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# “Library users come to a library to find books”: the structuration of the library as a soft information system

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## Abstract

**Purpose:** Considering the perceived significance of librarians and information experts as professional information seekers and information seeking educators and of the institutional setting of information work, very little is known about the information practices of librarians and information professionals, their contexts and implications for libraries and their users. The aim of this study is to explore the information interactions of library professionals within and in relation to the context of the setting of the library.

**Design/methodology/approach:** The analysis is based on a qualitative case study of a large North European city library. Material was collected using information seeking diaries, interviews and ethnographic observation in the library space.

**Findings:** The information practices of librarians are contextual to the setting of the library within which the meeting of the assumptions of library users of the use of that particular system play a significant role. The systemic interplay of librarians, library users and other parts of the system constrains the breadth of the available information at libraries, but at the same time, keeping to a particular set of shared norms and practices of library use also facilitates the use of the system.

**Research limitations/implications:** The generalisability of the findings is limited by the fact that they are based on an individual case study.

**Practical implications:** The systemic nature of library and its reproduction in a process of structuration underlines the need to develop information services in libraries from a holistic perspective that takes into account the practical implications of the shared norms and assumptions of how a library should work.

**Originality/value:** There is little earlier research on the information practices of library and information professionals, particularly with specific reference to its implications for libraries and their users.

## 1 Introduction

Traditional information science literature tends to portray librarians and information professionals as privileged information seekers. They are experts that help ordinary people to explicate complex information needs and navigate through difficult information systems in order to find relevant information (Hedman, 2006). Information seeking and reference skills are recognised as core competences of information professionals (Abels et al., 2003; Kajberg, 1997) and a premise for new competences (e.g., as in Partridge et al., 2010) even if the development emergence of web searching has decreased the relative significance of direct reference work at libraries and information services (Pugh, 2007, p. 4, 44). Information seeking competence is also considered as a fundamental premiss of information literacy (Huvila, 2011) and a non-significant dimension of broader contextual notions of, for instance, information practices (Talja & Lloyd, 2010) and information work (Huvila, 2008).

Even if the digitalisation of information provision has broadened the contexts of information seeking of both information professionals and non-professionals, libraries and other types of information institutions form the principal setting for the professional information seeking of library and information experts. Instead of being a neutral scene, earlier research has shown how the institutional setting influences library users' behaviour (e.g., Fleming-May, 2011) and librarians' work practices (Schultze, 2000). The institutional setting can also form a prohibitive structure that makes it difficult to adjust to new forms of knowing and informing (Maina, 2012).

Considering the perceived significance of librarians and information experts as professional information seekers and information seeking educators and, secondly, of the institutional setting of information work, very little is known about the information practices of librarians and information professionals and their implications for libraries and library use. The aim of this study is to explore the information interactions of library professionals within and in relation to the context of the setting of the library and to explicate the factors that affect the outcomes of their information work. How do librarians work with information? How do they find information and become informed? What are the factors and actors that influence the ways of in which librarians seek and use information? The analysis is based on a qualitative case study of a large North European city library. Material was collected using information seeking diaries, interviews and ethnographic observation in the library space.

'Library' is conceptualised in this study in terms of Checkland (2000) as a soft (information) system that incorporates institutional, technological and human actors, and the shaping of this particular system as a process of structuration according to the theorising of Giddens (1984) and Orlikowski (1991). The strength of the approach is that it helps to explicate the interplay of human actors, technologies and other contextual factors within a single comprehensive framework. Giddens theory perceives the reproduction of social systems (in the context of this study, also Checkland's soft systems) as an active constituting process based on a mutual interplay of objective structures and subjective agents. The theory is based on an assumption of the duality of structure. The structure shapes and is shaped by human action and functions simultaneously as a constraining and enabling frame of action for the agents. Agents are free to to comply or work against the structures, although, as Orlikowski et al. (1991) remark of the theory, "interestingly, people readily allow their actions to be constrained by these shared abstractions of social structure". Shared abstraction, and routinisation and institutionalisation of action are foundational in the process of enacting social order and social systems. The present study uses the notion of structuration to explicate the reciprocal process of how soft systems are constituted in the sense proposed by Orlikowski et al. in the context of information technology. Like IT for Orlikowski, the soft system is perceived as a product (outcome of design, development, appropriation, modification) and medium (soft systems facilitate and constrain) of human action. At the same time, a system is influenced by and influences institutional properties such as norms, state of the art and available resources.

## 2 Literature review

There is very little research on how librarians and other information professionals seek information (Hedman, 2006). Klobas (1991) conducted an early study of the information seeking behaviour of librarians and information professionals. A decade later Brown and Ortega (2005) studied the information practices of physical science librarians. The findings show that librarians relied mostly on personal communication and online discussion forums in their information seeking. Scholarly journals were used to a lesser extent, primarily to inform information literacy education, collection development decisions, users' own research and to learn best practices from other libraries. Schulze (2000) and Clement (1996) report on ethnographies on library work from knowledge work and systems design perspectives. The central finding of Schulze (2000) relates to the continuous balancing between the objective and subjective in the informing practices of knowledge workers. Asnafi (2008) has studied the self-appreciated information seeking behaviour of special librarians in Iran. Anthony (2006) investigated the knowledge and information skills of another group of information professionals, the archivists. Her study describes the work practices of reference archivists. She makes also an important remark on the impact of the changing technological context of their work. Bruce et al. (2004) observed the personal information management behaviour of three different groups one of which comprised librarians and information professionals. Even if the study was able to find some differences between the groups, the authors do not make specific inferences about their possible implications or premises. In addition to the specific studies of information professionals, the generic models and frameworks of information seeking and use are relevant in the context of the present study, but considering the relative lack of earlier research, the explanatory power of the various models needs to be discussed. Some of the most influential models are without doubt, the processual models of Kuhlthau (1993) and Wilson (2000), and the general model of information seeking of professionals of Leckie and Pettigrew (1997). In contrast to the linearity of the popular models, Foster (Foster et al., 2008), (to a degree) Dervin (1998), and the socio-constructivistic and constructionist notions of information practices (Talja, 2010; Talja et al., 2005) have underlined the non-linearity of information work.

Most of the existing studies on the information seeking of information professionals have focused on the competences and knowledge base of information professionals and their information seeking for others (Hedman, 2006). A handful of studies has remarked on librarians' perceptions on information seeking (Limberg et al., 2002, 124). According to Limberg et al., librarians have a tendency to see information seeking in rather technical and procedural terms (similarly to e.g. Kuhlthau, 2004) instead of perceiving it as a contextual activity (as e.g. Tuominen, 1997).

Hedman (2006) discusses the information seeking skills of librarians working in higher education from a theoretical perspective. She refers to the notions of *imposed information seeking* and *self-generated information seeking* of Gross (2001) and discusses the implications of the two modes of information seeking for the work of

librarians and information professionals seeing a specific need to problematise the hegemonic risks related to the imposed forms of information seeking on behalf of others. Hedman (2006) concludes her discussion by arguing that if (and, in practice, because) librarians' information seeking cannot be seen as a purely altruistic activity, critical theoretical perspectives are needed to make sense of its underpinnings and realities. Others, including Makri et al. (2008) and Nardi and O'Day (1996) have discussed the same risks and opportunities from the gatekeeping point of view. In addition to the possibility of the conscious withholding of information, another frequently discussed barrier of successful imposed information seeking is the problems related to reference interviewing (e.g., Taylor, 1968; Attfield et al., 2008). Hedman (2006) notes that according to earlier studies, many users and supervisors of users criticise librarians for lacking imagination and for making suboptimal inferences about the relevance of particular materials. At the same time, librarians have different ideas of the needs of the library users than the users themselves. Rimmer et al. (2008) made a similar remark in the context of the work of archivists and noted that the attitude of an individual information worker can have a major impact on the outcomes of the work of the user.

The literature on the perceived core competences of library professionals provide indirect evidence of information seeking practices. Kajberg (1997) emphasises the continuing relevance of information retrieval skills. It is also discussed as one of the core areas LIS curricula in the 2005 volume *European curriculum reflections* (Kajberg & Lørring, 2005). The central role of information seeking competence is also implicitly underlined by the fact that it is often omitted in the future oriented library literature (e.g. Casey & Savastinuk, 2007) even if it is apparent that the advocated new forms of engagement and cooperation are heavily based on an assumption of the information seeking expertise of the information professionals. A similar general reliance on assumptions and a lack of comprehensive contextual investigations of actual information activities may be argued to characterise the research on information professionals' information practices as a whole. The present study addresses this specific gap by presenting a comprehensive empirical analysis of librarians' information work that places a specific emphasis on the interplay of librarians and the context of their work.

### **3 Methods and material**

The aim of this study is to explore the information interactions of library professionals in the context of a library institution. The study was conducted as a case study at the main branch of a North European city library in 2011. The data were collected using a combination of ethnographical observation in the library space, and information seeking diary studies and the interviews of seven employees of the library. The study population formed a theoretical sample. The sample was formed after a close analysis of the organisation and employees of the library aiming at reasonable balance of age, different departments and duties (as to content and status of the employee in the

hierarchy). The sample included two departmental heads, two outreach oriented librarians, three librarians working primarily with fiction, one with music collections and two with non-fiction. Two of the interviewees worked with children and youth. One of the informants was primarily working with information systems and web services and one on language minority related duties. Two librarians could be described as being in their early careers, two were senior and the rest in mid-career. In order to be approximately representative of the typical gender balance, one of the informants was a male. For reporting purposes, the informants were assigned false names Jean, Javert, Fantine, Éponine, Thénardier, Marius and Cosette.

The ethnographic observation was conducted as a non-intrusive participant observation (Hammersley & Atkinson, 1995) in the public library space during summer and autumn of 2011 at different times of the days on different weekdays. The observations were documented by taking notes in a notebook. The diary study consisted of an initial meeting of approximately 15 minutes with the aim of introducing the research project, researcher and the diary study. Special focus was put on creating the necessary level of trust between the researcher and the informants to encourage the informants to be open and meticulous in their work with the diary. The informants were handed five diary forms and they were asked to document five individual incidents of information seeking or use on the forms with a focus on a description of the situation, performed information use activities and an assessment of the successfulness of the task and how typical it was. After completing the diary forms, the informants returned them to the researcher by mail. The forms and their contents were used as a starting point in a semi-structured (Luo & Wildemuth, 2010) follow-up interview, each of which lasted an average of 60 minutes. Informants were asked to describe their daily work, describe their information use with a special reference to typical information channels and sources and to comment on their diary keeping as well as to specify some particular questions arising from the diary entries. All interviews were conducted on the premises of the city library by the researcher, taped and transcribed by a professional transcriber.

The ethnographic data, diary entries and interview data was analysed using the constant comparative method (Glaser & Strauss, 1967) and close reading (DuBois, 2003). Finally, after a preliminary analysis was complete, the material was revisited using negative case-analysis (Lincoln & Guba, 1985, 309-313) with the specific purpose of finding contradictory evidence (as e.g. in Zach, 2005) that would decrease the reliability of the conclusions drawn.

The empirical approach has some obvious limitations. Findings are based on a case study of a single library that limits the possibilities to generalise the expressed views. In order to control for the overexpression of individual opinions, the analysis places a special emphasis on views expressed by multiple informants. Secondly, bearing the exploratory aim of the present study to provide evidence for the existence of a phenomenon in mind, the possible inability to generalise is not considered to be a major issue.

## 4 Analysis

A classification of the diary entries shows that in spite of the uniformity of the description of the task of diary keeping, individual informants reported very different types of incidents of information use. Most of the informants recorded tasks when they had sought information for library users (18 cases) i.e. in terms of Gross (2001), conducted imposed information seeking. Another popular category was indirect (in a sense, 'quasi-imposed') information seeking for the public as a part of planning outreach and dissemination activities such as book clubs (11 cases). The remaining seven cases represented relatively unambiguous self-generated seeking of information (e.g., seeking information on train times for a project meeting trip).

### 4.1 *Imposed information seeking*

Both the direct and indirect searching for library users and cooperation partners was described as being guided by the explicit and implicit needs and desires of the audience whether it consisted of 'ordinary' library users or a colleague from another library. In the single example of searching for information for a colleague, the librarian from another library knew that she would get the information by contacting the library. Even if the user needs are often described as complex and heterogeneous in the literature, in the case of non-professional users, the fact that the most of the users come to the library looking for books makes, as Éponine explained, both direct and indirect searching easier for a librarian. In addition, many users ask about books they know to be found in the library (Éponine) even if they may have varying levels of information on the particular volume they are looking for, as Thénardier recalled. A user can perhaps remember the topic of the book, part of its name or only the colour of its cover. The knowledge of different languages can be helpful for librarians in their task of finding a useful book. The variations in terminology and language use means that the proficiency of using a dictionary is not always sufficient (Thénardier).

Javert described how "the right kind of question [to trigger users to speak of their needs] is necessary to make conversation, to make [a user] to discuss about important things." The actual information needed and the expressed need can vary a lot (Thénardier). At the same time, however, as Éponine noted, in all searching, the librarian's interpretation of the meaning of the "topic" can have a major impact on the outcome of the search and on the advice given to a library user. Éponine tended to interpret the user needs relatively broadly and look at a particular topic from different angles. In contrast to Éponine, Cosette was much stricter in her direct searching for library users. She tended to focus on the explicit topic indicated by the user without taking any side steps and by focusing on that what "might be good for a particular user".

### 4.2 *Quasi-imposed information seeking*

The informants tended to downplay the information seeking they did for themselves

and only consider the direct information seeking for library users as 'real' information seeking. The direct, traditional reference work functioned also as a general yardstick for information seeking. Jean said that "it seems that only a few of us need to do such in-depth information seeking for one's own work, if one is not writing an article for a newspaper or professional journal or something like that. Then you have to tell more about background and like that [...] but mostly these are like quite small and fragmentary these information seeking needs". Jean also assumed that "our information officers might need to seek information more [than me]".

In spite of the belittling of self-generated information seeking both Jean and Thénardier explained how successful information seeking is a source of professional fulfilment. The interviewees were inclined to value higher more ambitious information seeking tasks. "If I had gathered [diary entries collected for the present study] for a longer period of time there could have been more a bit more ambitious [i.e. informative] ones" (Jean). Jean put also emphasis on the thoroughness of his searching on important matters: "do I need to get the information, [I'll start] from right down from Google [and go] as long as it takes" (Jean). Also Thénardier thought it is "nicer to search when you can really focus on the work, use time and do it properly". It is "ok, if you just point a book for someone, but it is nicer if you can put a real effort in to searching" (Thénardier).

In addition to Google, typical starting points of searching were to ask colleagues, either face-to-face, calling or by emailing. A failure in information seeking was an obvious source of anxiety. The interviewees considered that a librarian was supposed to be successful in finding information. For instance, Jean explained that "If you can't find from your own [institution's] web page, it is a bit awkward situation". He was unable to find information on a particular event from the library web page when he was sitting at a computer together with a library user. In the interview he did, however, describe rather proudly how he had solved the problem by calling a colleague, asking her to take a photo of a print advertisement (with the required information) and email it to him.

Besides the contradictions between 'proper' and colloquial forms of information seeking, the librarians expressed anxiety about their reading of literature. Éponine commented that "I should have time to read more books" but, at the same time, she noted that she does not like the idea that librarians should read a lot during their time off. Fantine said she is allowed to use one day a month for reading literature at home, but most of the informants claimed that they do not tend to have time for reading at work. Thénardier admitted somewhat apologetically that he reads novels (in his free time), but not that much non-fiction even if he works with it. To compensate and complement his reading, he said that he tends to take a look at the new acquisitions shelf at the library now and then.

In practice, however, most of the searching described by the informants was relatively straightforward use of the library catalogue and "googling" for contact details and other work related information. Much of the information seeking did not involve searching at all. "Sometimes you don't need to search information on books, because the information comes to you: a colleague writes about a book in Facebook and so on" (Jean). A closer look at the diary entries written by the informants, show that this was

the case far more frequently than merely “sometimes”. It was common that information tasks were either initiated by encountering information or that they benefited considerably from the accidental acquiring of information. Search strategies varied between individuals. Jean was an opportunistic search engine user while Javert and Thénardier tended to favour familiar places when searching on the web. For practically all informants, web searching was a combination of meandering and purposeful searching.

### *4.3 Sources of information*

The following section describes the principal sources of information observed in the library space and described by the informants in their diaries and interviews. All interviewees relied on their colleagues, library collections, and catalogue and, to an extent, to their intranet system. Otherwise they seemed to have very few common sources of information.

#### *4.3.1 Colleagues*

The most popular source of information was colleagues from their own organisation. “I got [pointer to a source] from a person who had worked with the theme” (Jean), or as Cosette described the informational collaboration, “we have such a collegial exchange of information and experiences” at the library. In addition to asking others for pointers, Javert explained that he could ask colleagues to search for information on topics they knew better.

Even if most of the informants relied primarily on internal contacts, some of the interviewees talked about colleagues from outside their own organisation. Cosette had relatively recently moved from one position to another within the library. The internal contacts within the library had been the most important ones for her in her former post, but by the time of the interview, she reckoned that she was informed more by two external stakeholder organisations and a particular individual from one of them than by her colleagues at the library. Besides Cosette, Javert also relied a lot on external expertise. Most of the experts he tended to consult were librarians around the country, people he had met at different seminars and to an extent, colleagues with similar duties in other libraries. Javert was also the only one who explicitly mentioned that he expressly discussed library matters with his non-librarian friends and used them as a sounding board for probing what non-library people think. Javert considered that it helped him to question what he himself might hold as self-evident truths.

Thénardier, on the other hand, consulted mostly his superior and a specific administrator rather than rely on a broad network of colleagues. Marius consulted colleagues both within and outside the organisation. He was mostly happy with his different cooperation partners, but noted that the organisational boundaries made a difference. The outsourcing of the IT services of the library to a service centre had made his work more difficult. Earlier it had been much easier to get information and work



with IT professionals who worked at the library with a total commitment to the organisation and its projects. At present, the service was “nice and friendly”, but lacked continuity because the IT professionals worked for the entire municipality.

Cosette described another administrative obstacle to effective information seeking and use. In her projects it was not uncommon that a decision to cooperate was made on a high administrative level without particular consideration of how the cooperation would be relevant for the two organisations on a practical level. According to her, sorting out a working and relevant partnership was left to the discretion of individual practitioners.

Javert preferred to use the telephone to contact his colleagues. Others, for instance, Marius tended to call, send email or to meet a colleague face to face depending on the matter he was about to ask. Thénardier and Marius thought that it is easier to call people instead of writing them email and it is also faster, especially with those who get a lot of mail. Meeting colleagues personally was also a viable option for both of them, especially if a question was a complex one (Marius). Cosette had the opposite preferences. According to her, reaching someone by telephone could be difficult and it was easier for her to make the first contact by email. She and Éponine also liked to discuss directly with neighbouring colleagues. An additional place to meet colleagues was the library cafeteria. Javert explained how much information is exchanged there by discussing with colleagues from the different departments of the library. Even if colleagues were an important source of information also for Éponine, especially when she needed information on complex things, she also stressed that colleagues are not supposed to be disturbed all the time.

A common characteristic of the use of colleagues is that the most of the informants clearly used their colleagues as references and pointers to information. Thénardier expressed this explicitly by underlining that in practical matters, he often chose to ask his colleagues where to find information and noted that most of the time his colleagues were extremely helpful in pointing out useful sources.

#### **4.3.2 Meetings**

In spite of their apparent overlap with ‘colleagues’, the meetings appeared in the material as a distinct channel for obtaining information. Even if the participants of the meetings were colleagues, a ‘meeting’ provides a particular frame for information interactions that is notably different from a personal contact or an *ad hoc* chat at the coffee table. Almost all librarians participated in some formal meetings. Cosette was a semi-retired. She was allowed to work mostly by herself without an explicit need to participate in all meetings. She did, however, miss the possibility to ask direct questions in meetings in which she was unable to participate. Javert, Marius and Thénardier expressed more anxiety about the number of meetings they needed to attend. Javert, in particular, was in favour of short and effective meetings. Éponine criticised the fact that too many notes are taken during internal meetings for anyone to have time to read them. Marius agreed with her view, although he noted that most of his meetings were

informal and no formal minutes were ever recorded. The different meetings he participated in also served different purposes. Some of them focused on making decisions while others were consultative meetings of experts. For him, meetings also had the social dimension of providing an opportunity to socialise with colleagues. Otherwise the interviewees did not readily see meetings as a part of an informal social information exchange with their colleagues.

### ***4.3.3 Library as a source***

In addition to colleagues, another almost equally often mentioned source of information was the library and its collections. The collections were accessed by using a catalogue search as a starting point, but in many cases also by referring to personal or a colleague's knowledge of the existence of particular books. Thénardier told that while doing reference work, he almost always starts by searching in the catalogue together with the user, even if he could sometimes go directly to the shelves. Cosette tended to start by searching with keywords. As Éponine commented, their own experience of usable keywords and the library collection is important. Thénardier noted that there are no keywords on every book in the catalogue, but the possibility to ask colleagues is a good complementary source of information.

The library also had an intranet system with in-house library specific content and sections that were common to all employees of the municipality. The most enthusiastic users of the system worked on administrative duties and for them the system functioned well as a source for regulatory and organisational documents. Others tended to use it more sporadically and focusing mostly on reading minutes and notes of meetings they had participated in and for reading internal news from the library and cultural sector of the municipality. Cosette tended to use it also for keeping updated on general cultural news concerning the municipality. All non-administrative employees mentioned the intranet system during the interviews first when prompted by a direct question of the existence of such a system, and only Thénardier named the municipal intranet as a significant source of information. Unlike the others, he also described himself as a regular contributor. The comment of Javert is illustrative. He noted that the Intranet contains important things like phone directories and news on current matters, but mentioned the existence of such a system only after he was specifically asked about it. Éponine also agreed that the system contains valuable information, but the fact that she seldom consults it is characteristic to all interviewed librarians.

### ***Web and the social media***

Not surprisingly, Google was the most common instrument for retrieving information from the web. Javert remarked that it is as easy and often quicker to search in Google than to ask colleagues. Éponine said that besides normal searching, she tended to use Google also to check phrases and idioms for translations she did as a part of her work. In contrast to the predominance of Google, the use of social media tools varied among the individual librarians. Marius was an active user of multiple types of social media

tools whereas Javert and Cosette read only one blog each. Javert read the blog of his own department. Cosette was working with a project and followed the project blog. Cosette followed also the web sites of her external cooperation partners, but otherwise was rather restrictive in her daily use of the web as an instrument for keeping herself updated.

Mailing lists, RSS feeds of news sites and blogs, and discussion forums were rather unpopular among the informants. Thénardier was the only one who was a regular user of an RSS reader and a participant at a national library related discussion forum. Éponine received mail only from internal mailing lists because of her membership in a particular working group. She said that she browses professionalish web sites now and then, but felt that reading texts without a strict professional relevance during work hours was not quite right. Marius was also slightly critical of his web use on duty, but stressed that getting into a particular “surfing flow when I go and follow something” could be very productive.

In contrast to the sporadic use of web services, it was apparent that Facebook played a particular role as an information context and a source of professional news and updates in the studied library. The library management endorsed Facebook and the library itself had a presence in the social network. Marius described Facebook as a third “default” place for finding information besides Google and the national library portal. The attitude towards the professional use of Facebook was not, however, entirely uncomplicated. Cosette had some reservations on Facebook-based information exchange and considered it as “light-weight”. At the same time, however, she felt that as a professional librarian she had to be knowledgeable about it. Most of the informants were dubious about the convergence of professional and private communication in Facebook as well as of the obscuring of the working hours and the time off. Éponine estimated that 50% of her Facebook friends were colleagues at the time of the interview. In contrast to her, Thénardier was primarily an infrequent professional Facebook user. He said that he did not use it at work and had only recently promised to update the institutional Facebook page now and then. In contrast to Éponine and Thénardier, Marius used the service for both work and leisure.

#### *Other sources of information*

In addition to earlier discussed sources of information, the interviewees made occasional use of other materials and channels. Jean and Marius were eager to attend interesting seminars, but the most of the informants regretted that they did not tend to have time to participate in such events. Only Fantine was a regular reader of a professional library journal. Jean’s comment that “I might read sometimes in coffee room, but I am not reading professional library journals regularly at all” was much more typical. Éponine said that she read professional press only now and then, and pinned part of the blame on the poor availability of professional journals in the work place.

Individual informants also had some personal favourite sources. Javert said that he regularly read a business journal on the Web because it contained interesting articles on leadership. He was also a frequent user of an open online music database that,

according to him, was the most authoritative source of information on particular genres of music. Éponine said that she used relatively often web-based bookshops to find book reviews and other complementary information that is not available in the library catalogue. Jean had recently discovered a new search system for literature he considered to be useful because it allowed him to find literature on even rather narrow and specific topics.

#### **4.4 Information strategies**

The choice of the strategies of using specific sources was explained by the interviewees by several different reasons including the lack of time (e.g., Éponine) and the lack of experience and habits (Cosette). Javert left the others at his department to deal with social media. He considered himself to be too old for social media, even if he quite apparently appreciated its possibilities and thought that his subordinates should invest time in it. Marius remarked that the working style of his superior significantly affected her information seeking and use. His earlier supervisor had put emphasis on doing things with less concern to the practical details while his current senior was more or less the opposite.

The interviews also showed clear tendencies to value some sources over the others. “You could do it professionally and go to the regional collection and find materials there” (Jean). Searching in the library catalogue was also considered to be ‘professional’ and something that a librarian was supposed to do. In some cases the librarians referred to institutional credibility of information coming from, for instance, government or municipal sources, and remarked on the (lack of) reliability of web information. Thénardier noted that Wikipedia is sometimes useful for personal information needs. Cosette expressed similar concerns of the quality of information in Facebook. Otherwise the concerns about information quality seemed to be subordinate to the perceived intrinsic reliability of information practices and consulted sources. Library collections and the library itself seemed to function as a guarantee of the reliability of information for the informants. The general belief of the reliability of libraries was underlined in the material by occasional references to exceptions, for instance, when Marius noted that the web pages of other libraries are not always updated and reliable.

### **5 Discussion**

The analysis revealed three particularly interesting findings that can help to explain the structuration of the information work at the studied institution. First, all informants had apparent conceptual difficulties in explicating information needs and information use in the context of their own work. A common *ad hoc* norm of librarianship appeared to be that only library users have information needs and the librarian’s role as an information seeker is determined by their relation to the users of the library (as in e.g., Julien & Genuis, 2011). It was also common to belittle one’s own information seeking efforts and

to note that probably some colleagues sought more information. Information and PR officers in particular were often assumed to seek more information than the informants themselves. Jean suggested that he might seek more information if he were engaged in an information intensive activity such as writing an article for a newspaper or journal. The tendency to dichotomise self-generated and imposed information seeking reminds one of Hedman's (2006) discussion of the categories of the imposed and self-generated information searching of Gross (2001). In addition to Hedman's apparently very useful suggestion to problematise imposed information searching, the present findings underline the significance of putting emphasis also on the self-generated information seeking. In the present study, the invisibility of the librarians' own information seeking and its structuration on the premises of imposed information seeking seemed to translate to a relative lack of transparency of the premises of their own informedness. The study and its focus on information seeking made many informants reflect on their information practices, and consequently to pluralise and problematise their view of the information searching. In terms of Giddens (1984), as a highly routinised activity, imposed information seeking is easier to use as a facility in social interactions whereas the informants seemed to lack practical and discursive consciousness to act in the context of their self-generated information seeking.

The interview record demonstrates also the prevalence of other normative assumptions. The notions that librarians are general information experts, that librarians' expertise is based on information searching skills (e.g., Jean's anxiety of the problem of finding information together with a user), that a librarian should read a lot of fiction and factual literature, and that participating in professional discourse by reading professional journals and engaging in discussion forums were deeply embedded in the ways how the informants articulated their work practices. Even though the presence of the interviewer could have been expected to encourage informants to disclaim stereotypes, explicit critique was surprisingly rare. In contrast to the inertia of many other assumptions of what to do and not to do, the informants made a particular case of the use of search engines. The emphasis of Éponine that "librarians use Google, too, you know" exemplified the general attitude among the interviewees that reminds one of the dichotomy of practice (Garoufallou et al., 2008) and the opinions expressed in professional library debate (e.g., Williams, 2007).

Adherence to largely traditional appropriations of librarianship might be seen in a negative light from the point of view of the contemporary calls for new forms of librarianship (e.g., Lankes, 2011). The analysis shows, however, that processing these anxieties was important for the interviewees as a form of a professional 'boundary work'. The structuration of information seeking as reference work related activity and the critical remarks of, for instance, Éponine on her browsing and reading of non- and semi-professional web pages during working hours parallels with the question of reading and not reading literature. They all serve the purpose of defining the norms of professional librarianship (what should be done, when and to what extent) and in the context of this study, even more importantly, as practices that define the essence of 'library' for both librarians and library users.

Secondly, the analysis highlighted the complexity of the notions of information seeking and information source. In contrast to the classical models (e.g., Kuhlthau, 2004; Wilson, 2000), the information seeking of the informants was empathetically non-linear activity of a contextual enactment of informedness. Its appearance is underlined by the fact that the use of structured diary forms (as a data gathering method) might be assumed to lead to an artificial linearisation of the descriptions of information seeking activities. Another related observation was that making a distinction between information sources and information channels was largely meaningless for the informants in the context of their everyday information practices. Information channels functioned as *sources of becoming informed* (or, for the sake of simplicity, sources of information, as in the title of this article) even if the information was known to be originating from elsewhere. The librarians were aware of the usefulness and reliability of particular information 'sources' (i.e. a place or origin for a particular piece of information) such as books, colleagues or the catalogue. In practice, however, they assumed various strategies to obtain that information. Colleagues were appropriated as a part of a structure that functioned both as a source (e.g., their experience, knowledge of a particular domain) and as a channel (e.g., one colleague knows another colleague, colleague as an information searcher). Similarly, a library catalogue functioned as a channel for getting information on books but at the same time as a source of information on the collections of the library.

The observation resonates with certain findings presented in the earlier literature. Huvila (2010) describes the information source use of Wikipedia contributors and even if he is able to distinguish a range of sources consulted by the Wikipedians, the principal finding of the study is a categorisation of contributing strategies (i.e. forms of information source use) rather than of the sources themselves. Many of the information practices and information literacy related research contain similar articulations of the intertwined nature of information, information systems and information practices. Informedness is an outcome of a systemic, social or socio-material (depending on the theoretical underpinnings of the approach) process rather than of the 'use' of a particular piece, or source, of information.

The third major, even if not entirely unexpected, result of the analysis was that similar to many other professionals, from an information seeking point of view, librarians are living in a 'round' (as in the work of Chatman, 1999) and the process of the enactment of the 'round' can be explained in terms of structuration. While the librarians have a tendency to comply to a norm that states only library users have information needs, they are implicitly defining the library as a pivotal source of information. Even if it seems that web searching has broadened the information landscape of librarians outside the walls of the library, the principal context and resource of information the librarians are working with is the library itself. It functions at the same time as a yardstick for the availability and quality of information and information seeking strategies and defines boundaries of informedness in that particular context. The informants had a tendency to blame problems of quality on external information sources (with the exception of the utterance of Marius on the

unreliability of some library websites) and turned reliability to an intrinsic question by demarcating the library as a 'proper' context for searching for and finding reliable information. In general, the utterances concerning the credibility of non-library sources were similar to those reported in the earlier literature (e.g., Francke & Sundin, 2012). Even if the adherence to the structure implies a certain closure of information environment, people (including information professionals) are still willing to use advanced and complicated strategies in their information seeking (e.g., Fields et al., 2005; Warwick et al., 2009; Blandford & Attfield, 2010). The satisfaction of being able to engage in complex reference work expressed by Thénardier seemed to be related to the sense of satisfaction of accomplishing a demanding task and of the creative use of available resources rather than using unfamiliar sources or strategies of searching. Csikszentmihalyi (2000) has explained this tendency by suggesting that an optimal human experience is a result of the best possible use of *known* tools and competences rather than unknown ones.

A common denominator of the three main observations of the present study is that they highlight different systemic aspects of the information work of library and information professionals and the functioning of libraries as information institutions. Libraries have been discussed in systemic terms in the earlier literature (e.g., Hjørland, 2010; Van der Veer Martens, 2011). The soft systems approach has also been used in a handful of studies to develop library and information services, but somewhat surprisingly, it seems that the implications of a holistic and contextual (soft) systems theoretical point of view to the librarians' information work have not been considered to a significant extent in the earlier LIS literature (Delbridge & Fisher, 2007). The remark of Hjørland (2010) that a holistic systems based approach could inform technical systems oriented information research in the context of the notion of relevance could be extended to all systems oriented information science research.

Similar to observations by Wilson (1983) and, for instance, Sundin et al. (2008), the analysis shows that the expertise and cognitive authority of librarians is contextual. Wilson and Sundin et al. underline the role of the communities of justification as an additional factor to the skilful use of tools. The findings of the present study suggest an even broader holistic systemic contextuality reminiscent of the perspective suggested by Hjørland (2010). The participation of librarians in a soft system of 'library' and their familiarity with it is a consequence of a process of reciprocal structuration. The expertise of librarians is a property of that system and the process of its emergence. Blandford and Attfield (2010, p. 25) have noted that "[f]amiliarity with particular resources is an often overlooked aspect of expertise." The present results suggest that the expertise related to the familiarity of resources has three dimensions. It is based on the practical experience of 1) what can be found in a library (knowledge of sources) and on 2) how the library works (knowledge of the system), including how to access the library catalogue (and how not to access it) and who are the people to contact to find relevant information. Thirdly, 3) the expertise build on the librarians' explicit and implicit understanding on how a library user perceives the library (as an information system) and on the reciprocal understanding by users of what a library is supposed to

be. As Éponine remarked, most of the people were entering a library hoping to find a book, which makes the theoretically very open task of understanding user needs in practice, a significantly easier task. In addition, she continued, a large part of user questions were about “known” items, i.e. a book they know exists in the library and they basically just want a confirmation (Éponine).

The professional practices and their articulations as dos and do nots play a significant role in defining the norms and boundaries of the ‘library system’. The interviews and observations alike suggest that the interaction with the collection, use of library catalogue, dichotomy of factual literature and fiction, and, for instance, the proper uses of library space (e.g., not as a stage for party political activities) all served the purpose of defining the outer limits and internal norms of the ‘library system’ and of setting the stage for information practices. At the same time, the descriptions of the informants contain numerous examples of how the articulation of boundaries was related to the emergence of established library practices as boundary objects that helped librarians to communicate with library users and other professional groups. The intranet was an example of a problematic information source that was not uncontroversially a part of the ‘library’. The on-going negotiations appear very similar to the bodily production of knowledge in the study by Eckerdal (2012) in which she describes the interaction between midwives and young women using the conceptual apparatus of Haraway (1988). The demarcation of boundaries and setting up internal rules by the articulation of practices and shared ideas (e.g., that people come to libraries to search for books and apparently not to meet the representatives of political parties, librarians are expected to perform particular duties and to be knowledgeable of the literature) are necessary conditions for the functioning of *material-semiotic actors* (Haraway, 1988) such as “library” or “information”.

Even if the empirical material portrays the small world of the studied library as a relatively intact system, there were some activities and contexts that break the ‘magic circle’ (Huizinga, 1949) of the library. The input from library users in direct information seeking and in the context of book clubs organised by Cosette and Fantine is an apparent example of an external input. Opportunistic Google searching, information encountering (ref. Erdelez & Makri, 2011), the outreach work of Cosette, Javert’s reading of business journals and other examples of the use of isolated sources of information can be seen as similar boundary spanning activities. The use of scholarly journals by the informants of Brown and Ortega (2005) may be suggested to play a similar role. They all represent strategies to go beyond the boundaries of the system while still being firmly anchored in the magic circle of informational opportunities provided by the (library) system. From the cross-contextual point of view, Facebook did, however, play a very particular role at the library in the study. Facebook use was a controversial issue for many informants and a boundary spanner that was not (perhaps, yet) fully appropriated in the context of the library. Cosette was worried about the philistine nature of the content of Facebook, but felt at the same time that as a library professional, she should be competent to use it. Not unlike to earlier descriptions in the literature (e.g., Berggren, 2011), most of the interviewees felt that Facebook was useful,



but several of them expressed doubts about the consequences of blending their private and professional selves and of blurring the boundaries of work and leisure. It was apparent that the fact that the library management was using Facebook put pressure on individual librarians to participate even if they had doubts about how to control their presence and engagement. The immediacy of interaction in Facebook amplified the impact of the social environment in the work of the individual librarians. Even if Marius, who was working closely with the management, was the only one who noted that the working style of his supervisor affected his work, it was evident that Facebook extended the impact of the working style of the library management to concern all Facebook users in the library and even non-users by putting pressure on them to sign up. In contrast to the library café that served as a partially similar venue for informal interaction outside the conventional institutional premises with its own rules of engagement, Facebook was felt to have a more explicit element of control. Facebook was experienced as changing the premises of interaction and as interfering with the separation of the library as an isolated magic circle, or a small world that was distinct from the private life of the librarians.

While the portrayal of 'library systems' as small worlds (citing the original notion of Chatman, 1991) may conjure negative connotations of constraints and information poverty, the boundary work also has positive implications (e.g., Faraj & Yan, 2009). A library provides a distinct framework for information activities and influences the strategies librarians and library users are likely to employ to seek, evaluate and contextualise information. This was especially apparent with the problems of working with IT specialists from outside and the ease of communicating with their colleagues working in the library. It is apparent that library use is unlikely to lead to a similar vicious circle of information poverty as with the information practices of the informants of Chatman, but the practices of library use do still have a comparable impact on the boundaries of which is seekable, worth searching for and how this is done. The relative closedness and self-sufficiency of the library-as-a-system reinforced a tendency to focus on network-internal information. Javert read only the blog of his own department and the most of the respondents who used the library intranet system tended to focus on information concerning events and meetings they had participated in themselves. Cosette made a specific point of the lack of interaction with outsiders by urging better face-to-face interaction with library users, both in the context of enhanced service delivery and more active information exchange. She criticised librarians for working from the premises of the existing collection instead of the needs and interests of the users, and for sitting behind their desks at the library instead of reaching out to society.

The constraining articulation of the boundaries of the library system define and control the boundaries and constitute the inner structures of the 'library system', but at the same time turn the professional practices and library related artefacts such as books and the library space into boundary objects (Star, 2010) that help both librarians and library users to discuss with each other. The strict, but to a reasonable degree shared norms and common understanding of the professional practices help librarians and library users to communicate with each other. Even if both the library (as an

information system, systemic gatekeeper in terms of Barzilai-Nahon, 2008) and librarians (as part of the system, and as persons as gate-keepers) function as gate-keepers, this gate-keeping is not only restrictive. The established frames together with the serendipitous aspects of library use and the connections beyond the 'core' system through personal contacts and the use of external information channels provide opportunities for augmenting and reconfiguring the small world. Working within and from within the system (i.e. library) provides a framework for librarians work both as a contextual and boundary spanning activity. An individual librarian benefits of the capabilities of the entire system in their work. Perhaps even more importantly, a librarian can benefit from the fact that a library is a system that is geared towards finding satisfactory answers to the types of information (and other) needs the library users have learned to expect to be solved by a library.

Besides being useful in understanding some of the ramifications of how librarians and libraries work, the notions of structuration and soft systems helps to understand that as an information institutions, the principal strength of libraries is in the internally (within the institution) and externally (by its users) shared understanding of the essential boundaries and inner structures of the soft system. The library works as long as both librarians and library users share an understanding of what a library is and how it works, and act accordingly. Similarly, the expertise (i.e. the ability to help library users) of librarians is dependent on how the library users have been structured in that particular system. The ability to act as a part of the system is not a competence or a question of meeting particular explicit or implicit needs, but a match of how both librarians and library users conceptualise themselves and their activities as a part of a single systemic interaction. In this sense the arguments made about public library research and cultural policy debate of the need to articulate a common societal understanding of what a library is, are also significant from the point of view of mundane activities at the library. Further, it may be argued that in addition to a societal understanding, it is necessary to develop a common practical understanding of the systemic roles of different technological and human components of the soft system. In simple terms, librarians need to adhere to a necessary degree to the ways libraries are supposed to function and library users need to be knowledgeable of how they can effectively help libraries to help themselves. The consequence of the lack of perceived relevance and common understanding of library institutions is not only that some individuals are unable to use certain library resources. The failing of some parts make the entire system less effective in what it is supposed to accomplish.

## **6 Conclusions**

The present study shows that the information work practices of librarians are contextual to 'library'. The analysis shows that 'library' can be described as being basically a highly self-contained soft system that is both a medium and an outcome of a continuing process of structuration. The soft system consists of the tangible and articulated physical library space, collections, employees and library users together

with their professional and colloquial practices. From a systemic perspective, the principal strength of libraries is in the internally (within the institution) and externally (by its users) shared understanding of the essential boundaries of the small world. The library works as long as both librarians and library users share a set of norms of that what a library is and how it works, and conform to a set of compatible practices that make the soft system work in practice. In this sense the arguments on the need to articulate a common societal understanding of what a library are not only a question of policies and understanding of common goals, but of the enactment and articulation of a coherent system of practices and structures embedded in the activities of librarians and library users in the context of the library-system. The central outcome of the deterioration of the perceived relevance and common understanding of library institutions on an individual level is that the library-system as a whole becomes less effective for its remaining users. At the same time, however, the systemic perspective underlines the necessity of evolutionary change and an active maintenance of a common frame of reference. Libraries and librarianship can be innovative and revolutionary, but in order to function as a 'library', the changes have to pertain to the entire system at the same time, not only to some of its components.

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