**LIS-education – a complex patchwork**

Library and information science is a complex patchwork. That is the case for LIS-research and it is the case for LIS-educations. Although LIS as an academic and educational undertaking has common historical roots related to the need for qualified staff in libraries, research and education has developed in different directions. Some of the major dividing lines are:

- From being vocational education, LIS has gradually established itself as a research-based academic undertaking. There are, however, relatively big differences with respect to how far and how fast different schools and countries have moved on the road towards Academia.
- Academization necessarily implies establishing a distance to the field of practice. Critical research presupposes distance. But again there are differences both in degree, speed and form of establishing that distance. For some, becoming an academic field implies developing an academic discipline like sociology and history. Hence LIS becomes a generalized information science. For others, it is more a question of developing an academic and research-based profession like medicine and law. It is obvious that which of these two strategies one chooses will affect the relationship to the field of practice.
- The degree to which LIS-educations are integrated into the academic system of degrees from bachelor via master to the doctoral level also varies.
LIS is a multidisciplinary undertaking. Educational program can choose theoretical and methodological perspectives from different sources, varying from mathematics and computer science via the social sciences to the literary sciences.

What, then, about LIS-education in the Nordic countries – Denmark, Finland, Iceland, Norway and Sweden, to list them alphabetically? Does it give meaning to talk about a Nordic perspective on LIS?

2. The Nordic LIS-institutions – an overview

Let us start with the institutional background and the developments the last 10-15 years.

On entering the 1990s, we had in four out of the five Nordic countries (Denmark, Iceland, Sweden and Norway) a national monopoly as far as LIS-education was concerned. The Royal School of Library and Information Science in Copenhagen, The Swedish School of Library and Information Science in Borås (part of the University College of Borås) and The Norwegian School of Library and Information Science were all large by international standards – Copenhagen extremely large. The three schools also shared the following characteristics:

- They were colleges and not integrated into the national system of academic degrees.
- They had a strong vocational tradition; they educated librarians, and the curriculum consisted of all subjects deemed necessary for a librarian: Classification, cataloguing and retrieval, the management of libraries and also literature and the mediation of culture and literature. The strong weight literary and cultural subjects has had in the curricula of these schools is maybe one of the characteristics of Nordic LIS.

Although Finland had a different situation with three LIS-departments firmly embedded in an academic culture at the universities of Tampere, Oulu and Åbo, it seems reasonable to say that the three large schools in Denmark, Norway and Sweden with a combined academic staff amounting to between 150 and 170 and well over 2000 students constituted the major Nordic model.

Today the situation is radically different from that which we had 10-15 years ago. Only Denmark has kept the national monopoly. (Iceland is so small that there is not market for more than one programme). Altogether we have 12 schools or departments offering LIS-program leading up to at least a BA-level. On entering the 1990s only Finland had educational programs integrated in the system of academic degrees. Now that is the case with all programs. On entering the 1990s, research education was in practice non-existent outside Finland. Also that has changed radically. And the march towards Academia has put the practice oriented model described above under pressure.

The Royal School of Library and Information Science in Denmark is, as mentioned, the only one that has maintained a national monopoly. It is probably the world’s biggest LIS-school outside China, with an academic staff of more than 80 and more than 1000 students. The staff is divided into three institutes (one for information studies, one for library development drawing upon social science and management science, and one for media and culture). The smallest of these institutes has a number
of tenured staff which by far exceeds the average size of LIS-schools in the Nordic countries as well as on an international basis. Research activity is extensive, and the RSLIS offers education at bachelor and as well as on a master level. Recently it was given university status and thus the right to award the PhD-degree, the first of which was awarded in February 2004. One peculiarity in the Danish system is the practical field-project the students are invited to undertake after having completed their BA. After three years of study, the students achieve a bachelor’s degree LIS. But in order to get the title Bibliotekar DB – Librarian RSLIS - the students have to undertake project in the field of practice lasting for one term. That is an interesting way of combining academization with practice-orientation and, combining giving a general academic degree within a scientific field with educating librarians.

Travelling by car or train from Copenhagen to Sweden over the new Øresund-bridge, only takes you half an hour. Although the physical distance is short, Sweden represents a very different landscape from Denmark as far as the organization of LIS-education is concerned. The national monopoly in Denmark is supplanted with a high number of LIS-schools – the highest in Scandinavia and probably, relative to the number of inhabitants, one of the highest in the world.

When the Swedish Directorate for Higher Education undertook an evaluation of the country’s LIS-education in 2004, six schools were defined as giving LIS-education (it might be uncertain if one of these, the programme in Linköping, considers itself a part of the LIS-family and is considered as such by the others): the Swedish LIS-community consists of the old and traditional universities of Lund and Uppsala, the newer universities of Umeå, Växjö and Linköping and finally Borås University College, which is the site of the former monopolist and which still – to the annoyance of the others - tend to call itself The Swedish school of LIS. At all places one can take the Swedish parallel to a master’s degree (magister), which is a four year programme with two year LIS combined with two years of studies in other subjects. Växjö, the newest programme, deviates from this structure. The LIS component of the four-year programme is longer. Also in Borås is it possible to study LIS during the whole 4-year programme. All departments except Växjö offers MA and PhD-programmes. The PhD-programme in Borås is a joint undertaking between Borås and Gothenburg University.

The schools vary very much as far as size is concerned. One is tempted to say extremely much. Borås is by far the biggest. In academic staff and number of students it does not lag very much behind Copenhagen and it has more than 30 PhD-students. The other schools typically have 2-3 academic staff members and a similar number of doctoral students. Whereas Borås covers the whole field of LIS, the other schools have developed more specialized profiles. Lund profiles itself through extensive use of problem based learning as a pedagogical strategy; the programme in Uppsala is affiliated to an institute for archives, libraries and museums in the faculty of the humanities; Umeå has for decades had a high-ranking international profile in the field of bibliometric and scientometric research. In Umeå, LIS is organized under the department of sociology. Växjö develops a profile stressing the pedagogical element in librarianship, Linköping has had a technological profile.

Probably none of the Swedish schools would say that they educate librarians and teach librarianship. The do teaching an research within an academic discipline: LIS. But when studying the curricula in the different schools one find clear remnants of a
profession-oriented approach where one teaches the subjects deemed necessary to function as a librarian.

In Norway national monopoly ended in 1995. Till then, The Norwegian School of Library and Information Science, now a part of Oslo University College, offered a three year programme at the end of which the candidate received a diploma in librarianship. On the top of the three-year programme the school also offered a two-year programme on a master level which, however, did not result in a formal master’s degree but in the title civil librarian (modelled after civil engineers educated in the technological universities and civil economists educated in schools of management). When Norway implemented the Bologna reform in 2003, the LIS-programmes of Oslo University College was integrated into the national system of degrees – BA and MA.

In 1995 two other universities established educational programmes within LIS. NTNU in Trondheim (The National University for Technology and the Natural Sciences) established a master and doctoral programme in information resources management, with a weight on digital libraries. At the University of Tromsø a programme in documentation science was established. This programme goes from BA via master to PhD. Oslo University College, although it since 1996 has had a relatively high number of doctoral students, has so far not had the right to award doctoral degrees. Therefore one has had to find cooperative solutions with other universities. From this year on, Oslo University College has been given the right to grant doctoral degrees in so-called professional studies which also includes LIS.

In contrast to Sweden, probably most staff-members in LIS at Oslo University College would maintain that they teach librarianship and educate librarians, in spite of the fact that the school no longer offer a diploma in librarianship but a BA or MA in library and information science.

Whereas the RSLIS and the LIS-programmes at Borås University College and Oslo University College – the three dominating schools on the Danish, Swedish and Norwegian scene – quite recently could be described as anchored in a vocational tradition and were organized in colleges outside the system of academic degrees, Finnish LIS-education has been firmly anchored in a university tradition since the early 1970s, when the first chair in LIS was established at Tampere University. At present, one has LIS-educations at three universities - Tampere, Oulu and Åbo. The dominating school is the one in Tampere, which dominates both with respect to student production and research output. As far as research in information retrieval and information seeking is concerned, Tampere is an international stronghold. Out of a staff consisting of 13 teachers of 13, five are full professors. All schools offer programmes from a bachelor to a PhD-level.

There can be no doubt that the Finnish LIS schools have gone furthest in developing a pure information science profile and detaching themselves from libraries and librarianship. If one goes into the websites of the programmes in Oulu and Tampere to see how they profile themselves to potential students, both schools state that they educate professionals for the information sector. Libraries are mentioned as one example among others. Åbo deviates at bit from this. On its web site, the programme in Åbo advises young people to choose their programme if they want to become librarians. The curricula focus upon information retrieval, information seeking and information management. But even the leading and pioneering institution in the
building of IS as a scientific discipline detached from affiliations to the profession and institution of librarianship has not thrown cultural and institutional perspectives completely of their curriculum. Topics such as library history, cultural policy and cultural sociology and the role of the library-institution are still taught.

The three Finnish departments have different organizational affiliations within their departments. In Oulu, information studies is organized in the faculty of the humanities, in Åbo in the department of political science, whereas information studies in Tampere recently switched from the faculty of social science to the faculty of information science, meaning that they merged with subjects such as for example computer science and mathematics. These differences are not insignificant.

When one focus upon information retrieval and information seeking, not all subjects needed by a librarian, that naturally has structural effects. Although Finnish LIS is highly visible internationally, the three departments taken together has a teaching staff not very much above 20 persons. Compared to Denmark, Norway and Sweden that is a very low figure, and compared to the research output and citations, the Finnish LIS-community must be one of the world’s most efficient.

Summing up, then, the Nordic educational scene in LIS in 2005 is varied:

- We find large variations in size – from just two staff-members up to more than 80. Out of the 11-12 programmes, three are large also by international standards, one is medium sized (but academically highly efficient) and remaining 7-8 small or very small.
- We find variations in institutional arrangements reflecting differences as to how LIS is defined within the system of higher education: as a part of the social sciences, humanist sciences, technological sciences, pedagogy. All these institutional affiliations are found, and they are probably not without significance. Whether or not LIS is organized within and independent LIS-university (Denmark), a university college (Oslo and Borås) or a university (the rest) is probably also a factor which affects and structures education and research.
- We find variations when it comes to a professional and practice oriented approach versus a discipline oriented.

The process from 1995 till now which is described above, is a part of the process of academization which moved on gradually and slowly from the middle of the 1970s and accelerated from the middle of the 90s. As mentioned above, the first to embark on this process was Finland, where the first chair was established at Tampere University in 1971. University affiliation and the conscious efforts to establish information science as a discipline has structured the development in Finland. That which we could call the Finnish model is well in line with that which has been the dominating trend in the Anglo-American world for a couple of decades, i.e. going from library and information science to information science with a more detached relationship to the world of librarianship and focus on retrieval and information seeking. In Denmark, Norway and Sweden the march towards Academia started a bit later, and it started in schools of librarianship with close relations to the field of practice, not in universities. In the introduction to this paper, I characterized the tradition these three schools have stood in as the Nordic model. Transforming that which not very many years ago stood forth as first and foremost vocational educations into academically based professional educations is not a trivial task. So the question
is: what happens with the Nordic, practice-oriented traditions when it is to be adapted to today’s academic demands? Does the practice orientation contain values that deserves to be transferred into the realm of Academia? Has it contributions to offer that might get lost if it disappears? Can such a transferrance take place, or does academization of LIS imply the hegemony of a discipline-oriented paradigm? Such questions will be dealt with in the following paragraphs.

The integrated profession-oriented approach

In 2004 The National Agency for Higher Education in Sweden appointed a committee to oversee and evaluate its ALM-educations consisting of one professor from Denmark (Birger Hjørland), one from Finland (Mariam Ginman, who unfortunately had to withdraw early in the process) and one from Norway (the author of this paper) together with four Swedish master and PhD-students evaluated Swedish LIS-educations. (Högskoleverket, 2005). When embarking upon that work, the group naturally had to reach an agreement as to what to look for – what is LIS and which elements should an LIS-education consist of?

The group agreed upon four elements which should be a part of any LIS-education:

- Any candidate graduating from an LIS-school should have a thorough understanding of knowledge organization and retrieval and the principles and theories lying behind systems for knowledge organization and retrieval.
- In addition a librarian need to have a knowledge of the content to be acquired, organized and mediated, i.e. they need to have cultural and literary knowledge – a topic Jofrid Karner Smidt goes more profoundly into in this session. A librarian who only knows form and nothing about content cannot function adequately as a mediator.
- All systems of knowledge organization build upon epistemological presuppositions. Here, if anywhere, are we dealing with a reality which is socially constructed. In order to develop the students’ reflective and critical capabilities, they should be taught epistemology and theory of knowledge in order to be able to critically analyse the epistemological presuppositions of different system.
- One should also develop the students’ capabilities to understand and analyse LIS-institutions and LIS-practice in a broader social context. How is LIS formed by its social environment? How does LIS form its environment? What is the social role of the profession and how is that role affected by social changes.

Others would maybe have included other elements, but the central point here is that the committee tried to identify the knowledge and competencies needed to function as professional practitioner and it drew up a picture of the professional practitioner as a person who is capable of performing his practice in its totality and in complex settings. But it is also a picture of a reflective practitioner, who not only is being taught to repeat established practices, but to go behind them, criticize them, refine and develop them and sicard them if necessary.

Such a practitioner, with a complex, yet integrated, set of competencies can be termed the complete librarian. (Audunson, Nordlie&Spangen, 2003).

The competencies of a professionals cannot be reduced to a kernel or to one core subject. That is probably valid for any profession. The competency of a doctor of medicine cannot be reduced to biology although it probably can’t exist without
biological knowledge and understanding. We expect from a practitioner in the field of medicine that he or she in a concrete situation is capable of activating in an integrated form knowledge from scientific fields ranging from biology via physiology to for example psychology and social medicine. It is the same with LIS and the librarian as a professional practitioner. The competency cannot be reduced to knowledge organization, although it cannot exist without it. That is why discussions on the core-subjects of the field are so futile – a characteristic common for most discussions on the meaning of life. LIS is that blend of different subjects which together makes up the professional field (which is not given). The core of LIS is LIS in the same way as the core of dentistry is dentistry.

The four elements identified by the evaluation committee is reflected somewhat differently in the curricula of the three Nordic schools.

In Oslo the curriculum is organized into three topic areas: Knowledge organization and retrieval, Libraries and society and Literature and user. Libraries in society covers mainly management of libraries, but also to some extent cultural politics and the libraries’ social role, whereas literature and cultural mediation is covered in Literature and user. During the first two years of the BA-program, the students have practically no options to select and Knowledge organization and retrieval is the dominating subject, taking up 50% of the study time during those two years. The third year the students can specialize. One the one hand they choose between Knowledge organization or Literature and user, on the other between the management of public libraries or the management of special libraries. Two-third, then, of the educational programme is compulsory.

The RSLIS in Copenhagen has, as mentioned above, the three institutes of Information studies, Library development and Culture and media. Information studies corresponds to Knowledge organization and retrieval in Oslo, but Oslo has kept more of the vocational/professional training-aspects in its BA. One can say that information studies in Copenhagen integrates the discipline-oriented IS perspective into a professional school. The institute of Library development has over the years come to focus more and more on knowledge management. The institute of Culture and media takes care of those parts of the curriculum focusing upon cultural policy and the social and political role of libraries, mediation of culture, literature and literary sociology and library history. The first three terms of the BA-programme has no electives, and the students have to take courses from all three institutes. The possibility to select courses according to individual interests is introduced from the fourth semester. In Copenhagen, then, roughly 50 per cent of the curriculum is compulsory.

In Borås they also have divided the curriculum into topic areas or perspectives on LIS. Topic area 1 is called Libraries, culture and information in a societal perspective. Here one finds the cultural, political and historical dimension of the curriculum. Topic area 2 is Knowledge organization. Individuals’ and groups’ interaction with information systems is the third topic area. Here information seeking behaviour and information and learning represent central topics. Organizations and the development and use of their information resources is the name of the fourth topic area, which has a leaning towards information knowledge management. The naming of the topic areas, with the exception of knowledge organization, indicate broad and general perspectives more than subjects. They could very well be the names designating broad research programmes – which they also are – not sub elements in an educational curriculum. In
addition to selecting among these topic areas, course in the theory of science and research methodology is compulsory.

The students in Borås specialize in one of these topic areas from the second semester. So whereas 75% of the Oslo-curriculum is compulsory for all students and 50% in Copenhagen, that is the case for only 25% of the curriculum in Borås. The differences we have seen, reflect differences in the way these three traditional vocational schools have adapted to academization, with Oslo still closest to the tradition. In connection with the evaluation of Swedish LIS-educations referred to above, Borås defined LIS as a profession-preparing academic discipline. That is, one seems to have one foot in the academic discipline approach and one in the profession-oriented approach. That formulation illustrates very well the tension encountered by LIS-educations that have their roots in a vocational oriented tradition. In the next paragraph I shall go somewhat more into those tensions.

Adapting the vocational tradition to Academia: a tension ridden process

There are reasons of principle as well as more practically and historically rooted reasons to these tensions. Let us start with those of a principle nature. Above I have used the field of medicine as an example. We can do that also in this respect: Medicine might be pictured as the ideal type of an interdisciplinary, profession-oriented academic field. In medicine different subject fields, e.g. biology, chemistry, physiology, psychology just to mention a few, are integrated. University teachers and professors are not only academics, but usually also practising physicians. Students of the sociology of professions would probably define librarianship as a semi-profession. We have not reached as far in creating an integrated profession as they have for example in medicine and law. The effect is that the different subject-fields which we integrate into the blend which we call LIS, tend to have an outwardly defined relationship to each other. In reality LIS is probably more characterized by multidisciplinarity than by interdisciplinarity. (See Nordheim 2001 for a closer discussion of multidisciplinarity versus interdisciplinarity). Multidisciplinarity might easily lead to tensions. Whose perspective should prevail? My dream is a research programme where those with a background from IS join forces with those preoccupied with the cultural dimensions of LIS and those analysing the institutional dimensions joint forces in order to use their different backgrounds and competencies to throw light on a common problem. The field of practice is full of problems that call for such interdisciplinary research.

Then there are historical reasons. The most important one of these is no doubt that the speed and depth of the process towards academization has been different within the different subfields of LIS. The locomotive and forerunners have no doubt information retrieval and information seeking behaviour. Those fields have international networks, international series of conferences, a unifying discourse etc. Those teaching in literary and cultural subjects have to some extent seen themselves as much as literary and cultural scientists employed by an LIS-school as LIS-teachers and researchers using their background in an LIS-project. To the extent other subfields of the field feel that academization is identical with the hegemony of the IS-paradigm, conflicts might arise.

No doubt we have had such tensions in the schools representing the Nordic tradition of a practice oriented education. My impression, however, is that we are now on the move towards developing from multidisciplinarity to interdisciplinarity. That is a road paved with challenges and the outcome is uncertain. Above I referred to the Borås statement of
being a profession-preparing academic discipline as illustrating both the tension and the two possible outcomes. Although filled with challenges, I believe it is a road both necessary and worthwhile moving along and it is the only road that can adapt the profession-oriented model based that traditionally has dominated in the Nordic countries to the academic demands of tomorrow. I believe the patchwork of LIS-education and LIS education needs this approach.

**The integrated, profession-oriented approach: An alternative epistemology in library and information science**

The most important reason why I believe the profession oriented approach that can be said to characterize the three largest schools in the Nordic countries is necessary, is that it represents an alternative epistemology to the discipline-oriented approach. It is capable of generating other kinds of knowledge.

There are important differences between a subfield within a discipline, for example the sociology of culture as a subfield of sociology, and a research based profession. Those differences are rooted in the researcher’s and educator’s relationship to the field of practice. A sociologist might, for example, be preoccupied with Habermasian theories on the public sphere and, as a part of such a project, utilise the public library as an empirical field. A library and information science researcher might have the same theoretical underpinnings for his/her work, but use the theory as a point of departure for a research aiming at developing the field of practice – develop a theoretical basis for expanding the practical arsenal of librarianship. Where the discipline-oriented researcher utilises the field of practice to collect empirical data in order to test and refine his theories, the profession-oriented researcher utilises a given theory to improve and refine the field of practice. The dynamic between the field of practice and the field of theory also yields opportunities of producing theoretical insights and theoretical developments, which differ from and supplement those of the discipline-oriented approach. Discipline oriented research and education is probably capable of producing knowledge and competencies which a profession oriented approach cannot. But the opposite proposition is probably also true. A profession oriented approach represents a dynamic between the field of theory and the field of practice resulting in knowledge and competencies which it is difficult to achieve with the discipline oriented approach. Therefore, should the profession-oriented approach fall or be thrown out of our academic nest, we would probably lose valuable knowledge.

**Is the profession-oriented approach outdated?**

Developments in education and research had – as stated above – over the last decades has moved in other directions. It is, therefore, relevant to ask whether the profession-oriented approach, despite the arguments above, is outdated.

In an article dealing with academic libraries in the digital age, Tom Wilson (1998) argues that the traditional library has been structured according to differences between processes such as acquisition of materials, processing of material, diffusion of information and information enquiry services. Wilson argues that from the point of view of the user these differences are irrelevant. Using insurance companies as an example, he goes on to maintain that the possibility of producing high quality services and utilising digital technology efficiently, will increase if the user encounters what Wilson calls a “library case officer”, i.e. a librarian dealing with the user’s information needs in its totality.
That which Wilson terms “the library case officer” seems to a large extent to be the same as what the title of this paper calls the complete librarian, i.e. a professional integrating and synthesising different kinds of competencies needed to master the profession. It may be argued that even in a situation where the framework for these competencies are coming to be constituted by the functions performed, rather than by the institution they are performed in, information seekers still need to encounter this kind of professional. And if they shall meet him or her, that puts demand both on LIS-education and LIS-research.

**How can we develop an integrated professional approach?**

My answer is simple: by doing it. Then we must return to my ideal research project. We should not research side by side in the same way children play individually side by side before the age of three. Then we do not live up to the challenges of the knowledge society. Interdisciplinarity must take the place of multidisciplinarity. A library or any other information system or system for mediating and providing knowledge and culture is simultaneously a retrieval system, an arena for human behaviour, communication and cooperation and a textual system and cannot be reduced to either of them. That calls for interdisciplinanzary research which, in turn, can lay the foundation for a research-based integrated professional approach also in education. That will be a challenging undertaking, not only intellectually, but also because many of us will have to put our intellectual favourite horses which we often bring with us from our mother-disciplines in the stable at the advantage of common LIS-project.

There is no other way to go.


Utvärdering av ämnen arkivvetenskap, biblioteks- och informationsvetenskap, bok- och bibliotekshistor informations- och medievetenskap, kulturvård och museologi vid svenska universitet och högskolor
