A Celebration of Diversity: LIS Research in the Nordic Countries as Shown by PhD Dissertations 2005–2014

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A study of PhD dissertations in library and information science (LIS) was carried out to investigate which research topics have been of interest in Nordic LIS institutions. Seventy-nine doctoral dissertations from 2005 to 2014, published by 13 different research institutions, were retrieved from the institutions' archives and from library catalogues. Compared to other metastudies on research topics in LIS, this study on Nordic PhD dissertations revealed a noteworthy difference, namely the high number of dissertations on topics related to cultural policy and literature. The findings are discussed from the perspective of sociology of literature, according to questions of power. The main purpose of the study is to show the relevance of sociology of literature in the diverse and rich research field of library and information science.

Keywords: library and information science, research, nordic countries, sociology of literature

Introduction

What is library and information science? This is a frequently asked question, at least frequently asked in the LIS research institutions themselves. One possible way to answer this is to investigate what kind of research is going on in the field. This is, of course, an enormous task, considering the world-wide research activity going on, but the considerable number of theses and articles written on this subject nevertheless demonstrate an eagerness to define LIS, as will be shown below. From a Nordic perspective, a comprehensive contribution to this kind of mapping, published by the Finnish researchers Tuomaala, Järvelin & Vakkari (2014) was of particular interest. Their study counted and categorized articles from a selection of international academic library and information science journals, published in 2005. This study raised some questions and reflections on how to present LIS research, which in turn inspired the following article.

Tuomaala et al., (2014) sought to find both the main topics of LIS research, the methods used, and the perspective chosen by the researchers. The Finnish researchers' approach and their categorizing of research topics was predetermined by earlier examinations of the field, looking at research published in 1965 and 1985 respectively (Järvelin & Vakkari, 1993). The categorization of topics in articles published in 2005 shows that the dominating topics are information storage and retrieval (30%), scientific and professional communication (24%), library and information service activities (17%) and information seeking (12%). These findings are supposed to "reveal the foci of LIS research" (Tuomaala et al., 2014, p. 1446), and hence, to sort out the core of LIS research interests.

The presentation of categories made by the Finnish researchers may well mir-

ror the content in the journals selected (a number of 29 academic journals were selected for this specific year), however the presented findings are still questionable. To what extent do these findings offer a satisfactory picture of what was really going on in library and information science research in 2005, and even more interesting: Do the findings mirror the research foci of today? The presented overview of topics leaves out considerable parts of research contributions by library and information science researchers published in other journals, such as vital school library journals (of which they have not chosen any), as well as library and information science research published in computer science journals and both general and special discipline journals in humanities and social sciences. The study does not clarify the selection criteria. The list of journals could be further questioned, as they only include four German journals, and none of the remaining journals in other languages than English (p. 1460). It would be an enormous task to bring together all possible relevant academic journals to examine their library and information science contributions, and it is indeed understandable that some limitations had to be made to be able to handle the data. However, the limitations of this kind of metastudy call for still more explorations of the research field in order to get a fuller picture of ongoing research

To make an alternative and comparable picture of current research, an examination of PhD dissertations published at LIS research institutions was made in order to compare preferred research topics with those from the aforementioned Finnish study (2014). In the present study, the material is limited to dissertations published in the Nordic countries between 2005 and 2015. The dissertations are categorized mainly according to topic, and additionally, according to method and choice of perspective. The analysis and discussion of the material is put forward within perspectives from the sociology of literature.

The two hypotheses proposed are that the research topics among the Nordic PhD dissertations will differ significantly from those in the presented study of LIS journals (Tuomaala *et al.*, 2014), and that the dissertations will include a good number related to the humanities, the social sciences and to computer science. The hypotheses are based on knowledge of research going on in some of the Nordic LIS research institutions, and on communication with LIS researchers working within those institutions during the ten years in question.

The main purposes of this study are to get a broader understanding of the range of research topics in library and information science, and to show that sociology of literature has a central place within this field.

Theoretical and Methodological Affiliation: Sociology of Literature

The attentive reader has, by now, probably discovered that the writer of this text is a LIS researcher whose main interests are in sociology of literature and mediation of culture. In what follows, I will briefly introduce the main research tradition of sociology of literature before making use of tools from this tradition to highlight the relevance of my approach to the Nordic PhD dissertations in question.

A sociologist of literature has as her object either (or both) the literature in society or the society as presented in literature. This research tradition includes studies in production, distribution, mediation and reading of literature of any kind in its different contexts. Research questions of particular interest to a sociologist of literature are for instance how changes in socioeconomic structures changes production and use of literature, or how literature interprets and exposes social structures. There is a long tradition of research in this field, starting as early as 1800 with the French writer Germaine de Staël's considerations on the relation between literature and society, and gaining increased interest in the 20th century. The heyday of sociology of literature, at least in Scandinavia, was in the 1970s, often connected to Marxist views, relating publishing, disseminating and reading of literature to class struggle and power structures. Feminism played a prominent part as theoretical background then, and still has an important position. In later decades, sociology of literature has loosened its ties to certain political views, but could still be conceived of as a research tradition drawing upon critical theories (for instance, Benjamin, 1963; Bourdieu, 1979; Habermas, 1961). The current media situation and the considerable changes in publishing and reading ensures that this research field is as important as ever. Due to these changes, sociology of literature today shares vital research interests with related disciplines; for example, media studies and cultural studies (Griswold, 1993; Smidt 2013; Svedjedal 2012).

A sociologist of literature is familiar with empirical research; quantitative methods and statistical analyses of both reading and publication and often combined with qualitative interviews, observations, or literary analysis of social structures embedded in the texts. Concerning quantitative data collection, sociology of literature shares methodological interests with bibliometrics. Still, the research tradition in LIS has not yet linked those two traditions together. This might be due to different epistemological concerns, traditions or backgrounds. Sociologists of literature often have their educational or professional background in the field of literature as art and these scholars' research interests have mainly focused on genres of fiction, whereas bibliometrics studies scholarly publications. Some tendencies in contemporary research suggest that the two fields are moving closer together. Firstly, we see examples of fictional content enduring quantitative measures, as Franco Moretti has demonstrated in Distant Reading. Moretti even talks about a "rise of quantitative evidence" (2013, p. 212), referring to the present search possibilities in digital databases and automated

data retrieval, enabling the researchers to map for instance relations between fictional characters, frequency of specific words, phrases or metaphors, or certain features connected to style or plot. Secondly, we can observe that a broader variety of texts, especially non-fictional prose, has had an academic breakthrough as objects of research in later years' literary studies. Examples are varied, and may include, for instance, research on literature and law, and on travelogues—all of which are growing academic areas with associated journals and research communities

Previous Research: Categorizing of Library and Information Science Research

There have been a number of mappings of outputs in the LIS field. These examine the pertinent research publications. Results demonstrate a more or less inclusive approach (for instance, Jaytilaka, Klein & Lee, 2007; Prebor, 2010; Shu, Larivière, Mongeon, Julien & Piper, 2016, Sugimoto, 2011). In defining and describing library and information science, some researchers have questioned the consequences of removing the word Library and use just Information Science. Bibliometrist Fredrik Åström has examined this sometimes questioned relation between library science and information science. He concludes that the L-word and the I-word should be considered two main subfields of a joint library and information science (Åström, 2010), a conclusion in line with what Shu et al. (2016) observed: that there is still a strong relationship between library science and information science (p. 140). However, these two subfields could not be considered "clean" or defined in any absolute sense. Intertwined with the two are several fields, or disciplines, related to natural sciences as well as to humanities and social sciences. Several studies claim that library and information science should be a multidisciplinary research field (Luo, 2013; Shu et al., 2016; Sugimoto, 2011).

One study of the history of library and information science publishing (Larivière, Sugimoto & Cronin, 2012) shows that a growing number of researchers tend to publish in more than one discipline (p. 1013). This is crucial to the understanding of the field and demonstrates the problematic approach when considering research only from library and information science journals. Larivière *et al.*'s article demonstrates by citation analysis that there is a high degree of interdisciplinarity going on:

The increase in interdisciplinarity has been quite steep: the percentage of citations received coming from other fields has increased from 20% to 60% in 15 years. The majority of citations now received by LIS come from other disciplines. (p. 1010)

This study points to another interesting fact. Other sciences are more often cited in library and information science research, probably as a consequence of a more complex academic rigor, and hence a need for theoretical perspectives not yet available in existing library and information science theory. Larivière et al. mention computer science and management as the two most important disciplines in this respect. In a study by two Taiwanese researchers (Chang & Huang, 2012), the findings contradict to some extent those of Larivière *et al.*, as Chang and Huang have found that library and information science researchers most frequently cite publications in their own discipline. However, the multidisciplinarity of the field is clearly stated, as Chang & Huang show that citations are collected from sources across 30 disciplines (p. 22).

A range of subcategories, somewhat similar to that of Tuomaala *et al.* is to be found in a large study by Prebor (2010), who categorizes 228 doctoral dissertations and 107 master's theses published mainly in USA and Canada between 2002–2006 (Prebor, 2010, p. 260). Here, the most important research topics are found to be user studies (29%), followed by information economics and management (14%),

data organization and retrieval and information/learning society (both 13%), and foundation of information science and information technology (both 12%). Neither in Prebor's study, nor in the other studies mentioned, do the mediation of literature and culture, or sociological studies of publishing and reading seem to play any part in library and information science research. Based on the reading of the metastudies presented, these culturalsociological research interests seem to be quite marginal, even in a multidisciplinary field such as library and information science. How could it be that these research interests are completely left out of the metastudies mentioned? It is a rather puzzling discovery, considering the many highly skilled research colleagues at the Nordic and Anglo-American LIS research institutions who frequently publish studies on reading, cultural policy or social issues in literature. Are these researchers just imagining being LIS researchers?

There are, however, examples of LIS research to be found on the missing topics in another metastudy by Franklin and Jaeger (2007). They investigated a decade's worth of doctoral theses by 34 African-American Women, and the areas of research they pursued. The source of the statistics was the Association for Library and Information Science Education (ALISE). The content analysis of research topics yielded five broad categories, one of which was "Literature." All five dissertations in this category dealt with sociology of literature concerning Afro-American issues. Two more theses were researching cultural policy and mediation of art, which in total relate 21 % of the dissertations to the humanities or sociology of culture. The top categories were "Library/Librarianship issues" (47%) and "Information issues" (21 %) (2007, p. 194).

An interesting contribution to mapping of the broad range of theoretical perspectives in LIS research is the anthology *Critical Theory for Library and Information Science* (2010) where perspectives

from both humanities and social sciences are presented. Lisa Hussey's contribution to the anthology suggests how Pierre Bourdieu's concepts of *habitus* and social capital may be useful in a LIS research context:

There is a growing body of literature concerning the state of diversity in LIS. Using Bourdieu's habitus and cultural capital as a framework, researchers can look beyond curriculum issues and address the question of how our backgrounds made up of a majority of educated, white, middle class individuals are influencing our teaching. Are topics such as diversity, underserved populations, or gender focused issues seen as more fringe ideas, or are they given prominence in LIS educational programs, and who makes this decision? (Hussey, 2010, p. 50)

A Defense of LIS as an Inclusive Research Field

In the following, the understanding of LIS is that the field of practice (be it libraries or other institutions or functions including the mediating of information or culture) is a basic force that keeps LIS together as a specific research field. This view is in line with what Aabø and Audunson imply when they discuss library and information science as a "professional science: Without the links and mutual interdependencies between academia and practice in professional fields, the scientific fields in question would probably disintegrate" (2013, p. 3). "Field" is here understood as a sphere of activity, as opposed to an academic discipline, which refers to an indisputable branch of scholarly knowledge.

Several definitions of library and information science are at hand, striving either to narrow down, to get to some core research interests, or outbound, to include a broad range of relevant research topics and disciplines. In *World Encyclopedia of Library and Information Services*, a rather narrow definition is expressed by Da-

vis and Rush, who claim LIS to be "... an interdisciplinary field concerned with all phases of the information transfer process" (1993, p. 464). Representing the outbound way of thinking, I argue that by narrowing down library and information science, some crucial parts will be at risk. What happens, for instance, when you peel an onion to get to the central part? The definition put forward by Jack Andersen, in his article "The Concept of Genre in Information Studies" comprises the diversity of the field:

LIS studies how, and through what means professional, scholarly, cultural, and social knowledge as materialized in documents (print or electronic) is communicated in society as well as what function libraries and other similar knowledge organizing institutions or activities have, or are supposed to have, in these communications. (2008, p. 355)

This definition of LIS opens up to research in many areas and disciplines, and maintains society and communication as basic concepts in library and information science.

Method

The LIS dissertations to be presented here, published from 2005-2014, were retrieved from the publication lists on the LIS research institutions' websites. The material was found by examining lists of publication series and faculty staff's web pages, and by searching in library catalogues at LIS institutions in Finland, Norway, Sweden and Denmark. The study is limited to the Nordic institutions, mainly for language reasons. Researchers with positions at library and information institutions who had their dissertation published at a non-LIS institution are included, as some of the library and information science institutions have not had a PhD program of their own throughout the timespan in question. On the other hand, I do not include dissertations on a library

and information science-related research field by researchers outside of library and information institutions as these were too difficult to identify.

In accordance with the outlined procedure, a total of 79 dissertations were retrieved from the search sessions made. The dissertations were published at 13 different research institutions in Norway, Denmark, Finland and Sweden.

The dissertations were then categorized according to research topic and, tentatively, according to method, theoretical basis and perspective. The categorization was based on available metadata and paratexts connected to the dissertations, deriving from library catalogues and library and information science institution's archives, such as keywords, abstracts, summaries, titles and classification. A closer reading of the dissertations has only been possible to a limited degree.

Initially, the same list of research topic categories as that of Tuomaala, Järvelin & Vakkari (2014) was used, in order to make a direct comparison. These categories have been used by other researchers (Prebor, 2010), and was initially used in a previous study by Järvelin & Vakkari (1990). These categories did not work out well with the Nordic dissertations' research topics, as shown by the disproportionally

large 'Other' category (Figure 1). There was an obvious need for recategorization. The comparison became a starting point in developing new categories based on the topics of the 79 dissertations.

Creating mutually exclusive categories of research topics was an elaborate task. For instance, what is a topic? According to the Oxford English Dictionary, a topic has a vague definition, as "A matter dealt with in a text". The central concerns of a dissertation would most probably be highlighted by the author's keywords. As a result, the keywords were the most important source in deciding on a single topic by which to represent each dissertation. The topics were put in context by paratexts pertaining to each dissertation and, thereafter, linked to other related dissertations to form categories. The fewer categories there were the safer it was to categorize, but at the same time, more subfields become invisible through this process and the idea of presenting tendencies in research become somewhat blurred. In the end, the number of categories was narrowed down to five. and it was possible to claim that these categories show some important differences either in basic relations to science traditions and academic disciplines or in perspectives. In this case, the categorizing of research topics was pragmatic, based on

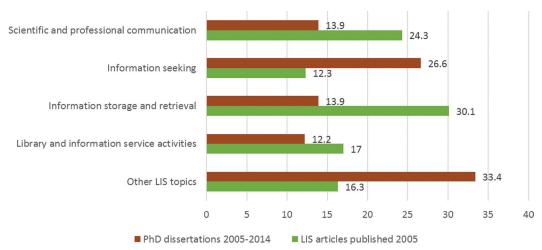


Figure 1. Comparison of articles and dissertations by categories (in percent) determined by Tuomaala, Järvelin & Vakkari (2014).

the empirical material at hand, and not on a priori categories like in some previous metastudies from, for instance, sociology (Jayatilaka, 2007; Shu, 2016; Sugimoto, 2011), or from earlier established LIS classification schemes (Aharony, 2011).

The five categories of research topics used in the study are as follows, included explications and examples:

- Information behavior includes in this case both information seeking, information sharing, reference work, information practice and information and learning, as all of those activities deal with some form of human-information system interaction, generally emphazising the end-user. This could be seen for example in Anna Lundh's Doing research in primary school: Information activities in project-based learning (2011), and in Mette Skov's The reinvented museum: Exploring information seeking behavior in a digital museum context (2009).
- Knowledge organization and information retrieval includes cataloguing, classification, other metadata issues, information systems and information architecture, generally emphasizing the system. Two examples, widely differing in both approach and discourse are Michael Preminger's *The Uexküll* approach: Evaluation of multivariate data organizations for support of visual information retrieval (2008) and Rune Eriksson (2010) Klassifikation og indeksering af skønlitteratur: Et teoretisk og historisk perspektiv [Classification and indexing of fiction: A theoretical and historical perspective], where the latter combines insights from both literary theory and knowledge organization.
- Information and society include a variety of studies related to social sciences, for instance politics of libraries and information, library and information management, including library & information organisations' planning,

- staff, economy, decision-making and communication. One example is Sunniva Evjen's *Placing the public library* (2012), and Nanna Kann-Christensen's study of librarians' concepts of change in *Forestillinger om forandringer: Organisatoriske forandringer i to danske Folkebibliotek* [Conceptions of change: Organizational changes in two Danish public libraries], (2009).
- Sociology of culture/literature includes studies mainly related to humanities and the social sciences, like library and book history, cultural politics, sociology of literature, as well as mediation and promotion of literature, cultural studies and general (not scholarly) publishing. Among these are studies concerning reading and mediation the most frequent, i.e. Gitte Balling: *Litterær estetisk oplevelse:* Læsning, læseoplevelser og læserundersøgelser: En discussion af teoretiske og metodiske tilgange [Literary aesthetic experience: Reading, reading experiences and reading studies: A discussion of theoretical and methodological approaches], (2009), while Eva Wahlström's Fria flickor före Pippi: Ester Blenda och Karin Michaëlis: Astrid Lindgrens föregångare [Free girls before Pippi: Ester Blenda Nordström and Karin Michaëlis; Astrid Lindgren's predecessors], (2011), is mainly a literary study, but in a context of sociology of literature.
- Scholarly communication includes bibliometrics, webometrics, studies of communication genres, systems of communication among scholars and scholarly publication. Examples are Bjørn Hammarfeldt's Following the footnotes: A bibliometrical analysis of citation patterns in literary studies (2012) and Sara Kjellberg's Forskarbloggar: Vetenskaplig kommunikation och kunskapsproduktion i bloggosfären [Researcher's blogs: Scholarly communication and knowledge production in the blogosphere], (2010).

The list of the 79 dissertations, along with the pertaining categories of research topics, was presented to colleagues with different LIS research interests, as a quality check. Some alterations in categorization were made according to their feedback.

Findings

Distributed between the presented categories, and displayed in a chart (Figure 2), we observe that information behavior appears as the prime research category (29%), followed by knowledge organization (23%), sociology of culture/literature (20%), scholarly communication (18%) and information and society (10%).

The three Finnish research institutions stand out with no contributions in sociology of culture/literature and only one PhD in information and society in the period in question, thus indicating a difference in research tradition at the LIS research institutions in the Nordic countries

Gender

The distribution of researchers by gender shows a female dominance: 63% are written by female and 37% by male researchers. Looking at the list of dissertation from a gender perspective, we find

interesting connections between the fields of research and practice. Today, libraries of all kinds tend to have mainly female staff, and female students form the majority of students in the educational programs in LIS at both bachelor's and master's level. However, this is not the case among academic staff, at least it used not to be in American LIS institutions, as shown by Dillon and Norris (2005). Lacking any comparable study of this matter in Nordic LIS institutions, I draw upon Dillon and Norris's study of staff in library and information science institutions (from ALISE), which shows a decline in male dominance from the 1970s up to 2003, indicating that research in this area used to be a male activity, but is now without any particular gender dominance. Looking at the PhD supervisors mentioned in the Nordic dissertations' forewords, there is an equal distribution on gender. Hence, one could expect the Nordic dissertations to be evenly distributed on gender. This is not the case: the female dominance to be observed in the field of practice is mirrored in the PhD dissertations from the last decade, indicating that women's influence on LIS research is increasing. There are no significant relations between gender and choice of research topics, nor in choice of method and theoretical perspective.

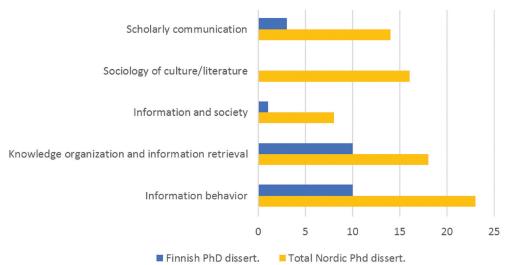


Figure 2. Number of dissertations by category of research topic.

Methods Used

Abstracts have been the main source for determining use of method and perspective. A simple counting (methods are not always expressed in the abstracts), demonstrated a preference for qualitative studies, as opposed to quantitative or experimental studies. Forty-three dissertations identified the use of different forms of qualitative methods, among which the most frequently used were document analyses, interviews and observations, while only seven stated that they had made use of mainly quantitative methods. An interesting observation is that at least 15 of the dissertations made use of a combined research design, including both quantitative and qualitative methods, for instance by following up a survey by doing in-depth interviews. There is no indication of any changes in preferred method over the 10 years of PhD publications in the list.

Theoretical Perspectives

The determination of the dissertations' theoretical perspective is where my material is most lacking in consistency, as many authors surprisingly enough leave this highly important information out of their abstracts. One visible trend is the use of discourse analysis, six dissertations were counted that explicitly mentioned this approach in their abstracts. Discourse analysis as a method also implies a philosophical view in research that has been in high esteem in academia in social sciences and humanities in the last decades. Three of the dissertations in this study from 2009 and onward are using institutional theory as their approach. The overall impression is that different theoretical perspectives are found in several of the topic categories, each of them representing a broad range of disciplines-from sociology, aesthetics and linguistics to theories of learning, as well as using grounded theory research methods.

When it comes to perspective in a

broader sense it seems like the user is the winner; more than 20 of the dissertations have a clearly stated user perspective, among them many end-user studies concerning information behavior in different kinds of user groups, while four out of these 20 are concerned with the user as a reader of fiction. I consider nine to have a public/civil society perspective, while about 20 are written within a professional perspective, concentrating on working tasks, professional communication, and change in library organizations. Some of the dissertations are not categorized by perspective, due to lack of information.

Discussion

The list of dissertations, divided into categories, raises questions relating to power structures in society. In what ways do the preferred research topics or the perspectives chosen express certain power structures both inside the field of library and information science and in society in general? To categorize research is to put preferred terms to a number of publications. The practice of categorizing is thus an act of symbolic power, in line with Bourdieu's (1979) use of this concept, in his description of how hierarchies of power are situated

The Hidden Topics

A comparison between my findings and those of Tuomaala *et al.* (2014), reveal important differences. The most striking being the considerable amount of research related to reading, sociology of literature, management and politics in the PhD dissertations. These topics are not visible in either the Finnish study or in Prebor's. In part, this could be a question of labelling categories. The unspecified "other library and information topics" category, count 6.4% (Tuomaala *et al.* 2012, p. 1452), and is probably where any research on reading or mediation of culture might be hidden. The categories used in the two studies

makes it difficult to sort out research based in humanities or even sociological studies, except book history and library history, both of which are explicitly mentioned. However, the fields invisible in Tuomaala's study, appear both in the overview made by Franklin and Jaeger (2007), and in my own study, as considerable parts of library and information research.

It turns out that categorizing is crucial, and above all, an act of power when mapping LIS research. Viewing library and information science as an inclusive field would necessarily lead to a visualization of a broad range of research topics, whereas an exclusive view of LIS such as that stated in Davis & Rush (1993), would focus on aspects of the information transfer process in mapping of LIS research, leaving the rest for 'other.' The result is a marginalization of vital research, at least vital in Scandinavian LIS institutions. Being 'other' is to be not named, it is being made invisible, which is an expression of execution of power, with parallels to Simone de Beauvoir's study of women's position in society, in her influential book published 1949; The Second Sex.

The hypothesis that I put forward at the beginning is confirmed when it comes to the amount of research related to humanities and social sciences topics (literature, reading and management). The assumptions were, however, wrong when it came to the expected amount of computer science research. No dissertation in computer science was found among the 79 and the many studies of information systems are basically focused on users, or with a user perspective. The fact that findings in the Finnish, and in other international studies. compared to my own, differ to such a great extent, could be a sign of a specific tradition in Scandinavian library and information science research where the humanities and social sciences have had a rather high standing in recent decades (Audunson, 2011). It is more likely though that the findings relate to the type of publication in question. A lot of researchers do publish outside library and information science journals, as shown by Lariviére, et.al. (2012). A brief check of publications by Scandinavian colleagues show a number of published articles in journals pertaining to the disciplines of cultural policy, comparative literature and sociology of culture.

The Advantage of Differences

The above-cited definition by Andersen (2008) appears to cover all the fields of research that the 79 dissertations represent: the genres of texts, the ways they are "communicated to society" (I imply publishing, reading, mediating, information behavior and even bibliometric studies here), and "what functions libraries and other similar knowledge organizing institutions or activities have," which implies both management, knowledge organization and services offered. This generous definition represents the inclusive view on LIS, implying acceptance of possibly conflicting theories and basic views on science. This could be understood as an advantage. Regarding research in a broader perspective, some theorists claim that multidisciplinary, interdisciplinary and even transdisciplinary research, applying different perspectives, methods and concepts, should be conceived as crucial in contemporary research. This view can be related to both the complex challenges and problems our world is facing, the challenges that no single discipline can overcome alone, and also to new ways of producing knowledge in late-modern society (Gibbons, et al., 1994). This is the case even when considering the collection of the Nordic dissertations, where theoretical concepts and methodologies from sociology, aesthetics, rhetoric, theories of communication and theories of information are in use, often in combinatorial ways.

This is a small study, with obvious limitations, both in the time-span chosen (10 years) and in the limitation to Nordic research institutions. The dissertations

published do not mirror the full scale of research interests at the different LIS institutions in question. There may also be dissertations missing in the material, in spite of the efforts to make the list complete. Still, the findings do prove that vital parts of Nordic LIS research are concealed in metastudies which are exclusively looking at LIS journals. Further research is needed to see if this is the case in other regions as well.

Considering the massive research interest concerning the end-user in library and information science, both when it comes to use of information systems and of library institutions and services, it appears self-evident that sociology of literature is a part of LIS. The reader is indeed an end-user. Furthermore, as I have pointed out, sociology of literature share some common interests with bibliometrics, when it comes to quantitative research methods. These common interests have the possibilities to inspire and cooperate with each other in the development of future LIS research. An existing example of which can be observed in one of the 79 PhD dissertations, Following the footnotes: A bibliometrical analysis of citation patterns in literary studies (Hammarfelt, 2012).

Conclusion

This small-scale study of library and information science research shows a more multidisciplinary and diverse field than the previous metastudies mentioned. The differences in findings suggest that expressing metaviews on a specific science is a matter of viewpoint; we see the world from where we ourselves are standing. This implies that categorizing is an act of power, where the categorizer manipulates other people to see the world in the same way, or with Bourdieu's words; to define the doxa of a field. To reflect upon questions of power and to analyze power relations, both within a research field and within a field of practice, is crucial for the critique and the development of the fields in question. In library and information science, publishing of both LIS research as well as publishing in general, forms an important part of the field. Questions of gender, ethnicity, economy, technology and other power relations connected to publishing and research are challenging. To examine and clarify these challenges, the sociology of literature and culture offer relevant theories and methods as well as a tradition of critical approach.

Questions of power and influence are at the core of LIS itself, as selection of information sources and categorizing of documents is never done from a purely objective position. This fact calls for other mappings of library and information science, made in different contexts and from different parts of the world, to demonstrate the full range of research going on. Library and information science is, from my point of view, truly a broad field of research. Looking at the 79 dissertations, the research field appears as a celebration of diversity.

References

Aabø, S. & Audunson, R. (2013). From collections to connections: Building a revised platform for library and information science. *Information Research*, 18(3). Retrieved from http://InformationR.net/ir/18-3/colis/paperC29.html

Aharony, N. (2011). Library and Information Science research areas: A content analysis of articles from the top 10 journals 2007-8. *Journal of Librarianship and Information Science*, 44(1), 27–35. DOI: 10.1177/0961000611424819

Andersen, J. (2008). The concept of genre in information studies. Annual Review of Information Science and Technology 42: 339–367.

Åström, F. (2010). The visibility of Information Science and Library Science research in bibliometric mapping of the LIS Field. *Library Quarterly*, 80(2), 143–159. DOI: 10.1086/651005

Audunson, R. (Ed.). (2011). Krysspeilinger: Perspektiver på bibliotek-og informasjonsvitenskap [Cross bearings: Perspectives on library and information science]. [Oslo]: ABM-media.

Balling, G. (2009). Litterær estetisk oplevelse: Læsning, læseoplevelser og læserundersøgelser: En discussion af teoretiske og metodiske tilgange.

- [Literary aesthetic experience: Reading, reading experiences and reading studies: A discussion of theoretical and methodological approaches]. (Thesis), Royal School of Library and Information Science, Sopenhagen.
- Beauvoir, S. de. (1949). *Le Deuxième Sexe*. [The Second Sex]. Paris: Gallimard.
- Benjamin, W. (1963). Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit. [The Work of Art in the Age of Mechanical Reproduction]. Frankfurt: Suhrkamp.
- Bourdieu, P. (1979). *La Distinction: Critique sociale du jugement*. [Distinction: A Social Critique of the Judgement of Taste]. Paris: Les Editions de minuit.
- Chang, Y.-W. & Huang, M.-H. (2012). A study of the evolution of interdisciplinarity in library and information science: Using three bibliometric methods. *Journal of the American Society for Information Science & Technology, 63*(1), 22–33. DOI: 10.1002/asi.21649
- Davis, C.H. & Rush, J.E. (1993). Library and information science. In World Encyclopedia of Library and Information Services. 3rd ed. Chicago: American Library Association.
- Dillon, A. & Norris, A. (2005). Crying wolf: An examination and reconsideration of the perception of crisis in LIS education. *Journal of Education for Library and Information Science*, 46(4), 280–298. DOI:10.2307/40323908
- Eriksson, R. (2010). Klassifikation og indeksering af skønlitteratur: Et teoretisk og historisk perspektiv. [Classification and indexing of fiction: A theoretical and historical perspective]. (Thesis), Royal School of Library and Information Science, Copenhagen.
- Evjen, S. (2012). *Placing the public library*. (Thesis), Royal School of Library and Information Science, Copenhagen.
- Franklin, R. E., & Jaeger, P. T. (2007). A decade of doctorates: An examination of dissertations written by African American Women in Library and Information studies 1993–2003. *Journal of Education for Library and Information Science*, 48(3), 187–201.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzmann, S., Scott P. & Trow, M. (1994). The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies. London: Sage.
- Griswold, W. (1993). Recent moves in the Sociology of Literature. *Annual Review of Sociology*, 19, 455–467. DOI: 10.1146/annurev. so.19.080193.002323
- Habermas, J. (1961). Strukturwandel der Öffentlichkeit. [The Structural Transformation of the Public Sphere]. Berlin: Luchterhand Verlag.

- Hammarfelt, B. (2012). Following the footnotes: A bibliometrical analysis of citation patterns in literary studies. (Thesis), Uppsala University, Uppsala. Retreived 16.01.2017 from http://uu.divaportal.org/smash/record.jsf?pid=diva2%3A5119 96&dswid=1989
- Hussey, L. (2010). Social capital, cymbolic violence, and fields of cultural production: Pierre Bourdieu and Library and Information Science. In G.J. Leckie, L.M. Given & J.E. Buschman. (Eds.) *Critical Theory for Library and Information Science*. Santa Barbara: Libraries unlimited.
- Järvelin, K., & Vakkari, P. (1990). Content analysis of research articles in library and information science. *Library & Information Science Research*, 12, 395–421.
- Järvelin, K., & Vakkari, P. (1993). The evolution of library and information science 1965–1985: A content analysis of journal articles. *Information Processing & Management*, 29(1), 129–144.
- Jayatilaka, B., Klein, H. & Lee, J. (2007). On categorizing the IS research literatures: User oriented perspective. Use and Redesign in IS: Double Helix Relationships: A Monograph of the Informing Science Journal, 10, 2237–270.
- Kann-Christensen, N. (2009). Forestillinger om forandringer: Organisatoriske forandringer i to danske folkebibliotek. [Conceptions of change: Organizational changes in two Danish public libraries]. (Thesis). Royal School of Library and Information Science, Copenhagen.
- Kjellberg, S. (2010). Forskarbloggar: Vetenskaplig kommunikation och kunskapsproduktion i bloggosfären. [Researcher's blogs: Scholarly communication and knowledge production in the blogosphere]. (Thesis), Division of ALM, Lund University, Lund.
- Larivière, V., Sugimoto, C. R. & Cronin, B. (2012).
 A bibliometric chronicling of Library and Information Science's first hundred years. *Journal of the American Society for Information Science & Technology*, 63(5): 997–1016. DOI: 10.1002/asi.22645
- Lundh, A. (2011). Doing research in primary school: Information activities in project-based learning. (Thesis), Swedish School of Library and Information Science, University of Gothenburg and University of Borås, Borås.
- Luo, L. (2013). Being interdisciplinary: A look into the background and experiences of iSchool faculty members. Presented at the IFLA. Workshop on Global Collaboration of Information Schools, Singapore: Libres. Retrieved from http://libresejournal.info/wp-content/uploads/2014/06/NTU-2013 Submission LiliLuo final.pdf
- Moretti, F. 2013. Distant reading. London: Verso.

- Prebor, G. (2010). Analysis of the interdisciplinary nature of library and information studies. *Journal of Librarianship and Information Science*, 42(4), 256–267. DOI: 10.1177/096100061038082
- Preminger, M. (2008). The Uexküll approach: Evaluation of multivariate data organizations for support of visual information retrieval. (Thesis), Faculty of Information Science, University of Tampere, Tampere. Retrieved 19.01.2017 from http://tampub.uta.fi/handle/10024/67876
- Shu, F., Larivière, V., Mongeon, P., Julien, C.-A. & Piper, A. (2016). On the Evolution of Library and Information Science Doctoral Dissertation Topics in North America (1960–2013). *Journal of Education for Library and Information Science*, *57*(2), 131–142. DOI:10.12783/issn.2328-2967/57/2/5
- Skov, M. (2009). The reinvented museum: Exploring information seeking behaviour in a digital museum context. (Thesis). Royal School of Library and Information Science, Copenhagen.
- Smidt, J. (2013). Hva er litteratursosiologi?: Teoretiske perspektiv [What is sociology of literature?: Theoretical perspectives]. P. 21–62. *Litteratursosiologiske perspektiv*, edited by Jofrid

- Karner Smidt, Tonje Vold & Knut Oterholm. Oslo: Universitetsforlaget.
- Sugimoto, C. R. (2011). Academic genealogy as an indicator of interdisciplinarity: An examination of dissertation networks in Library and Information Science. *Journal of the American Society* for Information Science and Technology, 62(9), 1808–1828. DOI: 10.1002/asi.21568
- Svedjedal, J. (Ed.). (2012). Litteratursosiologi: Texter om litteratur och samhälle [Sociology of literature: Texts on literature and society]. (2nd ed.). Lund: Studentlitteratur.
- Tuomaala, O., Järvelin, K., & Vakkari, P. (2014). Evolution of Library and Information Science, 1965–2005: Content analysis of journal articles. Journal of the Association for Information Science and Technology, 65(7), 1446–1462. DOI: 10.1002/asi.23034
- Wahlström, E. (2011). Fria flickor före Pippi: Ester Blenda och Karin Michaëlis: Astrid Lindgrens föregångare. [Free girls before Pippi: Ester Blenda Nordström and Karin Michaëlis; Astrid Lindgrens predecessors]. (Thesis), Swedish School of Library and Information Science, University of Borås, Borås.