

KNOWLEDGE, KNOWING AND CHANGING IN A LIBRARY

**The State & University Library of Denmark,
and Ankerhus Konsulenter i Udviklingsledelse A/S.
A consulting process during 1987-2000.**

Marjatta Maula

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Department of Management, Politics and Philosophy

Copenhagen Business School

Blaagaardsgade 23B

DK-2200 Copenhagen N

Denmark

Phone: +45 38 15 36 30

Fax: +45 38 15 36 35

E-mail: as.lpf@cbs.dk

<http://www.cbs.dk/departments/mpp>

Marjatta Maula

Dr. (Econ. and bus. adm.), M. Sc. (Computer science)

Contact information:

The University of Applied Sciences in Seinäjoki

Phone +358-6-4162779

E-mail: marjatta.maula@seamk.fi

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The picture presented in this case description is my construction, based on interviews, written material and comments from my colleagues. It is also influenced by my theoretical and empirical research work about consulting firms as ‘learning and evolving systems’, and my practical experiences as a consultant.

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Marjatta Maula

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Copyright © 2000 Marjatta Maula
Dr. (Econ. and bus. adm.), M. Sc. (Computer science)
Associate research professor
Department of Management, Politics and Philosophy
Copenhagen Business School.
Blaagaardsgade 23 B
DK-2200 Copenhagen N, Denmark
Contact information:
The University of Applied Sciences in Seinäjoki
Phone +358-6-4162779
E-mail: marjatta.maula@seamk.fi

ABSTRACT

The State & University Library (Aarhus, Denmark) has developed – as a result of a long, self-induced process where Ankerhus Konsulenter i Udviklingsledelse A/S has had a role in some parts of the process - better orientation on clients, services and technology. The Library has also dismantled its earlier patriarchal organization. However, the directors of the Library and Ankerhus admit that the pace of change is too slow, and it seems to be difficult to speed up the process.

The Library's most important relations are the ones to the Ministry of Culture, the users (and especially the user organization), and other libraries with whom the Library cooperates and competes. The Library also uses consulting firms for various purposes. The State & University Library has cooperated with the consulting firm Ankerhus Konsulenter i Udviklingsledelse A/S from the year 1987 in several assignments.

This report attempts to identify potential reasons for the slowness of the progress. For that purpose it investigates the roles of knowledge and perception (of environment) for change, by using the theoretical framework of autopoiesis theory. The study ends up to several conclusions concerning the relationship between knowledge, knowing and changing. It indicates that mere possession of relevant explicit knowledge ('commodity knowledge') does not facilitate change. The librarians' professional skills ('meta-knowledge') to deal with knowledge are tied to traditions and rules and may even prevent changes on institutional and individual levels. Because of the historical tradition, change capability (a strategic 'meta-meta-knowledge') is relatively weak in the State & University Library as it may be in the libraries in general. Therefore, this report presents that there is a knowledge-knowing-changing gap in the Library that influences the pace of changes.

The Library's progress is slow in spite of Ankerhus' holistic consulting models and methods and in-depth theoretical understanding of changes. It is possible that they and the Library's own understanding of the complex emerging nature of the reality do not sufficiently simplify the decision-making situation and create the necessary 'drama' to it. The Library has made three user surveys in 80's and 90's and a new strategy in 1999. However, the analysis indicates that the Library is not very *open towards the environment*, concerning the articulation, communication and operationalization of the changes in the operating environment. Moreover, it is not easy to import best practices from the private sector to the Library. A reliable, shared picture about external challenges would be needed to specify the direction and urgency for potential changes, and to maintain trust among the critical librarians. The Library's investments in *internal development* ('*self-referentiality*') have been relatively small, compared to the number of employees and the need for a critical mass for implementing self-sustaining change. The Library could potentially strengthen its change capability also by improving internal communication methods.

The case suggests that the symbiotic characteristics of a long consulting relationship help exchanging information. However, they also require special attention so that neutrality and objectivity can be maintained and changes implemented. The case illustrates also the importance of organizational and individual identity for implementing change. Finally, taking responsibility of the changes is needed to fill the knowledge-knowing-changing gap.

1 INTRODUCTION

1.1 PUBLIC SECTOR ORGANIZATIONS AND CHANGE

Socio-technical and other changes in the society increase the pressure for change in organizations. Public sector organizations are often quite 'knowledge-intensive' measured by the role of knowledge in their activities. They also face increasing needs for change. Because the public sector organizations have direct and indirect implications on individual clients, other organizations, and the whole society, it is important to know how they learn and change, and how they implement ideas about wanted change.

The implementation of changes in public sector organizations may meet several idiosyncratic challenges. In the private sector, several factors reshape the organizations, services and professions. Some examples of these factors are deregulation, increasing global competition and new competitors, individualization, changing of market demands, and emergence of new socio-technical solutions. Public sector organizations may, however, perceive these aspects differently than the private companies, because profit-making and competitiveness are not regarded as their primary objectives.

1.2 THE RESEARCH FIELD

1.2.1 Libraries and Change

Libraries are relevant research objectives because they have a broad impact on society. They serve institutions (such as universities and companies) and individuals (such as researchers and students). Moreover, libraries can be regarded as knowledge-intensive organizations because they are *repositories of knowledge*, and their employees are *highly educated*. While these aspects provide only a very static characterization, the libraries' dynamic *capabilities to learn and change* in their environment may become an increasingly critical competence.¹ However, it is not obvious how competently the libraries use knowledge in their own change processes. Therefore, the purpose of this report is to increase understanding of change processes in libraries and in other public sector organizations.

More specifically, this report investigates how the State & University Library and Ankerhus perceived the Library's environment, identified needs for change, and transformed their perceptions into change by using their knowledge. The report focuses on the slowness of the change process that was recognized by both parties. It draws attention to aspects that could explain the slow pace of change and the difficulties in using perception and knowledge as enablers for change in a knowledge-intensive public organization.

The relationship between change and identity is paradoxical. Changes include the risk of losing identity, but also the opportunity to strengthen identity so that new structures and processes become possible. On the other hand, a strong identity may help implementing changes without the fear of losing identity. It is therefore relevant to ask what is the role and identity of the State & University Library in society.

1.2.2 Knowledge and Change Action

This report also sheds light on the more general question about the relationship between knowledge and change. Based on the literature about knowledge creation (e.g., Nonaka and Takeuchi, 1995) it could be possible to assume that knowledge creation and thereby improved knowledge also increases change capability and helps the organization adapt in the changing environment. However, this assumption is quite simplistic, and change capability may depend on several other aspects. Creating new knowledge, possessing knowledge, or developing professional skills to deal with knowledge, do not automatically lead to acting on them.

According to Sevón (1998) for example fatigue, insecurity and failure may reduce the desire to act. Real or perceived safety, presence of tradition, and lack of freedom can create reluctance towards acting. Moreover, new information may increase insecurity and decrease the willingness to implement changes. Sevón suggests that thought models influence change capability. The thought model of an acting person is simple and dramatic valued, while the picture of a reflecting person is

¹ The consulting firms operate in a slightly similar situation as the libraries: knowledge is traditionally their main product, and the employees are highly educated. However, the consulting firms are increasingly moving from the mere distribution of knowledge into implementing changes in their client organizations. This may increase the pressure on the consulting firms to implement changes in their own organizations (Maula, 1999). Moreover, the consulting firms may also be regarded as 'role models' by their clients (Ib Tranberg, Ankerhus).

more complex and less dramatic. Complex prescriptive explanations of business life may fail because they lack simplicity and drama. Therefore, a thought model has to be reasonably simple to trigger action. Prescriptive models can be presented in a simple form that provides a useful thought model for people. There are also some other cures available. For example, it is possible to cure passive anxiety, 'helplessness', by showing that 'it pays to act'.

According to Pfeffer and Sutton (2000) the gap between knowing and doing does not depend on a lack of knowledge, but on the inability to put this knowledge into practice. They define this deficiency as a "knowing-doing gap". They suggest that the following five traps can explain the gap:

1. It is often easier to talk about change, best practices and other innovations than actually do them.
2. It is often easier to rely on memory and precedent, rather than critical thinking. Strong organizational culture and an unwillingness to change may make it difficult to implement changes.
3. Fear of recrimination discourages risk-taking behavior that would be needed for change.
4. Organizational measurement and reward systems focus attention on particular objectives.
5. The competitive nature of many organizations encourages competition, which may create tension between perceived winners and losers, and discourage them from cooperating and sharing information.

The problems related to change can be seen against a larger philosophical discussion about the relationship between action and freedom. For example, Kierkegaard (1906) considers whether reality that emerged as a result of action confirms the opportunity that was realized, or negates those opportunities that were not realized. If acting is seen as a reduction of potential alternatives and thereby of freedom, it may be tempting not to make choices and to restrain from acting. According to Kierkegaard, possibility and necessity are equally important for humans, and therefore a proper balance between them is needed. "A personality is a synthesis of possibility and necessity."

1.2.3 Interaction between Consulting Firms and Their Clients

The literature about management consulting is abundant, but the literature about the interaction between client organizations and their consultants is relatively scarce. A major part of it includes practically oriented literature (e.g. Poulfelt & al., 1999). Theoretically oriented and empirically tested literature is even scarcer. Alternative models for knowledge transfer and interaction can be found for example in Kubr (1996) and Sevón (1999a, 1999b).

1.3 THE THEORETICAL FRAMEWORK AND METHOD

1.3.1 Theoretical Framework

Change processes are a paradigmatically diversified area, and empirically often difficult to investigate. The methods to analyze processes depend on the meaning and definition of the process (such as the logic of the process), the theory of the process (such as evolutionary models), and the research design for observing the process (Van de Ven, 1992). One alternative is to analyze organizations as knowledge systems. 'Strategic sense making' and processes of creating new knowledge in the specific context of a firm's dynamic environment can be regarded as a system (Sanchez, 1998). Making sense of the complex and changing environment is one of the central challenges to the strategic managers and their cognitive capabilities. Another challenge is to imagine new assets, capabilities, coordination processes and new strategic logics.

In order to investigate the Library and its interaction with the environment and consulting firm as a knowledge system, this study will use a recent systems theory called autopoiesis theory (Maturana and Varela, 1980)², and its new interpretation in the business context (Maula, 1999)³. The autopoiesis theory explains the evolution of systems that continually re-produce themselves (including their components and boundaries) by mutually interacting and changing with their environment. According to the new interpretation, also organizations evolve in their environment. Their evolution depends on (1) *interactive openness* (interaction with the environment, creation of new knowledge), and (2) *self-referentiality* (access to, and utilization of existing knowledge). Openness to environmental changes enables creation of new knowledge and coordination with the environment. Self-referentiality - the utilization of existing knowledge - may facilitate efficiency, but it may also restrict perception and prevent from changing. The coordination of these two aspects is necessary for a 'living' organization. This neutral, theoretical system model does not include any value propositions except the basic assumption that survival is the (only) purpose of a 'living system'. From this theoretical angle survival is a central goal also for the State & University Library. However, in the complex operating environment, survival may depend on several aspects such as change and innovation capability that influence competitiveness. Therefore, the model and its concepts will be used as a framework to evaluate the change process of the Library, focusing on the cooperation with Ankerhus.

The following figure presents the key concepts that are needed to provide openness⁴ and self-referentiality for an organization. It implies that the Library's perception of its environment (such as market and competitors) is maintained by its interaction with that environment, for example through exposure to relevant triggers from that environment. New data may potentially influence existing

² Auto = 'self', poiesis, poein = 'create'. Autopoietic systems = 'self-producing systems'.

³ A comparative study to another 'dyad' of organizations could be another way to investigate the Library's change process.

⁴ The organizations can facilitate their interactive openness by:

- Exposure to triggers from the environment,
- Mutual, reciprocal interaction with the environment,
- Experimentation. (Maula, 1999).

knowledge. Internal aspects, such as existing knowledge and competencies, influence the Library's capability to interpret new data.

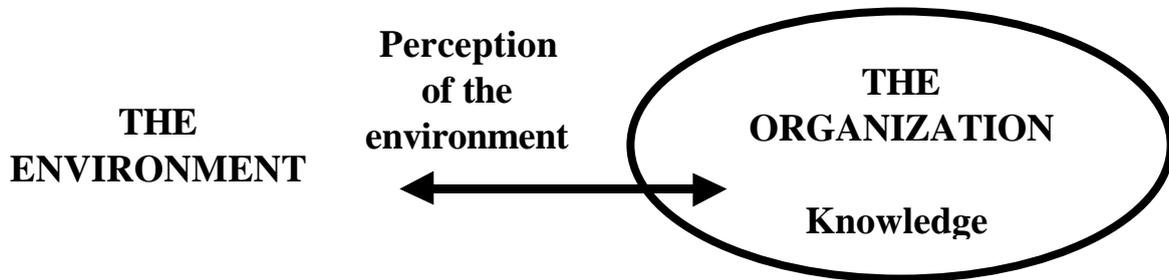


Figure 1: Perception and knowledge as facilitators for change (conceptualization by the author).

This theoretical model implies that changes occur as a result of the Library's 'interactive openness' with the environment and its 'self-referential' utilization of existing knowledge. However, it is obvious that the relationship between knowledge and action is more problematic (Pfeffer and Sutton, 2000; Sevón, 1998). It is also important to take into account that knowledge processes occur on individual and organizational levels and are interconnected (e.g., Nonaka and Takeuchi, 1995).

The study assumes that while Ankerhus (the consulting company) is a part of the Library's environment, it also:

- helps the Library improve its perception of the environment,
- provides new knowledge, tools and methods for the Library,
- helps the Library implement necessary changes.

To support the analysis, this study assumes that the transformation of perception and knowledge into change includes the following activities:

1. Defining the identity (Who are we? Who do we want to be?).
2. Selecting the operating environment.
3. Being exposed to 'triggers' from the environment and its changes.
4. Perceiving (e.g. monitoring) the environment.
5. Screening and interpreting the data/information.
6. 'Giving meaning' to the data/information. Making conclusions and creating new knowledge about it by using existing information. Decision-making.
7. Sharing and communicating knowledge within the organization.
8. Implementing knowledge in the form of actions and organizational changes, including proactive changing of the environment.

1.3.2 Method

This report is about the change process at the State & University Library in the light of the 'dyad' relationship between the Library and Ankerhus. The purpose is not to depict the Library's use of consulting services in general. Therefore the Library's interaction with other consulting companies was not included in the study. This study will focus on:

1. The Library's perception of its environment, Ankerhus' influence on that perception, and the impact of the perception on changes in the Library.
2. The Library's and Ankerhus' existing knowledge. Impact on changes in the Library.
3. The Library's capability to transform that perception and knowledge into change, and Ankerhus' capability to support the Library this process.

The primary data for the study was collected by interviewing the Deputy Director Svend Larsen at the State & University Library, and Management Consultant Bent Engelbrecht at Ankerhus in the spring 2000. Managing Director Ib Tranberg, Ankerhus, has provided general comments concerning public sector and libraries. He has not personally participated in the consulting projects with the State & University Library. The interviews were tape-recorded, and the material was transcribed for analysis. The secondary data consists of printed material such as annual reports, management contract report, information newsletters and brochures. The analysis has been conducted in several stages. The interviewees have checked and commented the intermediate and final reports.

2 THE 'DYAD' OF ORGANIZATIONS

2.1 THE STATE & UNIVERSITY LIBRARY

The State & University Library was founded by the Danish Parliament by law in 1897. It was opened in 1902. According to Svend Larsen, Deputy Director, the Library was originally founded as a research library for the general public. It was changed to the State & University Library 25 years later. The main activities of the Library are located in Aarhus, Denmark. The depository and immigrant library is located in Ballerup, close to Copenhagen. The State & University Library is a public library for researchers and studying. It is also the main subject library for the institute libraries of the University of Aarhus and the University Hospital of Aarhus. In 1999 the Library had 253 employees (budgeted), and its budget was about 130 million DKK. The Library's 900,000 catalogue cards have been transformed into an automated system, and a new IT system was under implementation during the interview. The Library had a total of 890,000 transactions in 1998, of which 750,000 in Aarhus, and the rest in Ballerup.

The Library fulfills the following functions:

- a national library
- a university library
- a nationwide library
- a research institution.

The Library takes care of cataloguing collections of about 100 departmental libraries at the university and hospital departments. It purchases the most important foreign literature in the fields that are covered by the Library:

- Humanities, theology, psychology,
- Sociology, political science, economics, law, forensic science, descriptive statistics,
- Science (biology, geology, physics, chemistry, mathematics, computer sciences), medicine, technology, and agriculture.

The Library is also a legal deposit library and therefore receives a free copy of all Danish books, newspapers, periodicals, other printed products, and audiovisual materials. The collections are registered in the Library's catalogue and can usually be borrowed through the Library. The Library also has a reading room, newspapers reading room, and a listening room. Moreover, it has a minor research institution in the area of theoretical and applied research in information and library sciences.

2.2 ANKERHUS KONSULENTER I UDVIKLINGSLEDELSE A/S

Ankerhus is a Danish, internationally oriented consulting company⁵. It was founded in 1979 by three colleagues with an academic background. The head quarters are located in Hinnerup, Denmark. The company has also an office in Copenhagen, and an independent subsidiary Ankerhus Norge a.s. in Oslo, Norway. Ankerhus employs 26 consultants, 5 secretaries and 10 persons specialized in analysis. The activities are divided into three sections: Industry, Service and Public. In addition Ankerhus has a research department, office, and finance and accounts function (Source: Hvem er Ankerhus, Konsulenter i Udviklingsledelse A/S?). The annual revenues were 21.2 million DKK in 1998 (Source: Forretningsplan, August 1999 – July 2000). The company co-operates with other consulting firms in Austria, Germany, Netherlands, England, USA and Norway.

Ankerhus' services are influenced by 'social ecology'⁶, an ideology that is based on Rudolf

⁵ Ankerhus A/S is owned by Ankerhus Gruppens Fond ('selvejende institution').

⁶ Social ecology refers to a systemic approach towards people and organizations, assuming that they are able to develop and change themselves through self-created dynamics (Source: Socialøkologisk Grundsyn, Ankerhus. Translated from Danish by M. Maula):

- People are evolving towards increasing consciousness, individuality and social competence.
- Groups and organizations are social organisms that evolve through stages towards tight and integrated relations with their environment.
- Management of development is a never-ending process of perceptions, understanding, intentions and actions.
- People are holistic units of spirit, soul and body. They have 3 fields of activity: thinking, feeling and will.
- Organizations are holistic units of cultural, social and technical subsystems with the need to develop and balance between market, organization and resources.
- Development occurs in the field between progressive and regressive powers that can cause conflicts and consequently increase risk of illness and weaken the development potential.
- Inspiration, fantasy and intuition are fertilized through openness concerning the environment and through authenticity, and general humanity.
- Artistic/creative forms of expression are an important source of life-supporting processes.

Steiner's⁷ and Bernhard Liverhood's ideas and holistic worldview. Ankerhus' objective is to "advise and support persons, groups and organizations that take the responsibility to develop and implement the necessary changes"⁸.

The 'system view' refers to an integrated model of:

1. 'Human view'
 - spirit, soul and body,
 - thoughts, feelings and will,
2. Organizational system
 - cultural, social and technical system,
 - capital, market and organization,
3. Society system
 - culture, economics and politics

The company provides consulting services in the field of development management, and focuses on the development of leaders, employees, organization and strategy⁹. The development work is normally implemented in four stages:

1. Diagnosis concerning the situation and the reasons for it.
2. Creation of the picture of the future (vision).
3. Operationalization ('realisering').
4. Anchoring.

⁷ Rudolf Steiner (1861-1925): Born in Austria, Steiner was the leading esoteric researcher of the 20th century in the realms of the nature of the human being, karma research, spiritual cosmology, and the occult research into Christianity and European cultural history. His complete works include 40 volumes of writings and about 270 volumes of transcripts of his approximately 6,000 lectures. His artistic work established new artistic currents, among others in architecture (through the Goetheanum buildings) and the art of movement (eurythmy) (Source: [www. Goetheanum.ch/leute/esteiner.htm](http://www.Goetheanum.ch/leute/esteiner.htm)).

⁸ Translation from Danish by M. Maula.

⁹ Ankerhus provides multiple consulting and education services, such as:

- Vision management
- Strategy development
- Organizational development
- Value basis
- Organizational culture
- Quality management
- Milieu management
- Competence development. The development of employees and leaders.
- The development of learning organizations
- Team development
- Project management
- Streamlined organization
- Analyzes and measurements on various fields
- Conflict management
- Recruiting and related questions (ethical basis)
- Supervision and career strategies.

Ankerhus also organizes long-term educational programs in Denmark and Norway, and publishes books via its own publishing company, Forlaget Ankerhus. 'Ankerhus university' refers to internal education.

3 THE CONSULTING PROCESS

3.1 CONSULTING ACTIVITIES

The cooperation between the State & University Library and the consulting company Ankerhus started in 1987. The objective was to develop the first explicit strategy for the Library. Since then the cooperation between the two partners has consisted of several separate and interconnected projects, such as:

1. Strategy development, strategic organization development in 1987
2. A merger between three different departments in the Library¹⁰
3. A user survey in 1988¹¹.
4. A staff survey with Ankerhus in 1997.¹²
5. Management team seminars.¹³
6. Middle management training, 'the first stage' (12-14 persons).
7. Evaluation of management 1999.¹⁴
8. 'Project pilots' education: 'the second stage' 1999 (20 persons).¹⁵
9. Middle management training, 'the third stage' 1999 (20 persons).
10. A research project: 'Barriers to organizational learning' with other organizations 1999.¹⁶
11. Organization development program to integrate the new partners in the Library.¹⁷
12. 'Career patterns' –project.¹⁸

¹⁰ The project was implemented in the late 80's, and it was also about merging three different cultures. The project was a great success.

¹¹ The Library has made altogether 3 big user surveys in the last 12 years, 2 of them with other consulting firms.

¹² This project was one of the financially big contracts.

¹³ Management team seminars were organized during 1992-1998 twice a year. They lasted two days, and they included discussions about the strategic situation of the Library.

¹⁴ The evaluation of management is related to the new staff policy for all state institutions in Denmark. Regular management evaluations should be used as a basis for developing management.

¹⁵ The term 'project pilot' was inspired by KaosPilots (an Aarhusian education institute). It was introduced to give a higher value for project leaders, and to give status to join the seminars. The purpose is also to create a new atmosphere where people take initiatives.

¹⁶ Two private and two public institutions including Ankerhus finance the ph.d. project. It includes a small staff survey in -98 and another one in 2000. The ph.d student is affiliated to the Department of Economics at the University of Aarhus.

¹⁷ In middle of -98 the Library got a branch in Ballerup, outside Copenhagen. It was a depository library and included some special libraries such as the library for immigrant literature. The Library decided to conduct an organization development program together with Ankerhus to integrate the new partners in the Library.

¹⁸ 'Career patterns' project refers to implementing senior policy. Senior people are defined as those from forty years and up. The Library was among the first ones in Denmark to write a book on senior policy. In that work Ankerhus has resulted in a 'life phase' oriented personnel policy. The hypothesis is that a person needs different aspects from the organization depending on his/her position in his/her lifecycle.

There is also an additional 8 weeks' management course, concerning management of change. It is practically oriented and more about training than education. Projects 7-10 are recent or currently ongoing projects (1999-2000). The projects that the Library has conducted during the 90ies with Ankerhus consist of internal surveys, training and education, i.e., creating preconditions for change. Consulting activities that help understanding the environment include three user surveys, one of them has been conducted by Ankerhus.

3.2 IMPACT

According to Svend Larsen, the State & University Library has become more client, service and technology oriented as the result of a long, self-induced process. Ankerhus has had a role in some parts of this process. Cooperation with Ankerhus has helped the Library to better understand the organization and conflicts. It has also improved the Library's awareness of external forces that influence the Library.

“I would say that the consultancy company has given us a better understanding - more adequate understanding - of the workings of the organization. And that is also what should be ... what should you be aware of when ... the organization is changing. And what should you concentrate on, focus on, what you should avoid. So, a better understanding of organizations. And conflicts in organizations. That's the important ... And the forces that shape the organization, and the forces also from the outside. That's ... that's important.” (Svend Larsen, the State & University Library).

The libraries are traditionally hierarchical organizations. However, the State & University Library has been able to delegate responsibilities in the organization.

“Well, at least we have got some way in dismantling a very traditional patriarchal organization. But, as you see, more in public sector, (--), we have been as traditional as others, and we have ... Some organizations have moved longer than we have in delegation and so on.” (Svend Larsen, the State & University Library).

Ankerhus' view about working with the State and University Library and libraries in general is very positive. Partially this depends on the personal preferences.

“And I like to work with them. Maybe I have always been fond of libraries in my young years. Maybe that's why I like to help them, and I like to work there, I like the atmosphere.” (Bent Engelbrecht, Ankerhus).

The Library is content with Ankerhus' services and the results of consulting. However, it recognizes that its own objectives could have been more ambitious.

“... As Bent ... some would say, and also some consultants would say that we have not been as ambitious as we should be or could be. But I think it is fair to say that we have got from Ankerhus what we have asked for. That's ten years.” (Svend Larsen, the State & University Library).

3.3 THE SLOW PACE OF CHANGE

In spite of the recognized progress, the directors of the Library and Ankerhus regard the Library's change process as slow. The Library takes the responsibility for the slow pace of change.

“ ...In some sense we could ... we don't have ... we haven't been radical enough, I suppose, because we tend to hesitate when we go into some ... something new. And then that's ... we don't ... we only take one step instead of two, so. That's my view.” (Svend Larsen, the State & University Library).

The recognized slowness raises questions about:

- How to measure the pace of change?
- Who are responsible for the changes in the Library?
- What are the reasons for the slowness of the progress?

The perception of the pace of change as 'slow' or 'fast' may depend on an organization's change objectives or on similar processes in other organizations, for example in other libraries, public sector organizations, or private sector companies. Furthermore, the perception of the pace may depend on market needs or other pressures, internal needs, or a manager's or consultant's own wishes. The 'slowness' of the Library's progress may thus be related to several aspects. However, the reference point has not been clearly articulated. A more clear presentation of pressures, objectives and other relevant aspects could clarify the situation and potentially accelerate changes if needed.

In a consulting relationship, the client organization is traditionally responsible for making decisions. However, one of the consulting firms' success criteria is their capability to 'trigger' changes in their client organizations. This means that the interaction between the client organization and the consulting firm may be very delicate. While the consulting company has to respect the client's view, it simultaneously has to try to change that view. This can happen, for example, by improving the client's perception about the environmental pressures, and by providing adequate knowledge and methods for implementing necessary changes.

The reasons that may slow down the change process will be analyzed later in this report.

3.4 IS CHANGE NECESSARY?

It is possible to critically evaluate the origins and needs of change. In modern society, the consulting industry may create new markets for themselves by selecting the most innovative organizations in the private sector and making them into new standards for other organizations. This consulting practice may imply that some existing and still viable solutions and practices become outdated or at least out-fashioned too early, on an accelerating speed. Therefore the 'push' towards changes may partially originate in the consulting firms themselves.

It is not possible for this study to measure 'objectively' the Library's environmental pressures for change, but the study assumes that there may be relevant external reasons for change that do not originate (solely) in the consulting firms' market-creation activities. For example, globalization of society and socio-technical innovations increase the value of knowledge in general and improve the

organizations' and individuals' access to it. Knowledge and entertainment are becoming more closely linked together because the information and communication technologies, other media and presentation forms are converging and becoming mobile. Therefore the role of the libraries and librarians as knowledge specialists may be changing.

4 THE EMPIRICAL ANALYSIS

In the following, the pace of change will be analyzed in the light of the 'dyad' structure between the Library and Ankerhus. The Library's mission, described by the law, has been defined earlier. It has influenced the Library's identity and operating environment (such as clients).

4.1 THE LIBRARY'S PERCEPTION OF ITS ENVIRONMENT

The term 'perception' is used here to emphasize the identification of aspects and changes in the environment. Perception enables and facilitates cognitive processes on institutional and individual levels.

4.1.1 Strategy

At the time of the interview the Library was negotiating the goals for the 3^d contract management agreement with the Ministry of Culture, covering the next four years¹⁹. In preparation for the new contract, the Library formulated in 1999 a new strategy called Link 2004.

4.1.2 Approach to Competition, Commercialization and Socio-technical Development

The State & University Library is cooperating and competing with other libraries. For example, the State & University Library and the Royal Library are competing for the same money in the Ministry of Culture, but they are regarded as 'twins' rather than competitors. There is an increasing pressure to commercialize the services, to learn from the private sector, and possibly to compete with it. The Library has to earn part of its income by selling its services.

“And now when they are going to earn more of their money themselves they have to go out into the street and that's a little difficult. But it's coming.” (Ib Tranberg, Ankerhus).

Socio-technical changes, such as telecommunication and Internet technologies, alter the patterns of accessing, retrieving and using knowledge. This puts pressures on the Library, its management, services, and librarians' professions and methods. According to Svend Larsen, the Library has discussed for example the 'library bypass' effect that could be analogical to the principles of home banking. One threat against banks is that people do banking from their pc at home and the banks as physical places, buildings, are no longer needed. According to Svend Larsen the same may happen to libraries. The Library has discussed the threat that people get access to information resources via pc and networks and the libraries as physical places are bypassed²⁰. The potential impact of technology and competition on the Library is recognized also by Ankerhus.

“Is there a need for change?” (Marjatta Maula, Copenhagen Business School).

¹⁹ The author has not access to that material, but instead to the material concerning the current contract period.

²⁰ The socio-technical development is also an opportunity that enables new services, etc.

“Yes. (--) Because ... because ... I do think that there will be heavy competition on library services. I think there will be a lot of private ... private companies going into this field. I see no hindrance to that they could outsource a lot of their services to private companies in the years.” (Bent Engelbrecht, Ankerhus)

MM: “For example what kind of services?”

BE: “For example, if you want to use the e-mail or the Internet system, it is easy for me to sit here and ask for information. And if I have to pay for it in the State Library, why not to go to a private company? I mean, so now it is free of charge, but I don’t think it’s possible here in the Danish society to have it free of charge ... all kinds of services in the coming years. So I think there will come competitors into that field.”

“I do think that ... (--) in the State Library ... they need to be very clever ... very very clever in using electronic computers. Much more than what they are today. And I also think that there will be a new kind of profession for librarians, namely the ... that I as a user of the system can get all kind of information on books, titles and so on. But I need now a person maybe to help me finding ... finding the quality of it. (--) And you need now help from an experienced professional librarian to say what are really good stuff here. And I think that the majority of the students, which is the basic goal group, that the librarians ... they must follow also ... they must follow the development and become as clever as the students are to be able to help them. (--) In one way I don’t think we have been so clever in helping them as I would have liked to be, because we still – as consultants – meet employees there who not take initiatives, who does not respond the quality problem or who waits initiative being taken from management. So, you know, out in the whole Library organization I still see there is a lot of things to have to do there.” (Bent Engelbrecht, Ankerhus).

4.1.3 The Lack of Economic Pressure to Change

According to Svend Larsen, the Library’s current budget frame does not cause hard pressure to implement changes. Because of this, the employees do not regard changes as necessary.

“We have no reason to change quickly. Because the ... Because we have ... Compared to other institutions we have don’t have ... Of course we have financial restrictions, but they are not that ... on that ... until now, at least ... hard pressure, under hard pressure, financially. (---) Of course we see the need to change, especially as (--), but we are not under pressure to change quickly as other libraries have been (--).” (Svend Larsen, the State & University Library).

“So, we don’t have ... We don’t feel us ... We don’t have same pressure. But I am also ... sometimes I am – I am perhaps a little anxious that we should feel more pressure to change than we do. Because of - I suppose - the environment which we are a part of. It is changing very rapidly, and the production and distribution of the scientific information. But we will ... Our daily experience is as ... we have a lot of users, and (lots of) useful books and, our (--) services are. But ...” (Svend Larsen, the State & University Library).

The lack of budget pressure may provide false safety for the Library and its employees, and postpone potential changes. Proper identification and communication of the environmental pressures could therefore help implementing changes while the budget still is favorable and there is no excessive pressure for effectiveness.

4.1.4 The Library's Opportunities to Perceive Its Environment

The Library's perception of its operating environment depends on its exposure to the triggers concerning that environment and changes in it. There are few institutions that have better access than the State & University Library to information about the society. However, as the earlier research suggests (e.g. Sevón, 1998) the mere possession of such relevant knowledge, including management literature, does not necessarily lead to its utilization.

Organizations may monitor changes in the environment and establish procedures to accumulate, screen and convey new knowledge into the organizational learning and decision-making process. An empirical study (Maula, 1999) indicates that such solutions can be useful for the organizations' capability to learn and act proactively in the changing environment. Further investigation about the changes in the Library could potentially focus on how the Library has built boundary roles and functions and delegated learning-related responsibilities onto the different levels of the organization.²¹

The individual librarians' attitudes and perceptions about the environment may vary. There are tensions among the employees concerning their attitudes to change²². Some of the employees are willing to implement changes, whereas others are not aware of the needs, or resist changes in general. It is possible that the attitudes and existing knowledge influence the perceptions of the environment and the creation of meaning for that knowledge.

4.1.5 Ankerhus' Impact on the Library's Perception of Its Environment

A recent empirical study shows that consulting firms tend to transfer a combination of explicit and tacit knowledge to their clients, focusing however on the explicit end of the continuum (Lahti and Beyerlein, 2000). Some examples of such explicit knowledge are reengineering methods, technical knowledge enterprise resource planning software, and business area knowledge such as finance or HR. When tacit knowledge was transferred, it did not happen intentionally but rather as a bi-product of the collaboration, for example in the form of stories and feelings. In the case of the State & University Library and Ankerhus, the picture is quite different. The Library's needs are clearly on the tacit competence side, not on transferring facts from the consulting firm. Also, Ankerhus' methods focus on creating tacit competencies by using multiple untraditional methods that activate emotions and intellect alike, and involve also physical training and experimentation.

²¹ This refers to 'boundary roles and functions', where persons, groups, organizational units and SW solutions are mobilized to interact with the environment and to accumulate information that is relevant for the organization's learning (Maula, 1999).

²² According to Finn Hansson, Copenhagen Business School, the employees in the research libraries consist mainly of two groups:

1. Educated librarians (the majority). They have got their education in the Royal School of Librarianship.
2. Research librarians (the minority). They have an university degree.

There is a tension between the groups. The classical qualifications and tasks of the educated librarians, such as perfection in classifying and making data, are becoming partially automated, which causes job insecurity.

Ankerhus can provide references and 'best practices' from outside the Library, and thereby help the Library re-create its perception of the environment. The Library has recognized the value of Ankerhus' impact, for example for clarifying forces that shape the organization from outside. During the long cooperation, Ankerhus has acted formally and informally as a 'boundary element' for the Library, conveying triggers about the environment to the Library. However, it is possible that this role has not been defined very clearly and proactively. None of the recent and current projects between the Library and Ankerhus investigate the relation between the Library and its environment. Moreover, Ankerhus' holistic approach and methodology that focus on tacit skills may emphasize the development of internal reflection rather than creating explicit knowledge about the environment.

4.2 KNOWLEDGE

4.2.1 The Definition of Knowledge

Knowledge has traditionally been defined as a 'justified true belief'. The new theories and philosophical paradigms suggest that knowledge may mean the following:

- Serving our purposes and explaining the phenomena; knowledge is 'probably true' (Critical realism) (Guba and Lincoln, 1994).
- Operating adequately in an individual or cooperative situation (Autopoiesis theory) (Mingers, 1995).
- Providing viable procedures (Radical constructivism) (Glaserfeld, 1991).

Knowledge can be defined as the possession of facts ('knowledge by acquaintance', ostensive knowledge), or as the possession of a competence/skill ('ability knowledge, competence knowledge', performative knowledge) (Bordum, 2000). Research and management literature has recently focused on the possession of intellectual capital. However, there is also an increasing focus on the process of 'knowing' instead of the possession of knowledge. For example, Blackler (1995) suggests the transition from theories of knowledge to theories of knowing. Spender and Grant (1996) suggest that a firm is an organic system of knowing activity, not a system of applied abstract knowledge.

4.2.2 Knowledge in the Library

Knowledge is the main 'product' for libraries. However, knowledge may refer to several aspects in libraries:

1. **Knowledge as commodity.** The clients who are looking for 'knowledge' search it for example from books, journals and other media. The State & University Library possesses plenty of explicit knowledge (facts, 'knowledge by acquaintance'). On this level, 'truth' is a relevant characterization of knowledge.²³
2. **Specialist knowledge and skills ('meta-knowledge').** In order to fulfil the clients' requests, the libraries have developed relevant specialist knowledge including taxonomies, tools and skills

²³ The libraries have also the cultural function. Therefore the concept 'truth' or 'truthfulness' (e.g. in the context of fiction) is a complex question.

(‘ability knowledge’, ‘competence knowledge’) that help finding relevant (commodity) knowledge. The Library possesses these competencies on the institutional level and also on the individual level, in the form of the librarians’ skills. Effectiveness, proper procedures, and correct, relevant end results may characterize librarians’ expert knowledge.

3. **Change competence** (*‘meta-meta-knowledge’*). The impact of knowledge, ‘knowing’ and professional skills on the changing competence is a problematic question on the institutional and individual levels. The libraries have acted for centuries by using traditions and heavily structured, standardized taxonomies, practices, and rules. For this reason, the libraries have not had the need to develop specific change competencies.²⁴ However, socio-technical changes will increasingly influence the libraries. Therefore the change skills may become an increasingly important type of knowledge for the libraries.

4.2.3 Ankerhus’ Knowledge

Ankerhus’ knowledge and skills are based on the academic background, the selected social ecology approach, and experiences from earlier consulting assignments. Ankerhus maintains and develops its knowledge base by interacting with the business schools and universities especially in Aarhus, but also by learning from new employees who do not have an academic background.

Ankerhus has developed special expertise in the library sector, and it has also successfully consulted other libraries. For example, the head of Aarhus Business School’s research library won the first prize in a European competition in 1999. However, the fine appraisal is a result of a long process in the Business School library, where Ankerhus has acted as a consultant at a relatively late stage.

4.3 THE DIFFICULTIES TO TRANSFORM KNOWLEDGE AND KNOWING INTO CHANGES

An organization creates new knowledge by interpreting its perceptions in the light of its existing knowledge. Accordingly, the Library’s capability to implement changes depends on its capability to create new meanings from the perceptions and existing knowledge (commodity-knowledge, professional skills, and change skills). However, the case indicates that transforming the perceptions and existing knowledge into changes does not happen automatically when necessary knowledge is available. This section will analyze what kinds of aspects may potentially slow down changes in the Library.²⁵

²⁴ According to Finn Hansson, Copenhagen Business School, the library directors and managers are normally earlier librarians. Because of the promotion method, they have acquired their management experience and picture about change only within the libraries. Because of the tradition and the relatively low compensation level, it has not been necessary nor possible for the libraries to employ directors that have another kind of background. However, the management style has started to change because of the contract management agreements with the Ministry of Culture. They increase accountability in the libraries, and cause changes in priorities and power structures.

²⁵ Examples of some other factors are (1) the age structure of the personnel and (2) the tension among the employees.

Age structure of the personnel. Of the Library’s 251 employees altogether 199 persons were 40 years or older in 1998. 25 new persons (permanent staff) were employed in 1998. The employees’ age structure may strengthen their tendency to respect traditions and lead to the postponing of changes. People who are approaching their pension age may be less willing to implement changes that influence their work. The Library is aware of the senior employee question and is working on it together with Ankerhus.

4.3.1 Lack of Urgency for Change

The libraries are as institutions characterized by stability and certainty. During their long history, they have been less exposed to uncertainty and turbulence compared to, for example, organizations in the private sector. The slow pace of change in the Library may therefore depend on the lack of urgency for change, or the lack of feeling urgency. In spite of the willingness to implement changes, the actual slow pace may also reflect the avoidance of uncertainty, instability and risk-taking.

“You need to do something. But we are not on that situation. So we have to change ... We have to adapt or change processes to the (--) which we are. So. But the important thing is that we talk of change, talk of the need to change. And also then try to... to give as many as possible ... better understanding of the need for change and what happens with the change and how to cope with it. That's the ... That's the essence of what we are doing with Ankerhus.” (Svend Larsen, the State & University Library).

4.3.2 The Librarians' Attitude Towards Consulting Knowledge

Access to general management literature does not automatically induce change. However, it may trigger changes and suggest alternative ways to implement changes. Consulting knowledge, such as consulting reports, often evaluate the situation and suggest changes in a specific organization. The librarians classify, store and retrieve knowledge (books, journals etc.) as commodity. The case indicates that they may treat also consulting knowledge as commodity and be indifferent to its content.

However, the librarians require that consulting reports should contain precise and detailed information like the scientific material does. They treat consulting reports as scientific material rather than guidelines for implementing changes. The librarians are therefore demanding clients for consulting firms.

“They are used to read so many books that you cannot just give them - as you call it in Denmark - ‘a song from the hot countries’. (--). You always need to be ... you really have to make your (--) and to refer to books and literature: “Who has written about that?” You will always be (--) to say that “Can you refer to that? Could you give me the title of the book?” So, in that way it has been good to work there as consultants.” (Bent Engelbrecht, Ankerhus).

“So that the management consulting reports and proposals are not what they are - let's say - ‘normally’ for business firms, but it has to be more like a scientific...?” (Marjatta Maula, Copenhagen Business School).

BE: “Much more scientific.”

It would be tempting to conclude that because of the professional routines the Library does not differentiate between the ‘commodity’ knowledge, and the consulting and management knowledge

Tension among the employees. According to Bent Engelbrecht, Ankerhus, there is some tension among the Library's employees. Some of them look forward, but majority does not want quick changes.

that the Library should act on. However, this is not entirely true because the Library also selects and provides new relevant professional knowledge for Ankerhus.

“But, on the other hand, my pleasure has been that they are so knowledgeable people that they also ... you know ... very often say to me: “Oh, Bent, have you read this? I have an article here.” Very helpful people in that way, because that’s the profession. So that goes back also to Ankerhus. And for example, Lars has been very, very kind through all the years to come with the professional books and articles because he reads them self. So it is so ... he (says) very often that “Have you read that?” (Bent Engelbrecht, Ankerhus).

Why, then, it is so difficult to accelerate the transforming of knowledge into action? It is not probable that relevant information is missing. Instead, the professionalism may create a ‘shield’ against changes, influencing the cognition, ambition, motivation and decision-making. It is also possible that the pressure of the daily work prevents from focusing on changes and development.

Many of Ankerhus’ consulting techniques stimulate the intellectually oriented knowledge-specialist librarians, their emotions, social skills and physical (bodily) existence through various exercises. Obviously these kinds of intervention techniques have increased entrepreneurial spirit among the librarians. However, more focused efforts would perhaps be needed to develop responsiveness to triggers, to influence mental maps, and to link knowledge to emotions and motivation structures. Moreover, ‘chaotic’ communication in networks is increasingly important for organizations, aside the tacit and explicit knowledge processes (Maula, 2000). Experimentation and efficient internal communication and knowledge sharing could possibly reduce tensions and fear for future challenges, and speed up changes in the Library.

It is also possible that the number of librarians trained by Ankerhus is not sufficient and there is no ‘critical mass’ in the Library. The trained people can be counted in tens while the whole personnel consist of 253 employees. For an organizational change a certain critical mass may often be necessary so that the self-sustaining organizational change process can be started and maintained. A limited education may also cause tensions among the employees, instead of uniting them to implement changes.

“Perhaps also we have a problem that members - the staff members interested in this kind of work - (are) working in development projects and perhaps tend to lose the contact to daily work. So you have a little enlightened aristocracy and big number of daily workers. So, that’s one ... That’s ... Perhaps I suppose a little of a caricature but also I think it might be some truth in it.” (Svend Larsen, the State & University Library).

4.3.3 Evolutionary, ‘Tolerant’ Approach to Change at the Library

The high education of the management of the Library, and especially the understanding of the emergent nature of reality may influence the timing, pace and method to implement changes. The State & University Library favors evolutionary adaptation to strategic changes, and a ‘tolerant’ attitude towards the nature and pace of the changes. Changes are assumed to happen when time is proper, according to their own internal laws.

“I tend to think of blueprints and consultants' ready-made solutions as metaphysical systems. If you have a system which fits perfectly, which presents the world as nicely organized, it is a construction; it is a simplification as reality evolves and changes all the time” (Svend Larsen, the State & University Library).

The consultants would like to speed up the change process because they see what the Library should do. The situation is slightly frustrating for the consulting firm because it sees that the Library has to implement changes in some way and at some point of time, but they (the Library) do not do the things, or they do not move. And “the quicker they do it - the better results they can get” (Ib Tranberg, Ankerhus).

According to Nonaka and Takeuchi (1995) a ‘natural’ or a purposely created crisis may facilitate innovation (and change) in an organization. It is also tempting for the Library to facilitate change by the sense of a crisis. However, this solution is not regarded as feasible.

“Some gurus are saying that the good way to promote change is to create a crisis if there is not a natural crisis.” (Marjatta Maula, Copenhagen Business School).

“Well, I sometimes ... I am tempted to do that. But it is also a little ... I am ... Well, I don't think it would be a good idea to do it, because we are not tuned to do that. We couldn't ... I am not sure we would go ... You could do, I suppose ... read some interesting cases of business process re-engineering, but I think it more confusion here, and it would be provocative.” (Svend Larsen, the State & University Library).

4.3.4 Holistic Approach of Ankerhus, and Allocating Responsibility for Change to the Client

Ankerhus' consulting assignments are based on social ecology that is a ‘holistic’ approach. While the Library's evolutionary approach may influence the scheduling of changes (‘when’, ‘how quickly’), Ankerhus' holistic approach may influence the selecting of change objects (‘what’). In principle, the holistic approach provides a solid, balanced and justified basis for understanding complex organizational phenomena and the relationships among internal and external variables. Therefore, in an ideal situation it helps empowering people and implementing organizational changes successfully. However, a holistic approach is quite demanding for decision-makers who may find it difficult to decide what to do and where to start the change. If it is understood as ‘everything influences everything’, it may – together with the evolutionary, tolerant approach - paralyze the decision-makers and reduce the initiative of the employees. Paradoxically, a simpler, narrower and more straightforward approach could help selecting critical aspects, taking risks, and implementing the transformation more rapidly.

In a situation where the change process is complex and difficult, finding a right change strategy is not easy. As to complexity, it is necessary to differentiate between (1) the number and complexity of details, and (2) systemic complexity (sophistication of the system)²⁶. Holistic approach and the understanding of the emergent nature of the world are related to the latter one (systemic complexity).

²⁶ For example, the simple mechanistic systems are on lower complexity level than the ‘living (self-producing, autopoietic) systems.

Such 'complex systems' can sometimes be described by a very simple form, such as 'lemniscate' – model.²⁷ It also is possible to misinterpret a holistic model as a 'detail complexity' model, to emphasize 'totalitarian control', increase bureaucracy, paralyze the organization, and prevent it from taking necessary actions.

In a long consulting process the relationships between the consulting firm and the client may become close and personal, which facilitates communication between them. Aside the symbiotic cooperation it is also necessary for the consulting firm to maintain neutrality and objectivity. Ankerhus has, for example, introduced new consultants to the Library's projects to bring fresh impulses. For a consulting firm a long cooperation means thus balancing between objectivity and a shared destiny with the client.

"I often say to young colleagues here in the house that they should be aware of that this is also in a way 'destiny job'. You create destinies together with the clients. And it is not just that you say "Now I give my recommendation and then I leave." It is not so easy. If you really ... and that's also ... a difficult side of the professional life is that ... that you need a kind of objectiveness and so. You need a neutrality. On the other hand you also need to be warm and your feelings to the client. You need ... You must like them ... the clients. It is not ... It is not possible to help the client if you do not like them. You must have a kind of sympathy for them. On the other hand you must not take them totally into your organization because then you cannot be neutral any longer. This is the difficult thing, but you find out through the years where are the limits." (Bent Engelbrecht, Ankerhus).

Ankerhus' consulting approach means also that the clients themselves take the responsibility for the changes: "The main objective of Ankerhus is to advise and support persons, groups and organizations that take the responsibility to develop and implement the necessary changes." This statement is in line with the generally accepted consulting tradition that the client is responsible for the decisions. Moreover, allocating the responsibility to the client may facilitate learning processes in the client organization. However, the change processes may have earlier been simpler than they are today. Examples of such relatively simple forms of consulting processes are:

1. The traditional 'directive' mode of consulting (Kubr, 1996) that may concern the adoption of 'facts', or the implementation of a single well-defined change or solution.
2. An interactive process-consulting where the consultant proactively facilitates the changes.
3. The 'outsourcing' of implementation activities to the consulting firm.

Instead, the implementation of change competencies, such as 'learning organization' principles, may be much more complex and demanding for the client because it touches all aspects of the organization and the employees. While the responsibility for the change activities stays with the

²⁷ Lemniscate Model refers to the 'eight curve' (a mathematical concept). The term also refers to infinity. It has been introduced into the sphere of management consulting by Alexander Bos. The model consists of five areas:

1. The *questions*: "What you are looking for?"
2. The *observation* "What do you see?"
3. The *diagnostic* area: The reasons, causes and explanations on what you have been observing.
4. The *'future field'*: "What could be aims and goals for solving the problem or question?"
5. The *appropriate means and actions*.

clients, it is possible that they need much more support to implement such comprehensive cultural and organizational transformations.

4.3.5 Internal Reflection Versus Openness to External Changes in the Library

For a 'living' organization, it is important that internal effectiveness and the utilization of existing knowledge (self-referentiality) are balanced and coordinated with openness to changes and new knowledge. Based on earlier empirical study (Maula, 1999) an organization works well when both functions are strong and coordinated. Two conclusions can be drawn from the interview material about the 'dyad' of State and University Library and Ankerhus, by using the theoretical model of openness and self-referentiality as a framework:

1. *In the Library – seen as a 'living system' - openness is weaker in relation to self-referentiality.*
2. *In the Library – seen as a 'living system' – some weaknesses can be identified both in openness and self-referentiality.*

The list of recent projects suggests that Ankerhus' projects for the Library have focused less on the openness towards the environment than on self-referentiality²⁸. The list does not include projects that would, for example, explore changes in the market and technology, and help articulating them as a change program for the Library²⁹. Moreover, the chain of transformation activities may be relatively unstructured. It could include, for example, monitoring the market and potential changes in the library sector as a part of the 'boundary roles', interpreting this information, making conclusions about it, sharing and communicating the knowledge within the organization, and implementing it in the form actions and organizational change.

As to 'self-referential' internal reflection, the Library's recent projects with Ankerhus include education, training, and management evaluation, i.e. internal development. Their purpose is to help the Library's employees 'think rhetorically', reflect, 'mirror' their own behavior, and improve their competencies and capabilities. Ankerhus' methods, such as painting, scenario techniques, 'lemniscate' model and SWOT³⁰, help the employees understand themselves, the Library, and its relation to its environment. As mentioned earlier, the problem may be that there is no critical mass in terms of number of trained people. This may influence the opportunities to efficiently interact and share new ideas.

4.3.6 Difficulty to Apply Ideas from the Private Sector

Commercialization in the libraries increases their need to transfer best practices from private to public sector. Ankerhus knows both sectors and could therefore inspire the Library with new ideas.

²⁸ Earlier management team seminars (1992-1998) contributed to openness. The 'project pilots' education aims to strengthen the capability to implement changes. However, it is related to internal competence development rather than direct investigation of the environment.

²⁹ This may potentially also mean that the Library uses different consulting firms for different purposes. This is indicated by the fact that Ankerhus has been responsible for one of the three user surveys but not for all of them. Also, there are other ongoing projects, such as the IT project, that are conducted by other consulting firms.

³⁰ Ankerhus' methods include also other concepts, methods and tools, such as 'Biography', visioning, 'Walnut' in cooperation, 'Sea marks' in project management, development through measurement, conflict staircase, etc.

However, it is not easy for the Library to apply lessons from the private sector. For example the people in the public sector may overestimate the competence of private sector companies.

“And we come with inspiration from ... from other sorts of the organizations. That’s a part of our strategy. We work half in public organizations and the other part on private organizations. And we can see that maybe of the public organizations - field that it is interested in working with us because we work in the private sector too. So you get some inspiration from the private way of thinking.” (Ib Tranberg, Ankerhus).

“They have to earn the money themselves by selling services instead of just getting money from the government. So there is a pressure on many of the organizations and on the management. And we come from ... When we work in the private sector - their focus is to earn money. And then you can make the knowledge transformation about how to look at it, and how to manage it. But you cannot use everything that is going on in the private, and then transform it to the public. It is not ... it is impossible. You have to ... you have to (--) some of the things that are ... you are able to use in the public area. And there is a lot of pictures of what is going on. Many of the people in the public area have never been in the private sector. And they think that the private sector ... they always do the right things and they are very clever and they give them money and so on. And then you tell them that they are not so clever, every (--). They are not so good to earn money. And we get more - (--) - a better picture of what is going on.” (Ib Tranberg, Ankerhus).

On the other hand, the librarians fear that the ideas from the business world ‘creep’ into the Library. This fear is also reflected in the employees’ attitudes towards consultants.

“They cling to (--) values, I would say. The values they have been living with for many many years because this is a library with very low staff turnover. So it has been for many years, so they are very ... It’s in library - very institution very much influenced by traditions. And the tradition is that we know how to do business and nobody should come and tell us how to do it. So, that’s part of the scepticism against consultants. But I think ... Always you have ... When involved in projects ... I must admit that it’s not that dangerous. Sceptical.” (Svend Larsen, the State & University Library).

“Why we still use Ankerhus is because we think they have respect for the process ... is important. Personally, some of us would think that we should speed up a little bit sometimes, because it is not ... But basically we think that it is important to ... with the respect for the development process. We would never think ... It is hardly conceivable we could make any business process engineering in this Library. If only ... It would be a quite destructive to try to do that.” (Svend Larsen, the State & University Library).

The librarians are influenced by their traditions, routines and lifestyle. This reflects the other side of self-referentiality, i.e. that existing knowledge may limit choice alternatives and prevent them and the organization from changing fast.

5 CONCLUSIONS

The State & University Library in Aarhus, Denmark, has a history of 100 years, and a mission that is defined by the Danish law. The Library has a central position in the Danish society. It has developed several strengths, such as the extensive collection of material, and multiple professional skills. The success of the Library has been measured formally by the earlier management contract with the Ministry of Culture. A new agreement is under negotiation. Three positive user surveys indicate that the State & University Library and its services are necessary for the Danish society.

During the years the State & University Library has used several consulting firms. However, more important than the consultants have been the Library's relations to the Ministry of Culture, the users and especially the user organization, and other libraries that the State & University Library cooperates and competes with.

This report focuses on the capability of the State & University Library to transform knowledge into changes at the Library. This process is investigated in light of the interaction between the Library and one of its consulting firms, Ankerhus Konsulenter i Udviklingsledelse A/S. The Library is regarded by both parties as responsible for implementing the changes. Ankerhus is regarded as a facilitating organization.

The development of the State & University Library can be regarded as evolution rather than revolution. During the years the Library has dismantled a patriarchal organization, and increased its orientation on clients, services and technology. While the Library and Ankerhus admit that the pace of change is too slow, it seems difficult to speed up the process. The following main conclusions can be drawn about potential reasons for the slowness of the progress, and especially about the paradoxical relationship between perception, knowledge, knowing and change.

Explicit 'commodity' knowledge – even if relevant - is not sufficient for implementing changes. University libraries have excellent access to relevant explicit knowledge, such as books, journals, and databases about the society, its changes and management. While that knowledge can act as a trigger for changes, possessing that knowledge is not sufficient for implementing changes. This is also the case of the State and University Library. Instead of facilitating change, the almost unlimited access to explicit knowledge may reduce the capability to change if it creates a false feeling of organizational competence. The case therefore illustrates the difference between 'knowledge' and 'knowing' (Blackler, 1995, Spender and Grant, 1996), i.e. the need to give meaning to knowledge before it has value for an organization. From the theoretical perspective the consulting knowledge is only 'data' for the Library, as long as the Library does not attach meaning to it.

Professional knowledge and skills in dealing with explicit knowledge ('meta-knowledge') are not sufficient for implementing changes on institutional and individual levels. The libraries' and librarians' competencies include, for example, the acquisition, classification, storing, retrieving and distributing of knowledge. The implementation of knowledge and the creation of new knowledge have had a minor role among the librarians' tasks. However, the situation may be changing because of the increasing need to combine knowledge from different sources and to give meaning to it. The case of the State & University Library suggests that the libraries' functions and the librarians' professions are characterized by traditions and routines that may prevent implementing changes. It is possible that the institutional environment of the Library, including unions and library

schools³¹, have not sufficiently emphasized changing, communication and knowledge sharing capabilities.

Change competence is needed to implement changes. Change capability, the strategic ‘meta-meta-knowledge’, is a relatively new concept in management research and practice. In the private sector the foremost companies have been able to systematically develop change competencies, but in the public sector the need for such competence may have emerged later. Also the case of the State and University Library indicates that change competence, the strategic ‘meta-meta-knowledge’, is still relatively unstructured in the Library. It could possibly be strengthened by improving communicative capabilities and interaction in the organization.

The case of the Library suggests that change competence would be needed to ‘mobilize’ the knowledge of the organization and to facilitate changing and learning processes. This competence could improve the chain between knowledge, knowing and changing and make it into a sustainable process. The concept ‘knowledge-knowing-changing gap’ supplements and specifies further the ‘knowing-doing gap’ (Pfeffer and Sutton, 2000). The study supports Pfeffer’s and Sutton’s results, for example that gap between knowing and doing does not depend on a lack of knowledge, but on the inability to put this knowledge into practice. The case also supports some of their reasons for the difficulties, for example that it is easier to talk about change, best practices and other innovations than actually do them, and that memory and strong organizational culture may make it difficult to implement changes. Change can be seen as a contradictory process because the implementation of changes requires acceptance of risk and insecurity.

Holistic approach to change, and the understanding of the complexity and emergent nature of the world do not necessarily facilitate changes. The State and University Library and Ankerhus apply holistic models (such as lemniscate) and the in-depth theoretical understanding of the nature of changes available, at least on the management level. The case indicates that the holistic approach has been useful for those librarians who have attended the education. However, a ‘breakthrough’ has not happened yet concerning a comprehensive organizational change. As Sevón concluded (1998), complex prescriptive explanations may fail because they lack simplicity and drama. It is therefore possible that the holistic approaches applied on the Library paradoxically satisfy the requirement of simplicity in their presentation, but lack the element of drama and urgency.

A long and close consulting relationship may not be sufficient for implementing radical change. The case indicates that a long consulting partnership can help learning about each other, transferring knowledge among the parties, and implementing incremental changes on the long-term. It is also possible that during a long consulting process features of a symbiotic relationship emerge, where mutual respect prevents from suggesting revolutionary changes and emphasizing their urgency.

The methods to perceive the environment influence the changing capability. From the systemic perspective, the Library’s way to perceive its environment is quite unstructured. This concerns for example, mobilizing the employees to monitor important signals, and communicating and sharing new relevant knowledge about environmental changes. This situation is strengthened by the Library’s

³¹ According to Finn Hansson, Copenhagen Business School, the education at the Royal School of Librarianship has been changed a couple of years ago. Therefore the majority of the librarians are used to the tradition of maintaining and not of changing.

relatively good economic situation that has created the feeling of safety. This may prevent the Library from improving and continually maintaining its strategic competence and knowledge-base. Because the librarians' traditional virtue is to ensure that their knowledge is 'correct', and because some of them are afraid of the unknown future, it could be important to create a shared picture about the external challenges that is reliable. Any artificial 'crisis', created purposely to inspire innovation and change (Nonaka and Takeuchi, 1995), would possibly not work because of the professional approach of the librarians. Also benchmarking to other companies could be a viable solution. However, the librarians' more or less justified attitudes towards private firms and consultants make it difficult to learn from private companies.

Both openness and self-referentiality can be underrepresented in a 'living organization'. The case of the State & University Library suggests that it is not only the relationship between openness (new knowledge, coordination with the changing environment) and self-referentiality (the utilization of existing knowledge), but also their volume or scale that influences the organization's change capability. As to *openness*, there may be a need for the Library to more clearly articulate and communicate the competition, changes and pressures in its environment so that they can provide the necessary direction, motivation and urgency for change. *Self-referentiality* has been better represented in the Library's consulting projects with Ankerhus, for example in terms of education ('self-understanding', 'mirroring') of the personnel. However, also this investment has been relatively small compared to comprehensive organizational change programs in some other organizations. The case suggests that a bigger focus would be needed on the internal development to create the critical mass for change, to reduce tensions among the employees, and to improve change skills.

The case of the State & University Library depicts also the problem of *identity* in the change situation. The self-referential questions 'Who are we?' and 'Who will we be?' are relevant for the institutional and individual (professional) change processes because they are critical for setting the direction for changes. The libraries may be in a slightly similar situation as the universities in their relation to the society. Their mission is to neutrally observe the society and/or to convey knowledge about it further to other parties. In this observer role they and their employees may regard themselves to some extent as distant 'outsiders' in the society. It is possible that there is also some fear for 'reality' and for 'falling apart' in the rapid changes. Therefore the Library's traditions and rules may constitute a 'safe' fortress for the employees against the complexity and turbulence of the environment.

In general, the case of the State & University Library and Ankerhus is not primarily about resistance to a specified change. It could be about being against change in general. However, the case may best be characterized as a description of the *lack of clear, shared reason and direction for change*. It depicts the difficulty to identify, articulate and communicate reasons and direction for change in a knowledge-intensive public organization in an increasingly turbulent and changing environment.

The case demonstrates that 'knowledge' as such is not sufficient for facilitating change. Access to knowledge may even prevent from changing. The differences between *knowledge, skills and change competencies* have to be understood better. Knowledge has to be 'empowered' from the level of commodity and skills onto the level of 'knowing' and meaningful strategic change capability, before it becomes really effective tool for development. Finally, the case also sheds light on the

need to *take responsibility for changes*. This need is clearly reflected in the Library's picture about its main future challenge:

“Do you see that it is ... it is the challenge of the future? Or has it been there all the time, during this process?” (Marjatta Maula, Copenhagen Business School).

“I think ... I think it be increasingly difficult, because now it's beginning ... So far, usually I say, so far we have changed what our predecessors have made. Now we will have to change what we have made ourselves. So, and for some people that's really difficult. So, I think, we will, that's one of the very big challenges. And also to ... to make people take more responsibility for change processes. Because I think ... In many ways we have loyal staff which is very interested in working here, and respond to the user demands, and so on. But, they are not accustomed to work on their own hand, and take responsibility.” (Svend Larsen, the State & University Library).

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