues are aware of the fact that the English name for 'Rap' is ..Dewey. In the Donald Duck stories many visions and fantasies are turned into reality, and what makes Donald Duck great comic art at its very best is that in the grotesque stories we recognise our own lives, hopes and - in particular - failures.

I don't exactly remember if it is Dewey who keeps that precious book that many of us have been looking in vain for in libraries and bookstores, but it must be: The Junior Woodhuch Guidebook Here you can find any information you need, it is a complete dictionary and encyclopaedia, it contains instructive information on bridge building, cures against snake bites etc. etc. The format is quite handy, around one or two hundred pages - you can keep it in a big pocket or a small bag – that is carry it around with you and use it whenever you need information.

That - dear colleagues - is the ultimate vision of the role of information, it is at hand when you need it, you look it up, use it, turn it into personal knowledge that makes you able to manage in whatever impossible situation you find yourself caught up in. Huey, Dewey and Loui are smarter than their uncle. He nearly always comes unstuck, they often help him to

survive the endless number of crises his life consists of. The most reasonable explanation for this fact is that they very often turn to that precious book where the knowledge of past generations is stored in such a comprehensible way. What they carry around is the ultimate encyclopaedia - or even the universal library, combined with practical knowledge from every field.

Of course that Junior Woodhuch Guidebook is a magic wand, a fairy tale tool that you wish you had in real life as the pocket edition of Library of Congress with even better search facilities than those of the day. My point is that we have never been closer to having this splendid or naive (whichever you choose) dream come true than now. With the Internet we have got good library catalogues, portals, search engines, subject-based link collections, and a growing number of full text databases. To that we can add the Internet-based ask-a-librarian service which in Denmark also contains a chat-with-the-librarian facility till ten at night on most days.

We have a tremendous chance not only to produce value-added information tailor-made to each individual, but also to integrate the information service into the lives of students, researchers other professional information users and even citizens be they young, adult or elderly.

I believe we all work to fulfil the described vision - and in the following I will refer to some Danish experiences.

Let us turn to the national library

In basic terms the national library roles are the same at all times. Librarians know ad nauseam that to collect, record and preserve the national imprint and increasingly also other media such as CD-ROMs, web sites and web-published documents and even broadcast radio and TV, are the core library activities combined with various activities to make the collections accessible.

To this core activity we may add a number of other tasks that often, but not always, are maintained by a national library: producing the national bibliography, promoting collections and exhibiting rare books, manuscripts et cetera. What a national library actually does or leaves out depends on the co-operation with other libraries, the possibilities for users to choose and of course on the priorities made within the library itself.

The really interesting discussion is related to in which ways, to what extent and within which scopes you solve the tasks. Many national libra-

ries are also university libraries, and when they are, the university library functions will mainly be the functions that infuse life into the library. I remember visiting national libraries with very few users and of course some that are really heavily used. A general impression is that the heavily used libraries such as British Library and Library of Congress fall into this category not mainly because of their huge national collections but because of an extremely good service.

I don't think that you can contend that national libraries in general are in a crisis. But in a way they ought to be when you consider how traditional national library task in many countries are solved in other institutions. On the other hand it is remarkable how many new and mostly very prestigious national library buildings we have got, in particular in Europe within the last ten years, that is a period in which you had to be aware of the discussion on the risk of the library bypass. The situation of national libraries is truly full of paradoxes.

As early as 1989 the former British Library director, Maurice Line wrote in a UNESCO report on national libraries that there is nothing that national libraries do that cannot be done in some other way or by some other institution or body – and which is actually being done, even in terms of very basic functions by other bodies. In Denmark for instance we have a strong, rich and beautiful Royal Library which we recognise as our national library. But the State and University Library in Århus which along with the Royal Library receive the legal deposit copies has the responsibility of acting as superstructural ILL-centre and has likewise the national responsibility for collecting music and broadcast programs. The Danish National bibliography is produced by the Danish Library Centre, a limited company owned mainly by the Danish state and municipalities. And the Danish National Library Authority – which in its actual form came to exist in 1989 by merging the National Librarian's Office at the Royal Library with the State Inspectorate of Public Libraries, takes care of a number of services and for instance holds the appropriation for Denmark's Electronic Research Library.

Since Maurice Line wrote the report on national libraries I think it has become even more evident that ICT makes it possible and in some cases desirable to organise the national responsibility for libraries in ways that differ from the organisation of a classical prototype national library. I admit that many national librarians do not agree in this point of view. But as a matter of fact you all know the role and functions for national libraries varies greatly from country to country. A few examples from smaller European countries: The national library closest to Helsinki where we are now, is the Estonian in Tallinn. To a high degree it also serves as a

public library. It opened in a new building a few years after the independence of Estonia, and the lack of a modern public library in Tallinn providing access to all kinds of materials in proper buildings, resulted in a decision to let the new national library address the general public, and it did so with success. In other countries such as Ireland, the national library is – in terms of users – a relatively small library, the title of the director is ‘keeper’ which at least to a Scandinavian person like myself, suggests a more museum-oriented role than ‘librarian’. It seems as if the most heavily used research library in Dublin is the library at Trinity College. In Slovenia – another new state who like Estonia had its own national identity and a long national library tradition before it became part of another state – and is now revitalising this tradition on a new platform, the national library has a national responsibility to develop the public libraries. The role of the national library in these examples has been formed by the national scene of libraries and user needs rather than by an institutional policy.

In principle my conclusion so far is that you can not talk of the role of national library, but of a variety depending on the general library situation in the country in focus. In practice however I am convinced that the traditional national library-core activities: to collect, record, preserve and make accessible the national imprint will now along with other relevant media forms such as electronic, also be the core activities in the future. In relation to the global village you should think of access not only in national but in global terms, that is: you must ensure users access to foreign material and vice versa ensure foreign users access to your national material. Libraries worldwide have for many years been working for universal availability of publications based on interlibrary loan. Now we are facing a new era with growing electronic access which in every sense of the word calls for networking. National libraries do not have a monopoly here but again in practice they play and should play a leading part.

If national libraries should have a monopoly – and in this case in practise do – it is in their role of museum. Basically I regard the legal deposit based collection as a museum collection, and I think that most national libraries give a very high priority to this task, and even if the most radical scenarios on library bypass should come true and libraries turn superfluous, the library and book museum would remain. In this connection it is important to remember that the traditional museum role of maintaining and preserving collections may/will develop into another situation that may in some respects be more resource-demanding and in some ways less. I am of course thinking of the fact that electronic text will have to be refreshed to stay accessible (I am not competent to say anything about

the cost of these operations), that the mass of information is growing, that the paperstored material will become older and so on. On the other hand e-material does not need a lot of physical space. But in the present day the museum role is only a part of a much broader role in the global village

During the nineties the term 'global village' has been commonly used to express the short distance in space and time between places and in consequence also between cultures - at least some of them. In one area the global village term has been most convincing to describe new relations and conditions - and that is within research, where the world-wide web has revolutionised the kind of networking that has always been significant among researchers. In particular within science, but now in a new sense that has for instance made OECD run a number of conferences on the global research village focusing on research on networking, but also of course in more practical terms on networks for researchers.

The keywords networking and knowledge-sharing have also gained a new meaning in the last ten years and increasingly do so. Let me share some experiences from Denmark with you to illustrate this point.

In the public library area a number of recent examples demonstrate what libraries can do on a networking basis. The e-reference service, 'Biblioteksvagten', open seven days a week with chat facility till ten in the evening on most days, is run by 22 public libraries, and discussions are going on as to whether the service should merge with research libraries in Denmark - that have not yet such a service but realise they need to, and whether it could be connected to a specialist question service. More than 90 librarians create on a distributed basis what is called the public libraries' internet guide, a link collection where the links are all to selected webpages of controlled quality. An updated e-dictionary on contemporary Danish authors is created in a network among public libraries. Likewise the virtual children's library and various specific tailor-made info-services are examples on new services.

If we look take a look at the university and academic libraries in DK, the networking activities have even become formalised in the co-operation on the project Denmark's Electronic Research Library where more than a hundred libraries work together in establishing the electronic library: that is portal, subject gateways, full text databases and various user services.

To do all these things - in particular to develop new services, the staff need new competencies. In Denmark we have excellent continuing edu-

cation offers for library staff, but we needed another kind of learning, we wanted to give every library the chance of developing their competencies, so we try to produce trainers who are a kind of nomad librarians that can work with the staff in various libraries for some time and share their knowledge in the practical everyday situation.

So I can conclude that we have at least started to fulfil the vision of the hybrid library which in Denmark has been our guiding star and from which we have derived a number of strategies to bring about a technological lift, to establish a number of electronic and other new services, to develop new competencies, that will allow librarians to work closer to the user's needs.

The challenge is that technology offers us an individualisation of the library services that is close to an integration of these services in many kinds of everyday life, it is not only a question of tailor-made information - it is the possibility with a few clicks to get an information that will add value to your project or life.

Three types of actions

What should in general be done to fulfil the vision, is there a common strategy? In a way it should be quite easy to answer that question, as a lot has already been done in most countries. We might talk in terms of phases or blocks of actions since they are not necessarily linear.

The first block of actions is related to providing online access to the catalogue, which can be done on many levels. In Denmark we give access to the value-added Union catalogue with ordering (and buying) facilities from bibliotek.dk, the address library.dk also works – that access is based on the physical joint catalogue. But we also give access to the catalogues in a number of university libraries via the z39.50 based catalogue where you can locate a title and check if it is available or not – but you cannot order it. Of course there is a job to be done with merging these two systems.

Another vital task is, of course, the retroconversion of hand-written or printed catalogue cards or even worse: protocols. This is a typical example of a task that is being solved many years after the introduction of the first OPACs. In Denmark we will be finishing the project with converting the last two and a half million cards in two years time. Will the work then be finished? Of course not. Integrating web resources in the catalogue apparatus is already a challenge, and I share the opinion that we will have

to...In any case a good online catalogue, value-added and preferably with ordering facilities can be seen as the backbone of the hybrid library and an absolute condition for fulfilling the vision of the click-click access to the information you need.

A second block of activities is related to the Internet-based access to full text resources. A first relatively easy step has been taken in most western countries in giving access to licensed e-journals – in principle from any connected computer for the population of the university campuses. Evidently this is not enough. There are two more major challenges. One is quickly to give access to full text resources for the general public. I think that one of the greatest successes on the Internet seen from a qualitative library view, has been the access to Encyclopaedia Britannica. The publishers in Norway and Sweden lost fortunes on online versions of the newest encyclopaedias. In Denmark we have fallen behind in this field. Our new encyclopaedia had its final volume published last month, and we have not found a model for an online version yet. The publisher is scared by the bad economic experience in our Nordic neighbouring countries, but we do discuss models. In principle I think that it should be comparable to broadcast public service in the news field to give free public access to a national encyclopaedia via the Internet and also other encyclopaedias (dictionaries) – but right at this moment it would be very difficult to raise the money. So we must probably think in terms of licensing once again, but there is an obvious chance to add value to bibliotek.dk by linking to relevant articles – and since there are no references in the encyclopaedia – a very much criticised fact – bibliotek.dk could also add value to the encyclopaedia.

A much more delicate field in relation to giving access to full text material is of course digitising of printed material. The problems related to this task are so numerous and complicated that they call for a national strategy – the smaller the country, the fewer resources and hence the greater the need to spend the resources to best advantage.

Everybody here are probably familiar with the copyright problem which is not so much a question of paying for the rights, as the rightholder's right to refuse or demand a price that is obviously unfair. It is also the problem of identifying and finding the rightholder, and now some publishers claim that we should pay for the right for digitising the composition matter when you finally have a text that is either by an author who died more than seventy years ago or by one with whom you have agreed on the intellectual rights. So at the end of the tunnel we can still see the ultimate virtual library that can serve as that wonderful book of Dewey's

– and we do have the technology and know-how in librarianship to go there – but in terms of agreeing with the rightholders and in terms of raising sufficient money to digitise more than what is just a mere drop in the ocean, there is a long way to go yet.

A national strategy should primarily establish criteria for what should be digitised – preferably in libraries as well as in archives and museums – with public money and what standards should be respected.

The reluctant attitude among traditional publishers towards electronic publishing and e-books might easily be the topic in a full lecture. I will limit myself to one point:

Maybe the problems we face with publishers – rising prices, negative attitude towards digitising and electronic publishing, negative attitude towards establishing adequate electronic resources for university courseware, call for an international strategy for changed conditions for access to at least research results achieved for public money. A change could be achieved if the universities and other relevant public research institutions agreed that all published results should be available on the institution's web site. The researcher might then have the right to printed publishing. Such an arrangement would probably mean a demand for compensation on behalf of the researchers, but even taking into account the extra cost this would involve for society as such, I am convinced that the model is cost-effective.

A third block of actions is related to all kinds of services that make it easier for the end-user to access and use relevant information, at the moment first of all various kinds of selection of information – old as well as new. One type of tailor-made information that is already being delivered at a number of institutions, and which I believe will increase, follows a model with a web site related to a research project, a semester, a course programme or a specific subject, typically in a university where the library keeps up a current flow of references and links, where teachers' notes and students' papers are presented together. This model can be used at every educational level, right down to the classes in primary school when the pupils are introduced to the concept of information competencies in connection with project work.

News services which continuously monitor specific subjects for on behalf of relevant users ought to be an area of growth, where machine-based harvesting is combined with manual librarian selection. Internet guides and ask-a-librarian services may belong here as well. A critical point in

most of the services in this third block is that the librarian should develop a more consultant like attitude towards the users.

A kind of conclusion

National libraries or similar bodies should network with other national libraries to establish world-wide co-operation on access to the complete human record. Practically all national libraries that in the seventies and eighties had the ambition to cover world-wide have given up that ambition - maybe with Library of Congress as the only exception. This adds even greater importance to the task of collecting national material - even if we have increasing difficulties in defining exactly what national materials are.

If we once again pose the question: what is the role of national libraries in solving these national problems? it is very easy to give the answer on a general level: it is to help solving the problems in cooperating networks with other relevant partners in the field, sharing the knowledge they have got. Of course, this answer is too simple or easy. You might as well ask: should the national library take a leading role in this process, and the answer would be - yes if the library is actually influential and competent. But if it is not, should you then try to develop the competencies of the library- is it desirable that it is the national library which takes on this leading role. Representing a government agency like The Danish National Library Authority, my answer to that question is not very objective, but I would nevertheless insist that there are clear advantages in a model like the Danish one. Could we by any means imagine a conflict between interests of a national character and an institutional one, could the narrow interest of a national library be in conflict with solutions that from a public library point of view would seem the best? And could we imagine that - as even library directors are human - that the decision of a director might be in favour of the institution. Even if it was not really the case, the libraries would probably suspect the national library of acting in its own interest. I would not dare to suggest myself that there might often be observed some tensions between the national libraries and other libraries, but let me quote an expert, Maurice Line once again, when he says: "National libraries usually attract a great deal of criticism ... from other libraries. The causes of this critical attitude differ from country to country but they include resentment of their perceived wealth, fear of their domination, impatience at their bureaucracy, scorn of their inefficiency and irritation of their arrogance or aloofness" (Do national libraries have a future? In: *Logos* 10, 1999).

On the other and more practical hand most European national libraries are good and strong. They do play a leading role and so they should – in particular if they are able to create a cooperative and networking spirit with other libraries in the joint solving of national tasks in the library field. In most countries there is such a good co-operation with the national library as a *primus inter pares*.

However here '*pares*' means university, research and other academic libraries. Should I in a very last remark point to a imminent truly national task that national libraries could and should see as their challenge it would be to broaden the perspective and incorporating also the public libraries in creating an information service adequate not only for the global research village but also for the true global village.

**Paper presented at the LIBER
annual conference in
Copenhagen, June 2000
Published in LIBER 2000:10**

Danish Research Libraries – Danish models

In Europe we tend to think of cultural diversity as the very essence of our European fabric. This conference has also underlined the necessity for sticking to internationally recognised standards if we want a seamless co-operation in the future. So I believe that presenting the Danish situation to you serves a dual purpose: that of confirming that basically we do the things you do, but we also do some things in a different way which hopefully might be inspiring. I shall be looking at both aspects, with the main emphasis on the Danish models.

We share a library vision in Denmark – to a great extent. Certainly we agree on the cornerstones in it, and this vision is something we share with most of you. It is the vision of an actual hybrid library with vastly improved electronic services based on co-operation between public libraries and research libraries and – not least – co-operation between small and larger research libraries. We seek to combine a decentralised development with a national strategy and a national electronic library infrastructure. The Danish National Library Authority, which I represent, is a super-institutional national body one of whose tasks is to develop national strategies and support co-operation between all types of libraries. Denmark has a population of 5 mil. and our strategy therefore has to contain close co-operation as a means to obtain a full-scale development of both service and collection building. We strongly believe that resource sharing is the basic element of high cost-effectiveness.

The tasks in question are linked to improved access and new services. Improved access is about easier access to more material for more people. New services mean i.a. electronic ordering and delivery, profile-based regular news selection and other value adding services, closer co-operation with users, consultative partnerships with various research projects, businesses and other segments. These services can be said to involve new roles and new partnerships in both well known and fresh contexts.

Key figures – main structure

In order to discuss the vision in earnest and comprehend its premises, you will need a few key figures as well as an outline of the structure.

Our official library statistics divide the research libraries into three main groups: 44 major research libraries, 180 university institute libraries and 144 minor research libraries. In organisational terms the 12 largest libraries form one group and the rest another. 'Minor libraries' indicate libraries with three staff members and less, so they are very small. The major libraries include one national library, five traditional libraries, 15 university college libraries and 23 special academic and training college libraries. To this list you may add a quickly growing number of libraries at upper secondary schools, business colleges, technical schools etc.

The picture is emerging of a closer co-operation than before. For example, the Danish National Library of Science and Medicine is at present acting as a library system host for 25 minor libraries in the health sector which opens the door to other kinds of co-operation as well. Another example is the growing integration of university institute libraries into major libraries, enabling them to offer new services and actually becoming real libraries. Yet another example is the quickly developing co-operation on networking such as building subject portals on the net.

Some of the biggest libraries, The Royal Library, The State and University Library, The National Library of Science and Medicine and some others are independent institutions under the Ministry of Culture. They all have a four-year so-called performance contract with the ministry in which their objectives, tasks and priorities are stated.

The typical situation is, however, the one most of you are familiar with - where the library is part of a parent institution with which it must negotiate its conditions. The three most important Danish ministries dealing with libraries are the ministries of culture, research and education.

Development over the last decade

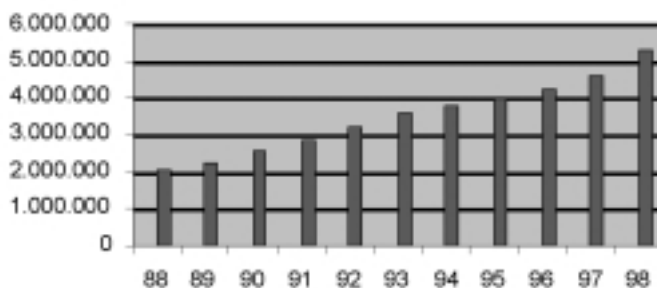
The development is probably mirrored most clearly in the statistical analysis the Danish National Authority carries out annually of the 21 biggest research libraries covering a ten-year period.

To put it briefly: There has been a constant expansion in usage – in num-

ber of loans 160%. Costs have increased – especially as regards serials, collections have increased slightly, there has been a growing demand for electronic services, a relatively stable economy and quite a stable number of staff. What the statistics don't tell us at the moment, are the figures for the use of electronic services. Most libraries do some calculations, but it is not reflected in the official statistics in a standardised way. From this year, however, we have decided to set up official counting even if there is no international standard in this field – normally we stick to ISO-standards. We most certainly are in desperate need of performance measurements.

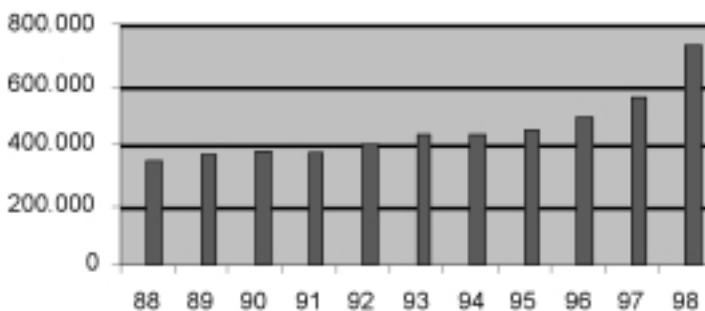
A glance at the graphs below will illustrate the situation more precisely than many words.

All loans: 21 res. lib.



Illustrates more than any other figure we know the expansion

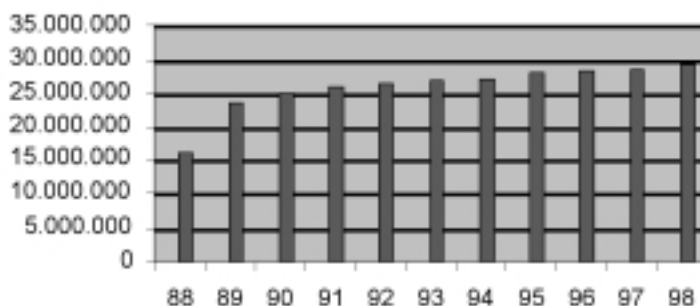
All interlibrary loans



The figure is extremely high. This was very clearly brought home to us when we participated in the EU-libecon survey. The project managers

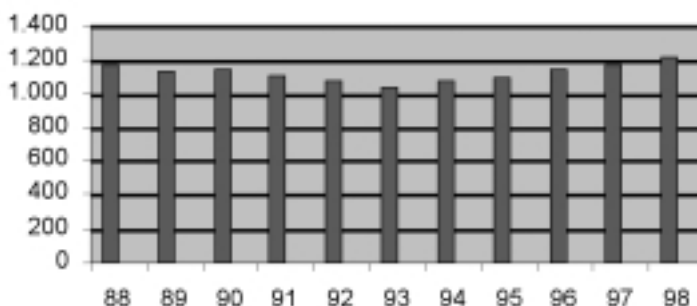
twice asked us if the number of ILL was correct and how we defined it. We do, of course, follow the international definition and the figures are correct, which means that the Danish number of ILL is 25 times the average in EU. So we may conclude that our collections are heavily used, and I regard this as a success factor for the co-operating library service.

Collections



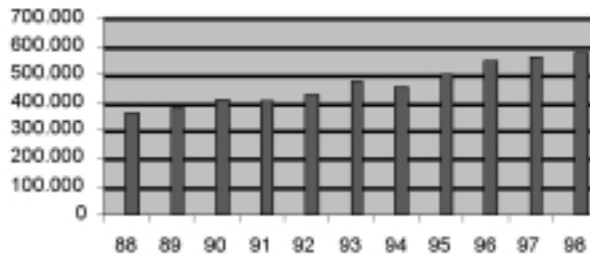
The figures here are likely to change in the coming years with electronic services booming and traditional ones stagnating.

Library staff

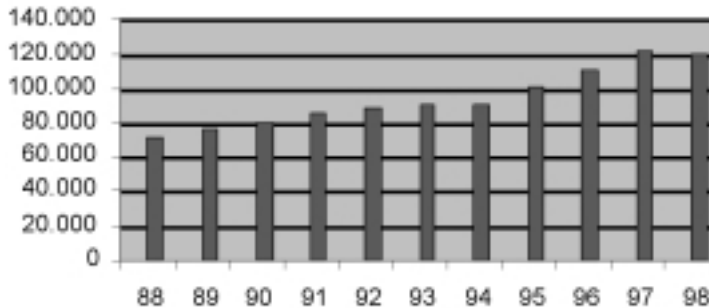


The stable number of staff members in the 21 biggest research libraries is about 1,200.

Expenditure (1000 DKK)



Expenditure, stock, subscription etc.



Challenges and strategies

The challenges are to a large extent similar to those in other western European countries, and I have already mentioned the most important one: establishing a well-functioning hybrid library system, with a new form of co-operation, new services and new professional roles. The users and the library owners want a lot more for the same amount of money. The Danish National Library Authority runs a number of programmes in public and academic libraries that can be divided into four strategies:

- 1) ICT-lift programmes aiming at Z39.50 based library systems, development of electronic services
- 2) Rationalisation of structure due to better co-operative possibilities: integration of libraries, support to systems co-operation in research libraries as well as public libraries
- 3) Skills development – a programme aimed at every public library is already running, and the academic libraries are beginning to follow suit
- 4) Development of new services – which we support by distributing grants to various projects and by initiating services and the new basis for these.

Act on library services

A new act on library services was passed by the Danish Parliament, Folketinget, in May 2000. The overall aim of the Act is to set a new standard for what a library actually is, namely a hybrid multimedia library with the emphasis on access – the connection concept being based on networking co-operation between libraries. This concept is not unfamiliar to large European research libraries, but the new standard – named the extended library in the Act - will apply to all libraries, even those in the smallest community. One of the backbones in the Act is ILL activities between research and public libraries, free of charge for the public libraries.

It was essential to determine a demarcation line between services which are free and services which may be charged for. The Act states that access to all media is free of charge in all libraries – with one exception. Libraries may charge users for access to licensed electronic material where the price is based on individual user consumption. But the main principle is that access to information is free while access to new and particularly time-consuming services will be charged for. It will for instance be possible to organise a chargeable instant-delivery service of printed material. Such a service appears natural in a library environment where you can search for and order library material from your home workstation. An instant digitise-on-demand service could likewise be set up – copyright legislation permitting.

Other chargeable services are linked to the learning library's recent experience that instruction and consultancy activities are increasing in all types of libraries. Many libraries possess skills of considerable value in the workforce market place. Take a field such as updating homepages with relevant links – obvious as a new paid-for special library service.

The new Act also defines new frames for the library structure with closer co-operation within larger regions than today. Likewise it opens for co-operation between in particular smaller communities.

www.bibliotek.dk

Free access for everyone to the Danish National Union Catalogue

In September 2000 the Danish libraries' shared catalogue of holdings will be available to everyone via the Internet. This will provide every citizen in the country with equal opportunities for searching, finding and gain-

ing access to information, and it will be possible to request books or articles (or other media) and collect them from your own library.

The Danish National Union Catalogue contains holdings information from nearly all Danish public libraries and most of the research libraries available to the public. This information is the basis for a new service: direct access for the end-user and the possibility of putting in requests. The database, called *bibliotek.dk* has more than 8 million records of materials in Danish libraries.

The user can search on three levels: simple search, advanced search and a blank CCL-screen and having selected a title, he must then choose a library to collect the material from. The user doesn't have to select which library should provide the material – only where to collect it.

The request is sent from *bibliotek.dk* to the user's own library either by e-mail (human readable or machine-readable), a web-based database of requests or in the near future by Z39.50.

If the library has got the material there is no problem. If it hasn't, it will receive information about relevant libraries according to the Danish ethical rules for Interlibrary Loan. Executing a request for an ILL-request is only a click away on the web-based database of requests.

Some may think that these facilities are at a rather unambitious level, but we have settled for a technical level which is expected to run smoothly. Being able to check in *bibliotek.dk* whether the title wanted is available at your local library would be an attractive service, but this will not be possible for another year or so when the Z39.50 has been further implemented.

Bibliotek.dk is the backbone of the Danish hybrid library model, and at the moment we are also designing a public library portal to be integrated into *bibliotek.dk* and the electronic research library portal. There are plans, too, for providing *bibliotek.dk* with booksellers' data which means using the database even for buying books.

There will be a Danish and an English user interface on: <http://bibliotek.dk>

Denmark's Electronic Research Library (DEF)

I should now like to introduce you to a model which is concerned with

the change of concept and of services in the research libraries. It is a national 5-year project run by a steering group and a secretariat within the frames of the Danish National Library Authority and supported by three ministries to the extent of 200 mil. DKK

An intriguing point about this project is that we don't know where we will end! The aim of the project is to speed up the process of establishing a new set of library services, a new co-operation on electronic resources, new co-operative relations between the smaller and the larger libraries and preparing the ground for scholarly publishing and other relevant new library tasks. But as yet we do not know what kind of organisation will in time be running the electronic library. What we try to do is to combine a decentralised development of local library resources with national co-ordination and a national electronic library infrastructure.

DEF's main components are national infrastructure (the research net having been chosen), library infrastructure (upgrading systems to Z39.50 standard), digital resources (mainly full text databases) and user facilities (print on demand facilities for instance).

Digital resources are the critical point. At the moment there is access to some 4000 electronic journals and there is a programme for retroconversion of the last relevant catalogues. As far as digitising printed material is concerned, a priority has been decided upon, but very little actually done about printed bibliographic sources and journals. We are rather uncertain about the cost benefit of digitising older volumes of journals. You have to remember that the Danish academic population is small, and that a lot of the older research material will not become more relevant just because it has been digitised. At the moment I am more in favour of a solution such as digitising on demand or simply digitising the articles that are asked for – and directing our attention towards developing better bibliographic tools to the journal literature.

The architecture of the digital library is based on three cornerstones: the DEF-portal, -catalogue and -key.

The DEF-portal is at the moment a directory with access to the libraries' own homepages, catalogues of the libraries' holdings, digital material databases and subject-based links collection.

With the DEF-directory the route has been mapped out to DEF's portal and from this general level the user can click his way straight into the libraries' special collections.

Furthermore, a number of projects deal with developing subject portals: At the moment five portals are being designed to open in the autumn 2000: A portal to business economics, including business-relevant, descriptive statistics, a portal to the virtual music library, to medical clinical information, to food industry and finally to energy technology. The project groups have agreed on a metadata profile, developed quality criteria, have started collection and registration of resources and are now working together with users on the development of a user interface. A sixth subject portal will probably deal with - and be organised by - art libraries.

At the moment there is also a project group working on testing cross-searching capabilities in different catalogues using the Z39.50 protocol. They are still experiencing difficulties with system vendors, and facilities for reserving materials and checking holdings are still to come, but progress is evidently being made every day.

The DEF-key is also an essential requirement of the whole project. A project group has analysed the possible solutions, a number of key specifications have been set up and tenders for the establishment of the key will be invited in autumn 2000. The core elements in the specifications are: access to resources independent of location, providing user identification to authenticate the user in relation to all DEF-libraries for determining their user privileges and decentralised registration and administration through a number of shared web-to-z gateways.

Important lessons

So far we have learned some important lessons from our projects – especially from the electronic library project which looks like being a definite success. Most of the lessons may be very simple, but they are not self-evident.

In the Danish research library environment, which has been characterised by keen mutual competition and sometimes even conflicts at a personal level, it is important to agree on the major goals in the action plan of the project run by DEF. Such an agreement is the prerequisite for co-operating instead of fighting, and sufficient time has to be devoted to reaching a level of unity.

An equally simple line of thought propounds that the strong should carry the heavier load. This principle applies, for example, to libraries being willing to allocate some staff resources to project groups and delegate

responsibility for current tasks. It also applies to the implementation of complex technical solutions. The principle is handsomely adhered to in the Danish National Library of Science and Medicine's co-operation with the 25 minor libraries in the health sector, which do not only – at a reasonable price – get to share a library system, but are also provided with tailor-made advice and support in other areas, which means pulling in the small libraries as partners in the electronic library. I may even go a bit further and say that those who can and will carry should do so, which means that project groups could be redesigned and adapted till they work efficiently.

We have always chosen the line of least resistance when given the opportunity to allocate funds to libraries with enthusiasm and initiative. We did so to enable them to launch pilot projects and gain valuable experience for the sector. This lesson only makes sense, however, if you have some money, so another simple lesson is: pool enough resources to act. There are many ways of doing this - the toughest being pooling the resources individually allocated – or cutting a percentage off your budgets for a pool. In the short term it hurts – in the long term it may create miracles.

The last lesson I am going to mention is: If you go for a networking project like the Danish Electronic Research Library, make sure that the co-operating organisation, the secretariat or whatever acting body you have, can make decisions independent of single institutions. If you manage to do that you will be able to make decisions which are for the common good and in accordance with the overall objective, and that is essential if one is to move from a level of the success of individual institutions to a national sector's effectiveness and ability to change.

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Information Management*
2001-2002. London, 2001
Co-author Jacob Heide Petersen**

Organisational development in Denmark's Electronic Research Library

Introduction

The establishment of an integrated national or regional electronic library infrastructure raises some important questions and political considerations regarding the choice between possible organisational models. This article examines some of the considerations that have been discussed in relation to the organisation of Denmark's Electronic Research Library.

With the establishment of an electronic library a decisive step has been taken towards a greater diversity of organisational options. The institutional frame is splintered – a network has arrived instead, and the question remains just how extensive this network is supposed to be. In most cases consortia are established between related libraries, but the Danish ambition is to create a national electronic library to include in the first instance all research libraries and subsequently all the public libraries, too.

Organisational change

Organisational change in individual libraries

The increasing emphasis on electronic resources in library services has been an important factor in encouraging many individual libraries to develop new administrative and organisational structures. The pace and scope of the technological development have emphasised the need for more flexible and responsive organisations. The more hierarchical structures with their fixed assignment of individual tasks and responsibilities have been replaced by organisations with an emphasis on teamwork, openness, sharing of responsibilities, and constantly changing tasks.

The nature of the electronic resources – their independence of physical

location and the possibility of simultaneous use by many users - makes the provision of these an obvious area for co-operation between libraries and thus introduces a change in the relationship between libraries in this area.

For the foreseeable future, most libraries will probably be hybrid libraries, in the sense that they provide both traditional library services closely connected to their physical location and electronic services that are to some extent independent of that location. This means that the electronic aspect of library service is subject to other conditions than apply to the more traditional library services.

There is first and foremost a greater political demand for efficiency in the delivery of these services, because of the focus on Internet related services in general and because of the possibility of comparing the delivery of these services with other domestic libraries or with foreign libraries. There is also pressure from students and in particular from researchers, particularly in the STM-area, where the leading foreign libraries set a new standard for library services. Finally there is the potential competition from foreign libraries, which could provide library service in some areas if the domestic libraries cannot do so satisfactorily. In addition to that competition, there are the private vendors, such as Questia in the US, who can deliver some library services directly to the end-user.

Organisational change in the library sector

Many aspects of co-operation on the provision of electronic library services can best be characterised as ad-hoc initiatives or as non-obligatory. In other cases the co-operation has been stable and more formal, e.g. through membership of various library associations and adherence to national and international library standards.

The number of potential electronic services, their scope and the cost of providing them have increased the focus on more formal and obligatory co-operative structures at national and regional level.

Such regional or national organisations can support and co-ordinate co-operation between the members of the organisations, thus enabling the organisation to provide library services beyond the resources of individual institutions – in some instances by realising economics of scale. They can, furthermore, foster specialisation within the organisation thus creating a larger diversity and a higher quality of electronic resources for all library

users. Finally, these regional or national organisations can provide the formal and financial framework for consortia models thus increasing bargaining power when negotiating purchases of electronic resources.

As with all such large-scale organisations there is the risk of creating a centralised rigid bureaucratic system which is not as responsive to the needs of the end-user as individual libraries or more informal co-operative efforts. An organisational model will thus have to ensure responsiveness to the needs of either end-users or individual libraries or preferably both.

The establishment of a regional or national electronic library also runs the risk of decreasing competition and resulting in waste or slack if the competition from other libraries is negligible or unknown to users. Any organisation for national or regional electronic libraries will therefore have to be subject to ongoing political control.

Although such a formal organisation might carry advantages for individual libraries, it will invariably mean a loss of institutional independence and institutional profile in this area. The organisational structure of the national or regional electronic library should therefore try to compensate this loss by ensuring that individual libraries feel an ownership in relation to the national or regional project by enabling them to take part in the important decisions of the organisation.

The above considerations and developments formed the backdrop for the decision to establish Denmark's Electronic Research Library three years ago, and they are still relevant when considering the future organisational structure of this initiative.

Background

DEF – the acronym for Denmark's Electronic Research Library – is the result of a governmental decision to establish a library infrastructure that will provide researchers, students, business, and other professionals with easier, faster, and more effective access to the latest research information.

The Ministry of Research, the Ministry of Education and the Ministry of Culture developed the DEF-project as a joint undertaking. The project was defined in a project description of September 1996 by the three ministries.

A governmental agency, UNI-C (an ICT company), and the management

consulting firm Ernst and Young then conducted a study, which resulted in the publishing of a report in the spring of 1997. This report formed part of the basis for the subsequent decision by the Danish Parliament to appropriate 200 million DKK over a 5 year period (1998-2002) to implement the vision of Denmark's Electronic Research Library.

There were two remarkable aspects of this vision.

The first was that it was defined as a national project which aimed at establishing a national virtual library service involving national policies for infrastructure, national licenses to full text databases, digitising of printed material and retro-conversion of catalogues etc.

The second remarkable aspect was that although the project had some predefined objectives, it had no clearly defined desired organisational end result. In terms of organisational outcome it was an open-ended project of the kind that had never before been carried out in the Danish library world.

The most important predefined objectives of the project was that it should develop a technical infrastructure that offered the end-user a single point of access, a unified login, a shared user interface, one uniform and user-friendly retrieval system and a direct access to electronic media and a unified request service.

In order to reach this objective the project would have to resolve technical issues such as making individual libraries accessible from the networks used by the end-users, building bridges between the different library systems based on standards, and establishing a coherent user authentication and authorisation system.

In addition to the task of developing a national technical library infrastructure, the project would also work to ensure the content for this infrastructure. This would mean purchasing licenses, digitising content and catalogues, and the development of new services in the form of projects for instance in user support.

Finally it was envisaged that the project should result in suggestions as to how a more permanent, formal organisation might be established. These suggestions would include development of models for financing the common service, resources, operation etc. and management structures for the relationship between the individual libraries and the new co-operative services.

To implement these ideas and objectives the current DEF project organisation was formed in 1998.

The current DEF project organisation

The model for the project organisation had to satisfy a number of important requirements. The appropriating authorities had to retain some degree of control to ensure accountability and co-ordinate the views of the three different ministries.

Given the project's focus on the end user, there had to be some kind of user representation. There was also a need for an organisational model that would accommodate the need for strategic planning on electronic library issues in general and the national electronic infrastructure in particular. Finally the organisational model for the project should include an organ for administration, implementation and servicing the other bodies of the project organisation.

These requirements were met by the current organisational model for the DEF-project, which consists of:

- A co-ordinating board consisting of members from the three ministries involved
- A Steering Committee with ten members appointed by the ministries and organisations
- A secretariat integrated in The Danish National Library Authority.

The role of the co-ordinating board is mainly to follow the overall development of the project and ensure that it is in accordance with the views of the government and the policy of the three ministries. In addition to this, the co-ordinating board guarantees that the project is co-ordinated in relation to other government initiatives such as the newly established Danish Virtual University.

The composition of the Steering Committee reflects various competencies and interests. The members of the committee include both end-users and members with specific competencies in library management, research and ICT, thus enabling the committee to both carry out strategic planning and ensure a prioritisation in accordance with user needs. Some of the members of the Steering Committee come from individual libraries participating in the project, and in that capacity they contribute to the committee's responsiveness vis-à-vis the library sector.

The role of the secretariat, which is integrated in The Danish National Library Authority (DNLA), is to execute the decisions of the Steering Committee in general. The secretariat benefits from its close connection to DNLA, because this enables both institutions to co-ordinate national initiatives in a number of areas such as standardisation in general, digitisation, subject-based gateways, and license negotiation and purchasing. The close co-operation is illustrated by the fact that the DNLA is the formal holder of DEF-supported licenses.

The close co-operation with DNLA enables the secretariat to make use of the competencies of the employees of that agency, thus expanding the capability of the secretariat.

The organisational model outlined above has been the framework for the DEF-organisation for the past three years. Together with the DNLA it has succeeded in developing national policies in the areas defined by the original objectives. It is of course the individual Danish research libraries that have implemented these policies and they should also be credited for the development of the various projects in the DEF-project. The co-operation between the libraries participating in the DEF-project and the secretariat has been very good, although it has at times been a learning process for all concerned.

Traditionally there has been strong competition between the university libraries in Denmark and pessimists predicted at the start of the electronic library project that the necessary cross-institutional co-operation could not be established. However, a remarkable change of attitude in the involved institutions' organisational cultures can be noted. We might assume that the change of attitude derives from the fact that the co-operation quickly led to convincing results. But the most important factor is related to the initial political decision to establish a project organisation with a budget of its own with the overall objective to accelerate a necessary shift in paradigm in the library sector.

The open-ended nature of the organisational development of the DEF-project has made it possible to experiment with different arrangements in different areas of the overall project and to gain valuable experience. Although there were predefined objectives at the start of the project it could probably best be characterised as a development project. The open-ended organisational structure is well suited for such a project, and it makes it possible to discuss the choice of a formal organisational model in the light of valuable experiences.

The model has served the project well and several objectives of the DEF-project have already been met. There is, however, a need to consider how initiatives implemented through the project might be given a more permanent status, and what an appropriate organisational model for a national electronic research library might look like.

The political premisses for DEF indicated that the five year appropriation was a specific project grant and as such would cease when the project was concluded. The grant is politically characterised as an 'adaptability pool' meant to speed up a process which the libraries involved would have to undergo in any case. The condition was that the activities and new services which were launched during the project period would subsequently be financed by the institutions' own individual grants. However, the effect of receiving grants from a project pool is convincing to the extent that the aim of the project is now to create a permanent model with a steering committee and a central pool for financial subsidies to both core activities like the current upkeep of subscriptions for electronic services and the development of new services.

In the following will be introduced the model that is under consideration for the future organisation of Denmark's Electronic Research Library.

The organisational model

The model presented in the following was not the only one discussed by the Steering Committee, but it is the model that at present seems the most likely candidate as the future organisational model for DEF.1

The choice of organisational model depends on the complexity and the nature of the tasks, the financing of the organisation, the interests of stakeholders, and the need for resources and competencies. One of the core issues in the present discussion is the composition of the DEF-board (the equivalent of the present Steering Committee) and the question of financing.

In order to provide a basis for the future organisation the Steering Committee identified the tasks and responsibilities of the future Danish Electronic Library.

National infrastructure

- User involvement and user surveys
- Monitoring of technical developments
- Shared Standards
- Development and operations:
 - Portals
 - Search engines
 - Shared user authentication and authorisation system
 - Union catalogue.

Library infrastructure

- Guidelines for DEF-systems
- Consolidation/integration of smaller systems with larger ones.

Digital resources

- Contact with vendors/purchasing/administration of licenses
- Technical legal counselling in connection with consortia licenses
- Co-ordination of digitisation projects
- Development and operation of The Danish Research Database
- Electronic publication of research
- Monitoring of market and technical development.

User facilities

- Project co-ordination
- New subject-based gateways, user service and user education
- Development of user facilities
- Implementation of new technical developments.

To what extent is it relevant to consider these tasks as being cross-sectorial and to aim for a national solution which includes both the large university libraries, small libraries in sectorial research institutions and public libraries? Our answer is that first and foremost we deal with shared digital resources and competencies in the virtual library. It is possible to work cross-sectorially, it is possible to offer equal opportunity for access to resources within a given subject area, and it is possible to offer the general public access to published material. So why should we choose not to ful-

fil the possibilities. In addition we prefer to deal with a single-stop-login in consequence of our end-user focus.

In an international context one does not generally think in terms of common structures for research and public libraries. University libraries, in particular, tend towards a marked target group conception which is also noticeable in Denmark, although all university libraries are public and obliged to take part in the national interlibrary loan co-operation. The university libraries are therefore primarily interested in establishing an electronic research library tailor-made for campus needs.

A number of broader information political factors must be said to encourage an integration of the electronic resources of the public and research libraries. The ideal justification for integration is related to the network society's demands for lifelong learning, development of open universities and establishment of virtual universities. Seen in this light there will be an increasing overlap between the resources relevant for users in the two sectors.

There is also a rational/economic reason for integration. As the picture of electronic library services becomes clearer, a number of tasks emerge which have to be solved whatever the target group might be, and which would involve the risk of duplication of work if they were to be solved in both sectors individually. This applies to central issues such as license agreements for electronic resources, portals, identification systems and cataloguing. An obvious goal could be to create 'my library' facilities, i.e. personal portals which contain sources from research as well as public libraries.

It is worth noting that as far as Denmark is concerned there are two obvious arguments in favour of co-operation. Firstly, at the moment some jobs are being done twice. This applies particularly to registration and value enhancement of resources on the Internet, where the research libraries co-operate on subject portals while the public libraries in a network co-operation have developed and maintain an internet guide with links to evaluated resources and an e-reference service. In this area alone an efficiency saving is within reach. Secondly, as possibly the only country in the world Denmark has established an Internet search and order facility in the catalogue base - bibliotek.dk – based on our union catalogue and as such giving access to all the material which have been purchased by the Danish research and public libraries. In bibliotek.dk you search on the material – not on the individual library, you just indicate which library you wish to collect the material from and your order will then be routed to that particular library.

With these aspects in mind one may conclude that it is possible to cooperate at three levels. The lower level contains the electronic resources, the middle level various services and the upper level user interfaces. Cooperation between the lower and middle levels is particularly requested. The task is to create an organisation capable of handling this job.

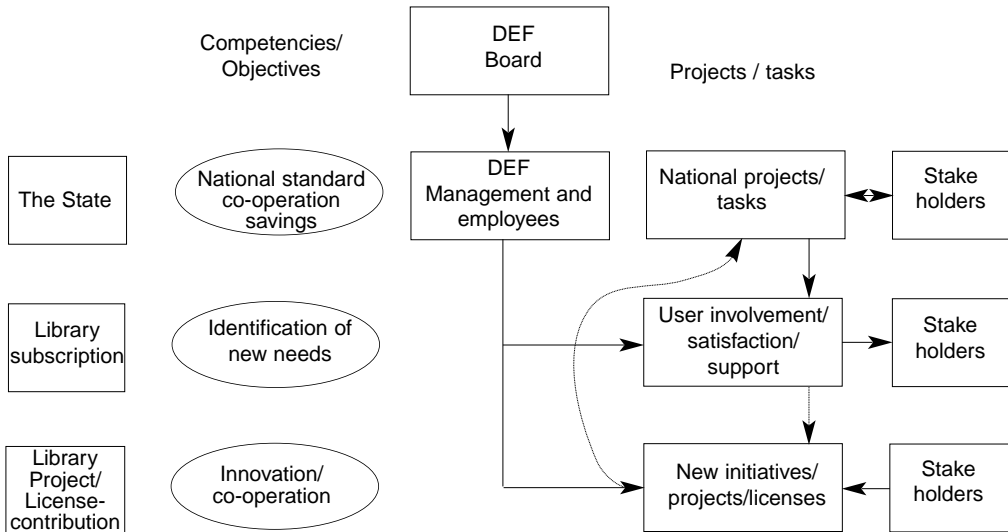
The choice of organisation depends on the complexity of the tasks and how well defined the task is. Bureaucracy is well suited to handle well-defined tasks of both low and high complexity whereas tasks that are less well defined and of high complexity are better handled by a project organisation. With reference to the above listing of tasks this means that the organisational model will have to allow for project organisation in some areas.

The mix between project organisation and bureaucracy in the model depends on whether there is an emphasis on continuity/stability in the services provided or on development. The Steering Committee has chosen to focus on development, which means that the libraries will have a more active role in the future organisation. It also means that they will have to finance a larger part of the activities, than would be the case with a more bureaucratic model.

The tasks of the future organisation can be categorised according to who has the primary responsibility/interest in relation to that particular task. The model divides the tasks into three categories: National projects/tasks, User involvement/satisfaction/support and new initiatives/projects/licenses. The dotted line from the latter to the former implies that successful new initiatives can be implemented at national level.

The arrows pointing from the stakeholders indicate active involvement in the task and arrows pointing the other way signify that these initiatives primarily originate from the DEF-organisation. The farthest left side of the model indicates the primary source of funding for the competencies and goals depicted in the following column.

Revised organisational model



It remains an open question how the financing will be achieved. The activities at national level will probably receive a greater degree of state financing than the other activities, and it is as yet undecided how the libraries will share the financing among themselves. One suggestion is that the subscription fee and contribution could be based on the number of researchers and students using the research library (the rate for a researcher being significantly higher than that of a student) and a fee based on size for the municipal libraries.

The organisational model is well suited to generate a real sense of ownership among the research libraries and ensure responsiveness to user and library needs, because of the bottom-up perspective inherent in many of the activities. The influence of the research libraries will depend on the composition of the board.

Although the model is based on individual libraries financing and carrying out many of the activities of the organisation it retains a top-down hierarchical decision structure. The future National Electronic Library will also operate in a political environment. This means that it has to function as a mediator of interests, set standards and distribute resources in the library sector. In order to do this effectively there has to be a centre of authority and established rules of interaction. This is important in order to reap the benefits of returns to scale, co-ordination, specialisation and standardisation.

In regard to the external environment the organisation has to act as a unitary factor. That will allow the organisation to build an independent institutional profile, which is an advantage when negotiating with vendors, entering international co-operation or interacting at political/governmental level.

The basic organisational model has many of the advantages of a formal institution while retaining the innovative nature of a project organisation

The composition of the board

Given the potential top-down decision structure, the composition of the board becomes a core issue.

In the discussions among the members of the present Steering Committee, the choice has been narrowed down to two basic models: a small professional board or a larger representative board.

In each model the three ministries each appoint a member of the board. In the small professional board the additional members are appointed by the municipal authorities, the research libraries and the municipal libraries. The composition of the board in this model reflects a wish for professional competencies, such as knowledge of information technology, business and company or library management and there is no direct connection between contribution and representation. The total number of board members is seven.

In the representative model the board is composed of members appointed by the research libraries on the basis of their financial contribution and members chosen by the municipal libraries also on the basis of their financial contribution. Together with the members appointed by the ministries the total number of board members in this model is twelve. This model establishes a closer link between contribution and representation.

The choice between these two models will affect the organisation's ability to accommodate the interests of different stakeholders – primarily the end-users and the libraries – and its ability to mediate interests and claim legitimacy and authority in the decisions reached by the board.

It will also affect the way it is viewed by the political system. A professional board will probably tend to be seen as more of a professional service institution to the public and it has the further advantage of being more unbiased in its decisions. It will, however, have to work hard to enlist the support of the libraries and maintain a constant awareness of the needs and wishes of the libraries.

The representative board will probably be better suited to enlist all the resources of the participating libraries but it may have difficulties mediating between interests and thus run the risk of impeding the effectiveness of the organisation. There is also a risk that it may be perceived as too much of an interest group for library interests by the public.

Plans for the immediate future

The DEF-Steering Committee and the DEF-secretariat must convince the political decision-makers that a permanent organisation is a good idea. An organisation which will administrate government grants, ensure the overall development and take on co-ordinating and administrative tasks on the most rational basis. At the same time it should be an organisation that puts the connected libraries under a certain obligation and possesses a high degree of flexibility, which is why an element of association construction would be relevant.

Right now the strategy is to ensure the necessary choices and – if successful – to conclude the project a year early, that is to say that the project goes into permanent operation during the final project year and in this way finances the first business year itself. That would be a truly successful finish.

Paper presented at “Digitising Journals. Conference on future strategies for European libraries” organised by Denmark’s Electronic Research Library in co-operation with LIBER. Copenhagen, 2000. Published in the proceedings from the conference. Co-author Kirsten Strunck

Digitising Journals

Three stories from the future

Scenarios for digitisation models

Scenario 1

Idea: It is the registrations (bibliographies and catalogues) of the information production of the past which are digitised.

A European student, sitting at his work station, is searching for information about the origin and development of Darwin’s theories. The interesting question for the student is what he can gain access to directly in digital form, and what he has to order from the library in printed form. The initial search shows that there is a huge number of articles in digital form, and likewise a huge number in old printed journals. He only finds *The Origin of Species* from Darwin’s own hand in digital form. So he decides he’d better ask a librarian to help select the articles, orders a handful of the most obvious titles in paper form from the university library, prints another handful of obvious new articles and sets off for the library after making an appointment with his favourite librarian.

The library available to the student is a hybrid library. All types of information media in printed form are kept in libraries which also give access to electronic resources to those users that do not have the necessary facilities themselves to use the network. The digitisation theory which was formed towards the end of the 20. century has ensured that preservation threatened documents have survived in digital form.

Out of concern for the preservation of the cultural heritage and also the worry whether information in non-digital form will be used optimally, it has been previously considered to digitise the existing printed documents. High on the agenda has been the digitisation of periodical literature, which for centuries have reported on the progress of research. The task would be quite enormous and very, very demanding on resources.

Periodical literature takes up a lot of room in the libraries' collections. On the other hand the volumes of these works does not increase very much at all, as electronic publishing of scientific articles has won the day early on in the 21. century. The preservation of periodical literature is not particularly threatened either, as it was quite common already towards the end of the 20. century to copy articles for the users instead of lending. The result of the discussion on digitisation of journals has therefore been that one only digitises the decidedly preservation threatened documents, preferring instead to spend the money on improved bibliographic systems and professional advice.

Retrieval and localisation of information media in printed form as well as electronic documents are guaranteed through a bibliographic system in electronic form.

Libraries, bibliographers and lately commercial firms have for centuries been constructing a bibliographic system consisting of registrations of documents and the works which the documents contain. Based on the knowledge of for example originator, title and the subject of the works you may here find the documents that will fulfil a need for a certain kind of information or experience.

Catalogues of individual libraries' collections have been produced for more than 1000 years. Bibliographies, too, go back a long way. Since the middle of the 20. century great energy has been exercised globally to make it a national obligation, that each country registers the national knowledge production in national bibliographies. UNESCO and OFFAL have published national bibliographic recommendations which were adopted at international conferences. Together the individual countries' national bibliographies represent a global registration of knowledge production. The documents were kept in the libraries – and preservation for future generations is guaranteed through legal deposit.

Catalogues and bibliographies registered previously primarily at document level which gave rise to a commercial industry of Abstracting and

Indexing services that for the main part indexed the articles in the scientific journals, often with an extended contents analysis in the shape of subject words and abstracts. Many national bibliographies now also include registration at article level, just as many libraries have bought access to the contents of the article bases for those journals which they have on their own shelves.

Even before it became quite common to publish documents in electronic form, information technology was being used for the production of bibliographies and catalogues. The advantages of the electronic bibliographies – both as regards production and application – are so great that retro-conversion of printed catalogues and bibliographies into electronic form has been firmly supported – also financially.

National bibliographies are financed by government means, catalogues via the libraries' budgets. Abstracting and Indexing services are commercial. Retro-conversions are often financed by project means.

The development of the bibliographic system and the desire for a common utilisation of it has brought about standardisation at national as well as global level. The standardisation applies to both the bibliographic data and systems and to the communication between systems.

In order to exploit the bibliographic resources to the full, a gateway to the bibliographic system has been established at European level. The national interlibrary loan co-operation between libraries, which already existed in some countries in the 20. century, has developed into a European system of lending paths, with common routed orderings via Internet.

Meanwhile the student meets the librarian and returns to his home with Darwin's chefs d'oeuvres, some articles and a handful of the absolutely most important monographs on Darwin – and a print of the selected bibliography that was produced with the help of the librarian.

Scenario 2

Idea: It is the information production (the journals) of the past that is digitised. The price is high, many libraries have been closed, access to the old printed book mass is difficult, the service is poor.

A British sociologist is wondering how around the year 2000 one used the Dream society to categorise the next historical step in society's development. He starts a search from his workstation and quickly finds a

rather limited number of articles. A quick glance at them reveals to him that they refer to an even more limited number of books, one of which, *The Dream Society*, was published in 1999 in New York and Copenhagen. His headache increases – he knows that the chance of finding it digitised is very slim indeed and that the chance of finding it in printed form in England is fifty-fifty.

At the same time a meeting is taking place in the European digitisation committee's working party for digitisation of journals. The European digitisation committee was appointed at the beginning of the millennium after a number of European conferences on the subject for the purpose of outlining the guidelines for digitisation of European information media in printed form. The committee has a number of working parties which deal with questions about digitisation of certain material and publication types.

By the start of the new millennium it became obvious to the library and information world that information which was not accessible in digital form within a very short time would be dead information. Studies and observations of the users' information searching pattern pointed to the fact that their experiences with information searching on the Internet would be normative. In order to secure the use of the extensive scientific periodical literature for the generations to come, an almost total digitisation of this type of document has been given the highest priority.

Political awareness of the creation of the network society and the interest in preserving the cultural heritage lead to the establishment of the European Digitisation Centre, financed by AEU means.

The Centre's primary task is to digitise the European documents which the Digitisation Committee and its working parties select for digitisation. When the Centre was established, digitisation was a comparatively expensive process. At the same time there was no European standard as such for digitisation. This fact weighed very heavily when choosing a central European solution for the digitisation task. By establishing a European Digitisation Centre one would gain administrative advantages and avoid the problems that might occur in connection with using digitised documents which had been digitised according to different standards.

The digitisation of material is a co-operative effort between the libraries of the individual European countries. When the Digitisation Committee and its working parties have selected the materials to be digitised and worked out a prioritised order for starting the process, the publishing country's legal deposit library lends the material to the Digitisation Centre.

Retrieval of the digitised documents is guaranteed by all documents containing metadata in accordance with the Dublin Core metadata standard. Some European national bibliographies have also introduced the practice of adding the digital document's URN to the existing national bibliographic registration.

The Digitisation Centre also fulfils an archive and maintenance function. When digitising documents they are also being microfilmed – to be on the safe side. Due to problems surrounding the durability of digital data and the technological development – concerning hardware and software as well as the development of certain standards – migration of the digital data will be necessary from time to time. This continuous maintenance of the digital data is simplified by the central solution to digitisation.

back to the meeting in The European digitisation committee's working party for digitisation of journals. Following extensive examinations of the use of digitised documents, the Digitisation Committee is re-examining its selection policy. So far a number of the absolute core journals within a broad spectrum of subjects has been included in the digitisation process. As it turned out, however, there are some 'dead' digital articles in stock, which means the selection criteria must be reconsidered.

It is the revision of the selection policy which is on the agenda for the working party for digitisation of journals. Once more it must be debated whether:

- one should digitise the core journals within every subject
- the research results of some subjects become obsolete so quickly that a digitisation would be wasted, and the digitisation should therefore be concentrated primarily on the core journals of the humanities
- one should not focus on journals at all, but on those articles in the journals that are of lasting value. The question then arises – how does one decide what qualifies as being of lasting value:
 - selection on the basis of bibliometric studies. Scientific journals and their articles are primarily targeted at the research world, therefore citation pattern must be the decisive factor in determining which articles are the most important
 - selection based on the use of the articles. Only those articles which the user in fact tries to get access to are alive. Therefore digitisation must be done 'on demand'.

The meeting starts in a heavy atmosphere of recycled arguments. Meanwhile the social scientist has found the old catalogue of The British Library. For a brief moment he was happy – the Dream Society should have been in the library, but turned out to have disappeared. He will have to wait to get it from Europe – and pay for it, too.

Scenario 3

Idea: Only memorable highlights of the cultural heritage are digitised – works with signal value for the owners. Physical libraries continue to be important and offer good service

An astronomer is wondering how Tycho Brahe – a Danish astronomer – could make quite precise observations of the planets even if his theory of their movements was incorrect. He starts searching for information on Tycho Brahe, and is particularly interested in his instruments.

Journals are digital – and have been for decades – but older journals you cannot count on unless they are in English.

Digitisation is done on demand, and particularly sought after articles are selected – slowly a digital journal base has been built up.

There is a broad general and professional interest in research into the cultural heritage. Fields that had been considered dead for long time are revitalised. The more obscure theories in all fields are re-examined. The easy access to the cultural heritage and research of past generations, the subject entries, the linking and path systems on the net have resulted in a more intensive use.

The interest was also relatively high in the beginning of the 21st century. At that time it became increasingly common to publish in electronic form and to communicate in all manner of ways using the information technology. It was considered whether it was necessary to digitise the contents of information media in printed form of the past in order to preserve the cultural heritage. For centuries research had been reported on in periodical literature and one was anxious that this resource would not be exploited to the full in an electronically influenced society.

The sheer volume of information media was frightening, however, and seemed to demand far more resources than were available for digitisation. If one did not digitise documents in printed form some of them would perish. But that was nothing new. One had never previously been able to – or indeed expected to be able to preserve the entire cultural heritage. But – unlike before – the possibility was there of obtaining financial

means for digitisation and preservation of the most valued treasures.

Hence quite different strategies developed. Now in particular English and American literature have been digitised, including the old journals some of which have been published in an unbroken line since the 18th century.

On the other hand minor languages, for instance in Europe, such as the Scandinavian languages, Dutch, Portuguese, Czech, Hungarian etc. – that often have a strong learned tradition - were forced to make calculations as to the cost of a quality digitisation. Consequently it was decided in most cases that the price was too high as it would swallow the best part of the library budgets and lead to dramatic cuts in the traditional library service – including closing down many minor libraries. So the counter strategy decided upon was to continue developing the bibliographic tools for the printed and electronic material.

After a decade bibliometric studies revealed that the use of older journals in English increased while the use of printed journals in non-English languages decreased. This pattern made publishing of research results in the minor languages nearly disappear.

In consequence several political programmes were established.

The most important point was that the most used articles should be digitised. In general articles were delivered from the large research libraries in a primitive digitised on-demand version. Three requests for an article would lead to governmental support for a quality digitisation and a free access on the net.

Likewise many of the small nations with their own language have government support programmes for publishing research in the national language to avoid a devaluation of the mother tongue.

The cultural heritage has not disappeared. It is – for example – lined up on the libraries' shelves. The cultural heritage has both shape and content – and the shape would have been lost by being converted into digital form. The digitisation technology is being used in order to prevent the most valued material from perishing.

At the beginning of the 21st century there was no common policy for digitisation in Europe. Therefore each library digitises to an extent which reflects its ability to provide resources for the process. The works that are being digitised are either those threatened by the ravages of time or works which the owners consider to be of special value. Rumour even has it that the digitisation resources are being used on prestige projects – choosing those works for digitisation which the owners will gain most credit for.

Just as in cultural historical museums one only finds mummies of those Egyptians who could afford quality embalming, one finds on the net only the digitised works which enterprising institutions have been able to obtain the financial means for.

The astronomer has found a lot of information about Tycho Brahe and his contribution to astronomy, including a number of articles on his instruments and his observations. And as a European library has deemed his work on the astronomical instruments worthy of a digitisation project, he has also been able to study on his screen pictures of these examples of the technology of the past.

**Paper presented at the
Bielefeld Conference,
Germany, February 2002**

Scandinavian information policy and financing models

I have been asked to outline 'Scandinavian models for financing' under the sub-theme 'State strategies and subsidisation' as part of the topic 'Structure and financing of electronic information supply in the future'.

I have suggested that the information policy dimension should be part of my presentation, because I take the liberty to assume that in an outline of Scandinavian financing models, you would expect to hear about a high level public service, financed by public money deriving from the toughest pressure of taxation in the world. At least my experience tells me that outside the Nordic countries the word 'Scandinavia' is associated with welfare societies with a very open information policy and a democracy that has traditionally been strongly influenced by the grassroots level. Another important point is the fact that the Nordic countries have small populations and we actually have 8 different languages, Swedish being the biggest with 9 mil. speaking it, while Denmark is the second biggest with only 5 mil. inhabitants. My point here is that the market for items like books, electronic information and other intellectual products is very small. That leads to state subsidies as part of Scandinavian national cultural and information policies. However, there are also quite a number of significant differences between the Scandinavian countries, which it would not really be possible to go into within the limited frames of this paper. So what I propose to do, is to describe Denmark's policy, supplemented with sporadic references to other Nordic countries. The central questions are: What kind of information product do we get? How do we spend the money? And how do we structure and organise the information under such circumstances?

I should say I represent the Danish National Library Authority (DNLA), which is a government agency. DNLA is relevant in this context as we are responsible for our union catalogue, which in its extended public

version is called bibliotek.dk and in which you can search and order material from every library in the country. Likewise DNLA is responsible for Denmark's Electronic Research Library, which is defined as a project running for five years – at the moment in its final year.

General principles for Information Policy

Denmark has no comprehensive formal, written and approved information policy. We have some basic political goals and a political practice based on these goals. The principles were originally formulated in 1993 by DNLA, inspired by the work initiated in UNESCO. In a number of reports prepared on the initiative of different governments, these principles have been further developed, for instance in *Info-society 2000* (1995) and *Information on time* (1997). These reports have formed the basis for various legislation, for example a library act in 2000, which makes internet services and equal access to all types of media obligatory in all public libraries. In terms of financing I should add that all use of library materials and basic help is free of charge for everybody. While at the same time libraries may offer special services at a charge.

In an extremely short version the basic information policy principles are:

1. It is up to the public authorities to make sure that every citizen can gain knowledge of and access to all major parts of published information.
2. The state must provide and ensure an efficient public infrastructure for information mediation. The public libraries and the public research libraries form the backbone of the infrastructure.
3. The public authorities must ensure the registration of publicly available information so that the users can find out which information is available, where it is and how one gains access to it.
4. The state must ensure the collection and preservation of the most important parts of any information published in Denmark.
5. Via their libraries the public authorities must guarantee the users access to internationally available, published information.
6. The state must ensure that information published in Denmark is accessible from abroad and must encourage international exchange of information.
7. Every citizen must be guaranteed sufficient training in how to exploit the information available. Such training should be part of everyone's education from primary school to postgraduate level.

These basic political statements are still valid and express reasonably well what we are aiming at. In one sentence: the state has a vital role - and the

basic responsibility - in developing informed citizens. But it has to be said that since they were formulated nearly ten years ago, we have witnessed the internet revolution and a shift of paradigm in the library- and information world. In practice that means that we do a lot of things that we did not do in 1993. So although the political principles are valid, their practical consequences, the means of information, have changed radically.

The Danish hybrid library model

The shift of paradigm indicates that the library concept today is that of the hybrid library. We define this as a physical place that gives access to a collection of printed and other physical materials, that also gives access to a growing number of e-resources and supports the users with advice and instruction.

A deal of thought has been devoted to the task 'a growing number of e-services'. Our vision is the same as everywhere else: we will give e-access to information born in a digital way and we will gradually digitise more material – and at the end of that very long tunnel will be the fast and ultimate access to the total human record from any computer or whatever tool you will at that time be working with. Interesting to discuss are the steps towards that particular light, the strategy – and the ways of financing the tremendous outlay.

The backbone of the Danish hybrid library was established ten years ago, the DanBib database which contains all records in university, academic and public libraries - approximately 7 mil. records. That was due to a far-sighted decision made by my predecessor as national librarian. It was not too popular in the larger university libraries, but it works. The database was and still is created and hosted by The Danish Library Centre, ltd which also produces the national bibliography due to an agreement with the state (DNLA). The Danish Library Centre is run entirely as a private company. It is quite effective, the products are of high quality and consequently rather expensive. The shareholders are for 90% of the shares the Danish State and the Danish municipalities, for 10% Gyldendal, the biggest Danish publishing house who has decided that no dividends should be paid. So we are talking in terms of a kind of non-profit limited company. DanBib is financed by a licensing model (4,5 mil USD) where all municipalities and the state pay an annual sum.

In 2000 a modified version of DanBib under the name bibliotek.dk (library.dk) and with a user friendly interface was introduced to the gene-

ral public. It has a search and ordering facility and there are three search levels. You can search on subject, words, titles, authors, media, and year of publication. You can from your home PC order what you want to borrow and you can collect the item from whatever library suits you best. From some libraries it is possible to request a delivery of the ordered material - at a special charge. We try to improve the search facilities all the time and the strategy for development is to extend the services. Again the ultimate vision is access from the catalogue to a huge number of full texts. The latest service is a facility whereby you from bibliotek.dk can choose to buy the books you are looking for, instead of borrowing them. There are plenty of net-services on the bibliotek.dk site, such as an instant ask-a-librarian service, and a subject guide to the Internet, Danish Authors' Net etc. They are all the result of librarians' work and demonstrate a new professional role for them, that of information producer.

Three different kinds of access to e-resources

Four years ago we defined three levels of access to internet-based resources. You all know them: 1) free access for everybody, 2) licensed access for registered users, in practice researchers and students at universities, 3) pay per view access or other kinds of paid for access. What is the situation right now in relation to these models?

Material that you can access free of charge

Looking at the free access: there is access to a small number of texts. We aim at digitising our classical cultural heritage including the literary part step by step, but due to the copyright situation we are talking only of the parts that have been released. We have a number of more or less spectacular digitisation projects, a state policy that demands of all public institutions that all the publications they publish should be available online, so the mass of texts in Danish is growing, but it is still a drop in the ocean compared with the classical library.

We try to compensate for that situation by providing good guidance to quality web-resources. For instance we run a number of subject gateways, some of them are improving the resources also by digitising, one example is a Music-gateway where you will find the oldest Danish music journal fully digitised back to 1920.

Libraries should prepare for the 7x24 society and develop access and sup-

port of high quality and we work on that perspective. But to achieve it we need a more substantial critical mass of full text classified as public service. And in order to obtain that, public services will have to interact with the market. Unfortunately this happens only too rarely. In my view it is a real problem that commercial players in the field at least in smaller countries don't want to invest in electronic access to commercial products. This means that the e-book trade is trailing behind what you might characterise as its technological potential.

Public service and the Internet

Like we do in practice have an information policy, we also have as part of it a public service policy in the broadcasting area, where the principles are quite parallel to many other European countries. It is based on three distinctive characteristics. First of all there is the particular cultural political and social role and obligation, which require independence, universality and diversity. Likewise there is a special obligation to devote time to the national culture and 'Danishness'. Public service occupies a privileged position and must therefore cater for everyone in the choice of programmes. Finally there is public steering, financial framework control and special controlling agencies combined with political independence.

An ongoing discussion in Denmark is concerned with whether we should work more consciously for a public service on the Internet. It might be financed in the same way as the broadcasting service, by a general fee or license for all who bought a connection to the Internet. What we need is a more systematic approach to establish access to facilities like dictionaries, encyclopaedia and other general information tools, and a more offensive strategy for internet-based programmes and info from public institutions. This need for a public service attitude within the area is due to the fact that publishers are very reluctant to offer services on the net, particularly in view of the bad experiences in Norway and Sweden on charged access to the national encyclopaedia, where the loss amounts to several mil. USD.

Licensed material

The second area: licensed material is organised more or less in the same way as everywhere else seen from the point of view of the end-user. Each university library - or any other research institution - buys access for a number of registered users to licenses covering a number of journals. In

this context the interesting point is how we organise the handling of licenses, the negotiation, user statistics etc.

As far as the Nordic countries are concerned, we may talk in terms of a national strategy. Where in larger countries license-handling is mainly done by self-organised consortia, we tend to have a national strategy and a national institution which handles the licences. In Sweden and Finland a department in the national library has been entrusted with that role, while in Denmark DNLA is the licensee and secretariat for DEF. Norway – the richest country in the world - is for some reason lagging somewhat behind in this area.

In Denmark the government in 1997 decided to grant 27 mil. Euro towards a project called Denmark's Electronic Research Library. The general purpose of this project is to accelerate the paradigmatic change of libraries towards electronic services and networking. The project is based on four pillars:

General infrastructure, library infrastructure, content and users. Each of these action lines consists of a number of programmes. In the context of this paper, the content pillar is the most relevant part.

The politically supported goal in the basic vision was to establish a critical mass of e-resources, that would be sufficient to attract a constantly growing number of users. High priority was already in the first year of the project given to establishing a policy for licenses to full text databases and for retroconversion of catalogues. Next steps were the creation of subject gateways or portals which include e-published material such as dissertations and e-zines and a policy and practice for digitising printed material.

As far as the retroconversion is concerned the task will be completed this year, when 2.5 mil catalogue cards will have been converted. Following an invitation for tenders, the retroconversion has subsequently been carried out partly by some of the big libraries, partly by private companies.

For access to licensed full text databases, encyclopaedia and other relevant databases, the policy is quite pragmatic: any library can choose any license it wants on its own, but you can also try to get national support and suggest a license to the License Board, consisting of representatives from various types of libraries. This board meets ten times a year, it follows the market and the use of the licenses and decides which licenses should be supported by central funding.

At the moment some 8,000 journals are supported centrally, often via a model where the DNLA pays a share of the price and invites libraries to

join at a favourable price. The model works particularly in favour of small libraries that would not be able to establish a contract on their own. Naturally we generally follow and also contribute to the ongoing development of international principles for the handling of these resources, such as ICOLC, LIBER, EBLIDA. The use is improving, but a lot still needs to be done in the marketing area. The final breakthrough is still to come.

In the way of the subject portals we have so far within the project Denmark's Electronic Research Library created seven. They are created with financial support from DNLA by networking subject-related libraries. A typical example is bizigate, a gateway to business information. It contains some 3,000 e-resources on about 15 topics such as statistical information, strategy, leadership, markets, products etc. It is created by librarians in four libraries and the estimated use of resources for this purpose is 10,000 hours. The gate has been open almost a year, so the time has come to evaluate the service among for instance students at business schools. User statistics for the last six months show that there are approximately 1,000 daily hits, a little less than 300 page views per day, 70 daily visitors staying 7 minutes or more on the site. The question is whether they actually got the information they were looking for. However, for the time being I am convinced that subject portals – not broad general ones – but specific target group-oriented portals lead to the most efficient use of research information. The other portals concern music, art, food, traffic, clinical information and energy.

As to digitisation of printed material, it has been quite easy to establish general overall criteria for this process. First priority has been given to the retroconversion of catalogues and important bibliographies. Second priority to journals, where we are hesitating a little, due to the fact that the much praised JSTOR-model is tremendously expensive for a small market like the Danish one. We have started digitising some journals in full, but I recommend that we find a 'digitising-on-demand'-model for the majority of our national journals. We must also try to establish business models with private companies and learned societies as well as the state in order to provide the access in the first place for researchers and other professional users.

Third priority is at the moment given to what will in the future be a critical issue as regards the use of digital libraries: digitisation of much used books and other texts and images.

In this last priority we focus on Danish material, or Danish/Nordic material in other languages, such as co-Nordic journals in English. We

select material which we presume to be of broad interest, that is we give the highest priority to material that can be expected to be of interest to different target groups and suitable for various purposes.

We have approximately 1 mil. Euro in the project for digitising purposes (not including retroconversion of catalogues and bibliographies). Consequently we can only present examples of digitisation of printed material in this category. Let me give you a couple: We digitise the largest and latest encyclopaedia on Danish artists. Having been financed mainly by public money, the rightholders have been willing to share the rights with the public. An example of older material that is not protected by copyright is *Illustrated News*, a Danish weekly appearing from 1859 to 1924, rich on xylographic and later photographic illustrations mainly of locations, persons and events. This weekly is very much used by researchers, journalists, editors, teachers and the general public so a digitised version would self-evidently be twice as valuable, since by digitising we improve the access and the use, and we protect the few very worn copies that we hold in our libraries. Obviously we will select this kind of material before material with a more narrow scope – and obviously what we digitise within these frames will be free accessible public domain material.

Pay per view-access

My general impression is that pay per view-access has not been a success anywhere in the information sector. In Denmark a few services have been introduced, for instance a service where you can access recently written articles and essays on a variety of topics. You will find these articles for instance by searching bibliotek.dk by subject and you pay by giving the number of your credit card. The price is 3 dollars per article which you can then access three times within 24 hours.

From a national information policy point of view, you should have the possibility to access by pay per view for instance the journals that you find in Denmark's Electronic Research Library, if you are not a registered user. In most cases the university libraries will offer you access as a walk-in user, but if you live in the countryside that is not an adequate offer. Some of the publishers do offer pay per view-service, but I think that with prices of up to 7 Euro per article it is no wonder that it is not very popular. It might be interesting to see if a kind of micropayment could work better.

Financing

Nearly all European countries have a general overall policy stating that the Internet should be exploited for value-adding and easier access to more information for more people. Likewise we want a policy for national content, as we take for granted that the Internet has and will continue to have a tremendous impact on our cultural behaviour, working habits and methods and our competitive skills in research, education and business. Of course, you also find this trend in Denmark and in the other Nordic countries. Our former Social Democratic prime minister last year stated that Denmark should be the leading ICT-country in the world. Naturally our new Liberal prime minister did not repeat that statement, but his policy in the field tends to be the same. It is a wise policy, too, as the market does not seem to be able to handle the task of providing the net with quality information, except for those publishers selling full text databases of university libraries and they are operating world-wide. Important aspects of the new government's ICT-policy are: high quality infrastructure, ICT competency development for the entire population, ICT-offensive public sector, the public sector as a dynamo for e-business!

In Denmark a number of publishers are offering e-services, but compared to the book market it is a drop in the ocean. One relatively successful provider of information in Danish, is the newspaper Politiken and their service Polinfo. Other papers and broadcasting companies are following suit, one publisher offers access to an encyclopaedia, but the recently completed, large, completely new Danish encyclopaedia is not yet available online. One of the reasons for that is that similar new national encyclopaedia in Sweden and Norway have been offered in relatively cheap personal web-subscription with very little success. Indeed the loss to the publishers runs into mil. of USD.

In that situation you must turn to publicly financed solutions, at least to begin with.

Hence we see some different public sources and models.

1. General information from the state and municipalities and their institutions are due to national policy and pressure from the users, an increasingly important cornerstone in the national provision of information. The financing is part of the budgets in the institution. Providers of value-added information are a number of publicly funded institutions like libraries, museums and Culture Net Denmark. High priority will be given to digitising cultural heritage material, the national literature and important journals. One way of increasing free accessible quality information would

be by introducing a public service license for all connections, at an annual charge.

2. Licensed information is for the major part paid by public institutions. More and more companies will probably be interested in similar solutions. Seen from the point of view of for instance university libraries, the problem is that the prices are unbearably high. The model is good, but a better balance between costs and prices should be obtained.

3. Pay per view information will, I guess – despite the relatively bad experience so far – be a source to be reckoned with, perhaps mainly as an additional source. The model will be interesting also for libraries that may wish to give access to all relevant sources, but only pay full license for the most frequently used ones.

To conclude: in small countries and in small markets the public service-thinking in e-information will be predominant, simply because market-oriented models will lose customers. This situation might lead to new types of networking and co-operation between publishers and public institutions and the state. This kind of co-operation will undoubtedly be necessary if we want to speed up a development where net resources become a more serious alternative to the physical library than is the case today.

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Open access to information: The role of public libraries

Public libraries stand for open access to information and culture. They support citizens and institutions in benefiting from the information, and they constantly work to expand the range of possibilities for citizens to develop their potential in every field. In the Information Society the use of information is growing and the demand for access and support to find the right information is being expressed by a growing number of citizens.

Networking in general and the Internet in particular are resulting in a shift of paradigm in libraries, the change from collection orientation to connection- and user orientation being the most important. The public library in the Information Society will offer access to all kinds of information no matter how it be stored. Printed material will still be important, but the use of electronic access to information will grow rapidly. New services are being developed as well as new skills, and the co-operational structure between institutions will change. The recent development seems to prove that libraries that create new internet-based services and develop a new kind of user orientation will indeed increase their impact.

The background – once again

Is that knowledge is the crucial competitive factor in the Information Society. The World Bank recently stated that knowledge is the single most important factor in developing and maintaining a welfare state. In the Information Society a much bigger knowledge potential is accessible than ever before – the role of the library is to facilitate the exploitation of this growing potential.

The way in which we deal with information and ICT-changes is already affecting our jobs and daily lives in nearly all aspects. We see new indu-

stries, new markets, new jobs, new cultural trends pop up all the time. In the library field the perspective is that via networks more people may get access to a larger amount of information in a quicker and easier way. An important point is, that in principle the user gets access to the same amount of digitized material whether she is a user of a branch library in northern Finland or a user of Library of Congress.

All known green papers aim at dealing with the changes on the broadest possible basis for economic, democratic and social reasons. Important points are the necessity to update the workforce to a still more information heavy production, to give general access to public information – including electronic information and the necessity to establish strategies to avoid the serious threat of social tensions deriving from a divided society.

So strategies are needed in the information society

- to provide access to all published information
- to offer lifelong learning opportunities
- to ensure general computer literacy
- to safeguard cultural identity in a rapidly changing world.

The obvious threat being a widening gap between information rich and information poor, 'have' and 'have-nots'.

A basic question in this context is whether we should build on existing institutions i.e. public libraries even if they are some times slow in changing, and often lack necessary skills? Or we should build new frames? The answer depends on at least one other answer: will Internet make libraries completely virtual or will the book remain as an essential carrier of knowledge?

My answer is that we should build on existing libraries but at the same time accelerate the shift in paradigm. Public libraries face the challenges and needs in many countries. The reason for this is that at the moment it seems as if the Internet is the book's best friend, inspiring to an extended use of printed material.

Visions and recommendations

Basically the same line is taken in the large number of green papers and reports on the Information society and the role of education, lifelong learning and culture. Some examples:

In the English report *New Library: The People's Network'* it is suggested that:

Tomorrow's new library will be

- a key agent in enabling people of all ages to prosper in the info-society
- an integrated component of a new educational system
- open and accessible to all, without preconditions
- continuing to make information about every aspect of life available
- involving itself more fully in the democratic process.

In the European Commission study *Public Libraries and the Information Society*² a vision is presented of an updated library in every community in Europe.

The updated library offers

- access to the human record in whatever form it might be stored
- a lending collection of printed and digitized media
- access to networks and support for net navigation & information searching
- workstations for customers
- open learning and training opportunities
- a physical place offering various meeting facilities
- electronic document delivery services.

And

- it will be part of a worldwide library network
- it will cooperate closely with other educational and memory institutions
- be a community information provider
- offer special service to various groups of users.

The European Parliament's own initiative report³ on modern libraries presents a large number of recommendations and statements, for instance: "14. Recommends that the Member States provide all types of library with modern equipment, particularly Internet connections, and adequate funding to enable libraries to continue to meet the challenges facing citizens of the information society and also take into account the costs arising from licence payments pertaining to electronic documents.." etc.

On this basis we may conclude that the new challenges to the public library are:

To offer

- physical access to networks at the library
- support and learning opportunities
- new services and new professional roles: net navigator - the library

educator- the consultant

- remote access to the library - new order & delivery services, digitised information
- new organisational and management structure
- ability to constantly develop new skills
- ability to develop new services.

If we succeed the public library will be a new paradigm institution in the Information Society bridging culture, information, technology and learning based on democratic values.

What is needed?

Basically we face some political needs to implement the new paradigm:

- A national policy for public libraries including inter-library co-operation
- A national information policy including public libraries
- National, regional, local strategies for implementation of new services
- Appropriate range of possibilities for professional continuing education and training

closer co-operation between different institutions and their users.

In Finland and in my own country, Denmark we have experienced a high speed move towards establishing Internet-based services in all libraries

The shift of paradigm

Let us take a closer look at the stages of the move from the paper-based, manual library to the updated hybrid library of the Information Society. The steps may be summed up this way:

1. automation of library housekeeping
cataloguing, circulation, stock control, acquisition
2. public access to the digitized catalogue
3. access to Internet resources - staff use/users
4. server-based Internet services available from the library's homepage
 - access to library catalogues (searching, reservation, renewal)
 - selected links to Internet resources, Internet guides
 - targeted services for children, immigrants, local community, elderly, business, (life circle)
 - special information: cultural events, authors' networks.

Closely connected with this development you will see an organisational

change based on a general change from collection orientation to user orientation. Professional values change, methodological and ethical concepts become more central. New professional roles including a growing personal involvement, and consultancy functions in new fields will go hand in hand with new management concepts and a new commitment. Today many European countries are working on a concept for digital library service as part of the full library service. A model is for instance Denmark's Electronic Research Library which will give access from any connected computer to

- electronic journals
- to search, ordering, delivery facilities in the national networking libraries
- digitized special collections
- 24-hours hotline service
- special delivery service for printed material
- Internet guides to printed collections
- high level consultancy services in information questions
- fee-based quick service offers
- publishing facilities.

In a number of countries you will find barriers for the fulfilment of this vision. The most obvious are inadequate technological skills among librarians caused by old-fashioned education and lack of continuing education and training opportunities. But that situation arises mostly from a lack of concrete plans for networking and lack of technical support resulting from inadequate funding and lack of political focus. In other words: lack of a vision for the role of the public library and lack of political support to develop the tools with which to turn vision into reality.

Where you identify these barriers, political goals should be to

- support programmes for establishing ICT-development
- support continuing education and training opportunities
- support curriculum development at library schools
- establish funding models for Internet facilities
- renew legislation framework

To conclude

Today the Internet is affecting the public libraries in various ways. It is a tool for quicker and extended co-operation among libraries. It is the basis for a number of new services for users, such as access to the Internet from the library, remote access to catalogue and homepage facilities and easier and extended access to the library.

New learning and training facilities are set up for users, and new consultancy services are offered for private firms, institutions and citizens. A final good question is: what will the future knowledge society bring? Or a less demanding one: what are the challenges of the next decade?

My list contains both practical and political goals:

- create high quality content in Internet resources
- establish well-functioning Internet guides
- personal/target-oriented services
- build bridges between printed and digitized resources to
- use the internet for promoting traditional library services
- develop the learning & consulting library further
- create a co-operative network with institutions served
- develop new professional roles
- play a proactive role in promoting cultural values and
- strengthening democracy

Especially the two last bullets will have growing political interest as the public library will be recognised as an enormously powerful agent for change. They are trusted by people to have no ulterior motives. They have a higher number of active users than any other cultural institution, they link culture, lifelong learning, education and public information, they can – soon – be reached at any time from any connected computer. They *must* incorporate a potential beyond our present imagination.

¹The report of Library and Information Commission dated 5.11.97
“New Library: The People’s Network” can be seen at
<http://www.ukoln.ac.uk/services/lic/new/library>

²EUR17648 - The Public libraries and the information society
By J. Thorhauge, G. Larsen, H.-P. Thun and H. Albrechtsen
Edited by M. Segbert
Luxembourg:
Office for Official Publications of the European Communities 1997

³The report can be seen under the title “Report on the green paper on the role of libraries in the modern world” dated 28.08.98 on:
<http://www.lib.hel.fi/syke/english/publications/report.htm>

Keynote speech at the conference “Scandinavia meets the world”, Århus, June 2001

The challenges of the public libraries in the Information Society

Thank you very much for this unique opportunity to speak to such an impressive audience representing so many countries that agree on the importance of developing public libraries. It is a special pleasure for me to speak to you on Danish conditions for as you will experience during your stay here, we are very proud of our libraries that have one of the highest user rates in the world. We are also very proud of our new *Act regarding library services* and the programmes that we are implementing to set what we call “a new standard for the library”, matching the demands of the Information Society.

The public libraries have participated in the development of the democratic welfare state. One could say, that without free and equal access to information and the freedom of expression, we might have a state and a society, but it would not be the people’s state and society. In that sense the public libraries have played and play a unique and central role in European history: The public libraries show the true face of the state. Their existence is the expression of article nineteen in *United Nations’ Universal Declaration of Human Rights* – the expression of the people’s right “...to seek, receive and impart information and ideas through any media and regardless of frontiers.”

Today we also focus on libraries because it becomes more and more obvious that knowledge is the crucial competitive factor in the Information Society. We know that knowledge is the single most important factor in developing and maintaining a democratic welfare state. As everybody here are aware the public library is a unique source of knowledge for all citizens.

In the Information Society a far greater knowledge potential is accessible

than ever before – the challenge of the library is to make use of this growing potential. The way in which we deal with information and ICT-changes is already affecting our jobs and daily lives in nearly every aspect. We see new industries, new markets, new jobs, new cultural trends popping up all the time.

In the library field the perspective is that via networks more people may get access to larger amounts of information in a quicker and easier way. This represents an immense potential for growth and wealth. And actually for democracy as well.

The challenge is obvious – it is to secure that the classical library vision: that the information available in the library will actually add value to the lives of the users and to take care that the potential is actually realised. I am not sure that I believe very much in progress – but I am certainly facing change all the time.

We gain new opportunities and we lose opportunities and values in an ongoing process. And let us face it: there are numerous threats from the ICT development.

Much focus has been given to the widening of the information gap eventually resulting in social tension. Likewise may the vivid change of working and living conditions lead to a loss of social values, lack of understanding of continuity, difficulties in building or maintaining a personal identity, which in earlier times was if not a birthright exactly, then a relatively foreseeable result of social processes.

There is an obvious threat that the information overload may create a superficial “zapping” culture leading not to more enlightened citizens but to more ignorance and narrowmindedness. Maybe even ignorance towards the values of democracy can become a common attitude. Everyone who reads Naisbitts latest book *High tech : high touch* will be convinced that there is a thoroughly cultural disturbing threat in the technological development that we take part in today.

However dangerous these threats are - we can not turn our back on the obvious opportunities in the present technological and cultural development. So in that perspective the basic challenge is to develop a public library that is truly hybrid in the sense that it offers a variety of electronic services that interact with the traditional physical library. A library that all the time will improve in its ability to deliver to a growing number of defined target groups precisely the information wanted, needed, and requested in the form that suits the different users.

To develop a library fit to meet the needs of users in the information society two major steps have been taken on a government level in Denmark. One of them is the national project called Denmark's Electronic Research Library which will make digital research resources available from any connected computer and eventually result in a general virtual library. The other is the new *Act Regarding Library Services* - which is probably of major interest to this audience so I will turn to that as an example of how to cope with the challenges of the information society.

New library act

The new act regarding library services is the result of a rather long process. A recommendation in the Danish government paper on the Information Society in 1994 was that an analysis of the role of the library in the information society should be carried out. In 1997 the report on the library in the information society was finished and in 1998 we began to prepare the new act which was passed by the Danish Parliament a year ago.

The act contains some very important basic principles, which I would like to outline in brief:

The first principle is that we regard the library sector as a whole. It is my belief that the large research and university libraries must cooperate with the public libraries on interlibrary loans. Library materials should be within reach of any citizen, whatever the access point to the library system. To build a virtual library with access to a digitised cultural heritage and various electronic services, networking is necessary and also, I believe, partial integration between academic and public libraries.

We have a unique tool - the DanBib database - with registration of holdings in all the larger and medium-sized research and public libraries built over the last ten years. We have now established on the web site 'bibliotek.dk', the general internet-based access to this database including not only search - but also ordering facilities to the entire holdings. Bibliotek.dk is becoming the portal to the Danish libraries - but (planned) gradually also the web site where you can buy books, music and electronic texts.

The second principle is what we call the extended library. The act will make it obligatory for all public libraries to give access to not only printed material, but also CDs, multimedia and Internet. In this context I would like to say that the political signal at the moment is very clear that

the new media should not lead to a weaker position for the books, this is the reason that we got more money. For most of you the principle of the extended library is self-evident and what you have been practising for years. But you belong to the elite of the profession. It might not be quite so self-evident to a local politician in a small municipality.

The third principle is that the access to and use of materials - at the library or by lending - is free of charge. In my opinion the public library shall be an open house without payment - simply because it is good for all of us and society as a whole that citizens have free access to information and experiences.

On the other hand the principle of gratis access is only related to core services. The fourth principle is related to an extended possibility for libraries to charge users for special services. We have a very good reason for that - well, two actually. One is in order to create a better economic situation for the public libraries.

But a far more important reason is that with the new technology the possibilities for offering a better service to those who are willing to pay, are much improved. You might also say that charged for services may keep you more aware of market conditions and hence is an adequate tool for the innovation process which is probably one of the most merciless conditions in the information society.

The fifth principle is that the superstructure of Danish libraries should be changed according to the new possibilities. Due to performance contracts between the Danish National Library Authority and those 16 public libraries that are serving as county libraries as well, new tasks are being defined with due regard to local needs, and we are likewise preparing a totally new structure. The county libraries are entrusted with the responsibility for skills development and consultancy in their service areas. But they do also increasingly play a role in the networking effort among groups or consortias to create new electronic services.

The sixth principle is related to the need for more cooperation between the public libraries. The new library act will implement various economic instruments in the library sector in order to create more coordination and cooperation between the libraries.

I believe that these principles will ensure the standard for the extended library in a few years time. But principles in an act are not necessarily guidelines in the ongoing daily work in institutions that are rooted in another more stable and probably more conservative culture. In order to

ensure the implementation of the act my institution is running a number of implementation programmes in the period from 2000 to 2003. Under the headline: “setting a new standard for the library” we run programmes for a *technological lift*, we are working on implementing a *new superstructure* and setting better frames for *cross-municipal co-operation*. We focus strongly on *competence development* on all levels and we run programmes to support *new services* to ensure that the innovation process will not dry out.

I believe that we are privileged in Denmark to have a very good co-operation between the municipal libraries – and state funded research libraries as well – on the one hand and the National Library Authority on the other. Most of the ideas for new services are born in the libraries. An application for economic support may be addressed to the National Library Authority – and a dialogue on the implementation of the idea starts up. On the other hand basic initiatives such as the bibliotek.dk facility and the competence development programme have been born in my institution but developed in a constant dialogue with the libraries. The competence programme – just to give you a taste of it – consists of three elements so far: One is a training programme for trainers selected in the libraries to travel around among other libraries to work along with colleagues there in order to implement new working methods etc. A second element is a number of courses educating project managers, due to the fact that projec work is considered a fundamental model for work organisation today and even more so in the future. Thirdly we support and co-operate on a programme running for one and a half years on four locations in Denmark aiming at training library directors for leadership in the information society.

I am convinced that so far we have only seen the beginning. We observe the development of new professional roles, and we are spending a lot of effort on the new technological possibilities that are given to us. But I would also like again to stress the very strong cultural challenge the public libraries have to deal with. The cultural role of the public library has always in practice been not only to give access to information but actively to inspire the users to transform information into genuine knowledge and a personal sense of affinity and identity - to give the users tools to improve their lives. And to return to my initial remarks on the threats in our extreme technology-focused world, the public library must not only be aware of those threats but also define programmes calculating with the negative impact of ICT.

This task is more important than ever. The public library is sharing it with many other cultural and social institutions, and my point is that a

much closer cooperation between different institutions and organisations is needed. We have also to devote our attention to the development of the physical library. And here I want to advocate in particular in favour of the idea of the library as an-up-to date, genuine cultural meeting place for everyone: Parents, children, students, immigrants, teenagers and senior citizens.

Behind all these challenges there is a common objective and desire to strengthen democracy in the sense of citizen participation and political debate as the foundation for social, political and economic development. Here we need libraries as the active meeting place and to provide extended free access to information and librarians to support the dialogue and the free use of information.

In a European context we are doing something already. Libraries have always had a broad international orientation, and I am convinced that there will be a growing technological cooperation between the European countries in the future - arising out of sheer necessity.

But I want to stress that there is an immense need for new ways of playing a proactive role in promoting cultural values and strengthening democracy. I think that libraries have a unique role to play in this field. They are trusted by people, and no other cultural institutions have so many users. They link culture, education, including lifelong learning and public information. They can be reached at any time from any connected computer.

I am convinced that the libraries have a potential for impact far beyond our present imagination – go for it!

**Article written for the Swedish
journal *Ikoner*, 2000:1
also published in German
(*Buch und Bibliothek*, 2000:3)
and Portuguese
(LIBERPOLIS, 2000:3)**

A new standard for all libraries!

A classic anecdote describes how Albert Einstein once asked his secretary to type out the questions for his students' exams. The bright secretary set to work, but soon after had to disturb the professor with the following information, "I am sorry, professor, but these are the same questions as last year". "I know that", Einstein replied, "but the answers are no longer the same". The anecdote springs to mind because I have been writing many articles about the library of the future where the same questions tend to crop up again and again. But the answers keep changing, one of the reasons being that many of our ideas are realised very quickly. In Denmark we have just passed a new library act which will update the libraries and provide a frame for future development. Precisely this situation demands that the classic questions are asked once again: What do we imagine the new library to provide? On what do we base our assumptions? How are we going to realise them?

The new library

This is the way I envisage the new library: It is based on a well-functioning Z39.50 protocol and is a contributing and recipient part of a global library network. Like any other library it has a broad spectrum of electronic services which many users hardly suspect originate from the library sector – they understand perhaps that the local information they find in rather surprising abundance on the net is the result of a targeted effort on behalf of some local institutions. And communication via the net is not restricted to public institutions only, but includes associations and a local debate and chat forum which is a source of wonder particularly to the elderly citizens who well remember how political life wilted after having flourished during their youth in the sixties and seventies. Now reactions

are prompt in relation to decisions in the town council. Ethical discussions arise which would have been unthinkable in the nineties, there is an open debate on taboo subjects, on local, national, Scandinavian and European identity. The capitalist market society is no longer social monopoly, and certainly not taboo, alternative distribution and production methods are being discussed – also seen in the light of negative experiences with a copyright governed media market.

The new library is also a cultural centre with lots of activities. It still makes media available to the public – particularly via the net in a combination of free and paid for services. All types of media, all available and known music recordings, all printed works, all digitised works, there is interpretation assistance available on the net and in the library, there are hotlines to a number of experts – some are free but difficult to get to, others have to be paid for. But the last step is creative workshops : music and multimedia workshops, writing workshops.

The most popular for years, however, has been, the library's knowledge department. Searching in old indexes and catalogues requires knowledge of the construction and the basic idea of a thesaurus. Many subjects at university also include teaching information search. Access to the cultural heritage demands an interpretative expertise which is very far removed from modern search facilities on the world net.

The knowledge department arranges courses, offers concrete help with complicated searches and discussion groups meet here. Exhibitions are running continuously which open up vistas for new areas of knowledge through exhibiting the old media.

The library's major activity is visible only on the net. This is the current surveillance of new information resources, a kind of selection service for permanent subscribers in business firms, research projects and educational institutions as well as an increasing number of private individuals. This is where the educational institutions gather inspiration for new courses – this is where the business firms throw in the initial resources: what are the latest developments important to our market, research, interests? – during the night hundreds of new sources will be examined and selected.

The national library system has an 'instant service' – any available document is delivered electronically – at a price. Prices vary a great deal – special digitisations are costly, but hundreds of thousands of the international knowledge society's most important works are digitised and delivered electronically at the cost of only a few hundred DKK. The same applies,

of course, to all recent works. They can be ordered for the place of work, the home - or the library which incidentally has the best binding facilities. Strangely enough the paper-based book has never gone out of fashion. The world's consumption of paper is at a peak, even though by far the majority of documents are being read on the pocket screen.

The library environment of the future is based on two main traits. One is that netbased information has become totally dominant. Physical media are important – old as well as new, but they are by-ways in an ICT motorway system. Our access to any kind of information is now electronic.

The other is the individual service. Firms, institutions and many private individuals have adapted themselves to a profile of information supplies. Hardly anybody manages without personal information supplies – and everybody spends considerable time every day on knowledge and experience updating within exactly those areas which are most profitable for him/herself.

Behind these two services lies a total re-structuring of our information society.

Co-operation between libraries is a matter of course. It goes right back to the first public organisation of the library system, but it also has its roots in co-operation with educational institutions, cultural institutions and over the years businesses at an ever increasingly differentiated level which quite naturally leads to the individually targeted service.

I believe and hope that most library people find this imminent version of the future almost embarrassingly banal and obvious. A less banal question is: which structural initiatives are *you* taking to embrace this future? Because we are going to embrace it, are we not? The old library concept: the right book for the right person at the right time – will at the electronic knowledge and information level reach its full potential. Instead of 'book' we are more or less talking about any kind of work. The barriers are coming down. Everybody can get access to everything. The challenge is to turn this fact into a source of enrichment for everyone.

'The Information Society' and other societies

Twenty years ago Alvin Toffler wrote in *The third wave* that we were about to leave the industrial society and heading towards an information society, where all our capabilities would be redefined. He predicted a

number of conflicts on the labour market and a number of structural and culture-related conflicts which basically happen because of the confrontation between the different structures of the industrial and the information society. He gave the western world twenty years in which to readjust. Has this happened?

In so far as the information technology permeates the affluent world and to a great extent has become synonymous with wealth, the answer is: Yes. The 2000 fear was a kind of mild doomsday fear. Like a fear that the oil, the sun or some other fundamental source for the preservation of your lives would disappear – at any rate for a period of time. The concept 'information society' has particularly during the nineties proved itself to be one of the most politically potent concepts in recent years. Every nation in the western world has produced reports with visions and plans as well as strategies for their realisation. And on the whole they have realised them. In the world of business it has happened almost automatically – well supported by inherent instruments for rationalisation and efficiency. But we have also quickly got ICT in our schools, ICT as the basis for libraries, culture on the net, the public authorities provide the citizens with much easier access to information, specific cases and casework.

After this considerable wave of readjustment and investment the talk is now often of other societies: the knowledge society, the competence society, the network society, the dream society. Each of these concepts has a point which illustrates the limitations of the term 'information society'; 'information' is just a raw material which is useless unless it is absorbed and refined, 'value adding'. Information must be absorbed in order to be turned into personal productive knowledge, it must become part of a network, manifest itself in improved skills and result in an enhanced product and human integrity in a dream society.

Since the total collapse of socialism as an economic and political model it has not been politically correct to talk about capitalism. But whatever one wants to call a society which has information technology as its backbone it has to be described as an extremely market orientated society. ICT is a tool for business and from the very beginning the political strategies for information have focused on the wealth creating effect. E-trade is a point in case and is considered as having the largest economic potential of all activity areas. The logic behind ICT based activities is exponential growth in the mass markets just like in the industrial society. But apparently there is an individual product orientation and marketing in this market, and a new (and much larger) class of capitalists are on their way with the option strategy which is the most important element

in the competition for what really matters in this new era: human capital.

Our strategies for cultural and knowledge policy have to accept this market orientation. One must be able to act in this ever changing world and very few question marks are put against its logic. On the labour market it is a question of lifelong learning, not only the *will* to change but also the *ability* to change, forever adjusting to the new conditions imposed by the market.

In cultural terms the minimum task is basically to enable people to endure the constant change. One must secure an identity as the basis for the individual's ability to act and find his way. It is therefore imperative to avoid too hasty breakaways from values which have been carefully acquired in earlier decades. Too abrupt abandonment of previous values are bound to create too many losses of identity or at any rate people who are feeling confused about their identity, which particularly the collapse of the Soviet social system has demonstrated to a frightening degree. The all important target of the cultural policy is of course an enhancement of a human being's creative opportunities.

Market orientation is not the only central factor behind the policy which we are now about to adopt, but it is a factor that has not been greatly considered so far. Globalisation, the changes in the function and content of the national states, the multi-cultural challenge on the other hand are major factors which have been fairly widely discussed.

Political thought makes it quite obvious that the aim in supporting investment in ICT development is 'more for a greater number of people in a simpler way', but more broadly speaking it also means: not only better economy and more wealth, but also more democracy, improved access to culture, better possibilities for personal creativeness, easier access for the handicapped – with the ultimate goal: the development of every person's full potential.

It is thought-provoking that giving people the freedom to develop fully is both a cultural political and a commercial strategy in the new society.

Realisation strategies

The library in the industrial society was a democratic corrective to the market. This was an area where there should be free and equal access to 'the human record' which in its ideal form is common property. This is

why the 'gratis' principle plays such a decisive role in Nordic cultural political thought. As long as the printed medium was the most important provider of information, the concept of the universal library as covering at any rate the printed 'human record' could be maintained. And the market and the libraries interact in a way which has proved beneficial to both.

In a society where electronic access to almost any kind of information is the order of the day, whether we are talking about symphonies, encyclopaedia, scientific articles or poetry, the idea of keeping watertight shutters between a democratic free knowledge room and a culture and knowledge market is rather difficult to sustain.

The new standard for the library must be set according to those conditions which the economic and the political room ahead of us provide. And we can discern the contours of it.

I am going briefly to mention some deliberations behind the latest Danish library legislation which wants not to regulate in detail, but rather to create a framework for the development of library activities/services which are based on these contours.

The gratis principle and paid for services

In all the Scandinavian countries the future of the welfare society is being keenly debated, including the question of gratis or paid for services. In the *Act on library services* which has just been passed in the Danish parliament there is a precise distinction between gratis and paid for services which is meant to fulfil two objects. One is to ensure free access to in principle all accessible, published information. This is the so-called core service of the library. On the other hand there must be room for developing new services which can only be maintained at a charge.

Some services have to be paid for, and some of these will no doubt move into an area where there is a market and therefore have to operate on market conditions.

In the financial negotiations prior to the new act it has been a prerequisite that increased earning for the libraries is not only a possibility but also an economic precondition. The increased earning is particularly interesting when associated with some of the new services mentioned above. Express service,

home page maintenance, fulfilment of special information needs in projects, in educational institutions etc. Courses, literature surveillance and different types of consultancy.

Development frames for new services

My introductory picture of the new library contains a number of services to be developed. How do we make sure that this happens? The new library act maintains the Development Pool which is an annual grant of 17 mil. DKK for the purpose of innovation and development in public libraries. This pool attracts projects which aim to be permanent new services and create new methods. By far the majority of these projects are run by libraries. A number of Danish libraries have gained status as development locomotives because they have chosen to create a development culture. And over the past few years a definite tendency has emerged towards a new form of network-based co-operation, a case in point being the Public Libraries' Netguide which is a subject-based internet guide to good web sites, (www.fng.dk), 'Ask a librarian', an internet-based reference service until 10 o'clock in the evening on weekdays (www.biblioteksvagten.dk) and Catapult which is an internet directory for children.

The project Denmark's Electronic Library is clearly an example of a new form of co-operation which is network-based and which i.a. create virtual subject portals. The Development Pool stimulates the most visionary experiments and cooperative efforts in the libraries which may be termed a development from the grassroots so to speak.

But national management of some tasks is also imperative. For example the overall strategy for cataloguing, and the definition and provision of national library portals where different types of electronic services are gathered together in one common gateway and where improved search facilities are constantly being advocated.

The national strategy in Denmark today concerning catalogues is to launch www.bibliotek.dk during the summer 2000. This is an internet-based access to DanBib, Denmark's national shared online catalogue which covers both public and research libraries, with a new electronic ordering facility. At the same time we are developing the Z39.50 protocol and via Denmark's Electronic Research Library we are working on a virtual catalogue model which is not, however, quite ready. The Danish National Library Authority will define national superstruc-

ture projects and offer them to libraries and other relevant institutions, for example the construction of a portal to public library resources on the Internet. We also define strategies, supported by government grants, such as inter-municipal co-operation about library systems.

The Act also operates with the possibility of inter-municipal payments, the idea being that the municipalities where the citizens to a great extent use the neighbouring municipality's library may be presented with a bill. This principle is expected to encourage co-operation between municipalities so that the library service is adapted not according to municipal boundaries, but takes into account where the users in fact pay their visits to the library.

Contract management

The given examples illustrate the fact that I believe in the interplay between the dynamic libraries and a relevant national management to produce the leap towards the realisation of a new standard. A consequence of this line of thought shows itself in the *Act on library services* stipulating that the future management of the county libraries will be carried out via performance contracts between the National Library Authority and the county library municipalities.

From an ideal point of view the county libraries should be both traditional centres of materials supply and local competence centres within the library field. The role as competence centre must be strengthened, because competence development is a sine qua non in this development strategy. The county library must analyse the needs and locally initiate further education, action learning, and projects which will ensure the necessary professional development.

Some of the superstructure tasks which i.a. the county libraries carry out today will in future become a question of national electronic solutions and they will be offered by the state. Like in some other countries we are probably going to see a change in the county library structure. Just what kind of change this will be we do not as yet know, but contract management is bound to be one of the instruments in this process.

Contract management will become more popular because the method has proved effective in a society that wants certain results and at the same time also wants to encourage employees and citizens to develop into individually responsible beings who have an influence on and participate

in the social processes.

I therefore envisage a political request to the libraries for a much more professionally binding co-operation with schools, institutions, associations and cultural life which could be furthered through contract management. There will also be a demand for more thoroughly prepared and transparent plans and strategies than the ones we see today.

New professional identity

The pivotal point in the sketched development process is as I have said – skills development. But skills development is only a tentative step towards a new professional identity which has been advocated in endless articles. An increased specialisation of the librarian's roles has been under way for quite a while. It will intensify. The market will be very large indeed for structuring, selecting and value-adding of information at many levels, but subject specialisation will be a prerequisite and hopefully a detectable tendency to combine several educations will increase.

Another important tendency will be the librarian's closer co-operation with the users. The librarian will to a greater extent act as a consultant which also requires subject specific knowledge. The librarian will be a consultant for teachers, institutions, associations, public authorities, firms and research projects, where much more than before he will be a creator of strategies together with his partners, and will participate in projects on an equal footing with scientists, artists, educationalists and business people.

My vision is based on optimism. I believe that the much improved frames for human development we see ahead of us will bring about a new renaissance which will be both spiritually and materially enhancing for the individual and for society as a whole.

There is of course also a dystopia which cannot be excluded – 'information overload' might together with polarisation tendencies between social groups bring about confusion and add to the loss of identity, social conflicts and disintegration.

But Utopia will be victorious. "If you can dream it you can do it!"

Keynote speech at Scandinavian conference for children's literature and libraries in Stavanger, Norway, February 2001. Published in *Scandinavian Public Library Quarterly*, 2001: 2 and in *IKONER*, 2001: 2

The children's library – past and present

The great hunger

In one of my childhood textbooks there was a story about the boy Mathis who desperately wanted to read, but could not get hold of any books. Then a man in the neighbouring town promised to lend him a book. On a winter's day he walked over to fetch it, and promised himself that he would not open it till he had reached home again. But on the way back the temptation became too great. The book was burning in his hand. He unwrapped it just to have a peep inside. It was a history of the world – and opening that book meant the introduction to a completely new world. He became totally engrossed in it – forgetting everything around him. But as it was a bitterly cold and frosty day the reading turned into sleep or unconsciousness. And only because his parents began to worry and went out to look for him was he saved!

The story seems to contain an ambivalence. On the one hand reading is presented as a kind of basic urge which has a magic power of attraction. On the other hand the exact opposite: reading can be dangerous, one might even call it a death urge, because it may swallow you up and devour you, or at any rate turn your attention away from essential realities. With this ambivalence the story reflects the paradoxical ambiguity in the attitude to reading which is apparent for so long in the industrial society.

Not very many years ago children were first and foremost creatures who were trained to become adults and then go to work and do what was expected of them. We still come across adults who were not really sup-

posed to read books as children because it was not a useful thing to do. Especially in rural areas and within those social classes where one depended on selling one's physical working capacity it would never do to get fancy ideas from reading, which might then detract from physical work. The attitude was prevalent even though Nordic mythology tells us about Odin's power over the runes – a special power by which he governs the elements. The myth has it that right through history man has known that knowledge is power. But it is not until quite recently that this realisation has had a direct influence on every single individual. The old saying that the shoemaker should stick to his last and not interfere is in fact just that – old. It belongs to another culture and is something we should forget about.

Physical work plays an ever smaller part in our wealth and it is nearly always combined with the demand for a high level of knowledge skills. But from the time of the emergence of the public libraries about a hundred years ago we have many stories about in particular poor people's immense appetite for reading and learning. In his memoirs Vilhelm Moberg tells us, for example, of how as a child he discovered that behind the wallpaper in his room was plastered a layer of newspapers – and here he found a serial which he absolutely *had* to read because there was nothing else, and so of course he had to pull down the wallpaper!

The daily bread

The classic public library was among other things meant to alleviate the information poverty which prevailed in the early days of the industrial society and which was seen as a barrier to obtaining better conditions in life. The public library was born from the desire to give Mathis, Vilhelm and other information poor people access to enlightenment and to what we today call our common cultural heritage. The classic public library was characterised by frugality and deep respect for the book and the custodians of the book. It was a difficult and lengthy process to turn these small and modest book oases into real institutions which gradually had to become professional. But they were a successful link in the strategy for improving the general level of competence in the early industrial society.

A tremendous leap ahead from this kind of library model happened in the 1960s and 1970s with their unique prosperity, baby boom and educational lift. This is when the modern public library in its pre-digital form was created – and we still often come across reminiscences from this period. It was then that even the smaller local authorities managed to create

professionally run institutions. The large libraries especially, became efficient lending factories – very much in tune with the beat of the industrial society.

But NOW. As we all know only too well – now the situation is completely different. We do not have information *poverty*. Neither do we have information *wealth* like we did when the industrial society came to its close. We have an information *explosion*. We have the world at our fingertips on the Internet. We have remote access to no end of television channels. We have play stations and infotainment and we are in the middle of a development where more and more people talk about the imminent media convergence which – so to speak – makes us draw our breaths through the media. They will be with us all around the clock. And in a world like this, it becomes quite obvious that we shall need a completely different kind of library. We have to tear down the meticulously erected walls of the library of the industrial society and tune in to the beat of the network society. How do we go about it?

Reservations

And yet. Notice how paradoxically tenacious certain old-fashioned cultural artefacts are. Look at the success of the book. Notice that people keep wanting to have places where they can meet, provided they are of a certain quality. Notice that even though the music industry complains about piracy, MP3 files, lack of copyright protection – their sales are booming. If anybody had asked the book people five years ago: Is it possible that in a year or two you will see a successful book which will make 12-13 year-old boys (*boys!*) forget everything around them just as blessed Mathis did? Will there be a book which booms the western market totally with millions of copies printed? They would probably have answered: No, it sounds rather like a fairytale and we do not believe in it. But it is in fact happening right now with the Harry Potter series which demonstrates beyond doubt that the story lives. Harry Potter is printed in 80 mil. copies all over the world.

I do not believe the allegation of the literati that the great story is dead. Only the blasé think that. The story is fundamental for man's ability to articulate, interpret and communicate his experiences. Film might be a kind of story, but language is the medium of realisation par excellence.

I should like to quote from an essay by Norwegian author Jan Kærstad on the potential of fiction: "We know hardly anything about our strength

and possibilities. Sometimes I see man as a creature all folded up. We walk upright, but we have not managed to raise thought. Mentally speaking we are cripples I further imagine that books, fiction is just about the best tool for making us unfold And that is precisely why I am worried; why am I not hunting in a more determined way those books which will make me rise, which will make me grow a few centimetres? Because I no longer wish to be changed? I admit it: because I am afraid”.

More paradoxes and questions

When imagining the future children's library, the question we should *not* ask ourselves is of course – “how can we adjust our existing institutions? By and large this is, however, how we do things in practice. Today we are hampered by very painstakingly created old knowledge-heavy and tradition-conscious institutions. Often they are peopled with a tremendously conservative and highly professional staff which does not make the job any easier.

We have to think: what do children need? What kind of skills will help to create the good life? How can we turn them into good democrats and citizens? How to release the creative instincts and turn them into action? How do we make use of new technologies in order to create a vibrant interplay between the individuals' power and creativity?

Let us look at some aspects of children's situation today. We have a tremendous media explosion. Lots of TV channels, Internet, a great variety of multimedia. A great number of possible activities outside school: clubs, hobbies, sports – and sometimes the child encounters ambitions on its behalf. The choice is almost too wide.

Modern society is loosing its norms and for many adults this makes bringing up children more difficult. There is a danger of loss of identity or at any rate of fragmentation. On the positive side it could mean freedom to cultivate creativity. But there is a grave risk of many children getting lost in a world full of confusion and lack of direction. One of the answers to what children need must be: a framework that encourages creativity and protects against loss of identity – that is to say an ever balancing attention.

What to do?

I believe we must be extremely value conscious. If we know what kind

of values we want to pursue - which is by no means easy. If values are being intellectualised instead of being linked to social reflexes adopted through unequivocal upbringing, they become vulnerable.

Professor Per Schultz Jørgensen, former chairman of the Children's Council, suggests that "it is not a question of extending the services and the possibilities for passive entertainment, but to improve those cultural offers which turn children into players. We must try to make children into participatory, productive, responsible and reflecting human beings. They should be given a deep and fundamental feeling of being valuable contributors to our society."

We have to manoeuvre between fantastic and hitherto unknown opportunities for children on the one hand, and on the other we face the very real risk of a loss of identity, because to a much lesser extent than before are we born into a social identity – a place in society.

The white and the black games

Focus has been on children lately – sparked off by the Danish minister for culture, Elsebeth Gerner Nielsen's children's cultural political report. The Cultural Council for Children was established in 2000 and has now prepared a plan of action for the next four years. So things are getting organised and well-defined.

The Finnish brain researcher, Matti Bergström concentrates on the child's inner life and its – as we see it – chaotic 'possibility space'. Professor Bergström maintains that it is not only a question of 'white games'. The white games are our pedagogical efforts trying to bring up children in our own image. But there must also be room for the 'black games' where children test themselves and the world around them. They must be given space. At a recent conference, Matti Bergström posed the question: do children need a knowledge lift? His answer was no, they need a chaos lift. We must allow children space and opportunity for the black games which are created in the unorganised and unsupervised meeting with other children.

Very briefly, Matti Bergström's reasoning can be boiled down to this: The core of culture is art. The core of art is creativity. The core of creativity is possibility. The core of possibility is play. The core of play is chaos.

Therefore all culture is based on chaos. More than ever before do we wish to encourage each individual's creativity and culture-creating ability. The skills of the agrarian and industrial society have long since become obsolete.

The library of the networking society

In our networking society my vision is that the library can act as the child's (and in fact any citizen's) co-operative partner and helper. That is nothing new – but it must be brought about in a different way. Creativity and learning must go hand in hand and children will to a much greater extent determine the activities.

This means a new institutional concept and new roles for the librarian – and also new services. The result is a library far removed from the idea of the industrial society's book lending factory. The collections will continue to be the obvious prerequisite, but the institution's success will depend on its ability to create strategic alliances with other partners, kindergartens, schools, societies, clubs and sports. The virtual library will also become a reality for children: an increasing number of virtual services will become available for children to use at school, for their homework and in their leisure time.

The librarian's new role

The inter-acting librarian is swiftly replacing the neutral information communicator. There is a marked tendency for the librarian to act as 'value enhancer', e.g. by selection and annotation of sources, for example in Internet guides. We may also expect a more culture-producing librarian or at any rate a much more personal approach.

Most of all, the librarian must develop a closer dialogue with the users and become adviser, consultant, active co-operative partner – for example in relation to kindergarten and school. The librarian will also become a children's cultural co-ordinator who will investigate the fora where children act and where the library can step in with something special and relevant to offer.

New services

The library will increasingly help with homework via the Internet. The school class will have a homepage with links to other web sites with information on subjects that are currently being studied. The libraries co-operate on an Internet guide which will suit the needs of different groups of children. An Internet enquiry service of high standard is on the cards where children can ask more complex questions. And the library will certainly become the arena for a multitude of cultural activities. That is perhaps already the case today, but the librarian will have to become more creative herself if she is to make her mark. Children will become more personally involved and bring their influence to bear, which is important in itself, but will also be part of the effort continually to encourage citizens to form their own society.

How do we bring about this new standard for libraries? How do we realise the vision of using our increasing wealth to create a better life for people in our countries? In principle the recipe is quite simple. Any textbook on development management will tell you how. The essence is that each company, each institution must create its own vision of development. Naturally there must be a common hybrid library vision, but the individual libraries must adapt this vision and prioritise according to local players. This means that the vision should be shared by the players. All relevant parties should be able to claim some kind of ownership to the vision and that applies to politicians, staff and partners alike.

Strategies and action plans must be worked out. There must be management and there must be motivation, and ready support when barriers have to be forced. We must actively cultivate the values of the culture of change which are amongst other things: generosity, high level of tolerance, zest, zest for play, zest for adventure – and reciprocity.

Many have already started – and more are following suit. But it will be a little while yet before the goal is reached, at any rate for some of the libraries, because some institutional frames are so solidly built that they cannot be altered without a fight.

**Summary from study written for
the European Commission
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Co-author Gitte Larsen.
The summary has been translated
into some 10 languages.**

PLIS

Public libraries and the Information Society 1997 Executive summary

1. Background, context, objectives: the Information Society and public libraries

Knowledge is the crucial competitive factor in the Information Society. The way in which we deal with information will therefore be increasingly important as the digital revolution affects our jobs and daily lives.

We shall have to cope with these changes on the broadest possible basis for economic, democratic and social reasons. The Information Society will offer new opportunities for prosperity and will allow citizens to take a more active role in society. However, a widening gap between the information rich and the information poor could well result in social tension.

Strategies are therefore needed:

- to provide access, in a spirit of democracy, to all published information
- to offer lifelong learning opportunities
- to ensure that citizens can cope with computers and have access to the equipment and systems they need
- to safeguard cultural identity in a rapidly changing world.

Traditionally public libraries have provided the answers. And there are more than 40,000 of them in the European Union. But are they up to these new challenges?

In their favour, we have:

- their users which in some countries amount to over half the population
- their strong tradition as local information centres and
- the potential of information technology for libraries.

Indeed, Europe's more enterprising public libraries have already convinced local citizens and politicians that they can offer efficient services in answer to the demands of the Information Society.

But most public libraries are still lagging behind. To take up the challenge, they must redefine their role and establish strategies for today's changing requirements.

The ultimate goal in the context of the Information Society is to provide access to any type of information for anyone, at any time, anywhere. Technology can already provide the answers, but we need to overcome widespread dependence on traditional media. And we shall have to open up the possibilities offered by networked libraries.

Even if, for years to come, the book will remain the most important vehicle for information, libraries limiting themselves to printed material will find themselves lagging behind those that successfully provide modern networked services.

1.1. The updated library

In this study, the term updated library is used to describe public libraries dealing with traditional services as well as with new services and technologies - as most European libraries do.

The study is based on eleven country studies, five case studies describing inspiring examples of good libraries and regional co-operation, and on desk research.

The objectives are to analyse what public libraries should do to adapt their traditional services and to offer new ones, in order to respond to the needs of their users in the context of the Information Society.

2. State of the art: European public libraries are developing at different speeds

The state of the art is described in three stages:

1. automation of housekeeping routines aimed at giving public online access to the catalogue
2. access to online databases for staff and users, including Internet access, leading to
3. server-based Internet services on the library's homepage which can be accessed remotely.

There is considerable diversity in the Member States with regard to Stage 1, varying from 20% to 100 % of libraries which have automated. A clear movement towards Stage 2 can be observed in some countries, where up to half of the libraries have some kind of Internet access. In others this is exceptional, as is access to CD-ROMs. At the European level, a small minority of public libraries offer remote access to their catalogues. Similarly, only very few provide electronic document delivery services. To accelerate change here, the study describes a vision based on inspiring examples of public libraries which have modernised.

3. The vision: the public library as a key player in the local implementation of the Information Society

Our *updated public library* offers

- access to the human record in whatever form it might be stored
- a lending collection of printed materials and multimedia
- access to networks and support for net navigation and information searching
- workstations for customers
- open learning and training opportunities
- a physical place offering various meeting facilities
- electronic document delivery services.

The *updated public library* will

- have access to union catalogues for interlibrary loan and, in time
- be part of a world-wide library network
- co-operate closely with other memory institutions, schools and other educational institutions
- be a community information provider; and
- offer special services to various target groups - from business information to services for ethnic minorities and the visually impaired.

The local public library will develop according to local needs. There will be quite different libraries within a given region, but - as a result of co-ordination - they will be able to establish a full range of library services in their area.

4. Key roles of the public library

This forms part of a broader vision of the public library as an institution playing a number of key roles in the local implementation of the Information Society, including:

- an active partner in safeguarding democracy, providing uninhibited access to all published materials
- a supporter of education and learning at many levels, delivering the raw material of knowledge
- a local IT centre, providing access to hardware, software and networks, giving the citizens an opportunity to deal with a new and completely pervasive technology and
- a cultural institution.

If the importance of the updated public library is so fundamental, why has it not been implemented more widely? What are the barriers? Can they be overcome?

5. Barriers: Insufficient political awareness, inadequate funding, lack of professional training and unchanging attitudes

The barriers between the state of the art and this vision are of two types.

From an external point of view, there is a lack of political awareness or confidence in the potential of the public library in the move towards the Information Society. There is an obvious difference in the efficiency, range and technological development between public libraries in countries or regions which have political planning and those in regions which do not. Similarly, there may be a lack of concrete plans for networking, lack of funding and inadequate technical support to implement new technologies.

Internally, the barriers are related to professional development. Skills are inadequate as a result of old-fashioned education or the lack of continuing education and training opportunities. A professional strategy for development is also needed at national, regional and institutional levels. Sometimes it is missing as a result of inadequate managerial skills, reluctance to come to grips with the new media, fear of change, and a very low rate of newly recruited staff with up-to-date IT skills.

6. Conclusions and recommendations - What should be done?

To fulfil its potential, each public library must therefore have strategic plans for establishing new skills and attitudes and new and enhanced services for the citizen. There is a need for considerable support in training, education and implementation.

6.1. General recommendations - mainly for implementation at a national or regional level

We recommend actions within two areas:

6.1.1. Policies and strategies

- national policies should be formulated for public libraries, linked closely with a specific policy on public library services in key areas such as interlending and interlibrary networking
- national information policies should ensure that the role of public libraries is recognised
- local, regional or national strategies for implementation should be developed for new services and technical support.

6.1.2. Improving skills - urgent need for modern training programmes

- the availability and take-up of an appropriate range of possibilities for professional continuing education and training should be ensured
- closer co-operation between different types of libraries - in particular between public and academic libraries - and with other institutions should be strongly encouraged.

6.2. Specific recommendations to be implemented at a European level

The responsibility for the local public library is at the level of the local community. At the European level, initiatives in support of national, regional and local policies might be helpful.

We recommend actions within four areas: policy and planning, improving of skills and competence, new tools and services, the telematics market place.

6.2.1. Concerted actions, studies on policies and planning, implementation of new services

We recommend actions within the following areas:

- concerted actions to develop plans to change political priorities, develop national policies and as a consequence attract increased funding so that all libraries can begin to achieve adequate levels of telematic development
- inspiring case studies on the development from visions to policies to new services
- studies or projects on the relation between new technology, new services and changing organisational patterns and administrative structures
- study on the impact of the public library in its various functions and roles
- initiation of pilot projects dealing with 'new services'
- dissemination of knowledge on new IT developments.

6.2.2. Development of or support for training and continued education

- distance learning programmes
- self-instruction programmes
- training of trainers at a European level
- a European Training Centre.

6.2.3. Studies and projects developing new tools and services

- a study on further development of administration and organisational structures
- a study on charges
- a study on adequate levels of services for different types of public libraries
- projects on new models for small public libraries based on networked services
- projects to develop new services and tools to be implemented according to local needs: tools for user instruction, for information consultancy, for IT-based marketing
- universal design providing access for different types of users
librarian's workbench - organisation and presentation of multi-media-based information for the network.

6.2.4. Stimulating the market for telematic products

- establishment of a concerted action in support of a platform to strengthen the dialogue between public libraries and system vendors.

To these concrete suggestions we add the need for funding. A European source for funding is highly desirable and would be helpful in accelerating the change in public libraries.

Danish Library Policy outlines principles, problems and perspectives in the Danish library system in the new millennium. The connecting thread in the book is the effort to establish the hybrid library, and the articles and papers cover topics like the role of the national library, organising the electronic research library, models for digitisation of journals, setting a new standard for the public library and children's library in change.

The author, Jens Thorhauge, is the director of the Danish National Library Authority.

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