

Borrowing and Lending Tools

Skrifter från Valfrid, 64

Borrowing and Lending Tools

The Materiality of X-Lending Libraries

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2018



THE SWEDISH SCHOOL OF LIBRARY
AND INFORMATION SCIENCE
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Borrowing and Lending Tools: The Materiality of X-Lending Libraries
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Thesis for the degree of Doctor of Philosophy at the Swedish school of
library and information science, University of Borås

Cover photo: Suss Wilén
Printed in Sweden by Stema
Series: Skrifter från Valfrid, no. 64

ISBN 978-91-981653-6-4 (print)
ISBN 978-91-981653-7-1 (digital)
ISSN 1103-6990

Available at <http://urn.kb.se/resolve?urn=urn:nbn:se:hb:diva-13871>

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To Lars-Åke Åberg for encouraging me to write

ABSTRACT

This thesis investigates lending and borrowing of materials in the setting of the local, physical library. The research problem area is found in the broadening of what types of materials libraries offer, and contradictions in current notions of what libraries are supposed to provide. The concept of *x-lending library* is introduced for abstracting the library as a method for providing expanding varieties of materials, *x*, and the practice of naming the services accordingly. The aim of this thesis is to provide a deepened understanding of *x-lending libraries* through a case study of tool lending libraries.

Four papers comprise the body of the work. A theoretical paper reviews the problematic downplay of physical collections in contemporary research on the social and societal role of libraries. A renewed focus on local collections from a community perspective is proposed. Three empirical papers investigate tool lending libraries from different perspectives: why patrons borrow tools from the library, the role of tool lending libraries in the communities they serve from the perspective of staff and managers, and patrons' perspective on the tool lending library itself.

Results indicate that patrons borrow tools to solve immediate and practical needs: they relate their tool borrowing mainly to social and economic impact and value on a local level. Staff and managers share much the same perspective: the tool lending library is motivated by its value and usefulness to the specific community where it is at. Further, the tool lending library was observed to be a socially intense place where patrons and staff actively engaged with each other and materials. Participants experience the tool lending library as more social than other libraries. Patrons rely on staff to advise which tools to borrow and how to use them. Staff inquire into the needs of patrons to an extent that might not be suitable in other library settings. The materiality of the library seemingly plays an important role; what is borrowed and lent matters. Lending tools require different types of skills and knowledge than lending books, and also a different type of interaction in some regards.

The thesis concludes with a discussion on its theoretical contributions by, first, suggesting a number of materialities that seemingly play into understanding *x-lending libraries*. Second, a case is made for approaching the materials of *x-lending libraries* as part of documentary practices rather than as documents. Third, the theoretical concept of *library community value chains* is proposed as a scalable, analytical tool for understanding how library borrowing and lending can be related to value in the community context.

Keywords: borrowing, community, documentary practices, lending, materiality, tool lending libraries, value, *x-lending libraries*

SVENSK SAMMANFATTNING

Syftet med denna avhandling är att ge en fördjupad förståelse av bibliotek som utlåningstjänster genom fallstudie av verktygsbibliotek. Biblioteksforskningen har hittills visat relativt lite intresse för studier av lånande i sig, och vad det egentligen innebär att samhällen erbjuder människor möjlighet att låna saker systematiskt och oftast utan direkt kostnad. Området aktualiseras av att allt fler bibliotek nu lånar ut material som tidigare inte har associerats med bibliotek, såsom leksaker, kläder, frön och verktyg. Denna utveckling i sig tydliggör en intressant dikotomi i hur bibliotek ofta ramas in, med avseende på de resurser de erbjuder sina besökare. Å ena sidan förankras idén om bibliotek i böcker och litteratur. Boken återfinns till och med i själva ordet för bibliotek på flera språk inklusive svenska och engelska. Utvidgat innebär detta biblioteksbegrepp också att idéer om kunskap, information, dokument och kultur ligger nära. Å andra sidan ses biblioteket samtidigt som ett sätt att tillhandahålla resurser. Biblioteket är en beprövad, väletablerad modell för att stödja människor att få tillgång till relevanta resurser för deras behov. Avhandlingen fokuseras på att utforska detta andra förhållningssätt: biblioteket som modell för att tillhandahålla resurser.

Mer specifikt avgränsas problemområdet till tillhandahållandet av fysiska material genom lånande. Digitala bibliotek, samt tillhandahållande av sådana resurser som inte är direkt kopplade till lånande och utlån, faller alltså utanför avhandlingens ramar. En viktig precisering här är avhandlingens fokus på både lånande och utlånande. Avsikten är att utforska problemområdet ur både besökarnas perspektiv (lånande) och bibliotekens perspektiv (utlånande). Vidare, för att tydliggöra projektets fokus på bibliotek som ett sätt att tillhandahålla en växande variation av material genom utlån, etableras begreppet *x-lånebibliotek* (x-lending libraries). Begreppet betonar en avgörande utgångspunkt för det fortsatta avhandlingsarbetet: biblioteket som generisk modell för att tillhandahålla x som är utbytbar mot olika material, men där detta material x samtidigt ingår i hur biblioteket kategoriseras. Detta illustreras av hur exempelvis verktygsbibliotek, direktöversatt verktygs*låne*bibliotek (tool lending library), ofta benämns. Materialet x sätts alltså i namnet och namnet markerar även att det är en tjänst som lånar ut dito.

De forskningsfrågor som formuleras för att approachera problemområdet syftar till att ta reda på: vad karaktäriserar verktygsbibliotek och det som lånas ut där, och hur detta skiljer sig från andra bibliotek; vilka värden som tillskrivs verktygsbibliotek som offentliga tjänster i sina närsamhällen (communityn); vilka teoretiska dimensioner som framkommer som relevanta för att förstå lånande och utlånande av olika material på olika x-lånebibliotek. Dessa frågor besvaras genom en analys som i sin tur grundas på slutsatserna från de fyra artiklar som ingår i avhandlingen.

Den första artikeln presenterar en teoretisk diskussion som sammanför begreppen samling, plats och community. Genom att kontextualisera samlingar som lokalt situerade i communityn, läggs en grund för att förstå biblioteksmaterial ur ett samhälleligt perspektiv. I den andra artikeln introduceras och diskuteras den första delen av avhandlingens empiri: intervjuer med låntagare vid ett amerikanskt verktygsbibliotek. För att möjliggöra en rikare fallstudie gjordes även observationer på biblioteket. Materialet syftar till att undersöka varför människor i ett community lånar verktyg från ett verktygsbibliotek. Här ges en del av den empiri som handlar om låntagarperspektivet, alltså lånandet. Det omvända perspektivet, utlånande, undersöks i den tredje artikeln. I denna intervjuas personal och ansvariga från tre olika verktygsbibliotek för att ge fördjupad kunskap om varför ett bibliotek lånar ut verktyg i och till sitt community. I den fjärde och sista artikeln återgår perspektivet till låntagarna. De intervjuas här om sina erfarenheter av och syn på verktygsbiblioteket i sig, samt på de personer de möter där.

De sammantagna resultaten från artiklarna visar att materiella aspekter spelar stor roll i deltagarnas erfarenhet av och syn på bibliotek och lånande. De ser verktygsbiblioteket som unikt i jämförelse med andra bibliotek. De material som lånas ut kräver en annan typ av kunskap och kompetens hos personalen, och det innebär också en annan typ av interaktion mellan låntagare och utlåningspersonal. Deltagarna ser verktygsbiblioteket som att det medför en mer socialt intensiv plats än andra bibliotek enligt deras erfarenhet. Det faktum att det är verktyg och inte böcker som lånas ut, innebär exempelvis att utlåningspersonalen både kan och bör gå längre i att stödja låntagarna i korrekt användning av lånat material. Vidare ser deltagarna verktygsbiblioteket och lånandet därifrån främst som något av lokal och omedelbar betydelse. De värden som tjänsten och dess användande kopplas till, handlar för deltagarna om vad det direkt ger dem och deras community. Dessa värden möjliggör och bidrar till utveckling, lärande och sysselsättning, lokalt.

Ovanstående resultat lyfts därpå till en större teoretisk diskussion. Materiella dimensioner, *materialiteter*, som tycks ha betydelse för lån och utlån på x-lånebibliotek diskuteras inledningsvis. Därefter kopplas x-lånebiblioteks material till teoretiska perspektiv på dokument. Detta landar i en argumentation för att dokumentära praktiker tycks som en mer fruktbar ingång än att söka definitioner av dokument, när det gäller att förstå vad som erbjuds på bibliotek ur avhandlingens breddade perspektiv på lånebibliotek. Slutligen föreslås det teoretiska konceptet *värdekedjor i bibliotekscommunity* som kan användas för att närma sig den vidare kontexten kring ett lånebibliotek, med fokus på hur värden kan ses som sammankopplade, cirkulära och avgränsade av communityt. Värdekedjan utgör ett skalbart, teoretiskt koncept som kan användas för att diskutera hur bibliotekstjänster kan förstås

som relaterade till olika aspekter av ett communitys tillstånd. Sådana aspekter kan omfatta exempelvis grannskapets underhåll (eng. upkeep) och invånarnas välmående, och i värdekedjan kopplas dessa i sin tur tillbaka till vilket stöd biblioteket har i communityt.

Bristen på adekvata teoretiska ramverk och koncept i befintlig forskning har spelat en avgörande roll för avhandlingens problemformulering och motivering. Ett av avhandlingens primära bidrag till framtida forskning, och till utveckling av det biblioteks- och informationsvetenskapliga ämnet, är därför de teoretiska begrepp och koncept som tagits fram i arbetet. För att kunna fastställa avhandlingens syfte och frågeställningar i dess slutliga form som de ges här, introducerades tre koncept. De bidrar alla till hur bibliotek kan kategoriseras och kontextualiseras såsom gjorts i detta arbete. Begreppet *communitybibliotek* används för att referera till bibliotek som verkar på lokal nivå och öppet till allmänheten, oavsett institutionell tillhörighet och driftsform. Detta begrepp i sin tur nödvändiggör en precisering av community. Därför används *bibliotekscommunity* som ett samlingsbegrepp för att samtidigt tala om biblioteks sociogeografiska, materiella kontext, och biblioteket som sociogeografisk, materiell kontext. Bibliotekscommunityt är alltså både där bibliotek är, och en konsekvens av biblioteket. Inledningsvis introducerades även x-lånebibliotek. Konceptet erbjuder en lösning på problematiken med att urskilja olika låneverksamheter utan att basera distinktionen på svårpreciserade dikotomier såsom gammal–ny, traditionell–icke-traditionell och kulturell–praktisk. Studien som sedan följer i avhandlingen, landar i ett förslag på hur de komplexa relationerna mellan x-lånebibliotek, material och community kan förstås på lokal nivå ur ett värdeperspektiv: som *värdekedjor i bibliotekscommunity*. Dessa fyra teoretiska begrepp, tillsammans med avhandlingens empiriska resultat inom ett relativt obeforskat område, kan förhoppningsvis bidra till framtida forskning inom ett flertal områden. Uppslag på ämnen för potentiell fortsatt forskning inkluderar: fortsatta studier av fler x-lånebibliotek, inklusive bokbibliotek, för vidareutveckling av den komparativt grundade förståelsen av bibliotek som utlåningstjänster; hur katalogisering och liknande väletablerade koncept gällande kunskapsorganisation appliceras på det allt mer varierade material som tillhandahålls av bibliotek; politiska perspektiv på vad ett samhälle erbjuder medborgarna (och inte) i form av materiella lånetjänster; x-lånebibliotekens roll i hållbar utveckling, inklusive komplexa socio-ekonomiska frågor såsom inverkan på sysselsättning och näringsliv lokalt.

ACKNOWLEDGMENTS

Thank yous are in order, to all without whom this work would have been a disaster or not happened at all. Thank you,

Joacim Hansson, who opened my eyes to a critical perspective on, well, everything, at an early stage. Linnéa Lindsköld, best office roommate, curator of breeze and *bildung*. Mats Dolathkhah for reading paper drafts and taking feverish New journalism-style seminar notes. Amira Sofie Sandin for opulent breakfast reading sessions extending into lunch. Elias Said, non-academic voluntarily forcing his way through my papers out of sheer curiosity. Colleagues for many rewarding discussions and helpful advice: Ola Pilerot, Maria Lindh, Catarina Eriksson, and in particular fellow library researcher Katarina Michnik who helped with all sorts of practical stuff towards the end, including providing the chainsaw for the cover photo. And for the awesome cover photo, Suss Wilén behind the camera, and Margareta Lundberg Rodin, model.

Jan Nolin and Jenny Johannisson, my intelligent, cheerful, and patient supervisors. If you read this it seems we made it. A special thank you Lars Höglund who supervised the project during the first years and who prodded me to apply for the PhD program to begin with. A great reader and commentator. Also a walking archive of Scandinavian LIS history; clear your schedule if you get him started. Lars's valiant and surely frustrating quest to get something of value out of this student was stoutly squired by co-supervisor Helena Francke.

Nanna Kann-Rasmussen for sharp, challenging, and constructive final-seminar commentary. Roger Blomgren and Anders Frenander, internal examiners (grönläsare), for their fair and helpful appraisal. Anonymous peer reviewers for well-founded feedback greatly improving the papers.

Michael Buckland for mentioning tool lending libraries during a lecture in Uppsala, 2008, first time I heard about them. I had just started my studies and decided on the spot to change the thesis subject. Suddenly I had a topic that genuinely fascinated me instead of a thesis plan written just to get into grad school.

Byttorp branch and school library where I discovered the joy of library materials and the satisfaction of borrowing them home.

Hanna, Oda, and Albus. Love and fun of my life.

Patrick, baby brother, for sharing the road to the mysterious land of Middle-Class.

Dad, brooding Finn, connoisseur of dirty jokes, island of calm.

And of course my biggest supporter: mom! Non-compromist and uncredited inventor of power walking. I owe you everything.

PART I

1. INTRODUCTION

Library research, almost in a paradigmatic sense, treats libraries as institutions. Accordingly, libraries are distinguished, characterized, and defined by organizational belonging, catchment area, delegated responsibilities, infrastructure, and so on. Could it be relevant to instead approach libraries as distinguished by the materiality of that which is provided on loan? We library researchers also seem to take for granted that the institutions studied provide texts. Would we understand the library as a different phenomenon if it provided something other than texts?

This thesis builds on a research project stemming from such fundamental questions of library research. Libraries come in many forms, are called many things, provide a multitude of services, and offer a wide range of material resources. This thesis touches upon all of these aspects of libraries by primarily focusing on the last one: the materials provided, specifically the collections of items being borrowed and lent. The longstanding library model for providing items on loan to patrons is increasingly put to work to handle more things than just the materials conventionally associated with libraries, most typically represented by the book. One prime example of this is the tool lending library, the particular phenomenon studied in this thesis. Of course, libraries have long lent out more than just books. However, most of these materials could still be categorized as publications, whether they are games, music, film, or magazines. They are even physically similar to books; almost always rectangular and solid, in the shape of blocks or sheets. Tools clearly break this rhythm. As a study object, substituting tools for books may help research to investigate borrowing as an everyday patron activity, and lending as a general service provided by an established library institution. It lays the foundation for discussing what value borrowing and lending offer to the library's patrons, the community, and possibly to the library itself.

1.1 Categorizing and Contextualizing Libraries

This thesis focuses on libraries catering openly to the public. However, demarcating them as *public libraries* is insufficient since the study also considers independent organizations outside of the public library system that offer library services that also cater to the public. Many tool lending libraries, for

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instance, are run as various types of non-profit organizations, depend on voluntary workers, and so on. At the same time they may model their service after public libraries to varying extent.

Categorizing and accordingly naming libraries is not trivial, and this many-faceted issue is discussed in the following. In a Swedish context, Eriksson and Zetterlund (2008) have proposed six categories for how libraries are termed or designated in the library geography (Fig. 1).

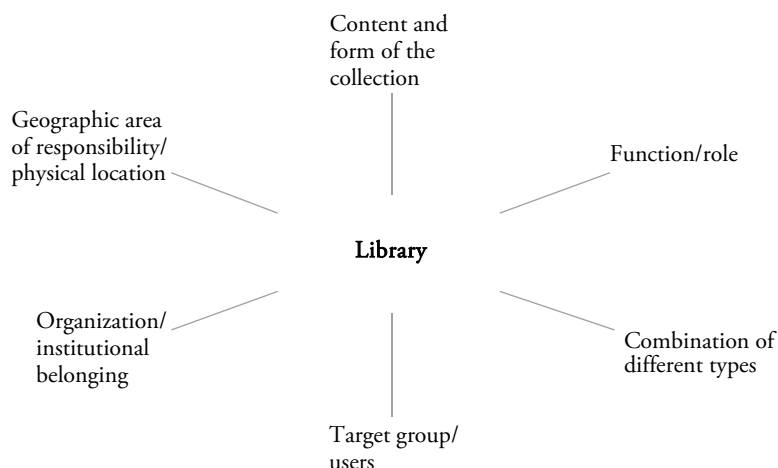


Figure 1: Schematic description of categories of designations for different forms/types of library organizations in Sweden. From Eriksson & Zetterlund, 2008, p.5. With permission.

The six categories each cover a number of different library designations. Most of these will arguably be relevant to other national contexts too, and have been the subject of library research to various extent. They are briefly overviewed here with examples of the types of designations that are relevant to defining libraries in this thesis.

Content and form of the collection covers library designations that stem from what a library's collection consists of, and/or how it is presented. Examples include special libraries, medical libraries, digital libraries, and manuscript libraries. Special libraries typically provide specialized and limited collections, specialized services, serve a limited clientele, and are part of a larger library (Shumaker, 2010). These include corporate libraries, medical libraries, law libraries, and government libraries. Subject-specific academic libraries are also often referred to as special libraries. Other, more restrictive definitions of special libraries use the term exclusively for libraries within business, industry, and government parent organizations, i.e., excluding any type of academic library (Semertzaki, 2011).

Function/role. Examples in this category include reference libraries, central libraries, lending libraries, and study libraries. The designation of a library based on its function as a *lending* library is an underdeveloped topic of research. Where lending libraries are mentioned in academic text it seems to mainly be in older works (e.g., Urquhart, 1957; Wood & Bower, 1970), and/or in works dealing with historical libraries (e.g., Cole, 1974; Allan, 2008). This implies that the concept of lending libraries has not been particularly pertinent for discussing what libraries currently are and do. Insofar as reference to lending libraries intends a focus on their lending function, it is seemingly in order to distinguish them from libraries that do not lend from their collections, such as reference libraries. A reference library is usually a part of a library, library collection, or library system where either users¹ themselves or reference librarians access materials such as encyclopedias and standard histories for reference in the library. Reference libraries are in decline however along with the concept reference library, though the term reference as such prevails (Duckett, 2004).

Target group/users. Includes some of the most common library designations such as public libraries, which are clearly well-documented from numerous perspectives, and which will be discussed and referenced at various points in this thesis. Also includes children's libraries and patient libraries.

Organization/institutional belonging. This category also includes common designations, e.g., school libraries, academic libraries, and hospital libraries. These designations are not particularly relevant to the thesis.

Geographic area of responsibility or physical location. Includes national libraries, county libraries, main/city libraries, and library branches. Library branches are often held forth as important social hubs, in particular in smaller or rural communities (e.g., Svendsen, 2013). Members of a community may sometimes become directly involved in the work with their library branch, and the branch can be led or managed by community members to varying degree. For an example of a project to involve community members in developing programming and services in a rural area, see Somers and Williment (2011).

Combination of different types. Includes hybrid libraries, a popular concept in the second half of the 1990s for the increasing merging of digital library

¹ While the terms *user* and *patron* are largely overlapping in the context of libraries, they are not arbitrarily mixed in this thesis. Patron is the preferred term throughout, as its connotations arguably are more open, carrying less theory-luggage. The term *user* is employed only like here, in reference to its common or established applications.

elements with other non-digital aspects of the library (Oppenheim & Smithson, 1999). The category also covers joint-use libraries, i.e., arrangements between two or more partners to provide library service to two or more target groups (McNicol, 2014). Examples of such joint arrangements are public–school and health–university libraries. Some of these combinations of target groups and institutional affiliations will have their own library designations that are so well-established that they might not typically be recognized as joint-use libraries. Instead they will fall into one of the other categories here as a freestanding, coherent library designation. A typical example is the libraries at university hospitals, which will be joint by definition to be able to perform their function. More obvious joint-use libraries are those that have been organized as a tailored solution to some local need, for instance the combined branch and school library in a smaller community.

The literature internationally on many of these library categories indicate that they should be valid for more settings than the narrow Swedish context – though of course the prevalence and status of specific designations in specific regions may vary. In this work, it serves a useful starting point for showing that any of the established individual institutional library designations become awkward and insufficient for satisfactorily delineating libraries as they are discussed here. A conception of public lending services that lend out tools and other less established types of library materials, but also well-established materials such as books, would relate to at least four of Eriksson and Zetterlund's (2008) categories.

First, a concept useful here would need to highlight the *function* of the library as a lending library. The library is a place and service for people to acquire different types of materials, and the variety of material types on offer is apparently increasing. Therefore it seems relevant to inquire into the library's role as a lending library in the lives of those who utilize it. Second, the libraries discussed in this thesis do include the type of library directed at a general *target group of users*, i.e., the public. Thus, the type of public library often institutionally embedded in a municipality or other public governmental body needs to be included in the concept. However, it also includes any library-type organization directed at a public target group, i.e., one that is set up and run as a library, and called a library, regardless of institutional belonging. Therefore, the term public library is avoided in the thesis unless in referral to that specific type of library organization. The libraries in focus here will be defined by their being open to the public regardless of where their mandate to cater to that group of patrons stems from. For the individual library, that public target group will in effect will be loosely demarcated with regards to the library's *geographic location*. The geographic location is the third connection to the categories above; a specific place such as a neighborhood

that the library primarily serves. Fourth and last, the conception should take into account how different libraries will be individually stocked to some degree, and that collections of materials such as tools are relatively rare and only available in some locations. Assuming that the specific local collection is not completely arbitrary it might instead be connected to the other three categories – the library’s role, target group, and location. Therefore, the *content and form of the collection* should also be incorporated into the conception.

To reflect that such different characterizations of libraries are regarded here as interconnected and local, the libraries explored in this thesis are hereafter referred to as *community libraries*. They are approached as specific libraries, in specific places, servicing a specific patronage of community members with a specific collection, by the specific staff members. The resulting whole, which includes the library, is the *library community*.

1.1.1 Community libraries / library community

The location of a library is not only physically geographic; it will also be social and societal. Approaching libraries as public services located in communities, combines both people and place. The concept emphasizes their specific socio-geographical contexts and being open to the public. Further, the concept is independent of institutional definition. Thus, instead of discerning libraries by their formal institutional belonging (public, independent non-profit, and so on), referring to them as community libraries recognizes a combination of physical location and target group.

The concept of community libraries is not new as such; it has been used to refer to specific, local services. There are numerous examples of libraries that use community library in their name, such as Sherman and Ruth Weiss Community Library and Painswick Community Library. The concept is sometimes used to refer to branches in the public library system, and sometimes to other independent libraries. The concept has also been used to distinguish small libraries outside the public library system, *from* public libraries, e.g., cooperation-run libraries as a community-specific solution in rural areas lacking a conventional library (Mahwasane & Mudzielwana, 2016). In some instances, such as the Community Library in Kenosha County, Wisconsin, the service started as a small volunteer-run operation to later formally join the public library system (“About us - Community Library,” n.d.). In the United Kingdom, the trend recently has been for the opposite: many smaller public libraries have been handed over by local councils to instead be partly or fully community managed (Goulding, 2013). Currently, at least 530 such libraries are counted (“List of UK volunteer libraries,” n.d.). The institutional flexibility and spectrum of the concept of community libraries suit the purposes of this thesis well. While it is

mainly understood here as referring to local libraries as belonging to and constituting library community (see below), the interpretation also includes community managed libraries alongside other library types. Further, the context and purpose here is to use it as a theoretical concept for investigation in library research. Previously, as in the examples above, community library has mostly been used as a practical, administrative, and political concept referred to in media, policymaking, and the library profession.

Community itself combines in one concept two distinct but related understandings (Amit, 2002), both which are relevant here. First, it describes a local socio-geographical place that would still be there even if the library was not. This is the *local community*, which is where the library is placed and largely synonymous with the neighborhood. While the library certainly becomes part of what the community is, the community's existence is not dependent on the library. The community might be different without the library but it would still be there. In the second understanding, community does depend on library. Here, library becomes a fixing point for understanding the material and social circumstances at a given place and time. It is not the same however as proposing that the community library alone creates the community, or that the community somehow flows from the library. This *library community* is dependent on several different social, material, and geographical circumstances (Fig. 2).

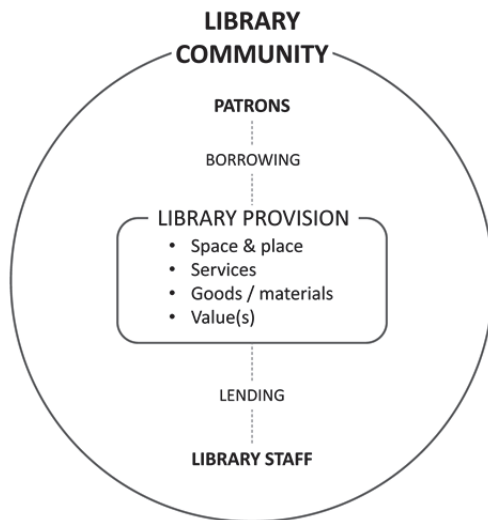


Figure 2. Structure of material concepts of library community that are studied

Thus, unlike local community, the library community is a more theoretical concept for applications in library research. This is aligned with interpretations of community as an ideal type where it is “not a description of reality

but an analytical tool” (Blackshaw, 2010, p. 10). Understanding community libraries in this structure provides an alternative to the categories of library designations presented earlier in Figure 1. A conceptualization of libraries based on the material community they constitute, complements formal and institutional categorizations by incorporating several interdependent circumstances of place, people, and goods. Accordingly, the conceptual structure visualized above is not a description of how libraries actually work in their communities, or of the specific communities created around libraries; it is an illustration of how the concepts can be structured for analytical purposes. Community provides a platform for study that centers on what the library provides: the material and social space and place of the library, certain services, goods and materials, and value and values. These are exchanged in and with the community primarily through the borrowing–lending dynamic. Of course, not everything provided by a library, such as its space, is available for borrowing or by lending it out. Still, the space and place of the library are approached as integral to the materiality of library services, including borrowing and lending – the particular focus of this thesis. Certainly, from a sharing perspective, it would be possible to view space, library materials, and library services as all being shared by the public. Here, however, borrowing and lending are at the forefront from an analytical standpoint.

The starting-point of the thesis is not any and all resources shared through libraries, but specifically those that are borrowed and lent. Accordingly, a different focus is achieved than would have been with a perspective of sharing. Focusing on borrowing and lending also helps distinguish the ambitions of this research project from the contemporary sharing *movement*, and from the topic of *sharing economy*. Discussing library services against the backdrop of the seemingly burgeoning sharing economy is certainly feasible and relevant in and of itself, and it is indeed being done (Ameli, 2017; Brachya & Collins, 2016; Ozanne & Ballantine, 2010; Schor, 2016). However, for this project, it would limit the openness of the exploration of community libraries towards certain predetermined interpretations. Borrowing and lending in the library context, including tool lending libraries, predate current discussions about sharing. Therefore it makes sense to ground this investigation, which is intended as a form of basic research into an understudied phenomenon, in the phenomenon itself rather than in any specific leading-edge perspectives however befitting they may seem at the time.

As shown in this section, a community library perspective entails several material dimensions. The library constitutes a material place in the community and is part of its geography and architecture. Items in the library collection are part of the collectively owned community material, and the collection as a whole contributes to the material structuring of the community’s resources.

Further, reference to library community members includes patrons, library staff, and managers. Accordingly, borrowing and lending are social activities in community members' material practices. The material practices discussed in this thesis revolve around items being borrowed and lent, provided by libraries, in the context of community, and involving community members. In the following two sections, further consideration is given to libraries specifically understood as lending services of different materials.

1.1.2 X-lending libraries

Tool lending libraries are just one example from an increasing number of community libraries, both public libraries and independent, which provide a variety of items. Prominent examples apart from tools include toys, clothes, and sports equipment. It could well be conceived that services unrelated to municipal library systems, and that lend types of items that are historically uncommon in libraries, would chose to brand themselves as something else than libraries, to reinvent their particular lending services into new, unique concepts. This however is seldom the case. The common approach seems to be to frame newly established lending services as libraries, regardless of their institutional belonging. Granted, there are examples of non-library organizations, bookstores for instance, offering borrowing-based or low-cost elements such as monthly book clubs and reading circles without calling themselves libraries. However, when lending is the main, defining service, the preferred strategy seems to be to call it a library and model it as such rather than repackaging and brand it as something else.

The very word 'library' seems central to labeling or even branding these services; the specific name may be subject to some creative wordplay, including using '-brary' as a suffix to create contractions such as techbrary and toybrary. Presumably, this practice is intended to convey an image of a particular operational model, by way of familiarity. There is an apparent duality at play here, which will be referred to in the thesis as two different modes of talking about libraries. They both pertain to how libraries are defined with regards to what is offered from their collections and why. On the one hand, as shown by previous research, libraries are expected to be about reading, literature, literacy, and so on (Michnik, 2018b). The book is in the very name of libraries, what many people associate them with, and what de facto dominates most library collections. This could be called the *book-centric mode* of talking about libraries, often emphasized in media and popular debate (e.g., Gaiman, 2013; Svensson, 2018). At the same time, the library is also a model or method of providing material resources to its patrons, where literature is only one among other possible content types to be delivered. The library becomes a template service infrastructure. This could be called the *provision-centric mode* of talking about libraries. Whether

such an infrastructure is generic, or if it is interdependent on the type of content it is employed to deal with, is a discussion that research such as this thesis can contribute to.

In this thesis, the concept *x-lending library* is introduced and developed as a consequence of the provision-centric perspective; to include the phenomenon of services that lend out materials which might not normally be associated with libraries, and that adopt a library model to do so. The argument made here is not that the standalone concept of library is insufficient and would be improved by adding an x to the name. However, it calls to attention that the library as a model, per the provision-centric mode, is employed to borrow and lend a number of materials, *x* (Fig. 3).

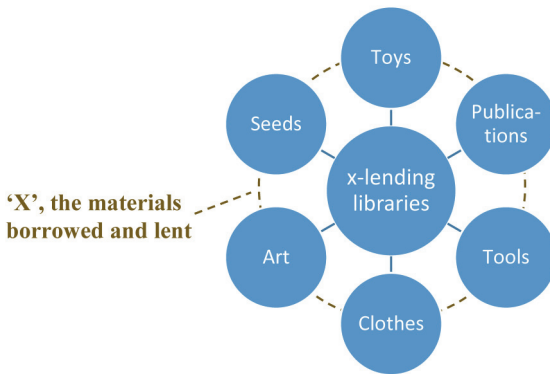


Figure 3. The library as a generic model for providing *x* by borrowing and lending, exemplified with common material types

This includes, but is not limited to, publications such as books. This way of representing what is lent at libraries might seem trivial but emphasizes the thesis's focus on the library as a way of providing materials, one which does not give precedence to one particular type of content, such as books. It is symmetrically arranged instead around the library model of borrowing and lending. Thus, on the one hand we find at the center a generic model of provision: the skeleton infrastructure of a basic library with its many well-established implementations such as a shelving system, catalogues, desk staff, loan terms, reservations, routines for returns, principles of patron privacy, and so forth. On the other hand, this basic infrastructure is employed for markedly different materials to be borrowed and lent. Accordingly, while most libraries share basic and recognizable traits, they also differ materially, and it is not clear what import or requirements these differences in materiality have. Further, the concept circumvents the issue of how to discern different libraries for analytical purposes. Instead of comparing tool lending libraries to *traditional* or *conventional* libraries, they can be compared to

other specific material services such as book lending, or what is referred to here as publication lending. Of interest in this thesis are such library services devoted entirely to a particular type of material and identifying themselves as such. (See 2.2 for a brief discussion on the concept of traditional libraries.)

The categorization of x-lending libraries is distinguished from special libraries as outlined earlier, which also covers a range of different library types but with a different focus. As a categorization of libraries, special libraries do not attach readily to x-lending libraries and vice versa. Special libraries do not necessarily stock special item *types* but will most often rely on the same generic formats as non-specialized, publication lending libraries, emphasizing being an information or knowledge resource. However, they are almost always catering to a limited patronage and not to a general public, unlike x-lending libraries which are categorizations of public community libraries. Special libraries, catering to closed communities, therefore do not fit into the publication lending category of x-lending libraries. Hence, they represent different categorizations altogether.

1.1.3 Publication lending libraries

The term publication is used in this thesis as a device to delineate particular types of library materials, as distinct from others. In effect, *publication lending library* largely refers to those libraries that in vernacular might be called ‘book libraries,’ which would be an overly narrow and restrictive definition to use here. Instead, a lowest common denominator is sought here to suggest what is lent at those libraries as compared to other conceivable lending materials discussed in this thesis. As the type of library discussed in this section is what dominates the world’s library systems, as well as library discourse and research, it will be the inevitable reference and benchmark when investigating any library type. Therefore, somewhat further clarity is warranted in what precisely we are talking about when comparing these different libraries based on the material content offered.

As suggested by the name, the simplest definition of a publication would be *that which has been published*, i.e., the product of the act of publication. The definition used here largely mirrors S.175 (1) of the UK Copyright, Designs and Patents Act 1988 (CDPA):

“publication”, in relation to a work—

- (a) means the issue of copies to the public, and
- (b) includes, in the case of a literary, dramatic, musical or artistic work, making it available to the public by means of an electronic retrieval system

As also defined in the CDPA, S.175 (4), representations of works such as performances and exhibitions are not considered publication. Publications

are the types of materials found in libraries often dominated by, but not restricted to, books. Publication is used here as a collective term for entities that in common usage are routinely described with properties such as author, publisher, and title. Depending on theoretical point of view, anything could of course be a publication. Most would probably agree that a newspaper article has an author, but it takes a more dedicated scholarly effort to declare that a wheelbarrow equally is authored. To propose an approximate rule of thumb: publications are those where individual items can be comfortably referred to as copies. Compare 'Five copies of this game/movie/book' and 'Five copies of this tool/jacket/toy,' where the latter would be awkward. Further, the publication-oriented terminology commonly includes specifications other than copy, such as issue, edition, release, and print/printing/reprint.

The above definitions are also indicative of how publications differ from *documents*. Document is a broader, more theoretical, and more inclusive category, that also involves social dimensions. As discussed later (3.3 and 7.2), a document is defined somehow by its context, and the potential and intention ascribed to it, rather than by observable or internal properties. The publication on the other hand is readily identifiable through observable properties. Consider a vandalized copy of Tove Jansson's *Moominsummer Madness* where the cover has been ripped off, all bibliographic data has been erased, and parts of the story been changed in ink edits. From a document point of view, it will have evolved; it will still be as much a document as it was before, but of something slightly different. The transformed document now also represents the acts of the industrious vandal, in dialogue with the original form of the book. From a publication point of view, however, it is ruined; perhaps a piece of art (or forensic evidence), but inadequate to be put back on the library shelf as a proper copy of Tove Jansson's *Moominsummer Madness*.

Yet another possible characterization is that a publication could potentially be – if it not already is – digitized, with regards to how it is packaged, stored, retrieved, distributed, and used. Publications commonly offered by libraries include books, magazines and journals, film, music, games, sheet music, and maps. These in turn may be presented in a number of formats, such as print, microform, digital disc, and digital online. Thus, when publication lending library is used in this thesis, it is in reference to libraries (or distinct parts of libraries²) where the collection is dedicated to books and other publications. In the larger context of x-lending libraries the publication

² As an example, the same library location, such as a branch of a public library, may offer separate facilities and services for tool lending and for publication lending, respectively.

lending library then can be compared and contrasted to other x-lending libraries.

1.2 Borrowing and Lending Materials

Libraries are known for lending out books, and patrons go to libraries to borrow them. Libraries offer other materials than books to borrow, too, and other services than lending. This thesis takes its starting point in the former: the proliferation of new materials not traditionally found in or associated with libraries but that now increasingly are, such as clothes and tools. The thesis raises the question of what import the specific materials that are borrowed and lent at libraries have. To what extent are libraries dependent on their materials for defining what they are and do, and in what regards are libraries generic services that can be employed for offering an expanding array of materials? These issues are not uncontroversial, and they do resonate outside academia. As an example, the political editor at Sweden's largest newspaper recently argued in an editorial devoted to public libraries that the decreasing focus on books in favor of new services such as tool lending poses an identity problem for libraries (Svensson, 2018). The present text, detailed in these chapters and accompanying four papers, explores those relations between libraries doing something new (lending *tools*) and yet doing it in the same old way (*lending* to the public).

To position the issue of library borrowing and lending in a wider context: there are many ways for people to acquire the numerous materials needed or desired in their daily lives. A person may buy, find, craft, be gifted, rent, inherit, earn, win, or steal that which they want. Regardless of how it was come by, it is now in a new owner's possession. Objects may also be shared by more than one person. Friends pool their money to buy a tent, collectively owned. A succession of drivers rent the same car, one visiting town for business, another taking their family to the water park, a third for a weekend of home furnishing and trips to the thrift store. A neighbor borrows a bow saw to cut curtain rods for their kids' bedroom. In the same home, other borrowed items might be found too, and not just from neighbors. This particular family is in the habit of visiting their neighborhood library where they are able to borrow a variety of material necessities both for everyday life and special occasions. This wider context, the human structures of exchange and sharing of materials in which libraries are here included, is more familiar to other disciplines than library research. The seminal anthropological work *The World of Goods* (Douglas & Isherwood, 1979/1996) established the topic of material consumption as socially shared already four decades ago. Fiske (1991/1993) proposed that all social scientists study one or more of only four basic models of social relations, of which *communal sharing* is one. Cheal (1988) examined the economy of gift-giving as a *moral economy*, "a

system of transactions which are defined as socially desirable” (p. 15), as contrasted to the political economy of capitalism. Social and psychological facets of museum collections, collecting, and museums’ relationships to the public through their material collections, have also been studied (Pearce, 2017). The more closely related phenomenon of materials that are borrowed, but outside the library setting, has also been studied from a social perspective (Jenkins, Molesworth, & Scullion, 2014). Returning to libraries, they have long been the key institution for providing objects for shared usage, though from a limited pool of materials: books, magazines, recordings of music and film, and other categories of publications familiar in the library setting. With this thesis, a link is provided from library research to such other areas of social science, including but not limited to anthropology and sociology.

Lending is arguably one of the most – if not the most – well-known and defining library services. Historically, what have been lent out are primarily books and other types of publications. Books are also what the public associate libraries with (Michnik, 2018b; Scott, 2011). Interestingly, from a material perspective, examples of *bookless libraries* lacking a physical on-site collection have begun appearing in recent years (Riley, 2014), primarily developed in the context of academic libraries, though bookless public and school libraries exist too. The epithet bookless is potentially misleading: these libraries do provide access to books, only digitally. The main difference from a *digital library* then would be the physical facilities offered by the bookless library. So far they are rather few however, and reasonably the image of a library is still that it has an in-house collection to borrow books from. Use of the epithet ‘bookless’ itself suggests this; by default a library has books on its shelves, unless it is bookless. It seems significant that any media debates involving libraries will also often be dominated by discourses centered on books, at least in the Swedish context, as noted by Hedemark (2009). However, while it may be the most common type of item stocked and lent at libraries, it is certainly not the only one – a premise for this research project. Other types of publications such as games and music have been lent out since at least the second half of the 20th century. And again, what is happening in more recent years, is a notable development of clearly stepping outside this pattern by lending out materials that do not readily fit the mold of a publication. This thesis studies the specific type of libraries where community members can borrow tools, i.e., tool lending libraries. Tools may include power tools, hand tools, gardening tools, and similar equipment, used for applications such as home repair, gardening, construction work, maintenance, and hobby projects.

The x-lending libraries and their expanding array of materials to borrow and lend, illustrate the duality introduced earlier: libraries doing something

new and doing it the same old way. It is a development that can be seen both as a deviation from what has been hitherto offered by libraries, and as being in line with the type of work long performed by libraries. It highlights a number of policy-level issues that might be summarized as: *what resources are reasonable to provide as public resources, and consequently, which public service(s) should provide them?* It is neither the purpose nor the place of a research project such as this to suggest a definite positioning on such matters of public policy. Although such issues have been considered during the work with this thesis, they will be put aside for the context of this monograph. The focus is on the library as a community resource rather than issues of cultural policy and the role of democracy-driven institutions. However, connecting to issues of legitimization does aid in formulating and delineating the problem space in which this research is positioned and made relevant.

1.3 Library Legitimization

From a wider, societal policy perspective, the themes discussed in this thesis are closely related to issues of who should have access to what resources, how it should be provided, how it should be paid for, and why it should be provided to begin with. A central question to ask, then, becomes: “Which mechanisms for distribution of economic resources are most democratic?” (Vestheim, 2012, p. 502). The question is complex, requiring a complex answer, and will inevitably depend on several dimensions. Michnik (2018b) suggests that the social legitimacy of public libraries is sensitive and vulnerable with regards to what they are expected to provide. Public libraries offering collections and activities that fall outside of expectations of what libraries traditionally do, poses certain challenges. To maintain and foster libraries’ social legitimacy requires a balance between offering collections and activities related to literature and reading, and trying out new approaches and services (Michnik, 2018a).

Regardless of what patrons, decision-makers, researchers, and librarians themselves want libraries to be and do, no library can provide everything. Further, it would be presumptuous and normative to assume that more library materials equals more value, in the sense of positive outcomes as related to, e.g., democracy, literacy, or sustainability. In particular considering that the public that policy is concerned with consists of more than library users and their interests. Accordingly, the questions of what value there is to providing what library materials to whom, need to be asked and debated – and analyzed in research such as this thesis. When the concept of value has been used in library research, it is mainly in two different interpretations: the *economic* value of libraries, i.e., how to arrive at a net of what libraries cost vis-à-vis the economic benefits they bring, and the *social* impact

of libraries (Oakleaf, 2010). In this thesis, the exploratory approach is open to including both interpretations in the understanding of x-lending libraries in the library community.

There is a seemingly constant controversy concerning general library issues. One source is the output of academia, often regarding current challenges to libraries and librarianship, and outlining possible futures. For a recent example, see *Library Quarterly's* two special issues on the theme "Aftermath: Libraries, Democracy, and the 2016 Presidential Election" (Jaeger, Gorham, Taylor, & Kettlich, 2017; Jaeger, Gorham, Taylor, Sarin, & Kettlich, 2017). Another is the local grassroots outcries and initiatives, regarding imminent changes such as the closure of a branch (e.g., Charteris, 2009), which can originate from a combination of members of the public, local news editors, and library staff.

Taking outspoken position with regards to issues or ideology is arguably part and parcel of library culture. It has been called a *crisis culture* (Buschmann, 2016a), and asking the big questions concerning the meaning of libraries is the normal state of affairs. In the meantime, libraries keep on offering materials on loan and people keep on borrowing them. Upon asking himself the question "if libraries did not exist, would someone invent them?" Batt (2011) notes, "for library workers and users, libraries are real and tangible, and there are just so many better things to do than deal with hypothetical questions" (p. 400). Indeed, libraries as institutions enabling systematic lending (the provision-centric mode) have been remarkably constant for a long time. Of course, political, economic, cultural, social, environmental, and technological dimensions make these developments different over the world. There have always been people who have not enjoyed the type of access to resources that most of us of more privileged background are grown accustomed to. Still, any library today that lends out items for free to the general public is doing so in more or less the same fashion as was done by libraries a century ago. While new variants of provision have been added, such as borrowing and lending of e-books, it is still built on the same basic model even if the infrastructure has evolved. Given that there is no immediate, clear benefit from the service providers' perspective in the case of libraries, it is striking that they have not fluctuated more than they have in form and availability. The incentives for providing free of charge, tax funded lending services are in no way obvious.

The general tendency of western societies since the last quarter of the 20th century has been a shift "from collective norms and values towards competitively oriented individualism" (Vestheim, 1998, p. 139) and decentralization. Against this background, public free services that are largely funded by personal and often progressive taxation, regardless of actual usage of those services, is inevitably a point of dispute in the current ideological

climate. Accordingly, there is a lot of discussion on what exactly the purpose and value of providing library services is, and whether or not ‘value’ is a relevant guiding principle to begin with. Two opposing positions are commonly outlined to explain the tensions regarding the justification of libraries: instrumental justification arguing optimization of the individual library to its specific users on utilitarian principles of maximizing the direct use value of private goods, and value-based justification, arguing equal access to public goods in support of democratic citizenry (Aabø, 2005). Some notion of community will often be called upon in these discussions, as it seems to provide fixing-points to aid understanding of otherwise fluid, relative concepts of library purpose and value. In library research, community is indeed often closely related to the value-based discourse of justification (Aabø, 2005), and community will often be integral to discussions of the role of public libraries (e.g., Hansson, 2010).

It has been argued (Kann-Christensen & Andersen, 2009) that a main problem with the influence of new public management on how services such as libraries are valued, is the pressure that makes libraries anxious to exhibit their worth through efficiency. This may be particularly evident when libraries are somehow perceived to be threatened, for example to be made redundant by the spread of affordable ICT, and respond “by trying to legitimize themselves in economic terms in order to prove their worth by being able to exhibit satisfied customers” (Kann-Christensen & Andersen, 2009, p. 220). The valuation of libraries and library services carries political weight; such valuation becomes a tool for justifying the expense and thus the libraries’ existence. By reporting or demonstrating the impact of library services in the communities they operate and for society at large, specified in desirables such as their social benefit (Hapin et al., 2013), their continued support is better secured.

1.4 Problem Area

This is a study of tool lending libraries, with implications for understanding x-lending libraries. The problem area is delineated as the intersection of x-lending libraries, borrowing and lending, material, and community. This locates the thesis in a broad tradition of research that deals with the library as a societal and social phenomenon, discussing its role and value (e.g., Aabø & Audunson, 2002), the relationship between libraries and public policy (e.g., Frenander & Lindberg, 2012), and concretely the services and profession associated with it. Further, as the thesis deals with a type of content that most libraries presently do not offer, it can also be positioned in the type of research that transposes analysis of libraries into discussing their *potential* societal role and position (e.g., Hansson, 2015).

More specifically, the thesis is focused on the library as providing a service to the local community by providing patrons with materials from its on-site collections. This point of departure leads to a discussion of the other various roles of libraries, mentioned earlier. There is little research dealing directly with library borrowing and lending as a phenomenon in any thorough or basic sense. Borrowing and lending as a specific topic of study has been largely overlooked in library research thus far. What research there is relating to borrowing and lending, often take its starting point in other specific topics of which borrowing/lending is only a part or a consequence. Prominent examples include two closely related topics connected to current infrastructural developments in libraries. First, studies of how e-books affect how materials are distributed to users and shared between libraries (interlibrary loans) (e.g., Percy, 2013; Radnor & Shrauger, 2012). Second, study of the strategy of patron driven acquisition (PDA) for developing library collections on a patron-by-patron and request-by-request needs basis. Research on PDA often pertain to collections in an academic library context and where e-books are given priority (e.g., Fischer, Wright, Clatanoff, Barton, & Shreeves, 2012), although study of PDA and print materials has been conducted too (Tyler, Falci, Melvin, Epp, & Kreps, 2013).

Examples of borrowing/lending-related research not specifically tied into current advancements in technology or collection development, include research on the economic value of library services, where the borrowing and reading of books has been used to explore economic benefit to patrons (Morris, Hawkins, & Sumsion, 2001; Sumsion, Hawkins, & Morris, 2002). This last example is certainly relevant to the present thesis. While research on the value of libraries has indeed continued to develop through the 2000s and 2010s (e.g., Aabø, 2005; Matthews, 2013), deepened efforts to explore the role of borrowing and lending library materials in this context are still needed.

The subject of x-lending libraries, and the specific example of lending and borrowing in tool lending libraries, could certainly be a topic for fruitful study in well-established areas of library (and information science) research such as user studies and knowledge organization. In this thesis, the strategy instead is to adopt a material perspective, where the items being borrowed/lent, the people involved in doing so, and the place and facilities where it all happens, all become part in exploring the subject in an otherwise open approach. This material approach potentially enables development of and finding common grounds for traditionally disparate areas such as the aforementioned user studies and knowledge organization. Here, the material perspective helps tying borrowing and lending into a larger theoretical framework that enables explorative inquiry into the subject without absolutely depending on concepts such as *information*, *culture*, or *use*, but still

leaving the door open to relate to them in future research. There might also be challenges involving how to approach borrowing and lending empirically and theoretically. Any number of entry-points into the topic of borrowing and lending in general, and *library* borrowing and lending which is of particular interest here, could be envisioned:

- Borrowing and lending as economic and material transaction,
- library borrowing and lending as administrative procedure,
- borrowing and lending as logistics,
- lending as business model,
- borrowing and lending as dissemination of culture and information,
- lending as professional skill and identity,
- borrowing as identity reproduction,
- borrowing and lending as ideological movement,
- borrowing and lending as vehicle of literacy support and promotion,
- intersectional dimensions of library borrowing and lending, e.g., class and gender,
- the cultural history of borrowing and lending,
- lending service interaction design, and library borrowing in user experience (UX) design,

and so on. Further, several of the entry points above may be treated as intertwined, interdependent or overlapping perspectives. The multitude of potential entry-points and lack of precedent, motivates a type of approach that starts in a more open-ended inquiry into tool lending libraries, and borrowing and lending. This thesis can be seen as contributing to the largely underdeveloped theoretical understanding of library borrowing and lending – how they can be fruitfully approached both as concepts and objects of study in library research. An exploratory study will then serve to suggest pertinent areas of deepened inquiry, and aid in outlining concepts for treating borrowing and lending as an area of library study.

1.5 Aim and Study Setting

The aim of this thesis is to provide a deepened understanding of x-lending libraries through case study of tool lending libraries. This endeavor is realized through studying borrowing and lending in the material context of tool lending libraries as community libraries. The empirical findings will form the basis for rich conceptualizations and theoretic connections that can serve to further analyze borrowing and lending concepts in library research. A study of one of the library's most utilized, defining, and longstanding services – provision of materials through borrowing and lending – should

contribute relevant insights for research and discussions on what libraries do, why, and for whom.

To achieve this aim, a case study of tool lending libraries is performed. A total of three sites (individual libraries) are included in the study, all located in the United States. This setting was chosen primarily because most tool lending libraries were located there when the data collection was planned in 2010 and commenced in 2011. The U.S. is also a relevant cultural setting for studying new library developments in general. American librarianship represents a movement that has been highly influential for other contexts – such as the development of public library systems in Scandinavia in the early 20th century, which was directly inspired by impressions from the U.S. (Hedemark, 2009). American libraries have long been and still are central for the field in general – both to the conceptual and ontological development of what libraries are, and to the specifics of what libraries do. It makes sense then to explore contemporary, little researched emergent phenomena in the U.S. context. The combination of both prolific grassroots initiative and formal organization of library interests (such as the influential presence of the American Library Association and its many vocal members) make for a rich context of study.

The data collected consists of 33 qualitative interviews with patrons, staff and managers at three specific library locations. Numerous on-site visits and observations were also made in order to understand the material practices of providing tools within the library model. Further, these libraries are situated in relative close proximity in the same U.S. state. This means that the study largely has the character of one case study involving three sites. The study explored what these borrowing and lending services mean in their specific settings and to their specific stakeholders.

1.6 Research Questions

The thesis's aim to conceptualize and understand x-lending libraries as public services in the form of community libraries will be achieved by answering the following research questions. The first two questions address the phenomenon of tool lending libraries as one type of x-lending library:

What characterizes tool lending libraries, their materials, and borrowing and lending, and how do they differ from other x-lending libraries?

Asking and answering the first question on how tool lending libraries are characterized also implies the issue of value, which could be further focused thus,

What values are ascribed to tool lending libraries as public services in their communities?

Thus, the first two questions are empirically oriented and will prompt descriptive answers. In order to explore the empirical material these two overarching questions are further broken down into four more specific empirical questions. These will be answered by the topics explored in the four papers comprising the study's empirical data, in the same order:

- 1) How can library collections in the social space and place of libraries be understood from a material community perspective?*
- 2) Why do community members borrow tools from a tool lending library?*
- 3) How does a tool lending library serve its community by lending tools, in the views of staff and managers?*
- 4) How is a tool lending library and its staff perceived by its patrons?*

These four empirical inquiries provide the results for answering the initial questions of what characterizes tool lending libraries, and the value ascribed to them. This empirical foundation in turn enables further exploring and defining x-lending libraries from a theoretical perspective. This leads to the final research question,

What are the pertinent theoretical dimensions of borrowing and lending different materials at different x-lending libraries?

This question differs from the previous in that it is not answered directly by the papers, but rather as the result of the analysis performed later in the thesis. Investigating the relations between materials, library types, and borrowing and lending, lays a foundation for discussing library services in a wider context. Through this inquiry, x-lending libraries are highlighted as material community services providing certain values to its community members.

1.7 Exploratory Approach

When this project began in 2008, little library research was published either on the borrowing–lending dynamic, the concept of libraries as models for borrowing and lending materials, or the specific phenomena of tool lending libraries. As of writing, the notion of framing library services in contexts such as consumerism remains largely absent in library research, though such discussions outside of our research community has decidedly increased. The exception is a longstanding interest in how libraries relate to commercial actors and interests, for example new library models inspired by bookstores (Kwanya, Stilwell, & Underwood, 2012; Rooney-Browne & McMenemy,

2010) or cafes, such as ‘shopping center libraries’ (Black, 2011). While relevant, these are still somewhat peripheral discussions to understanding borrowing and lending; they deal more with the library’s integrity as institution vis-à-vis commercial influences, than with the type of issues investigated here. Consequently, for this project’s initial aim of developing theory for conceptualizing and understanding library borrowing and lending, there was no readily available research tradition to write it into, more than library research in general. Therefore, a central task for the thesis is *exploration*.

As stated in the introduction, the main effort of the thesis is to conceptualize and understand library borrowing and lending. This will be achieved through exploration of the phenomena of tool lending libraries. They are deliberately approached in an open-ended inquiry, representing an unknown of libraries where the books are removed and instead other materials are provided. Among the unknowns, is to what extent the materials and services are really idiosyncrasies, or if the differences to other libraries are mostly superficial. This includes the place in and of the library itself, and in turn its place in the community.

In the formalized methodological sense, exploratory research is a specific approach most clearly distinguished from confirmatory research (Stebbins, 2001). This has certain bearings on how this study is structured. Data collection is not preceded by selecting any specific theory, which would guide what type of data needed to be collected in order for an analytical model to be applied. Rather, the phenomena of borrowing, lending, and tool lending libraries are initially approached in “broad, non-specialized terms” (Stebbins, 2001, p. viii). The object here is to uncover new ideas and, by extension, develop theory through a mostly bottom-up approach.

As illustrated by Figure 4, the study’s exploratory approach can be conceptualized as a dialogic and iterative process inspired by hermeneutics.

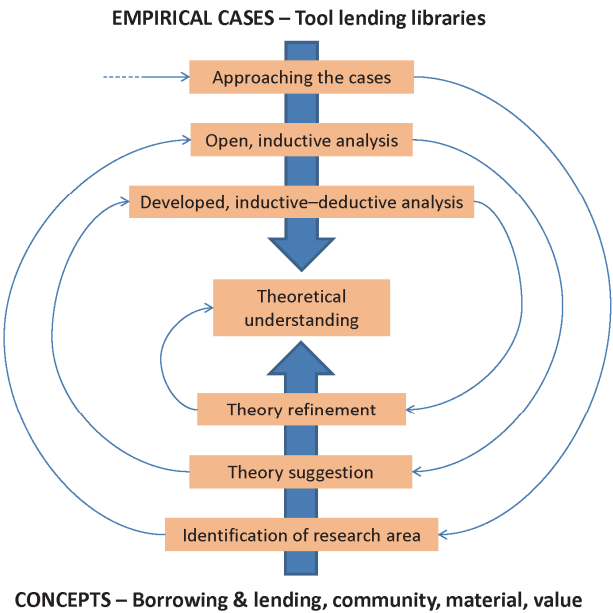


Figure 4. Iterative, dialogic thesis process, from initial case contact to proposed theoretical understanding

An idealized model such as Figure 4 is insufficient as a step-by-step account of the actual work-progress, certainly a messier affair. For instance, writing the conclusions (theoretical understanding) may not be a discrete activity following immediately or only upon theory refinement. However, the model does serve to illustrate important premises for the relationship between data, theory, and conclusions. The exploratory research process is dialogic in the sense of the back-and-forth dialogue between empirical case and theoretical concepts. This iterative process is also manifested in the thesis structure. During and after data collection, pertinent dimensions emerge that directly shapes what has become chapter 3; theoretical *starting-points* for taking the exploration further. Later, after results have been presented in chapter 5 and 6, generalized theoretical connections and concepts drawn from the results are presented in chapter 7. This iterative process of exploration is illustrated in Figure 5. This modelling of the process is central to understanding the relationship between empirical study and theory as represented in the chapters Materiality, Summary of the studies, Results, and Discussion. These parts of the thesis are thematically overlapping, and the finalized thesis

layout represents a non-linear dialogue between case, previous theory, and suggested theory.

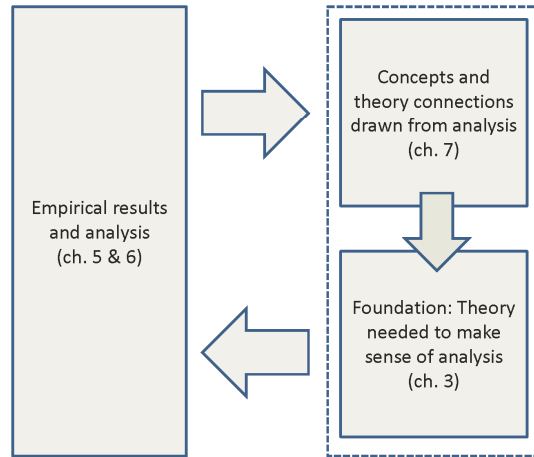


Figure 5. Empirical analysis vis-à-vis formation of theory, and consequentially the structuring of theory in two chapters of the thesis

Thus, while the text product reads as linear, the intention is to have it embody a process which has been more circular or iterative in character.

In line with this process, the literature review and theoretical foundation are developed not as discrete phases compartmentalized from and predetermining other steps of the work, but as part of the circle of back-and-forth between case and general concepts. This also applies to the writing of the literature review and theory and the reading of the works they refer to. Producing those sections is itself a hermeneutic process of moving between the text, its parts, and the wider bodies of relevant literature it resonates with (Boell & Cecez-Kecmanovic, 2010). Such a process of reading is not only relevant to the understanding of texts, but also to identifying them in the first place, and deciding whether to include them in the thesis, by constantly renegotiating the scope of what that particular section of the thesis could be expected to cover.

An exploratory approach also enables a process that engages the phenomenon studied from different angles and attempting different approaches. This is also why a thesis by publication may be particularly suitable for the endeavor (Pilerot, 2014, p. 55). The writing of the papers is also affected by this process. While the data for the three empirical papers was collected early in the process, writing of the papers was not. In particular paper 4, which was written during the project's last year and when this thesis text was three

quarters finished, employs a more theory-driven analysis using theoretical concepts refined during the project. Thus, the sequence of the papers can be read as the emergence of the basis for the thesis's theoretical contribution, representing the exploratory effort.

1.8 Relevance of the Project

A study of tool lending libraries as exemplifying libraries lending out new types of items, and with the aim to conceptualize borrowing and lending, has several potential points of relevance.

As already noted, library research is lacking any substantial theoretical development regarding one of the most high-profile, high-use utilities of libraries – people going there to borrow items from the collection of materials. The main target group for this thesis is therefore library researchers. The theoretical concepts proposed in these pages can serve both as a starting point for deepened inquiry into the various aspects of borrowing and lending, and as an analytical aid in understanding empirical data on, for instance, library use. Library researchers making argumentative inquiries to discuss library issues from some critical standpoint, might also find this project of interest. A study of tax-funded free borrowing of items that historically have been sold or rented commercially, could serve as input in scholarly debate on issues such as the influence of neoliberalism on libraries (e.g., Buschman, 2016b). It is important to note that this thesis does not represent taking a stand or promoting that libraries *should* be lending out all manner of materials. What this thesis is intended to represent, is a curiosity-driven investigation into a contemporary phenomenon: libraries evidently are lending out an expanding array of materials whether we want them to or not. The ambition therefore is that the findings should be relevant to any scholar interested in current developments in material provision through library services, regardless of their standpoint on what libraries should be doing. The thesis is potentially relevant to any discussion on whether the library's position in society is in need of some redefinition, or if its current development is only consequential with the library's established identity and mission.

The study should also provide findings of interest to decision makers who deal with libraries in some respect. As an example, at least one tool lending library during the course of the project, was on the verge of closure due to city budget constraints but the library eventually acquired continued support. This type of study can potentially provide insight for library stakeholders, into what role and value lending services can have in their communities. For instance, a study such as this could aid in making analysis and taking better position, with regards to what a potential library closure would mean in a community. Previous study has shown “how valuable and useful research

can be for local library management personnel who accurately anticipate the possible effects of a library closure” (Koontz, Jue, & Bishop, 2009, p. 85).

Discussion and development of the librarian profession is a further area where this project might have bearing. Expectations and demands on librarians’ work and skills are constantly being changed and updated. This thesis provides insight into how and why people borrow types of materials that historically have neither been very prominent in libraries nor associated with librarians’ skills or knowledge, but now seem to be on the rise. For instance, the question can be asked what difference the type of collection offered makes for librarian competency, if any. The thesis should therefore be relevant both to researchers studying the profession, to library professionals themselves, and to educators in librarianship programs.

Finally, this project provides research findings on the role of publicly funded provision, of potential relevance to societal debate and discussions outside of libraries, and library and information science. For instance, the findings could aid review and discussion of public services in various contexts, such as community development, sustainable development, and urban planning. Further, it might provide relevant case data for development of business models, both non- and for-profit.

1.9 Thesis Overview

The thesis builds on the results from a case study of tool lending libraries, and is organized in three main parts (I, II, III), comprising a total of eight chapters, four research papers, and appendixes.

In the opening pages prior to Part I, a Swedish summary of the thesis is given. Part I then consists of four chapters, which outline the area of research and how it is approached. In chapter 1, the topic and problem area has already been delineated, the aim has been stated, the research questions have been phrased, and the overarching approach of the thesis and its relevance been explained. Next, chapter 2 presents relevant background and context to prepare the grounds for the study: the library as institution and idea, introducing the concept of x-lending libraries, and the example of tool lending libraries. In chapter 3 a theoretical foundation of materiality is constructed. Chapter 4 further details the approach and process for the thesis work.

In part II the findings are presented in four chapters. Chapter 5 supplies a summary of the four papers that comprise the project’s studies. In chapter 6, the results from the studies are brought together and structured on the thesis level, in two major categories: *material matters*, and *local value*. Chapter 7 is a theoretical discussion of the findings, and finally in chapter 8 the conclusions are stated and the continuation for future research is proposed.

Part III consists of the four papers in full:

1. "Collections Redux: The Public Library as a Place of Community Borrowing." Article laying the theoretical groundwork, focusing on developing broad concepts of library collections and communities. Published.

2. "Borrowing Tools from the Public Library." The first empirical article of the project. It details a case study of patrons' perception of their borrowing from a tool lending library. Published.

3. "Tool Lending Librarianship." Second empirical article. Further case study of staff and managers at three different tool lending libraries, and their perception of lending tools, the patrons' borrowing, and the role of their service in their communities. Published.

4. "Not Like Other Libraries? Patrons' Experience of a Tool Lending Library." Planned last empirical article, currently in manuscript form. Returns to the patrons participating in article 2, to study their perception of the tool lending library as such. Submitted, accepted with revisions.

The papers are included in their published or submitted form.

2. RESEARCH FOCUS: LIBRARIES AND X-LENDING LIBRARIES

This chapter outlines 1) the thesis's general research focus, *libraries*, and how it relates to 2) the specific study setting, *the x-lending library* as exemplified by tool lending libraries. Libraries in their different forms and derivatives are reviewed, with particular focus on tool lending libraries. The purpose of this account is to establish the thesis's position in library research.

2.1 Public Lending Institutions Called Libraries

The library is a well-established resource that facilitates systematic borrowing through its lending programs – a unique service. Historically, this has not equaled borrowing and lending in general of any variety of things (provision-centric mode). Rather, it has most of the time been closely tied to the book (book-centric mode). According to Wiegand (2007), the spread of print text and libraries are closely interlinked and libraries are basically collections of textual records. The word *library* originates in Middle English via Old French from the Latin *libraria*, meaning bookshop (Soanes & Stenveson, 2008, p. 821). The *libr-* root obviously denotes book and it is significant that the book is (still) in the institution's name. Evjen & Audunson (2009) found that book borrowing and lending was indeed regarded as a dominant application of public libraries. Public lending libraries in the sense that is of interest here – lending to a general populace, free of charge – began emerging circa 1850. Their explicit purpose was to support the poor or otherwise underserved in one specific regard: literacy (Lerner, 2009). This precursor to the modern public library was primarily being developed in the USA. Around 1900 they were becoming increasingly widespread (Richards, Wiegand, & Dalbello, 2015). In Scandinavia, the American *social mission* library system was a direct source of inspiration that public libraries of the 20th century would be largely modeled on. This historical circumstance has been directly contributing to the choice of focusing the study on U.S.-based cases (see 1.5).

Questions of why libraries exist and what their role has been, what they are today, and will be tomorrow, seem quintessential to library discourse. The literature on the future of libraries seems to almost comprise a niche genre on its own, with book titles such as *The library beyond the book* (Schnapp & Battles, 2014) and *The end of wisdom? The future of libraries in*

a digital age (Baker & Evans, 2017) resonating a need to discuss the state of libraries based on the premise that the playfield is somehow changing. Indeed, since around the previous turn of the century, the public library's domain has evolved significantly, if not completely changed. What used to be a focus on literacy specifically connected to literature, targeted at strengthening socially exposed population groups, has gradually shifted towards a literacy of information for equitable access for all. These notions of information literacy are not as clearly embodied by any specific medium, such as books, and do not have such observable end goals as lifting up specific user groups. This development has given rise to a climate where the societal mission of libraries is something we are constantly seeking to define.

Chapter 1 presented one typology of libraries, expanded by the notion of community library to aid this thesis's focus on the local library and its patrons. For that purpose, a community research perspective helps in understanding such local contexts. In this study, the perspective allows for new forms of understanding the relationships between patron–library–society. From the community perspective, the library is a service and resource for the individual user, enabling and empowering them to engage, not only in but also towards, the larger surrounding society of which the library is representative and constitutive. The relationship between library and community is further developed in the thesis's first paper (see 5.1 for a summary).

2.2 X-Lending Libraries

Earlier in the thesis project, traditional and non-traditional libraries were distinguished. The former referred to libraries lending conventional, well-established materials such as books, the latter denoted libraries lending materials which are more commonly associated with other contexts. However, as the thesis work has progressed, this distinction has proved increasingly problematic to maintain. Libraries have always been exploring how the scope of their collections can be expanded or otherwise developed. Therefore, categorizing a large portion of libraries as traditional, conventional, or regular with regards to their collections, would require a complicated definition depending on any number of exceptions or reservations. Libraries have long dealt in materials such as games (Nicholson, 2013), and games are also publications under the definition given in this thesis. Stepping outside the comfort zone of traditional print reading matters is something most libraries routinely do.

Instead, a more specific but neutral nomenclature is sought for distinguishing these different libraries and their collections. In this thesis, x-lending library refers to any borrowing and lending service which stocks a substantial collection devoted to item category x, and expressly identifies itself as running a library-type operation. They may be formally organized in

a number ways, either as part of the public or other formal library system, or as some manner of independent, typically non-profit, organization. It is possible to distinguish at least six unique types of x-lending libraries that are established to some degree:

- toy lending libraries,
- art lending libraries,
- clothes lending libraries,
- seed lending libraries,
- publication lending libraries, and
- tool lending libraries.

These will be further detailed in the next section, except publication lending libraries which were introduced earlier. The interpretation here of being established is that there are several of the specific library type in existence, independently of each other but with similarities. A commonality among them is that the collection x offered often gives name to the service, hence the x-lending library or the x library, a highly interesting observation for this study. For instance, most libraries lending tools seem to call themselves tool lending library. Accordingly, when a library does not primarily lend books, it is named for what is borrowed and lent instead. This could be interpreted as an indication that the content of a library is somehow integral to its identity and definition. It is in no way obvious how or why, and this study can hopefully provide further insight.

The concept of x-lending library is closely related to the new and growing movement around *libraries of things* (“A Brief Survey,” 2017), or simply the things movement. A library of things lends materials where practical applications are in focus, rather than information needs, and the movement is aligned with other contemporary cultural trends such as sharing and maker culture (Robison & Shedd, 2017). While library of things is a useful and attractive concept in and of itself, there are three main points where it differs from x-lending libraries and that motivates using the latter in this thesis.

1) Library of things describes a specific, ongoing, and evolving movement, whereas x-lending library is a general concept for discussing library types with a focus on what is being lent out.

2) The term ‘things’ implies a certain theoretical luggage in the present research context (see 3.2 for a brief discussion). It may be unproblematic for mundane use and as a movement label, but for the purpose of this thesis the more neutral ‘x-lending’ keeps the exploratory door open.

3) As a consequence of the two previous points, the more general and neutral concept of x-lending libraries covers a somewhat wider spectrum of services. For one, it covers all lending-libraries, regardless of what is being lent, including books. Indeed, the concept of just ‘lending library’ was

considered for the thesis. However, the 'x' serves a purpose in bringing to focus *what* is being lent. Further, it reflects the idea of the library as a template model of provision by signaling replaceability with the non-specific x, per the provision-centric mode of defining libraries.

Lastly, a very relevant facet to this discussion is the consequence of the users' views of libraries, community libraries in particular. As mentioned earlier, many people seem to regard book borrowing and lending as the main utility of libraries. Ultimately this may pitch the reform initiative of librarianship against the views of the general public (Evjen & Audunson, 2009), insofar as the public opinion is that libraries should stick to books. The resulting dilemma: whose interpretation of the purpose and ideal utility of community libraries should guide their development? Do library users command the agenda of what they need their library to be and provide, or do libraries take the initiative to explore new applications even if it clashes with what users say they need? This, in the present thesis, is viewed not as a dichotomy but as a dynamic. The interplay of the two perspectives of patron and library, is expressed in the focus on borrowing *and* lending.

2.2.1 X-lending library types

Among the oldest, most well-established are toy lending libraries. The Los Angeles county *Toy Loan* program was started as early as 1935 and is still active, but it was not until the 1960s that the phenomenon began to gain ground, at first in Scandinavia and then down through Europe and to the rest of the world (Moore, 1995). Much of the ideas employed today in American toy lending libraries, for instance, have sprung directly from the Swedish *lekotek* concept³, which is largely centered on the therapeutic potential of play (Moore, 1995). Today toy libraries have their own international and national interest organizations that arrange conferences and other activities. Another relatively old phenomenon is the *art lending library*. Probably most prevalent in Scandinavia, as *artotek*, it was a phenomenon mainly during the 1970s. After a number of decades in decline, this concept is now enjoying renewed interest and several art lending library and *artotek* initiatives have recently surfaced.

³ **Lekotek:** in Swedish *lek* means play, and *-otek* is also found in the Swedish word for library, *bibliotek*, in turn derived from Latin and Greek for bookcase. Thus an English equivalent could be *playbrary*. This would make the interpretation more library-flavored, as compared to *-otek* which also can be found in other Swedish terminology apart from libraries. However, *lekotek* has in fact been borrowed and used as-is by the international, apparently U.S.-centric movement, thus removing any semantic preconception from its English application.

While the concept seed lending *libraries* is relatively new, the practice of seed *lending* is not. French colonialists installed seed loan programs to stimulate peanut farming in Senegal, 1905, where local farmers took seed loans and returned a share of the crop's fresh seeds at a fixed interest rate (Bonneuil, 1999). Seed lending libraries are not entirely different, though the motives are more oriented towards supporting community development (Tanner & Goodman, 2017) and preserving ecological heritage and diversity (Antonelli, 2008), rather than economic growth. Local initiative of supporting farming with seed loans, primarily but not exclusively in developing regions, still exists also (Pionetti, 2006).

Among the most recent emerging new types of x-lending libraries, is perhaps the clothes lending library. Apart from lending clothes for general weekday or weekend needs, they also demonstrate the library's potential to lend items for temporary needs. Two illustrative examples are borrowing and lending of specialized clothes for maternity and job-interviews respectively (McLaren, 2008).

The fifth major example, and the setting of this thesis, is the tool lending library. This type of x-lending library is detailed in the next section.

Finally, the individual x-lending library may or may not be associated with an actual library organization such as a public library, or some other branch of public services. It may also be a more or less independent organization, either a non-profit or for-profit. This, again, is why the concept of community libraries is used to gather these various organization types under one concept, as explained in the introduction. It will vary whether such an independent organization is based on membership and possibly requiring some level of involvement and investment, or a more open format where anyone can walk in and borrow without further commitment⁴. These independent locations – in the sense of not belonging to any formal library system – may still be part of other organizations such as charities, churches, or commercial enterprises. Finally, staff may either be paid or volunteers, or some mix thereof. Taken together, the variety in setup seems to only reinforce the idea of the x-lending library as an attractive, readily available template when an organization is providing materials by way of borrowing and lending. Its chosen defining features are its mode of provision, lending, and what is being provided, x. The specific setup – business model, financing, staffing – is largely blackboxed. Towards the patron it is marketed as a library, a place to borrow the x in question.

⁴ Most lending services will likely require some form of registration and agreement to terms and conditions. Registering, in turn, may pose certain requirements on the registrant such as residency in the catchment area, and minimum age.

2.2.2 Tool lending libraries

A tool lending library in this study is an x-lending library whose primary service is lending out tools, and that identifies itself as a tool lending library. The definition of the actual *tool* component, i.e., what a proper tool collection consists of, is left somewhat fluid. The collections of the libraries included in this study are largely comprised of common tools associated with home-repair, maintenance, basic construction work, and gardening. They include heavy-duty equipment such as concrete mixers and jackhammers, and exclude gas powered and pneumatic tools. The exact collection composition will also vary between locations, as with any type of library. For instance, at the start of the project, at least two of the studied tool lending libraries offered motorized chainsaws⁵. One of the libraries has since taken them out of its collection due to policy changes.

There are also other libraries that include a proportionally small selection of tools in their main collection, typically with little or no separate staffing, facilities or hours devoted to the tool. One example is the public library branch Mötesplats Norrby in Borås, Sweden. Although highly interesting, they do not fall under the study's definition of a tool lending library and are not included in the empirical or analytical work.

Numerous media articles have reported on tool lending libraries, in particular in local U.S. publications (Rogers, 2005; Learn, 2010; Watson, 2014). They typically focus on the phenomenon as a service that lets community members borrow tools for free for various home and garden projects. Newer articles also seem to a greater extent to connect the local service to larger issues and movements such as the environment, and sharing. Most news items on tool lending libraries seem to portray them in a very positive light, and report them as being generally appreciated by their users. Currently there is little academic writing devoted to tool lending libraries. It has been studied in the context of sharing economy and as an example of libraries of things, finding that a library solves the sharing dilemma that people would rather borrow than themselves lend out (high quality) items, and arguing that institutionalized sharing services make sense from a sustainability perspective (Ameli, 2017). A case report of the Pacific Gas & Energy Toolkit program (Benton, Huizenga, Marcial, Hydeman, & Chase, 1996) describes a lending service of specialized energy efficiency tools, mainly geared at professionals. An undergraduate thesis studied tool lending libraries and community sustainability (Tabor, 2013).

⁵ The idea of a chainsaw on a library shelf was one of the very first inspirations to launch this project in 2008. Almost no researcher or librarian I spoke to had ever heard about such a thing. Irresistible.

At this specific type of library, is borrowed and lent tools – one among the many types of items, *materials*, provided by libraries. The next chapter presents a theoretical overview of how that which is borrowed and lent can be approached, from a material perspective.

3. MATERIALITY

A distinct perspective of materiality has emerged during the explorative process of developing this thesis. An increasingly workable observation during the latter stages of analytical inquiry has been that *material matters*⁶. The concept of material in the context of x-lending libraries, is both a noun which includes collections, individual items, and the library space and place with all its resources. It is also an adjective, dealing with qualities, expressions, and structures – material *aspects* of x-lending libraries. Thus, material is deliberately used to denote both the mundane connotation of library materials that are lent and borrowed, and an extended material interpretation. *Materiality* is the wider, theoretical perspective. The core of materiality is an aspiration to understand the world from a viewpoint that transcends the separation of subject from object (Miller, 2005). Translated directly to the present context it enables analysis of, for instance, the relationship between patron and staff from a material perspective, encompassing that which is borrowed, the act of borrowing/lending, the physical and social place, and the people themselves.

The present chapter outlines such a perspective of materiality. The first section gives an introduction to materiality as the solution to locked subject–object positions, and the four following sections present the more specific material aspects of interest to this thesis’s investment in borrowing and lending in the library community.

3.1 Objectification

A central starting point and motivation for developing materiality as a theoretical perspective, has been the challenge presented by “the contested place of material objects in the study of human cultures or societies” (Hicks, 2010, p. 28). The quote betrays the origin of the theory; it emerged from the fields of archeology and social anthropology. This has been described as the *materiality turn* (Hicks, 2010), or sometimes for the social sciences, *object turn*. The object turn has been described as the coming out of things and reinstates the potentially positive contributions of material entities

⁶ To use Duguid’s (1996) words.

(Marres, 2015). Without a materiality turn, objects such as technological artifacts are mainly regarded as posing barriers and obstructions that need to be neutralized or wrestled into submission by humans in order for us to be able to act and engage socially. With the object turn, a tool is not a mere instrumental utility, which at best is optimized as to not be in the way of the operator's goals. The tool enables the operator and mediates engagement (Marres, 2015); the tool too *does*. This differs from a determinist interpretation that tools, technology, or things would determine outcome. It allows analysis that includes the material as meaningful and integral part of social situations, rather than as props and scenery that are always secondary to the human subject.

It is tempting here to propose the simplistic definition that what we are dealing with is a theory of things, stuff. Indeed, materiality should and does deal with things, which is further discussed in the next section. The foundation of materiality's theoretical investment in things, however, is objectification: what makes a thing a thing, its thingness. This process, in turn, is absolutely defining and necessary to how we as humans can understand ourselves. Objectification depends upon both the Hegelian idealist and the Marxist materialist versions of dialectics to accomplish this (Miller, 2005). "Whether we are dealing with mundane artifacts such as clothes or statues, or with more complex images and institutions such as dreams or law, there is nothing without objectification" (Miller, 2005, p. 10). Thus, the goal of such theoretical or philosophical inquiry is not just to grasp things themselves; it is to bridge back from the realm of matter to the realm of human and connect them under a common framework, with less or no separation between them. By a similar argument, materiality has been put forth as a necessary stepping-stone for advancing a sociology stuck in a disconnected duality of micro-level phenomena and macro-level structures (Pyyhtinen, 2016):

Besides inviting us to reconsider our ways of being together in relation to things and materials, by dissolving the boundary-line between the human and the non-human the foregrounding of matter also produces new understanding of what it is to be human. Human action cannot be properly understood apart from objects, materials and material flows, but the latter can even be understood as the other side of the powers of humans, without which our actions would not be possible. (p. 78)

This is a central point to why a theory of materiality has bearing on a discussion on borrowing and lending in x-lending libraries. The library, in this thesis, is conceptualized as a public institution that provides an infrastructure for the systematic borrowing and lending of certain things. To translate Pyyhtinen (2016) to a library research setting: *Materiality provides a foundation for*

analyzing the material flows of borrowing and lending certain objects, in order to understand what role this has for the power of humans and their actions, as library patrons, librarians, and community members.

Crucially, these theoretical developments also consider *immateriality*, not as an antonym, but on the contrary as that which brings forward the materiality of processes such as abstraction and conceptualization. The immaterial too is material. One particular abstract domain that has been fruitfully explored in this regard, is that of time. The temporality in and of human activity can be seen as deeply interdependent with material culture. Attention to this relationship offers entry-points for inquiry into, among other things, consumption (Shove, Trentmann, & Wilk, 2009). Objects of consumption can be approached as “communicators and stabilizing devices which people employ to attain, reproduce and challenge temporal identities” (p. 6). The same class of objects, depending on their ascribed temporal properties, can aid its custodians and users in experiencing and exhibiting a complex array of feelings and values. A non-fiction book, for instance, may at the same time be ascribed a rising collector value and diminishing authority value, with its advancing age. The same jacket can in turn be fashionable for its newness, after ten years be worthless or at best kitsch or ironic (bad old), then after another ten years highly desirable again when it is old enough for the style to resurface in the retro cycle (good old), then it will fall back into out-of-fashion again though not as mercilessly as the first time, to finally settle in the realm of general vintage. Further, two different people seeking the same in-fashion retro look (the 20 year old jacket), may prefer the actual old jacket because of the added authenticity over newly produced copies, or prefer the freshly produced modern twist over grubby pre-owned. While such a discussion veers into the domains of cultural studies, it also illustrates the subject–object dynamic that materiality seeks to capture. The textile artifact does not somehow in its form carry preset charges of in-fashion-ness and out-of-fashion-ness which it releases at timed intervals. The fashion currency of this jacket comes not from its essence, but from the socially constructed norms and values expressed by the wearer, and by the peers appraising the wearer. At the same time, the singular, essential jacket is absolutely needed for those norms and values to be reproduced, carried, and played out – even to be meaningfully conceived in the first place.

Thus, while object does not predetermine human (subject) activity and relations, subject is dependent on object for meaningful activities and relations; object is part of those activities and relations. For research and theoretical analysis, it follows that materiality offers entry-points to understanding human society, through the framework of matter it manifests in.

Common for these different perspectives and takes on materiality, seems to be the basic argument of what materiality is expected to deliver and achieve. It is invariably seen as a, if not the, missing piece to understanding humans and human activity in the world. Just as the world humans exist in cannot be satisfactorily understood as only made of stuff, human activity cannot be satisfactorily understood only as socially structured. The core tenet then, which is also adopted for the discussions within this thesis, is that the material context in which people are and do, is more than a mere stage; it is part of the doing. Concerning the topic and aspirations of this thesis, there are three prominent reasons why research on material perspectives and materiality are relevant to the study. First and foremost, it aids in positioning the thesis as exploring the borrowing and lending of things. Therefore, the first section below gives an account of how materiality can be related to that which is collected, offered, and borrowed at libraries. Second, and related to the first, is research dealing with documents, which might further aid developing how exactly the x in x-lending library might be approached and understood. Last, there is the materiality of the library as such, manifested as a building, a place, a space – physically or digitally or both.

3.2 Things

In effect, anything that can be described with a noun can also be a thing: rumination, emptiness, jealousy, success, or postcolonialism. A motivation for theorizing on things, may be the very fact that things are often taken for granted but that the relationship between the concept of objects and the concept of things is in fact complex (Brown, 2004).

The material thingness of that which libraries deal in has been approached from several perspectives in previous research. Many of libraries' services and much of their content can be provided electronically, and often online. The implications this has for physical provision is a topic for library research. Few if any researchers seem to deem the physical library, and onsite provision of for example print material, outright doomed. Rather, they have investigated such attitudes in other stakeholders such as city officials, while themselves making a more nuanced case where the unique properties of physical provision, such as its stability, are highlighted (e.g., Shenton, 2009). According to Bee (2008), the paper-based artifacts in a library's collection are more than mere vessels for text-based information. Rather, the artifact is part of the information, or interplays with the information to constitute a text.

Print artifacts are not just immaterial information; they have work to do in the world, and their medium has a great deal to do with their function. A passport has a unique look and role, from the stamps to the security

features. Novels, manuscripts, diaries, and accounting books change the culture around them. (Bee, 2008, p. 183)

Key to this line of reasoning, is the notion of paper-based artifacts as instances of information in the world. This in turn has implications for how paper-bound documents are preserved:

Selection and reformatting decisions need to be made with a more sophisticated grasp of the value of print artifacts than the idea that they are merely immaterial information that can be shunted from format to format without loss. (Bee, 2008, p. 183)

Another approach put forth in research, is the argument that information is best conceptualized not as thing, but as something active; something which happens, is going on, is done. These distinctions can be traced to Buckland (1991) who distinguishes between information as thing, as process, and as knowledge. Some research may explicitly position itself as primarily belonging to, or drawing upon, one category or the other (e.g., Pilerot, 2014, p. 20). This theoretical viewpoint has also been used to critically examine the professions:

The information professions need to move away from thinking about information as a series of material things of which they are custodians. They must begin thinking instead about information as a process both complicit in and dependent on the entire social context in which it is used and consumed. (Tredinnick, 2009, p. 47)

The obvious question which arises from such a stark statement, however, is how exactly does anyone use and consume a process? Concepts such as using and consuming still seem more applicable to things. This is interesting for the present study, not for arguing about logical or rhetorical inconsistencies, but because it illustrates a prevalent challenge. LIS research sometimes struggles to demonstrate how exactly to employ these delimiting, somewhat unforgiving concepts, such as information as socially contextualized process, with integrity. These discussions originate in the criticisms of what is usually referred to as *technological determinism*. This criticism has its main residence in science and technology studies, STS, and has also been very useful in LIS to develop our conceptions of technology from a critical standpoint (Budd, 2001; Lindh, 2017).

Usually, two central problems with technological determinism are pointed out. One, that technology is seen as developed independently of society, i.e., it starts out as pure and neutral. Two, that once technology is developed and put to use, it then affects people and society, one-way; “Technological determinism is imbued with the notion that technological progress equals

social progress” (Wyatt, 2008, p. 168). The earlier Tredinnick quote suggests that perhaps sometimes our field overreaches in these critical efforts, and lands on the opposite end of the spectrum in a *social determinism* instead. Winner (1980) describes this as a position where “what matters is not technology itself, but the social or economic system in which it is embedded,” but which, “taken literally ... suggests that technical things do not matter at all” (p. 122). The difficulties arise when attempting to follow through on such a strict principle, while still employing concepts (e.g., use, consume) that to some extent evoke the very notions that the principle rejects. The position of this thesis is to avoid the either/or approach and instead look to perspectives of materiality, which do not strictly separate thing and context or technical and social.

3.3 Documents

For the purpose of this thesis, documents are treated as a specific, theoretical breakout of the overarching category of materiality. The proposition made here is not that everything offered by libraries, such as tools, are documents. Rather, document is seen as one perspective or facet of materiality. As Johansson (2012, p. 28) notes, the document perspective is but one strategy, in Johansson’s case to deal with visualization tools, in our case physical library materials. This view gives license to library researchers to pick up a collection material and say, *looking at this from a document perspective*, i.e., allowing for pragmatic switching between facets of conceptualization. The document concept itself is fluid and its definition will invariably be dependent on context, though it is indeed often connected to materiality (Francke, 2005). In the context of libraries, documents invite one approach for pinning down how to approach the content of a library, alongside other concepts such as *collection* and *information*. The stuff that is on display on library shelves, retrieved from databases, lent to patrons – how is it defined, constructed, demarcated? Hansson (2015) argues that libraries are commonly seen as collections of documents, and that “if there were no documents, most people would agree there would be no libraries. A library without documents is not a library” (p. 7). This view opens up for several critical points of discussion. One obvious issue to resolve that follows from such a doctrine, is whether to include materials that are not seen as documents within the scope of a library.

From the late 20th century and onwards the concept of document has proved key to tackle information-related problematic concepts, not least information itself. While information is not a central concept to this project, it is the theoretical elephant in the room that needs to be addressed in any investigation of what libraries offer. If we attempt to conceptualize information in some pure, elemental form, what we may end up with is a sort of

etheric gas⁷, permeating everything, belonging nowhere. Frustrated by the unruliness of information we are tempted to see document as the medium by which information solidifies into discrete chunks of ontological somethings. A seemingly concrete concept, document affords ontological demarcations of inclusion and exclusion. It is important to stress however that this document–information relationship does not equal the content–container or sender–receiver (transmission) models of communication theory and information theory, notably the *Shannon–Weaver model of communication* (Shannon & Weaver, 1949/1964). This is also reflected in what Nunberg (1996) critically describes as a view where content is treated like a substance, noble in its absolute integrity and purity. Such overly simplified categorizations perhaps saw their demotion to history with McLuhan’s declaring that *the medium is the message*, holding the idea that the two are inseparable and interdependent, and even constitute each other. If subscribing to the notion that “the ‘content’ of any medium is always another medium” (McLuhan, 1964, p. 8), we must also conclude that any isolated definition of only content or only medium will soon see us stuck. In McLuhan’s sense then, we treat content and medium not as mutually exclusive phenomena but rather as two facets of whatever communication problem is at hand. As noted, information has not been identified as particularly pertinent to this investigation. However, it is certainly relevant to observe any emic perspectives on information if they surface during the studies, e.g., participants talking about information in relation to tools. Further, positioning the document perspective with regards to information, aids in laying the groundworks for continued research into the subject of the material contents of x-lending libraries.

As stated earlier, library collections are likely perceived by many people to consist of documents, regardless of exactly how documents are defined. At the same time, a collection of documents is not necessarily a library, and it is not by itself sufficient to constitute a library (Hansson, 2015). Taking a critical perspective on collections, the argument above does not dictate that collections should be dominated by documents, or that documents should be the conceptualization of collection items. In line with this open-endedness, library collection items could be regarded as objects (x) rather than documents. These objects in turn may or may not be treated as documents. However, our discipline is more familiar with documents than with objects. One strategy for going from documents to objects without deviating completely from LIS research tradition, is through a material approach such as the present. Examples from previous research include Pilerot’s (2014) joining of documents and materiality in looking at documents as *technological*,

⁷ *Information as gas* metaphor credited to Ola Pilerot.

boundary, and *epistemic* objects respectively, supported by the wider framework of social practice.

The primary vantage point adopted here is the exceptionally broad modern concept of document (Buckland, 1997). From this perspective, a multitude of artifacts can be processed as a material document, or be ascribed documentary aspects. A documentalist view might be fruitful; the act of documentation makes it a document (Briet, 1951/2006). A document is seen as a state or a process rather than a manifestation of predetermined form, as it is dependent on its context and intended purpose. This also solves the dilemma of attempts to physically delineate the document with regards to its content, a distinction of little relevance to the documentalist view. An object may have documentary characteristics without always being a document (Buckland, 2014). The document is a signifying object, a something laden with potential (Buckland, 1997), such as potential information and by extension knowledge, or simply potential. However, the document perspective is not dependent on information; document is larger than information and “many practices with documents have little, if anything, to do with informing anyone about anything” (Frohmann, 2004, p. 405).

The concept of particular interest here is the material and situated document (Johansson, 2012, p. 27). The document is located in the world, and “the importance of place for counting as a document, or for its having documentary places” (Frohmann, 2009, p. 297) is effectively illustrated by institutions such as museums, libraries, and archives. Again, this is not the same as defining document as a stable, solid entity that is constructed only by its appearance and properties. What, for example, to make of the e-book read on a tablet? At first glance the relationship is easily resolved: accessing the content relies on downloading a ‘digital document’. The end result would be that the reader has a piece of machinery with a document in it. However, is the tablet not ideally a technology where the user experience begins and ends with reading the object held in hand, just like with a paper-back? Then the whole tablet might be defined as a document – the physical piece of equipment, the digital data currently stored in its memory, and the literature represented by that data. However, what if the reader deletes all the books from the tablet, is it still a document? Perhaps it is an empty or incomplete document, like a book of blank pages waiting for words. Or a space representing potential document, in the same way an inch of empty shelf begs for a book. To stretch it further, what does the reader get when viewing two books simultaneously on one device – conjoined document twins? These exercises of definition serve to deconstruct the search for a universal essence of document. To tie back into Frohmann’s argument of documentary practices, that document is not dependent on information: the

readable books of literature manifested on a tablet become but one facet of the tablets documentality. Regarding the tablet-object itself, following Gorichanaz and Latham's (2016) suggestion that documents could be seen as affordances, perceived possibilities, the empty tablet discussed above could certainly be a document as well. Buying, downloading, reading, commenting, organizing, and deleting e-books on the tablet – even cursing at it when the battery dies in the middle of a plot twist – all are part of the documentary practice. Furthermore, such a description has only touched upon a narrow range of interaction-oriented aspects on the part of the reader.

Frohmann (2004) distinguishes four property categories of documentary practices that widen the scope considerably:

- the materiality of documents,
- the institutional sites in which they are produced and embedded,
- how they are socially disciplined, and
- historicity, i.e., the historical circumstances.

Extending this to analysis of library materials in x-lending libraries, these concepts could be used to investigate if and how a specific library is engaged in documentary practices. Instead of focusing on individual collection items and asking, 'Is this hammer a document?' the focus can be shifted to the circumstances in which the hammer is found: 'Is this material hammer part of a documentary practice?'. Further, a missing key in the account on documents thus far need be considered: the people involved with the document. It has been argued that the human being is absolutely necessary to a concept of document (Gorichanaz, 2015). The different community members of an x-lending library will be part of the context of documents and documentary practices.

A noteworthy example from the history of libraries regarding the treatment of objects as documents: Libraries have sometimes referred to unwieldy collection objects such as art or toys, as *realia* (e.g., Hektoen & Rinehart, 1977). Other times, *realia* has been a separate, more specific category for what are seen as real or natural objects where a distinction is made from both art and toys (Olson, 2001). In this latter definition, *realia* are everyday objects that have been made into library materials to serve a representational function; they are specimens that have been plucked from the wild of the world outside the library. This interpretation is seemingly in line with the documentalist view. Regardless, both usages of *realia* are symptomatic to the efforts of categorizing and cataloguing items that are somehow seen as defined by their three-dimensionality. A print book is of course no less three-dimensional. Still, the book perhaps more easily lends itself to be conceptualized as something abstract defined by its metadata and supposed

content, where the manifest block of paper is of less consequence. At least this seems to be the case in the current context of how libraries are socially and technically constructed. Considering the materiality turn discussed in the opening of this chapter, however, such a view on books echoes the liberation-technology criticized by Duguid (1996), where printing on paper would amount to putting physical constraints on the pure information inside.

These varying interpretations of the relation between object and document, through a context of people and practices, all share the implication that the material dimension means *something*. The takeaway to the analysis here, is to investigate if and how the library materials of a specific x-lending library are subject to documentation in the constitutive and generative sense. It opens yet another avenue of exploration regarding how the community members at the studied tool lending libraries relate to the tools. How do the concepts of documentary practices, as outlined in this section, pertain to borrowing and lending tools? By such an inquiry an attempt is initiated to find a common framework for comparing materials and material practices across library types that at first glance may seem entirely disparate.

3.4 Space and Place

The library is something a person can visit, where they can be, and do. This will take place in the space that is the library. This space in turn might be physical or digital. The distinction physical–digital itself connects to a particular instance of the material history of the library place. In the late 1990s, the concept of the *hybrid library* was important to understanding contemporary and future development in the field. This was at a time where, in a very foreseeable future, there was expected to be entirely digital libraries, i.e., libraries where the collections and services were provided wholly by digital means, to be accessed online. This impacted how the materiality of the future was envisioned: “In the digital library, the notion of place will be left behind” (Oppenheim & Smithson, 1999, p. 99). Many libraries were offering increasingly digitized services, which was still a relatively new occurrence. This prompted discussion on how to view these new services which were seen as something entirely distinct from the physical library. Hybrid library was the proposed term then, for this construction where two different modes of library were seen as distinct and separate, but to co-exist under one guise (Oppenheim & Smithson, 1999). The terminology is interesting from a materiality perspective as *hybrid* literally refers to the result of breeds being combined. Specimens of different breeds of library are crossbred to produce an offspring that is the next step in an evolution.

Perhaps the most tangible and evident dimension of the library place is that which encloses and demarcates its indoor areas: the library building

itself. When visiting a library, what is it about the place that makes it so, a library? The tool lending library exterior pictured below (Fig. 6) might not look like the typical library front, with its low profile, collection of large tools on the outside, and convenient drive-in-like parking. Yet it is presumably performing its role of being a library like any other. (There are of course poorly designed or inadequate library facilities too, that fail in their aspiration to be libraries in some regard. Still, even the failed library is no less material for its flaws.)



Figure 6. Exterior of a tool lending library. In the center in front of the parking spaces are wheel-mounted stands of gardening tools. To the right, ladders are leaned against or hung on the wall

It is certainly possible to theoretically approach library buildings as skeletal structures that are filled with that which makes a library a library. A more plausible route for a LIS project that investigates the role of the library from a material perspective, however, is to not separate architecture from the activity for which it is purposed. This follows the earlier argument on materiality where neither technology nor human activity is regarded as neutral or isolated with regards to the other. Research has shown that the history of library buildings indeed represents both the physical and the social development of these unique spaces:

The library building has developed as an independent building type with its own identity, ideal types, and model libraries, linked to modernity and the modernization of society and reflecting the development of 'libraryness.' (Dahlkild, 2011, p. 40)

From this perspective, library buildings, and the process of building libraries, are studied as aspects of the library as a whole. For instance, architectural manifestations of discourses of the library as a work- and meeting place have been explored (Johannesson, 2009), noting the challenges in communication between architects and library stakeholders, users in particular. Indeed, these issues may be ameliorated by a "focus on experiences of space rather than on the appearance of the architecture" (p. 315). Reversely, it was also concluded in a study of academic libraries, that the physical space of the library, including the building, "needs to be factored more actively into studies of student information seeking" (Shill & Tonner, 2003, p. 462). Concerning the relations between the specific built form of libraries, and the idea of what a library is, it has been found that people display a wide range of opinions and preferences and are certainly not in consensus (Black, 2011). Positions range from a preference for preservation of library buildings of old, to preference for new architectural statements, via preference for a mix of both, such as preserving the old buildings and exteriors but with updated interiors adapted to contemporary needs. Yet another position is that of indifference in the sense that libraries' architectural form or design is "less important than their core functions of providing access to good collections of materials, to various other services and to a protected and cherished public space for learning and cultural enrichment" (Black, 2011, p. 41). One of the contested points in this spectrum of standpoints, will be exactly what role form has, if any, in enabling such a "protected and cherished public space".

While the building may be the most concrete or at least obvious manifestation of library place, concepts of place and space often represent more comprehensive and complex notions in library research. One theoretical model that has been influential at least in Scandinavian library development and literature is the *four space model* (Jochumsen, Skot-Hansen, & Hvenegard Rasmussen, 2012). It posits an understanding of the library as four overlapping spaces: inspiration, learning, meeting, performative. It is an idealized representation of possibilities, and

in an ideal library these four spaces will support each other, and thereby support the library's objectives. The overall task is to make all four spaces interact by incorporating them in the library's architecture, design, services, programs and choice of partnerships (p. 590).

An understanding of libraries in spatial dimensions that span both physical and digital domains, enables analysis of how a specific library can attain the four goals also submitted in the model: experience, involvement, empowerment, innovation. These spaces and goals have been explicated in other research, such as the understanding of libraries as foucauldian *heterotopias* where the library is a space that is larger on the inside than its outwards dimensions suggest (Radford, Radford, & Lingel, 2015). This is because the library is a space that is experienced through just the very possibilities it exhibits, as in the four space model.

Library space has also been conceptualized as a socially important and involved public *meeting* place, unique with regards to how it can enable diversity among other things (Aabø, Audunson, & Vårheim, 2010; Audunson, 2005). With this specific example, the topic is moving closer to a predominantly social rather than material understanding of place. Indeed, much of this previous research could be reviewed in the next section on context and community rather than here. However, the tangible material starting point in the library as a building that will be intimately linked to both space and place, still made it seem suitable to discuss in the present section. A familiar issue that complexifies matters further is the terminology of space vis-à-vis place. One distinction offered by Templeton (2008) is an order where space is something regarded from a distance and which can be manipulated, such as a problem space. A place on the other hand is a space that has become immediate and known. This does not mean however that places are to be understood as trivial. “Places are not static; the movement of eccentric bodies through places ensures that boundaries and contents are continually rearranged” (p. 203). The interpretation relevant to this thesis is of *space as meaningful place* (Järvelä, 2009), a material understanding of the concepts where “meaningful place refers e.g. to the space people share through different fabricated items” (p. 164). Places are approached as “material manifestations of space” (Johannisson, 2009, p. 183). This perspective firmly positions the concepts in contrast with any exclusively social *or* geographical interpretations.

3.5 Context and Community

The composite of a particular social and material context is an important premise for the thesis. A central point which has emerged during the work is that the materiality of the library itself needs to be considered: the place, the building and facilities both exterior and interior, the larger collections of which borrowed and lent items are a part of, and the people that do the borrowing and the lending. The material library does more than just represent a lending service, however. Intermingled with borrowing and lending, the library also may provide shelter, information resources, meeting places,

bathrooms, events, children's play areas, facilities for work and study, coffee. Crucially, it *is* also a lending service, a place where anyone can go and pick something out at their choosing, to borrow home, for free. The point made here, is that the borrowing and lending does not happen in a material vacuum but as one facet of the complex materiality of libraries as places, facilities, collections, and people. To support this approach, the concept of community has been construed here as a platform for discussing library services in a relevant social and material context.

The concept of context has been a critical component in shaping particularly the socio-cultural strands of LIS research. Context has been researched in a number of guises, including: as time (Savolainen, 2006), as physical space and place (see 3.4), as situation (Cool, 2001), as information worlds and small worlds (Burnett & Jaeger, 2011), and as object properties for preservation (Beaudoin, 2012). This account aims at reviewing a few pertinent examples of research that deal with contexts that manifest in, through, and around libraries. Special attention is paid to the communities in which libraries operate and establish relevance. This will serve to position the thesis as an investigation of borrowing and lending in x-lending libraries as both contextualized and contextualizing phenomena. It is achieved by approaching x-lending libraries as being located in, being part of, and contributing to the creation of, communities, i.e., community engagement (Sung, Hepworth, & Ragsdell, 2012). A material interpretation of community offers an alternative to social relations as nets of individuals facing each other, separated by gaps. Instead, in the material community everything consequently is materially joined, i.e., by *touch*, sharing a division of surfaces rather than overlooking a gap (Coward, 2012). This includes both human and nonhuman, again avoiding the separation of materials as meaningless objects that are only waiting around to be used by omnipotent subjects.

The mundane usage of community is often positive and research also tends to employ the concept of community positively. The more community the better. Unreflected, this usage risks resulting in the deterministic position that community creates good, and by definition correlates positively to desirables such as sustainability (Hauxwell-Baldwin, 2013). This may of course be a strong point for an action-oriented research project with the researcher in a participating capacity. For the purpose of academic inquiry in general, however, community as an analytical specification of societal context, is as much defined by the people who are excluded from it (Coward, 2012). This opens up for, e.g., incorporating the issue of library non-users in the discussion on the context of the library community. Bridging to the previous section on the library as a material space, the library is also a public space (discounting, obviously, library-types that are not open to a public). For the present study of borrowing and lending, it is also relevant to approach the

library as a space in the context of consumer society (Rooney-Browne & McMenemy, 2010).

Marres (2015) argues that the point of looking at *the public* and people's engagement in the public from a perspective of materiality, is not uniformity; that everything would be equally material. On the contrary, "some practices of participation are more explicitly 'material' than others" (p. x), and "some sites of engagement are more material than others" (p. 1). This effectively opens up for comparisons of different practices and contexts, with regards not only to the characterizing of their materiality, but even their degree of materiality.

3.6 Summary

In conclusion, materiality as introduced in this chapter, serves as a foundation for approaching x-lending libraries as rich and complex phenomena. This study is not aimed at measuring exactly how material a specific library is, but the perspectives presented here will aid in investigating the material in the library and the library as material. By extension, this includes approaching different libraries (and library types) to construct an analysis that discusses potential differences. Tool lending libraries can be investigated in the "shared urban fabric" (Coward, 2012, p. 479) that is the community as consisting of the place of and around the library, the materials, and the people. The analysis is equally open to social and technical dimensions contributing to the explanation. Ideally, these dimensions would be treated as interdependent and inseparable. Practically, what this specifically brings into the methodology as presented in the next chapter, is laying the grounds for an analysis that can explore and refine unexpected dimensions as they emerge in the empirical study. Consequently, the analysis of the materials of a tool lending library is not committed to a specific social-theoretical lens. Rather, the exploratory study leaning on a materialistic approach, can serve to identify potential, fruitful theoretical entry-points into the topics of borrowing and lending at tool and other x-lending libraries. The material strategy is thus a meta-theoretical starting point in a project aimed at arriving at a proposal of more specific theoretical routes for future research. The material perspective has also become closely aligned with the project's exploratory approach through case study. This study design includes not only interviews but also observations, which has enabled a richer understanding of the materiality of tool lending libraries, as described in the following chapter.

4. RESEARCH DESIGN

In this chapter, the approach to and execution of the research project is detailed from a methodological and practical point of view. As established in the introduction, few investigations have been conducted previously on the type of libraries discussed in this thesis. This has significant bearing on the approach as elaborated in the first section below. The primary data collected for the study consists mainly of semi-structured interviews, and the data analyzed are the transcripts. In addition to the interviews, observations were also conducted at one of the tool lending libraries. The analysis of these data forms the basis for a theory of the role of borrowing and lending in publicly provided library services.

4.1 Case Study Process

The exploratory approach, with regards to its epistemological aspirations and implications for thesis structure, was introduced in chapter 1. In this section the case study process that enables the exploration is described. The precise definitions of what a case and case study constitutes, in social science research, will differ. Some researchers promote a definition of case study *method* depending on specific required techniques, whereas others rather emphasize the methodological *strategy* of case study (Yazan, 2015), where this study falls into the latter. Other variations include whether case study should rely exclusively on qualitative data, as is done here, or if it should combine quantitative and qualitative data. The approach to case study in the present project has been largely aligned with Stake's (2005) proposition: a strategy for qualitative inquiry that is focused on the *case*. Different projects may have different ambitions regarding how far-reaching the aspirations of generalizing the case are. Regardless, whether the case is seen as representative of something else (such as other cases) or not, the case itself is always at the center of attention. In Stake's (2005) typology, the type of study performed here primarily has the characteristic of an *instrumental case study*, where the case "is looked at in depth, its contexts scrutinized and its ordinary activities detailed, but all because this helps us pursue the external interest" (p. 445). The external interest here is the thesis's problem area located in the ongoing broadening of what is being lent at libraries, and the generally understudied state of libraries as material lending services. As there

is also no substantial previous library research detailing the specific phenomena of tool lending libraries, it seemed reasonable to start the investigation by dedicating considerable, close attention to a few of these services. Thus, while the thesis is aimed at framing the research topic in a more generalized context, the interpretations of the studied tool lending libraries as cases will be at the core of the investigation.

For this study, the case study was based on two modes of data collection – interviews and observations. The results provided by the combination of these two types of data, has enabled the emergence of the thesis's complex material perspective on the object of study. The initial plan included a more full-fledged mixed methodology approach where the qualitative data would be complemented with quantitative surveys. A survey questionnaire was constructed and quantitative data regarding patron perspectives was collected in connection with the interview study. Surveys were collected from a total of 257 participating tool lending library patrons. However, they are not included in the thesis but will be reported elsewhere. The limitations and advantages of this decision are briefly discussed in the thesis's concluding chapter.

4.2 Case context – the Libraries

Three tool lending libraries in total were studied during the project. From a case study perspective, one of them served as the main case, the others as complementary. They are all located in the U.S. (see motivation for study setting in 1.5), in three different size municipalities. Two of them are located at branches of the public library in their respective cities. These are formally part of the library system in most respects; funding, management, administration, and catalogue system are all shared. Where they are set apart from the rest of the library organization is mostly in their operational setup: facilities, staffing, service hours, and some facets of the loan terms. Concerning the latter, tool loans will typically be shorter periods, and patrons may not have access to the full range of electronic services otherwise available at their library, such as online reservations, renewals, and purchase requests. Further, a liability waiver will need to be signed by first-time tool borrowers before they can be registered to check out tools, in order to clear the library of responsibility for any injury resulting from the patron's tool usage. Patrons also need to be 18 years of age and be able to show proof of residency or property ownership in the city. After this registration procedure, they can start borrowing tools using their regular library card. Other than the physical division of the tool lending and publication lending facilities being housed separately, and that patrons cannot check out or return items from one at the other, they will now be using the library as one service, with one patron identity represented by their account and card.

The third tool lending library is not attached to a public library, or to any formal library system. It is run independently, as a 501(c)(3) U.S. tax-exempt non-profit organization. It is expressly modeled after the public library, however, and operates similarly to the other two tool lending libraries studied. For instance, aspiring patrons are required only to register to acquire their loan card – as opposed to a membership-based model, which would require or at least imply that patrons are somehow involved with the library. By not being membership-based, the library is open to, and serves, the public. A marked formal difference from the two public libraries, is that the non-profit employs a board of advisors, instead of being attached to a parent organization.

When choosing these specific three libraries, opportunity to learn was prioritized over representativeness or judgment of typicality (Stake, 2005). It was more pertinent to learn a lot from a heterogeneous selection, than to learn what is characteristic of the population through a representative sample, which is seldom the intent with case studies anyway. Therefore, one public tool lending library was chosen that is old and seemingly well-established in its community, another that is considerably younger and at the same time serving a larger municipality, and a third that has a completely different institutional setup. If the selection was to be representative, it should instead have included more, perhaps only, community managed independent libraries, as these are seemingly the most common type of tool lending library by far. The current selection allows learning a lot about tool lending libraries as *libraries*, by looking at two services that are run by public library systems, but without restricting the study to public libraries. Lastly, tool lending libraries are still relatively rare, and one of the included services is also unique by being much older than most other tool lending libraries. At the same time, two of the libraries are part of otherwise regular public libraries, all three are operating after a fairly standard library model, and the number of tool lending libraries is decidedly increasing anyway. The studied cases could therefore be categorized as somewhat *unusual*, if not *extreme*, and at the same time the cases also function as *common* cases (Yin, 2014). Both types of cases are investigated to provide insights that can be related to the study's external interest. Studying these specific tool lending libraries as unusual *and* common cases can aid understanding a larger issue discussed in the thesis: the duality of libraries doing something new, and libraries doing what they have long done.

The primary case consisted of one of the public library system-managed tool lending libraries. At the start of the project it was intended as the only study site. It was selected because of having served its local community for over 30 years, far longer than most other similar services. This circumstance made it seem suitable for explorative case study; a diverse range of participants

could hopefully be observed and recruited, and its long history should be grounds for a rich variety of experiences and views to be obtained from participants. Further, since the thesis pays special attention to these types of services as libraries among other libraries, it also seemed relevant to study a case that had functioned as one specific type of x-lending library in a larger public library system for a longer period of time. The other two libraries were added later in the process, primarily because it was realized that more types of interviews with staff and managers would be beneficiary (due to the limited amount of interviewees at any one local library). However, part of including two more study sites was also simply because opportunity arose and the project frame allowed it; qualitative research field work should strive for variety and acknowledge “opportunities for intensive study” (Stake, 2005, p. 451). The specifics of the data collection are described in the following section.

4.3 Data Collection

Data collection was organized mainly around the tool lending libraries’ most immediate stakeholder categories: patrons, staff, and managers. Study participants from these categories were recruited for semi-structured interviews, and observations would always include one or both of the first two. As introduced above, the possibility of employing further types of data was considered. However, as data collection commenced, it became clear that there was a rich enough material to explore with the interview and observation data in and by itself. It was therefore decided that rather than broadening the results with other types of data, a second phase of interviews could be conducted in order to further probe the themes from the first phase of observations and interviews. This decision would also make more room for exploring the interview and observation data satisfactorily in the papers.

The interviews consisted of 33 participating tool lending library community members: 22 interviews with patrons at the main case tool lending library, and 11 staff and managers total from all 3 different tool lending libraries.

As outlined in papers 2 and 4, the majority of participating patrons were recruited on the library site. They were selected with several dimensions of diversity as a guiding principle, rather than to be representative to a particular population. In order to achieve a heterogeneous sample with high variation, purposive sampling was used (Bryman, 2016; Robson, 2016). The characteristics of diversity that were ideally sought, included demographics such as age, gender, ethnicity, and occupation. They also included case-specific characteristics such as what they typically use the tool lending library for, and how often. This sampling was motivated by the thesis’s exploratory approach, and thus should uncover an as broad as possible range of relevant

concepts. Again, as when choosing the libraries for the study, it was more relevant to learn a lot than to learn what is typical. (This description was adapted from thesis paper 4, Söderholm, 2018)

Staff and managers were selected as to get a representation of different professional positions. These included: lending specialists (desk staff), tool lending library managers, library branch managers, and library system managers. All interviews were semi-structured, typically ~1 in hour length, digitally recorded, and transcribed. Interview themes include descriptions, views, and experiences of primarily the following:

- borrowing and lending,
- the collection of tools,
- the tool lending library in the community,
- who patrons and staff are,
- the meeting and relationship between patrons and staff (see Appendixes 1–4 for more details on how these themes were broken down into questions).

When planning the interview guides for participants working at the libraries, i.e., staff and managers, some consideration was given to the participants' background in terms of being librarian trained or not. It was correctly assumed that managers would generally be LIS educated, while lending specialists would not. This meant that managers were asked questions about certain concepts such as how they regarded tools in relation to general concepts of collections and collection development (Appendix 3), while staff were not (Appendix 2).

In addition to the interviews, field notes, including photography (e.g., Fig. 6), were taken to support observation during visits to the tool lending libraries. Given the exploratory approach, taking field notes seems suitable. It helps the research avoid being tied down by previous theory and proceed “in a more open-ended way, seeking to identify issues and ideas by careful sifting through and piecing together of fieldnotes” (Emerson, Fretz, & Shaw, 1995, p. 166). By itself, it comprises a relatively small set of data in this project and was not analyzed or reported separately in any of the research papers. Rather, it is seen as part of recordings to be explored, where the interview participants' accounts make up the greater portion. As complementary data, it has enabled me to make some illustrative points throughout. More importantly, it also provided examples to judiciously probe *during* interviews. A good example of both applications, is the observation that there often seemed to arise some discussion at the lending desk on what the best tool for the job would be, that these interactions could take time, and that the patron sometimes evidently left with some other tool than what they had first asked for. This observation was brought up during some of the

interviews, either explicitly, or by shaping some of the questions, for instance asking if the patron usually ended up borrowing the item they had first requested. It was also referred in the papers to make points about things such as reference interviews.

While not intentional from the outset of data collection, it has also become apparent that the observations have been crucial in forming the material perspectives which the project eventually arrived at. Being able to see, hear, feel, and even smell the tool lending library has been essential to understanding how participants experience and perceive the phenomenon as reported in the interviews. A concrete example is how some participants would associate the tool lending library with *using your hands*, as a positive. Many observations were made where the meeting between staff and patron would soon have a tool at its center; some greasy, clunky piece of metal that would be examined, twisted and turned, changing hands back and forth, seemingly a mediating focus of the interaction. During less busy hours, staff could be observed to be absorbed in some tool with its repairs, cleaning, or sometimes seemingly just out of curiosity or to keep their hands busy. I was asked while I was there if I wanted to help sharpen the edge of a certain tool, which they happily taught me, and so on. While few such observations were reported explicitly in the empirical papers, they have all been vital to helping the exploration forward and understanding what participants talk about.

4.4 Data Analysis and Reporting of Results

Data collection and analysis were done in several phases, each with a different focus on the subject. Table 1 presents an overview of how data collection and analysis was structured and what paper each phase is reported in. (Note that this overview includes only papers II–IV which were empirical, and not paper I which was theoretical.) The interviews were conducted in two rounds, 2011 and 2012 respectively. The two rounds of interviews in effect comprise one empirical material. However, the interviews from the second round came to be somewhat refined, focusing on the themes that appeared to be most crucial to continue exploring.

Analysis of the data was conducted similarly for the three empirical papers. The analysis was performed on the transcript texts, accompanied by reading and incorporating the field notes. The guiding analytical principle has been to let the textual data drive the process, reading and re-reading, drawing on expressed meanings to create larger theoretical concepts, then re-reading again – rather than to initiate the analysis from previous theory (Zhang & Wildemuth, 2009). In all three papers some variant of open coding was employed. Open coding is an analytical method for identifying, labelling, and categorizing meaningful, pertinent concepts from the textual material (Corbin & Strauss, 2015). The generated categories included both

Table 1

Collected data and its relation to analysis and papers II–IV. Arranged by participant group

Data	No. of interviews		Focus of analysis	Reported in
	2011	2012		
Patron interviews 15		7	Perception of tool borrowing	Paper II: “Borrowing tools from the public library”
			Perception of the tool lending library	Paper IV: “Not like other libraries? Patrons’ experience of a tool lending library”
Staff & manager interviews	5	6	Perception of tool lending and of professional role	Paper III: “Tool lending librarianship”

emic and etic concepts; emic are those that directly represent the participants’ perspectives including their language, etic stem from the researcher’s interpretations. Accordingly, the participants’ own words would sometimes be suitable for labelling or describing the larger category, i.e., their emic perspective has carried across in the generalized theoretical findings.

Arguably the most momentous ‘step’ of the analysis in this project, however, is the writing itself, initially of the empirical paper texts but even more so these thesis chapters. I subscribe to Richardson and St. Pierre’s (2005) view that writing constitutes more than mere writing up, and that it is also “a way of ‘knowing’—a method of discovery and analysis” (Richardson, 1998, p. 345). This thesis text is not a report of something that has occurred previously or elsewhere. The bulk of the research project occurs in, and is constituted by, the text itself. Accordingly, the writing process, now in its tenth year, is integral to the exploratory approach as introduced in 1.7 and illustrated in figures 4 and 5.

4.5 Research Ethics

All participants signed consent forms which stated their rights. These forms also stated that while the participant would not be named and reasonable measure would be taken not to disclose potentially identifying information, the specific tool lending library which they borrow from or work for, might be named. In the papers, participants are referred with as little unique identification as possible. Patrons are referred to with numerical IDs. Demographic data and other information about the participants is only presented on a group level and not connected to individual IDs. Similarly, staff

and managers are only identified by which category of professional position they belong to, without individual designations. Thus, quotes from different participants in the same staff/manager category are not distinguishable to the reader, as it would add no meaningful information. These measures are all intended to maintain a fair level of confidentiality in the presentation. Further, all source data, including original recordings and transcripts, are stored safely to be destroyed on completion of the project's final publication.

The relation between researcher and that which is studied also warrants a brief discussion here. I came into the project with an outsider perspective on what tool lending libraries, and libraries in general, do. Unlike many of my library and information science colleagues, I have never worked at a library, had an internship at a library, or previously collected data from libraries even for undergraduate or master's studies. This is not only a disadvantage. Being an almost complete outsider allows me as a researcher to focus on developing an academic understanding of the phenomena from a bottom-up perspective with little pre-conceived expectation of what to find, in particular with regards to the professional perspective.

In addition, I am also a partially cultural outsider with regards to the studied context in other respects. Only 'partially,' as Nordic libraries in general and public libraries in particular are historically heavily influenced by U.S. libraries, as discussed earlier. Still, they are not the same and my understanding and expectation of what libraries are and do, will inevitably be shaped by life-long experiences from library visits in Sweden, following Swedish library debate, and so on. The same could arguably be said of the general cultural differences between the two contexts of Sweden and USA. Sweden is a western country with a high proportion of competent English second language speakers, and a generally high influence from and interest in American culture. As a visiting researcher this can prove to be both an asset and a challenge. The amount of cultural barriers to overcome is manageable: it is relatively easy to communicate, to make contacts and arrangements, to find the necessary resources in order to work, and so on. At the same time, visiting such a high-profile culture as the USA, of which I have been getting second-hand impressions from news and fiction on an almost daily basis for as long as I have been a media consumer, will likely lead to a multitude of preconceptions affecting the study.

When looking at the above factors of cultural differences and outsider-perspective taken together, an important analytical takeaway is to be cautious as not to overestimate the uniqueness of tool lending libraries. Some of the findings that may at first come across as something entirely new, and unique to tool lending libraries, could possibly also be explained at least in part by other cultural differences. Such differences may pertain to either the library sphere or to more general culture, and further be affected by preconceptions,

and result in unintentionally overreaching interpretations or even outright misunderstandings.

As discussed in paper 4 but relevant to the whole project, there is also the issue of participation bias. This is the case in particular with recruited tool lending library patrons, corresponding to the data in papers 2 and 4. Most of the participating patrons were relatively easy to recruit – they happily signed up when asked. More than one responded with an exclamation along the lines of “Sure, anything to support the tool lending library!” This may have several implications for the study. The recruited patrons are almost certainly overrepresented with regards to their strongly positive stance towards the tool lending library. The reason for this is simply that they were easy to recruit. Among those patrons who declined to participate, which were about half or slightly more of those asked, there might very well be a larger proportion of neutral to negative views represented.

This study does not purport to make a representative sample of the population of patrons to begin with; that would have required different selection criteria, another recruitment approach, and a different analytical apparatus if the point was to make inference towards the population represented. Regardless, it is important to note that the resulting findings presented in this thesis *could* be interpreted as dealing specifically with patrons that are happy with the service. Hence, the service satisfaction is not only a result but also part of the very premise for the analysis. Only two participants stood out in this regard, who offered views ranging between neutral to positive; they were not outright negative, only not as overall strongly positive as the other twenty participating patrons. Lastly, the positive responses to participation requests, like the one paraphrased above, themselves could be observed and interpreted as expressions of the community around the tool lending library, as discussed in this thesis. Site visits at various times of day, week, and year to recruit participants was never announced to patrons beforehand, and so all participating patrons are in some respect sampled from community members during their presumably regular use of the tool lending library.

PART II

5. SUMMARY OF THE STUDIES

This chapter represents the study conducted through the four papers. The papers themselves can be found in part III, included in full. In this chapter they are overviewed and summarized, separately, in order of publication which is also their thematic order in the thesis. They are each a freestanding publication, and at the same time they together make up the coherent foundation of the thesis. Here, they are presented as to how they fulfill both roles. The papers each correspond to one of four sub-questions of the empirically oriented research questions, presented in 1.6. The first paper presents a conceptual and theoretical framework, and the following three papers report and analyze the empirical data. Papers 2 and 4 both build on the same observations and patron interviews. Where paper 2 focuses on patrons' borrowing specifically, paper 4 focuses on the tool lending library itself and staff's lending. Paper 3 builds on interviews with staff and managers, and focuses on both borrowing/lending and the tool lending library (Fig. 7).

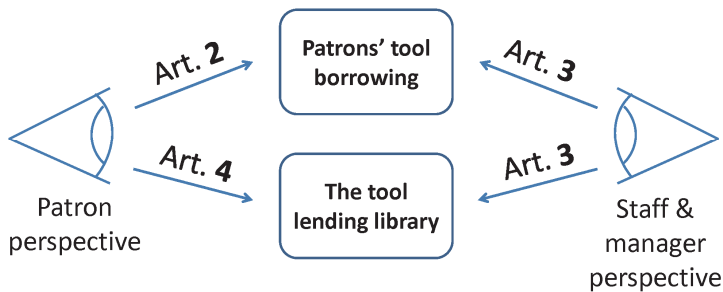


Figure 7. Empirical papers 2–4, two different perspectives on two areas of inquiry

Thus, for the thesis project, the papers complement each other. Papers 2 and 3 provide patrons' and staff/managers' perspective on borrowing. Papers 4 and 3 combine patrons' and staff/managers' perspective on the library and its lending. In lieu of ending the chapter with a summarizing review of what

the four papers together bring to the project, this will be the role of the subsequent chapter 6.

Papers 1–3 are published articles in peer reviewed library and information science journals. Paper 4 was written and submitted in 2018 and at the time of printing this thesis it had just received a decision corresponding to *accept with revisions*. The version presented and summarized here is the submitted manuscript version.

5.1 Collections Redux: The Public Library as a Place of Community Borrowing

Söderholm, J. & Nolin, J. (2015). Collections redux: The public library as a place of community borrowing. *The Library Quarterly*, 85(3), 244–260.

Purpose: The article was aimed at bridging an identified gap between social and societal perspectives in library research, by exploring the intersection of the concepts of collection, place, and community. By doing so it responded to the first sub-question of the thesis's empirical research questions, *how can library collections in the social space and place of libraries be meaningfully understood from a material community perspective?* This article initiated the conceptual groundwork for the project. It is not intended as a proposition of a ready theoretical framework as such. Rather, it provides entry points to topical areas of potential relevance for studying material library collections in a social and societal context.

Approach and findings: This article was written as a conceptual article that reviewed pertinent previous research and concepts in order to discuss identified problems and propose theoretical advancement. It started by providing an historical overview of library development, mainly concerning public libraries in western countries. From this introduction, it lead to a discussion on a problematic downplay of physical collections and services in contemporary library and information science research. This was contextualized in the dominance of two identified strands in discussions and research concerning social perspectives on libraries.

First, digital developments such as digital libraries, library 2.0, and social media, have recently often overshadowed the role of the physical library. Discussions on digital development are often made relevant or contextualized through notions of information, where the library's role is seen as making information available and accessible. We argued that this view of libraries a) downplays its potential for engaging in progressive development in favor of a passive, on-demand approach to their services, and b) demotes the status of physical materials to inferior precursors of evolved digital provision, overlooking the potential of investigating these physical materials on their own merits.

Second, when physical libraries are discussed or researched, the focus will often be on the library as a social meeting place where material collections are of secondary concern. While we supported the relevance of investigating libraries as meeting places, we also argued the need for further developing these perspectives with greater attention paid to collections as part of library place. This should help library research to further distinguish and understand the historical, contemporary, and potential roles of libraries as unique compared to other social places.

The article further introduced the topic of borrowing different materials, how the types of materials available at libraries has been expanding since the second half of the 20th century, and the exemplifying case of tool lending libraries, to the research project. These developments of the availability of different library materials were then used to make an argument for connecting collections to social and societal perspectives through the concept of community engagement. Books, literature, and reading used to be absolutely defining to libraries' roles in their communities of empowering underserved citizens through literacy programs. While this is certainly still the case in many parts of the world, it is far from the only or necessarily most pressing concern in all communities. Accordingly, we called for conceptions of libraries that are non-generic, understood as part of communities rather than part of library systems. A library can of course be both, but our central argument was that caution should be exercised with any standardized definitions on what libraries are supposed to provide.

Finally, the article also provided starting-points for relating borrowing to issues of consumerism and sustainability, and argued that it would be more fruitful to approach borrowing and other strategies of consumption on equal grounds, rather than to frame borrowing as *alternative*. During the early exploration in the thesis project, such issues of consumerism and sustainability were believed to be more pertinent to understanding the problem area and cases. As the exploration proceeded however, these topics were largely left for future research to explore further, as other dimensions turned out to be more relevant or rewarding. What the article primarily brings to the project is a foundation for researching the local, situated library collection in the context of the community. The community concept offers linkage to make theoretical connections from material collections to larger social and societal perspectives.

5.2 Borrowing Tools from the Public Library

Söderholm, J. (2016). Borrowing tools from the public library. *Journal of Documentation*, 72(1), 140–155.

Purpose: This article was aimed at exploring how patrons of a tool lending library perceive their tool borrowing, in order to understand the role of a

public, specialized lending service to its users. By fulfilling this aim, the article would respond to the second empirical sub-question: *Why do community members borrow tools from a tool lending library?* The problem area was delineated as the understudied state of the phenomenon of borrowing in library research. This deficiency included the more specific case of borrowing from tool lending libraries, which had received little scholarly attention and had been largely overlooked in LIS research thus far.

Approach: The subject was approached from a perspective inspired by Wiegand's (2003) argument for the *library in the life of the user*. Specifically, this allowed studying patrons' borrowing from the tool lending library, in the context of their lives as community members where the library is just one part. Consequently, borrowing materials from the library becomes but one among other possible strategies for acquiring those materials, in this instance tools. On this premise, a case study was designed to interview community members on their tool borrowing. 22 tool lending library patrons were recruited to participate in semi-structured interviews, on themes concerning their backgrounds as patrons, how they acquire tools, their use of tools, and their experiences and perception of borrowing from the tool lending library.

Findings: Participants were divided into two groups depending on what they stated that they mainly borrowed tools for. Twelve participants borrowed mostly for hobby purposes, i.e., maintenance, construction, and other projects in their own private homes and gardens. The other ten participants borrowed tools primarily for professional purposes, i.e., for commissioned work. The results were divided into two overlapping, major categories (called perspectives in the article but to avoid confusion with other terminology in the thesis they are called categories in this summary). The first category was termed *reasons for borrowing tools*. The second category, labeled *enablement*, dealt with effects and implications of borrowing tools. These categories were overlapping in that a perceived enablement of borrowing tools may also be the reason for borrowing them in the first place, and so forth. Rather, the distinction between the categories stemmed from how the more detailed themes under each category seemed to relate to each other.

Reasons for borrowing tools included what was referred to as weighted considerations, i.e., explicitly weighing different factors against each other when deciding how to get a tool. This typically involves frequency of use, storage issues, ease of access, and costs associated with acquiring the tool. Tellingly, all participants indicated that they borrowed tools when there was an explicit need for them. Nothing in their accounts indicated that they would borrow tools in any serendipitous fashion or go to the library and leisurely browse the tool section to see if anything catches their interest. They go to the tool lending library with a specific, practical, and instrumental need

articulated beforehand. Regarding decisions and preference to borrow privately or from the library, participants preferred borrowing from the library. They argued that borrowing is what the library is for – both in the sense that there is no imposition involved, and that they as patrons are already indirectly paying for the service through taxes and so are getting something back for it. Only a few participants expressed general ideological or politicized motivations for borrowing, in the sense of connecting it to global issues such as consumerism or sustainability. Instead, most participants would argue from a local perspective: it does not make sense for everyone in the community to each own the same tools; it makes more sense to be able to share tools within the community.

Tool borrowing as enablement included themes that dealt with what impact participants perceive their borrowing to have for them – what borrowing tools from the library allows and means to them. Borrowing tools inspires and encourages them, sometimes to do new, other, or more work with tools, than what they would have done otherwise. Further, some patrons talked of what they learn by borrowing tools. They might try new tools they would not buy because they did not know how to use them. Borrowing a tool for free with no commitment enables trying it, learning how to use it, and in some instances going on to buy the tool from a store. Apart from learning or improving the tool skills as such, it enables doing new or improved applications with the tool. Another highly relevant theme which emerged was support of self-employment, where patrons who used the tools for paid work claimed that the tool lending library had been essential to them in being able to do, or start doing, such work. It directly helped them get work for which they might not yet have all the right tools as they could not afford them. Then, later, they could buy tools once they got paid for work they could not otherwise have done at all. Thus, in their experience, the tool lending library served an active role in supporting local self-sufficiency and vocation. Lastly, patrons also saw the tool lending library as enabling the community as such. While this indeed includes the other aforementioned themes, participants would also talk explicitly about what the library as a resource for tool borrowing meant to the community, in general. They saw the library as enabling community members “to improve the quality of life in their neighborhood,” in the words of one participant.

The most relevant takeaways from the article are, first, the immediacy patrons ascribe to their tool borrowing, on several levels. They go to the tool lending library when they have articulated a need for something specific, and because of that specific need. Further, the value they place in having such a borrowing service in the community is also one of immediacy: it is a service of value to the community here and now. These values include beautification, support of local work, quality of life, and doing things in a way that

“makes sense,” in this instance the sharing of local resources. Lastly, the overall notion of *enablement* itself is potentially useful for more aspects of this project, in investigating and explaining the role of x-lending libraries.

5.3 Tool Lending Librarianship

Söderholm, J. (2016). Tool lending librarianship. *Journal of Librarianship and Information Science*. Advance online publication. doi: 10.1177/0961000616666627

Purpose: The third article explored how those working at or with tool lending libraries themselves relate to the service. The aim was to get a library perspective on the role of a tool lending library in the community it serves. It continued to deal with the problem area delineated in the previous article, of the understudied state of borrowing and lending from tool lending libraries. In the context of the thesis, this article contributes to understanding the phenomenon from a more complex, composite perspective; not just a patron perspective, *or* an organizational/institutional perspective. Instead, a community perspective on tool lending libraries is made possible by investigating them from the viewpoint of several different groups of library community stakeholders. Specifically, the third article responded to the empirical research sub-question, *How does a tool lending library serve its community by lending tools, in the views of staff and managers?*

Approach: The method was largely the same as in the previous article 2, using the same type of case approach with qualitative interviews with community members, and subsequent analysis of the data to discern relevant themes. The main difference is the participants, who in this article were recruited from tool lending library staff, managers, library branch managers, library system managers, and advisory board members. Participants from three different tool lending libraries were recruited; two public libraries and one run by a non-profit organization. Another difference to the previous article is that while treatment of the results also was done in a mainly bottom up approach, concepts from the previous article were considered and partially employed for the analysis.

Findings: Like the patrons in the previous article, staff and managers too focused on local and immediate aspects when discussing the role of the tool lending library. Four major themes were discerned regarding participants' experiences and views on this: what the tool lending library provides, what it enables, what it represents, and the conditions for its role.

Staff and managers perceived the tool lending library to *provide* something that is tangible, concrete, and immediate: they lend tools, and tools were not conceptualized as something more abstract. Further, they also saw themselves as providing support, and a community place where community members can meet. The combination of providing support and community

meeting place was accentuated in that the interaction between patrons and staff was regarded by participants to be more socially involved than in most other libraries. The stated reason for this dealt directly with the type of material borrowed and lent. Patrons were seen to always borrow tools for specific needs, but they might not always know what the best tool for that need was, or how to best use it. Further, issues of safety and liability needed to be considered. Therefore staff was reported to often ask questions of patrons, and to recommend other tools than what the patron requested, regardless of whether the patron had asked for advice.

The second theme, *enablement*, was adopted from the previous article and seemed highly relevant and prevalent in staff's and managers' accounts too. They conceptualized tool lending as something that enabled both individual community members, and the community as a whole. This enablement included, again, support to self-employment. Further, this article introduced the concept of *upkeep* to the thesis project, which became central to understanding the participants' accounts. Upkeep is enabled by patrons borrowing tools from the library. The concept describes both a process and a state. Patrons use the borrowed tools to help upkeep their homes and property, and also to improve the upkeep of their homes and property. Several participants used the word upkeep explicitly, and it was hence adopted as an appropriate emic concept to be lifted out and used in the article's analysis and the larger thesis work.

The third theme revolved around what participants saw the tool lending as *representing*, primarily something that makes sense, again reflecting the views of patrons. They largely refrained from viewing their service through any ethical or general ideological lens. In their experience, the tool lending library represented a practical service which is in high demand, and they mostly left it to patrons to place more specific value in it. They compared this with libraries in general, whose mission they saw as connecting people with relevant resources, and in this respect they regarded the tool lending library as very similar to other libraries. The differences they would identify pertained more to how these goals were achieved at their library compared to other libraries, and the different conditions for their work, summarized under the next theme. Finally, they also saw diversity as an important representational dimension; they wanted their service and staff to reflect the diversity of the community members which they serve.

The final theme, *conditions* for the service, captured what participants would express as mostly unique requirements for the tool lending library. Primarily, they saw tool lending staff as requiring a different type of skillset than professional librarians. Participants stressed that tool lending staff needs a much more specialized skillset, focusing on experience of tools and tool applications. This was expressed by both managers and staff.

The article brings to the thesis an understanding of how staff and managers view the tool lending library as an intensely social setting, where patrons need to actively interact with staff in a way that might not always reflect other library settings, or would not even work in other libraries due to privacy considerations. This view is connected directly to the material being dealt in: tools. The other major takeaway from the article is the need to connect library materials with the competency of staff, in this case seen as implying and requiring practical tool experience. Practical tool experience and specialized subject matter knowledge in this context become inseparable. Together, these different issues call to attention the role of *reference interviews* in the x-lending library setting, and the reference skill of x-lending staff. It highlights the role of the specific situation of requesting items to borrow, in community members' learning.

5.4 Not Like Other Libraries? Patrons' Experience of a Tool Lending Library

Söderholm, J. (2018). *Not like other libraries? Patrons' experience of a tool lending library*. Manuscript submitted for publication.

Purpose: The aim of the fourth and last paper was to investigate how patrons of a tool lending library perceived the library, its service, and its staff. The premise was that there already is a substantial amount of studies which report user perspectives on libraries and library services in general – an important area of research for understanding the role and position of libraries in society. Studies on how users perceive the more specific setting of tool lending libraries are lacking however, and therefore this paper could add to the body of research by reporting on a currently proliferating phenomenon. The paper responded to the fourth empirical sub-question, *How is a tool lending library and its staff perceived by its patrons?*

Approach: This paper dealt with how patrons perceive the tool lending library, its service, and staff. It built on the same patron interviews as in article 2. In order to fulfill the paper's aim of investigating how the library services were perceived, it was deemed relevant to also contrast the participant's experiences and views against a wider context. Therefore, the study also covered how patrons compare the tool lending library to other libraries and services. The interviews were analyzed similarly as for the previous empirical articles. The perspective from the first (theoretical) article was used to organize the results according to the community themes of *library place*, *library collection and service*, and *people* (specifically *library staff* in this case).

Findings: Overall, patrons expressed positive views and recounted positive experiences of the tool lending library. Main findings revolved around participants perceiving the tool lending library as different from other libraries they use, and also from other services such as hardware stores.

Defining for these differences seemed to be that participants saw the tool lending library as more socially interactive and involved. The results pertaining to the community themes of place, collection and service, and staff, were analyzed and discussed over six dimensions of relevance to how participants saw the tool lending library as distinct. The dimensions – social interaction, efficiency, technological service, size, trust, instrumental – are presented in the following.

Arguably the most prominent dimension, and also spanning across the other dimensions, is that of *social interaction*. Any library will constitute a social setting and be a stage for various forms of interaction from a theoretical point of view – regardless of whether people are actually talking with each other. The difference perceived by participants, however, could be summed in how they would explicitly describe the tool lending library as “more social”. They saw it as a lively meeting place where community members would talk with each other and with staff, often knowing each other by name. A central aspect to this seemed to be that there would often be discussion between staff and patron regarding tools requested by the patron. The patron would get advice and suggestions, and sometimes borrow other tools than they had first asked for, on staff’s recommendation. Reversely, other libraries were seen as quieter. From an LIS conceptual standpoint, the tool lending library is not more social than other libraries, which would be a problematic and overly categorical proposition. Rather, the difference in degree perceived by participants could be broken down into more specific dimensions.

The *efficiency dimension* expresses another perceived difference in degrees: how participants saw going to other libraries as more straightforward, demanding less of the social interaction described above. Being a patron of the tool lending library is a more involved affair where checking out an item often takes longer time.

Connecting to the previous dimension, the *technological service dimension* reflects participants accounts of how other libraries might not require directly interacting with people at all. Other library services could often be utilized by interacting only with machines and computers, unless a specific need to interact with staff would arise.

The *size dimension* potentially has bearing on some of the participants’ accounts. The tool lending library is small in several understandings of the word: compact facilities, few staff, a small collection compared to the book collections amassed in the city’s library system, a tight budget, and representing a concept that is still rather uncommon. Such considerations of size, may all be related to how the patrons saw the service as something precious, a part of their community, and that they would express a grateful and protective attitude towards it.

The *trust dimension* further explores the relationship expressed as how the patrons perceived the tool lending library as part of their community. The tool lending library trusts its patrons to take care of and return library materials, which in this case were often rather expensive.

Lastly, the *instrumental dimension* pertains to the value ascribed by participants to the collection of tools. As reported in articles 2 and 3, patrons borrowed tools mainly due to practical, immediate needs. However, the practicality of tools was ascribed more value than merely solving the specific issue at hands. Value was also placed in the ability to use the tools properly, and to be able to do work with your hands. This was also expressed in the admiration for staff's knowledge and skills with regards to the tools. This dimension covers similarities rather than differences regarding the tool lending library and other libraries: the affection for the materials and the value placed in using them, whether it is mastery of a tool or appreciation of literature.

This fourth and last paper of the project has further contributed to the investigation of the material aspects of a tool lending library in its community. Different dimensions of the material themes of place, collection, and people, all have added to the construction of the larger framework for approaching and understanding x-lending libraries through the example of tool lending libraries.

6. RESULTS

In this chapter the empirical findings, drawn from the papers as summarized in chapter 5, are synthesized and presented on a thesis level. This chapter responds to the two overall empirical research questions regarding what characterizes tool lending libraries, and the value ascribed to them.

6.1 Material Matters

Tools as material items seem to intimately relate to the specific service, in both the constitutive and performative sense. The stocked and lent tools seemingly contribute to define (constitute) the library service; neither patrons nor staff see the tool lending library as exactly the same as a publication lending library. The fact that they borrow and lend tools instead of books makes a difference to what type of place the library is. In the views of participants, the tools affect what is performed, and how; the lending staff act differently than they would if they were librarians lending books.

6.1.1 Domains of materials

Particular skills are required to lend out tools, and tool lending staff claim to relate to their patrons in a different way than other library staff do. Such views seem to indicate a need to pay closer attention to the role of *domain-specific knowledge* (Hjørland, 2002) in the study of the professional work of lending materials at a library. Further, it brings into question where to draw the line between information specialists and other categories of lending staff, or if the information specialist is actually a broad enough category to encompass specialized staff who lend tools or clothes and seemingly depend more on domain knowledge than generic library competencies. Regardless, these findings seem to support the idea that “one cannot treat all domains as if they are fundamentally similar, and a theoretical approach to LIS should consider different discourse communities” (Hjørland, 2002, p. 422). It is therefore suggested that domain analysis or other similarly oriented theory be considered in any framework for analyzing library borrowing and lending.

6.1.2 Material affinity and satisfaction

A dimension that also surfaced as pertinent to understanding the meaning of the material, is what might be termed *material affinity and satisfaction*. This captures those among both patrons and staff who expressly attributes positive connotations to browsing, acquiring, handling, or generally just being around and talking about the materials as such – tools in this particular case. A patron might describe themselves as a collector, and how much they enjoy having or using certain items. A library staff member might take pride in their collection, in looking after it, seeing it as a rewarding challenge to maintain and repair items as far as possible. The items are not just transparent tools in the metaphorical sense, replaceable with any functional equivalent that can achieve comparable output. They are individual things that might be of personal import to both lender and borrower. The value of those things might extend beyond their intended application. This appears to be an apparent parallel to the enjoyment of literature for its own sake; appreciation of written works as a craft, including the print artefact as such whether it is the glossy weight of an expensive magazine or the musty pages of an old mass paperback.

6.2 Local Value

The materiality of borrowing and lending at the tool lending library could be connected to value; a patron borrows a material seen as possessing certain values. These may be both instrumental and social, and different settings and libraries may stress one or the other more. The studied tool lending libraries seem to exhibit clear instrumental values – the material is almost always put to use for a practical end, to solve a tangible and finite problem, to somehow impact that which the material is applied on. The social dimensions of value however are there too, such as learning, safety, occupation, leisure, and well-being.

Study participants did talk explicitly about sharing, in an immediate, local sense. They saw the library materials as a shared resource; tools shared among community members instead of each having to get their own of each tool. They did not, however, explain or seem to implicate this local sharing concept in the context of any larger movement, ideology, or trend, with a few exceptions. They mainly talked about their library, the services and resources available there to them, and what it meant to them and their fellow community members.

The most central dimensions drawn from the empirical study are presented here. All are connected to each other, e.g., learning in the community is clearly connected to its upkeep, support of work is intimately tied into the notion of community building, and so on.

6.2.1 Community building and upkeep

Community building emerges as a pertinent dimension from the studies, and both in the figurative and the literal sense: building community socially, enabled by tool borrowing, and the actual building of homes, growing gardens, et cetera, using the tools. This corresponds well with a material interpretation that looks to the process involving people, places, library collections, and the relations among them. Community building is largely embodied by *upkeep*, understood in the broader, dual sense as introduced in paper 3 (see 5.3 Tool lending librarianship). Upkeep both captures the activity of keeping up the standard of community members' properties, and describes the state of those properties in the community when they are kept up. In the study findings, upkeep has become central to connecting the library to another crucial dimension in understanding borrowing and lending: value.

The upkeep of community members' homes, gardens, and other property, is not only a financial concern, but clearly also one of well-being and social import. The tool lending library helps people improve life in their neighborhood. Patrons saw the service as something that directly supports them and their peers in their everyday lives. The tool lending library was seen as an equalizing force in a diverse community of people. A resource that lends out tools for free and does so in a supportive format with helpful staff, not only allows and enables, but invites and encourages, people to work on their homes. Thus, the library offers a service that the community wants and needs; community members back it socially and financially through their utilization, taxes, and general appreciative support.

6.2.2 Community learning

The findings suggest couplings to issues of knowledge or more specifically to learning, which could potentially be framed as *community learning* and a type of *popular education*. By borrowing tools lent by the library, not only do patrons learn tool usage by doing, but there is also clearly a knowledge dimension to the interaction with staff. A library service lending tools may help them develop the skills needed to maintain and improve their homes and gardens, and to perform paid work. Aspects of learning in the process of interacting with staff can of course be related to reference interviews in any library setting. Tool lending libraries seem to have sprouted an entirely unique variation of the classic reference interview. Patrons in the study were often observed to spend extended amounts of time at the counter, engaged in animated discussion with enthusiastic library staff as to what tools and methods were best suited for the project at hand. This can be seen as a case of how a local initiative inadvertently has taken a staple of library discourse, which has received little attention in recent research, and seemingly renewed

it. Participants suggest that value might be introduced, altered, or enriched at the point of the social meeting at the library. In the context of the reference interview, the patron–librarian interaction seems to be vital in establishing or reinforcing the value of the lent material.

6.2.3 Work support and empowerment

Another vital aspect of community development through tool borrowing and lending, which deserves specific focus, is support to and of self-employment. A tool lending library may be instrumental for patrons wishing to start their own businesses. This is an example of how a library can have impact on the local employment situation, at least in the eyes of its community members. Local employment is both an economic and social dimension of community development.

7. DISCUSSION

The aim of this thesis has been to investigate tool lending libraries as x-lending libraries, framed as public services in the form of community libraries. To do so, borrowing and lending have been studied in the material context of three tool lending libraries. The findings from the papers have provided the basis for discussing theoretical entry-points and connections as outlined in the present chapter. This responds to the final, theoretical research question of *What are the pertinent theoretical dimensions of borrowing and lending different materials at different libraries?* These dimensions can be used to further analyze and develop borrowing and lending concepts in LIS. This chapter discusses research challenges, perspectives, and implications of such theoretical concepts. First, a discussion of the meaning of the material is given in 7.1. It presents a themed discussion on the significance of a number of materialities for understanding x-lending libraries, and paves the way for the subsequent connection to theoretical concepts of documentary practices in 7.2. Lastly, the chapter is concluded with section 7.3 on borrowing, lending, and x-lending libraries in the context of community value, explored through the concept of upkeep.

7.1 The Meaning of the Material

A prominent result of this study has been the finding that the character of the material matters. Libraries have always been concerned with the exchange of materials – connecting people with stuff. According to prevailing jargon, *libraries make resources available and accessible*. Libraries have in recent years increasingly offered collections and services in a reconfigured material format: digital and internet based. Tool libraries constitute a separate trend, relying on material items lacking a content that could be meaningfully separated and digitized independent of the item. Accordingly, these materials cannot be distributed or accessed online. These materials cannot be *shared*, in the sense of instantaneous dissemination and simultaneous access to user-specific instances of the material. Instead, the unique, permanent instances of the materials need to be transferred from library to patron and back. On-site visits to the library, or some other mode of physical delivery from library to patron, are thus non-negotiable. The borrowing and lending of publications and tools, respectively, are surrounded by practices

that appear qualitatively different. These practices pertain both to patrons' borrowing and staff's lending. Presumably, the same would apply for comparison of publication lending with many other x-lending materials such as clothes, seeds, and toys (assuming toys are categorized separately from games).

As explained earlier, in the chapter on materiality, material is understood here in a dual sense. Not only is it used as the noun for the discrete library materials that are borrowed and lent. It also denotes material aspects of the library, of borrowing and lending, and of the community and its members. Regarding the meaning of the library material, and the materiality of the library, there is a multitude of dimensions, here referred to as *materialities*, that potentially come into play. These will all affect the borrowing and lending services offered, the competence that is needed to do so, and why and how patrons borrow from the library. The materialities uncovered, suggested, or implicated by this study are discussed in the following. These materialities in turn are structured in four themes: items, collection, handling, and procedure. As suggested by the theme labels, this discussion has been focused on materialities that pertain directly to that which is borrowed and lent. Thus, other materialities such as the space and place of the library are not discussed here except to the extent they relate directly to borrowing and lending. The materialities suggested below are all potentially general for x-lending libraries, but mainly illustrated with the type of specific libraries and materials studied in the thesis. The materialities, thirteen in total, are not proposed as an exhaustive, definitive inventory. While they cover broad, relevant ground with respect to the perspectives of this thesis, the list could be further expanded and developed in future investigations.

7.1.1 Materialities of items

Material implications of the individual library items are considered here. They include physical appearance and dimensions of library materials, markup of materials, and quality of library materials.

First, the outwards *physical appearance and dimensions of library materials* are more than mere characteristics and looks: they affect both how they figuratively and literally fit into the library, and why they are lent and borrowed. Most well-established library formats such as books, magazines, video and audio recordings, and video games – all publication-type materials – share some general characteristics. They are usually presented as rectangular blocks of paper or plastic, and are sized within in a relatively narrow range. Most books range from thin paperbacks to the size of a large encyclopedia or atlas. The other formats (audio, video, game) will fit their packaging within that same range. Materials such as a jacket, a string trimmer

(‘weed whacker’), or a bicycle, clearly breaks the boundaries of the space occupied by most publication-type materials, as illustrated in Figure 8.

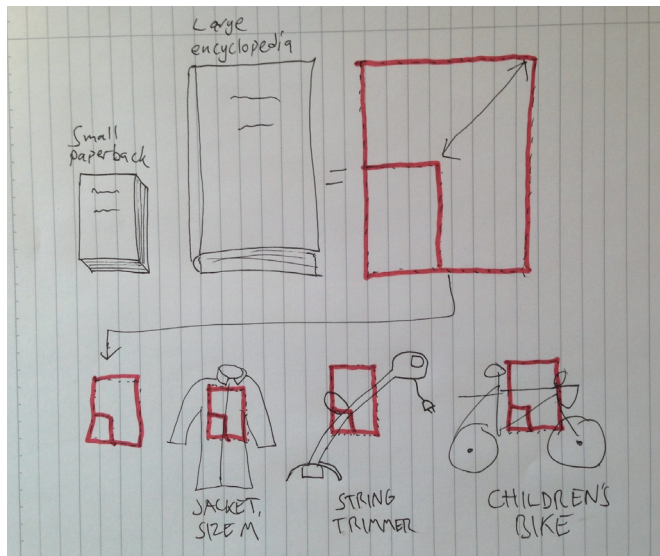


Figure 8. Notional sketch: Format of a small paperback, and of a large encyclopedia, compared to three other x-lending library materials

While such comparisons may appear simplistic, the implications are potentially extensive. Many home owners are caught up in patterns of consumerism that over time leads to more and more items being stored within the same limited space. This leads to a scarcity of space, and there might be conflicts between different types of space; that designated for living or working versus that allotted for storage. Books are arguably one of the few item types that many people (western, middle class at least) will happily store visibly in large quantities in the prime living areas of their homes. The storage of books, display of books, and decoration of one's home are conflated into one material expression. Granted, the same may be true for items such as tools, though necessarily not in the same place in the home. Imagine the neatly arranged tool shed, or optimized wall of tools in a garage, certainly also a potential source for aesthetic satisfaction. While individual preferences and facilities will vary, it is not farfetched to assume that not all types of materials are as readily welcome in comparable quantities in people's homes. For instance, objects that are not used often, as well as particularly bulky items that on their own require large volumes of space to be stored, might be preferable not to own even if the buying price would be manageable. An x-lending library can for these intents be seen as – and used as – an extension of home owner, or small business, storage space. For example,

large or unwieldy items such as ladders might be preferable for some people to borrow, because they do not wish to dedicate the required space permanently in their home. Further, the appearance of individual materials will affect how they are best stored and displayed, as is discussed under the *materialities of collection* theme. From a purely physical viewpoint, books are relatively easy to store and display efficiently both in a library and home setting; other types of materials may pose more of a challenge.

The materiality of items should also consider *markup of materials*, including labelling, barcodes, instructive notes, and marks – directly on items or on attached labels. The same markup data on a material may be useful for patrons, staff, and computerized processing. Markup complements other devices of classification, shelving, display, et cetera, for browsing, identifying, retrieving, and replacing items. The specific markup may range from a simple unique identification code, to whole sets of structured metadata, and not necessarily in natural language understandable to patrons.

The *quality of library materials* is also included here. This materiality pertains both to the actual performance of materials, i.e., objective measurements of quality, and to their perceived qualities. It covers a variety of factors such as precision, reliability, consistency, durability, and general look and feel. This may also include social or ethical qualities that might not be observable directly from the material without descriptive metadata, such as whether an item is made from recycled materials.

7.1.2 Materialities of collection

The whole of the individual items together is what constitutes the collection. At most libraries, the collection will be a dominant presence with considerable impact on what the library *is*, from a material viewpoint. In this study, it was apparent that participants had a conception not only of individual items but of the library's collection as a whole, which in turn reflects on how they perceive the library. The materialities of the library collection are considered in the following. They include how library materials are stored and displayed, how library materials are browsed and retrieved, and acquisition and deselection/weeding of library materials.

Library collections, as they are physically manifested, play important roles in understanding how library space is or can be constructed. The arrangement of library space cannot properly be analyzed from only a social perspective where material considerations are made subordinate. It becomes apparent with a collection such as tools, that *how library materials are stored and displayed* inevitably has a number of tangible factors to consider apart from purely thematic classification. Different materials have their different suitable storage options. They may be slotted on shelves, hung on a wall or rack, sorted in compartments in drawers, leaned in rows against the wall, piled in

a stack, or heaped in a dump bin. Particularly large or heavy materials may simply be stood on a designated floor area. It becomes clear that the term shelving, commonly used for how materials are physically inserted into the collection in the library (e.g., Herlocker, 2012), is widened to include storage and display solutions other than literally putting something on a shelf. Granted, most libraries will likely do some shelving not on actual shelves, such as book tables, flip trays for CDs, spinner displays, and children's book bins. Some of these solutions, however, will be for purposes of presenting featured, highlighted, or themed materials otherwise stored on regular shelves. At most publication lending libraries, the compact book-shelf-style presentation of rows of spines likely will dominate the shelving, simply because it will be the most space-economic solution that also allows accessible browsing. Accordingly, large parts of a publication lending library's collection will be interchangeable with regards to where it could potentially be shelved. At an x-lending library with a collection such as tools, largely inconsistent in size, shape, and weight, not all materials may be possible to shelve in all parts of the premises. The materials in such a library will be partially restricted with regards to where they can be practically shelved. For instance, cumbersome items such as ladders might be impractical to shelve in the library's main area, or even indoors at all (for examples of outdoors shelving see Fig. 6, p. 44.). Some materials are best shelved by hanging on the wall, others in compartmentalized drawers, yet others standing in racks, and so on.

In effect, this imposes certain limitations on how the collection can be displayed and arranged. It might not be feasible to present the collection to patrons based purely on considerations of classification and visitor experience, as practical issues of bulkiness and functional placement in the locale need to be solved. Again, this would be the case to some extent with any collection; a quantity of CDs and a quantity of map volumes might not be practically shelved according to the exact same schematic. They are however similar enough (following the argument illustrated in Fig. 8) that there should be some flexibility and interchangeability in how a library chooses to arrange them, not overly constrained by the differing appearances of the materials.

The physical appearance of different types of library materials has further implications, regarding *how library materials are browsed and retrieved*, i.e., how they can be accessed by patrons and staff. Not all materials may be practical or possible to shelve in all parts of the library. Also, other material considerations come into play in how they are suitably accessed. A notable factor will be the acquisition cost or market value of the material. A new aluminum stepladder similar to the red 9-step ladder seen in the tool lending library exterior photo (Fig. 6), costs about \$200–300 or 2000–3000

SEK⁸. It might seem a valuable item to shelve out in the open, not secured by any lock. However, its folded size is approximately 3000 x 750 x 200 millimeters, meaning it occupies a space of almost half a cubic meter. For comparison, a 400 page UK type B paperback (similar to a smaller U.S. trade paperback but larger than a mass paperback) measures about 130 x 198 x 27 millimeters. The space required for such a book is about .0000695 cubic meters. The three-dimensional space occupied by the stepladder then approximately equals the space occupied by 6000+ such paperbacks. Even if bought at low price, the 6000+ books will cost considerably more than a 9-step ladder. The books could be substituted for any small hand tools or other x-lending library materials, and likely arrive at the same conclusion. Accordingly, the risk of theft for shelving an item outdoors need to be weighed against the space it would take to display it indoors instead, a space (and thus expenditure) which can instead be used for hundreds or thousands of smaller items. Further, practicalities of the checkout procedure must be considered in how items are best accessed. Using the example of the ladders again, it is a large, bulky item that might not be desirable to have patrons carrying around inside the library⁹. Apart from the risk of accidentally injuring other patrons or staff, or bumping into shelved items or the library interior, it also aids the patron to easily get the item from its shelf location to their means of transport from the library, whether by vehicle or foot.

Smaller materials on the other hand might be better accessed over the counter. A power drill for example obviously has a much higher ratio of acquisition value over bulk than the 10ft ladder. Further, the monetary cost is not the only issue with regards to material size. Tool lending libraries might stock *very* small items such as individual drill and driver bits in their collections. While risk of theft could certainly be an issue with such small, easily pocketed items, it also presents issues of keeping an orderly presentation. It might be more efficient for both staff and patrons to keep smaller items in neatly arranged drawers behind the counter, rather than some system where patrons are expected to rifle through them and find what they are looking for without making a mess. Direct access to materials does not necessarily make a collection more accessible.

⁸ Price comparison as of February 20, 2017.

⁹ The tool lending library pictured in Fig. 6 was asked in personal correspondence (February 26, 2017) how they handled checkouts of large items shelved outdoors: They would typically ask the patron to go check the number written on the item instead of bringing it indoors. Then they would enter the number in the computer to register the checkout and the patron could just grab the item on their way out again.

As few collections are static, the *acquisition and deselection/weeding of library materials* need to be considered. They are fundamental collection development activities, reflecting a library's definition of what constitutes its collection. In libraries where these duties are performed by the same staff that are also working at the desk lending the materials, acquisition and deselection can potentially be in somewhat closer accordance with needs perceived in and by the community. Nevertheless, it will almost always be in the hands of the library rather than the community as a whole to decide these matters. Retiring materials can therefore be controversial and a sensitive issue with the public, in particular when the library is a public library that weeds out a large bulk of items (Metz & Gray, 2005). It highlights a material dilemma: a library's collection is regarded as equally shared in the community, but decisions on its composition and future usually are not. Community members not directly involved in the library's collection development – which will be most of them – can only affect selection/deselection by utilizing the service, adding to the library's understanding of the community's needs through their borrowing and requests. Explicit strategies and formalized procedures for basing selection on patron demands (patron driven acquisition) is mostly prevalent in academic libraries, and often for collections relying heavily on electronic material (Fischer et al., 2012). Many patrons in smaller, publicly oriented libraries may not even be aware of what collection development strategies are in place, or what power they have to influence them. As implied in this study, patrons' opportunities to influence will be largely dependent on the relations developed with staff, and thus by extension staff's sensitivity to community needs.

7.1.3 Materialities of handling

The theme dealing with the handling of library materials, covers on the one hand patrons' usage of materials for whatever applications they may be utilized, such as the reading of a book, hammering with a hammer, or wearing a purse. On the other hand, the theme also covers the physical handling of the material and the implications and effects thereof, such as the stress exerted on a book when flipping its pages and on a power drill when pressing it into a concrete wall. This also needs to consider incorrect and even dangerous handling. These materialities include usage and application of library materials, safety and potentially harmful materials, wear and tear of library materials, and maintenance and repairs.

Usage and application of library materials pertains to the 'correct' operation and application of library materials, i.e., intended outcome. This also includes if usage is intended for professional, educational, or recreational use. A beginner user may have different needs and requirements than an expert user, which in turn may have implications for the lending staff's

reference skill and specialized domain knowledge. ‘Correct’ usage also implies issues of *safety and potentially harmful materials*. With certain items, at a tool lending library in particular, safety is a key concern. Patrons may need to sign a liability waiver that frees the library of legal responsibility for harm caused from use of library materials. Regardless of liability it will still be in all community members’ interest, including the library’s, that no one comes to harm.

The third materiality of handling is the *wear and tear of library materials*. All library materials have a physical history. This history can range from being freshly minted from the factory or press and now lent for the first time, to having been handled by a long succession of borrowers all inevitably leaving their mark, even if imperceptibly, all contributing to its aging. For some patrons this might be part of the charm of the library. A scruffy looking book may be interpreted by some as a sign that it is well-liked or at least much-read. For others, all wear and tear is simply to the materials detriment, i.e., the newer the better. This might be the case with a material that is expected to deliver a precise result in some respect, such as a power drill. The more service years and number of checkouts a power drill has seen, the more uncertain a potential borrower might feel towards its unknown history, how it has been treated, and ultimately how this impacts performance. Whether the patron sees it as a positive, as something off-putting, or simply does not mind, the aging of library materials provides tangible proof that it is a shared resource. The wear and tear is a part of the sharing experience. It is an embodiment of borrowing–lending as a continuous process, even the material itself as a process. Each borrower adds, removes, or changes something about the material. No two borrowers therefore ever receive exactly the same material. Such temporal facets of a materiality of change, connects to the documentary practices discussed later in the chapter.

Lastly, *maintenance and repairs*: the aging of library materials inevitably means that individual items at different points may require some attention and maintenance. This is not necessarily only a cost issue, but may also depend on the pride and satisfaction of maintaining materials such as tools in good, clean shape and proper, efficient working order.

7.1.4 Materialities of procedure

The longstanding, seemingly well-functioning service model of x-lending libraries relies on several well-established routines and administrative devices to function. Some of these may be mandatory, take the form of rules, and be consistently enforced. Others may take the form of informal routines and praxes. Together they form the procedures upon which the borrowing and lending of library materials rely. Materialities of procedure include lending

terms, fees for late returns or replacement, and replacement of lost or irreparable materials.

Invariably, some manner of specified *lending terms* will apply for patrons to borrow something from a library. It is part of the arrangement for libraries to enable systematic lending from their collections. Typically, the number of days to borrow different item categories will be specified. Popular, new, or expensive items that the library has only one or a few of may have shortened loan periods, and so on. Lending terms are enforced and made material by late fees.

In the case of some fault on the part of the patron, *fees for late returns or replacement* may need to incur. Nominally, with libraries such as those discussed in this thesis, patrons will not be charged for borrowing materials¹⁰. It is common however for libraries to request reimbursement for lost items and a fee, often time-scaled, for late returns. These charges contribute to defining the conditions for the sharing of materials in the library community. They represent a contract in that patrons do not freely dispose of the materials. The fees make clear that conditions apply, which will have consequences if they are not honored. This structure of conditions and fees outlines the space in which the borrower is entitled to possess and utilize the material. Choosing to transgress the borders of that space, the borrower will be notified that their allotted possession of the material is expired. This may serve to show to the patron that they are now impinging on other community members' equal share of the library material.

Replacement of lost or irreparable materials will need to be handled routinely. All items have a lifespan which may be extended by proper operation and care, maintenance, and repairs as required. Eventually any material will need to be replaced, but their functioning lifespan of acceptable performance may be affected by patrons' attention to recommendations from staff or written instructions.

7.2 Documentary Practices and the Library Material

The previous section discussed different specific materialities in the x-lending library. In this section, the understanding of x-lending library materiality is further focused theoretically. The findings thus far are here discussed through the lens of theoretical conceptions concerning documents, as reviewed in 3.3. The library materials in the study were clearly not perceived as explicit documents or document-like phenomena by participants. Neither does it seem theoretically fruitful to firmly declare that materials

¹⁰ There are tool lending libraries and other x-lending libraries that do employ various types of fees for usage or membership.

such as tools are documents and thereby cement them in a certain status, or likewise to close the investigation by concluding that tools are not documents. There are grounds to question any endeavor that seeks out to define what a document or documentation is, and that it is entirely feasible to study documentation without strictly sorting out documents from non-documents (Frohmann, 2009). A more meaningful question regarding documents and documentation is to instead ask what they do (Frohmann, 2009). Therefore, focus is here shifted from identifying documents in libraries, to seeking the traces of *documentary* practices in libraries. From such a perspective several of the findings now appear relevant.

First, and possibly most central, are the findings on what the borrowing and lending of library materials enable. As has been discussed, enablement captures a broad range of statements, all pertaining to what the provision of library materials makes possible, empowers, encourages, and results in. Hence, enablement appears closely aligned to the aspect of *documentary* practices dealing with *potential* as a characteristic of documents (Buckland, 1997), and more specialized concepts such as *affordances* (Gorichanaz & Latham, 2016). A hammer, like a book, can represent promises to the prospective wielder. Borrowed and lent tools, by their potential role in enabling a community's upkeep, say something to the patrons about the possible futures of their community. Enablement further could be understood as performative documentality, as opposed to constitutive documentality. The former concerns documents as affecting "human activity, action or relation" (Hansson, 2015, p. 6), and "is created by documents that make things happen" (p. 8).

Second, the collection as a whole should be considered through *documentary* practices. A collection of materials is itself *documentary* in the context of a community library: it constitutes or performs ongoing documentation of the community. A community library collection is a documentation in some regard of the materials that have been the most relevant, are the most relevant, and will or should be the most relevant, to the community. In doing so, the collection represents a historicity (Frohmann, 2004), provided by the library and co-authored with those who utilize the service. Several participants in the cases presented here, recounted a specific view of the collection's range and completeness. Even with a relatively small library facility, some participants claimed that the library had more tools than a hardware store. This could be assumed to be more related to how well the collection reflected what the community needed, than to the actual quantity of items offered. It is unlikely that a library collection ever becomes a perfect documentation of the whole community; rather, it documents one idea of what the community is, wants, and needs. In this regard, the library collection, while imperfect, provides an idealized description of its community.

The documentary collection is dynamic, never static; new materials are constantly added, old ones get weeded out, lost, or damaged beyond reasonable repair. Materials that are permanently vanished from the collection are replaced with new copies if they are still deemed relevant, or the collection body will reshape to smooth over the open wound. The documentation of the community keeps getting rewritten, item by item.

The collection can also be a documentation of *quality* in a very broad understanding. How a collection of library materials is selected and maintained – curated – reflects on the individual items. In the studied cases, staff and several patrons held forth that the collection of tools was good quality with most items on the mid to higher end. It is unlikely that anyone, patrons in particular, ever take meticulous stock of the entire collection. Instead, the ‘average impression’ of the collection should also reflect somewhat on the individual items. Having the impression from previous experience that the collection of materials has a certain quality, perhaps creates the expectation that other items are representatives of that same quality. Borrowing a book from a collection that the patron has the impression is carefully selected and generally high quality, and borrowing the same book from a collection that the patron has the impression is not, should affect what the book *does* with the patron’s reading, even though the two books are otherwise identical.

The collection as documentation of quality resonates with at least three of Frohmann’s (2004) characteristics of documentary practices. First, and most obviously, the materiality of the collection: individual materials borrowed and lent, will need to be able to sufficiently reproduce and reaffirm the quality of the collection. Receiving a broken item will make a literal dent in the collection, renegotiating what is being documented. Second, the institutional site certainly has some bearing, in that the authority of the library and its staff, both add to the collection as a documentation of quality. Third, the social disciplining in the documentary practice in that it requires “training, teaching, correction, and other disciplinary measures” (Frohmann, 2004, p. 397). Here, the knowledge and skill of both staff and patrons become relevant. The meeting over the library counter can constitute a negotiation regarding the collection of materials, and what to borrow from it and not. In the studied cases of tool lending libraries, patrons held the staff in high regards due to their perceived skill and knowledge with the collection of tools, and what they as patrons in turn could learn by engaging with staff and borrowing the tools.

Connected to the last point, individual library materials also configure the practice by documenting certain knowledge and skills involved in engaging with the material in a way that is rewarding, safe, stimulating, and any other outcomes relevant given the situation, material, and the borrower’s intentions. It may also document an acquired taste or specialized knowledge

in identifying and selecting it among thousands of other items to begin with. A jackhammer is a documentation of heavy and demanding labor, of someone knowing what they need to get a job done, of having a job to get done to begin with, of a noisy spectacle involving the discharge of intimidating physical force, and of a specific skillset to use it effectively and without injury. A volume of Foucault similarly is a documentation of a demanding branch of literature, requiring a skillset of its reader for a rewarding experience, and so on. When the patron has borrowed it and has the material in their possession, they as borrower will temporarily be co-creator in the documentary practice. Like passports and keys are “substitute[s] for firsthand knowledge of a person’s identity” (Buckland, 2014, p. 183), jackhammers and books of Foucault too have documentary characteristics pertaining to the possessor’s identity. When a neighbor returns home from the library and unloads large power tools and volumes of convoluted French thinking from their trunk, these materials say something about them as a community member.

Lastly, most library materials have some correspondence with commercially available counterparts. Participants in the study would compare borrowed materials to what they would find in stores. Some participants also mentioned borrowing materials before buying, in order to try different varieties out before buying, to see if they needed one at all, or to get by until they were in a position to buy one of their own. These library materials will be documentation of, a) instances or examples of commercially available materials, or b) a sort of archive copies of materials which at one point in time were commercially available.

7.3 Library Community Value Chains

The previous two sections discussed implications of library material, from the perspectives of material itself, and the documentary practices in which it could be understood. In this final section of the discussion, a theoretical concept is proposed for a widened analysis set in the community context in which the material library can be understood from the perspective of values. The central notion developed in the thesis and finalized here, is that one way of understanding the conflux of borrowing, lending, libraries, patrons, librarians, and materials in the community, is as *value chains*. The theoretical concept has emerged as a solution to how several ways in which community members seem to experience and perceive their library, can be expressed in one larger, composite idea. As outlined in the following section, the theoretical concept is applicable to several aspects of how value can be understood in the library community, in that it is scalable.

The terminology value chain itself will also be found in business management, popularized in the 1980s by Porter (1985) and further developed

by others (cf. Kaplinsky & Morris, 2001). The areas of application are almost completely different: here, public services in communities, rather than products provided to consumers on markets. Further, the business management interpretation focuses on adding value with each step, and sees the chain as having a beginning (e.g., raw material) and an end (e.g., the consumer). The value chains proposed here, will instead describe a circulation. This circularity could be compared with other theories pertaining to *circular economy*, also with significant differences. Circular economy focuses on circulation in terms of not being wasteful, as a proposition for an environmentally sustainable economy. Goods are remade, reused, and recycled, to minimize unsustainable production from new raw materials, and maximizing the usefulness of those that are produced (Andersen, 2007; van den Berg & Bakker, 2015).

Value, as discussed here, is not necessarily added or refined with each step as with the business management value chain. Instead, the theoretical concept proposed below combines different facets of value to suggest how they can be seen as related: how economic value of housing can relate to the value of library services, in turn related to values of quality-of-life, and so on. However, one important similarity with the business management concept is found: to express values as complex and interlinked, taking into account the provider, that which is provided, and those who it is provided for. These complex relationships of value are, in turn, contained within a specific context such as a system or other enclosed unit. For the purposes of this thesis, it seemed suitable to let this context be articulated and delineated as community.

The concept of library community value chains will here be exemplified by the tool lending libraries studied. Community members saw the tool lending library as providing materials of value and a valuable service, supported by public taxes. Scott (2011) suggests that many people do not recognize the connection between taxes paid and library services rendered. This did not seem to be the case with the community members studied in this project. Several participants, both patrons and staff, explicitly mentioned the dependence on taxes in the context of public libraries and specifically the tool lending service. Some participating patrons mentioned that they think the tool lending library is a good example of something they get back for their tax money. They have collectively paid for the service. This is generally seen as a positive. They receive something meaningful back for the money: the opportunity to borrow tools. This service in turn enables the community to upkeep and develop its value – literally, as actual property worth increases. As property tax is increased accordingly, city incomes used to fund things such as the public library, are directly affected. This sequence of ideas is illustrated in the *library community value chain* (Fig. 9). It describes

the composite of several notions expressed by participants, the result a cyclic description of values: library services enabling the upkeep of property and housing, the same entities for which property taxes are calculated and collected, supplying money to the city coffers, which fund the library services, and so on. To this chain could also be added support of self-employment: patrons being able to take on paid jobs because of tools they borrow from the library, and in the long term generating more money back into the system from their income taxes. The work performed may possibly also itself contribute to some facet of the community's development, such as housing.

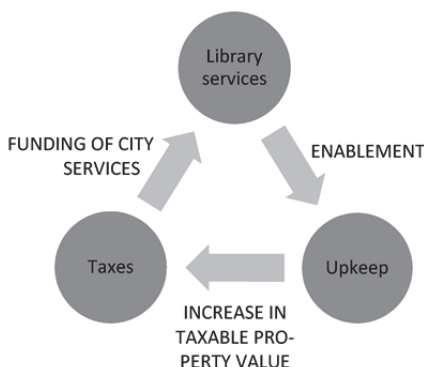


Figure 9. Library community value chain. Theoretical concept illustrating the circular value chain of patrons receiving a service back for their tax money which can be seen as enabling upkeep and in turn increasing taxable property value

This value chain, expressed as the service provided by the tool lending library, and what such a service enables for its patrons, is limited to a strictly financial perspective: a system of values measurable in money. The theoretical concept would benefit from being expanded to include a social dimension (Fig. 10), to aid a deeper discussion of the meaning of x-lending library services in a community perspective. The public's support includes the taxes collected, their vocal support of the tool lending library in their community, as well as their support by action (in utilizing the tool lending service). Community wellbeing includes both the financial value of properties and work, the beautification of homes and gardens, and social intangibles such as community members' health, welfare, occupation, and happiness.

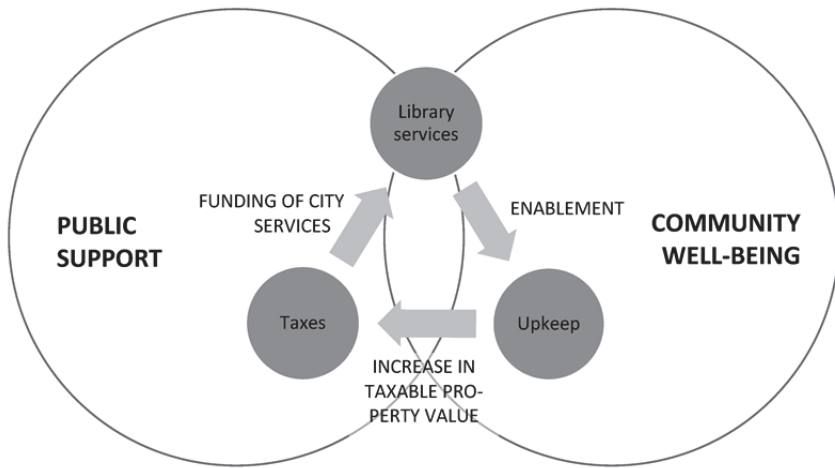


Figure 10. Library community value chain, expanded. Developed from the theoretical concept in Fig. 9, this has an added social foundation which the value chain rests on

Note that the argument of such value-chains would primarily illustrate a public library system. The non-profit tool lending library is not publicly funded through city taxes. However, it is still framed in a local public and social context as a community library. The idea expressed in the results of *getting something back* is applicable here too, when private donors, volunteers, and other backers are considered as part of the public that the library serves. A service dependent on volunteer effort certainly relies on the public's support in a very direct sense.

The theoretical concept proposed here builds directly on the analysis and discussion of the specific study of tool lending libraries as x-lending libraries. However, by scaling some concepts to even larger categories the whole library community value chain could potentially be generalized for x-lending libraries. Upkeep could arguably be retained for x-lending libraries other than tool lending libraries largely as is, if it is applied in the wide interpretation of community building. This understanding of upkeep constitutes more than potentially adding to standards of housing, beautification, and so on, as in the case of tool lending libraries. It may pertain to a range of aspects that is seen adding to "quality of life in their neighborhood," to use the words of one participant. Depending on the type of x-lending library, quality of life could include issues such as:

- literacy and equal access to information (publication lending libraries);
- children's right to childhood and play (toy lending libraries, and the children's libraries at publication lending libraries);

- community gardening and similar co-operative work-initiative (seed lending libraries, tool lending libraries).

Further, vocational dimensions, i.e., work and education, are potentially related to all x-lending library types. A few examples to illustrate parallels with the thesis's findings on how tool borrowing can be related to both work and learning in the community:

- farmers borrowing seeds to produce food; student/apprentice gardeners borrowing seeds to learn how to grow different varieties;
- fashion designers, tailors, and design students borrowing clothes for reference; job applicants borrowing clothes for interviews; set costumers borrowing clothes for stage;
- small businesses borrowing art for decorating the office; artists and art students borrowing art for reference;
- cafés and other family-friendly businesses borrowing toys for children's play areas; pre-school teacher education students borrowing toys for reference.

Feedback and support from patrons to the library potentially includes:

Usage – both the directly observable usage of who the patrons visiting the library are and what they are doing there, and the measurable usage through metrics such as visitor counts and loan statistics. A quantifiable sort of foot voting, provided that the library and its institutional belonging (e.g., the city in the case of a public library) choose to regard usage as indication of support for and legitimization of the service.

Vocal feedback, which may include both support, criticism, and general commentary on libraries from the public. By extension, research such as this thesis also could be included in such representations of feedback from communities on their library services. While research findings do not directly represent community members' own voices, it constitutes mediated commentary from professional librarianship's parent discipline, library and information science.

Relationships developed, which may range from direct and personal relationships developing between specific patrons and staff, to the more group-level general relationship of staff getting a feel for their patronage and vice versa.

Resources. This includes property and income taxes such as in the case of tool lending libraries (Fig. 10). It also includes donations. Regardless of whether the specific library is actually able to accept donations, they could be interpreted as actions of support. The collection of late fees and replacement fees is yet another measurable, material feedback of resources. The success by which such fees are collected, arguably provides some measure of

a community's interest in the continued use of the service, and is thus indicative of support. With some non-profit libraries, depending on setup, community members may further contribute with their direct support through voluntary work at the library.

Volunteering, i.e., directly helping out with library work. This could be seen as a variant of the resources donation above, where community members invest something of what they have back in the library. Even with public libraries, they may still employ some model of community support where paid staff are “given significant support by volunteers” (Department for digital, culture, media & sport, 2018).

Finally, it is important to note again that Figures 9 and 10 illustrate a perspective or conceptualization of how tool lending libraries and potentially other x-lending libraries can be analyzed in a community context. It is not a schematic that predicts or prescribes certain library services to result in certain effects. The concept provides openings for further study and analysis of libraries in communities.

8. CONCLUSIONS

This thesis has presented the first in-depth investigation into the phenomenon of tool lending libraries. It has introduced the concepts of library community and x-lending libraries, to aid analysis of libraries as material lending services located in specific communities. Value chains have been proposed as a theoretical concept of how the relationships between different values involved in borrowing and lending library materials can be understood in the community context.

A scholarly understanding of borrowing and lending different materials under different material conditions, should be based on considerations of a complex array of dimensions, as has been shown in this thesis. In the context of libraries, a critical reflection that must be taken into account is how libraries are at the same time stabilized and transformative institutions. The specific cases explored in the present project seem to exemplify this. It is largely the same well-established infrastructure put to work in x-lending libraries as a general concept, and in the specific library, whether they lend ladders, Blu-rays, or rain capes. Things are provided to be checked out and borrowed by the patron, following fairly standardized routines. At the same time, the services differ, the borrowing and lending differ. This is indicative of two distinct and equally feasible positions.

On the one hand, it could be argued that lending tools or other materials is just another example of what libraries already do – providing something meaningful that strengthens communities through shared resources, whatever those resources may be. As a public service provider, libraries continue operating in largely the same ways as they have for many years.

On the other hand, borrowing and lending tools also is different to borrowing and lending items such as books. This is a central contribution of this thesis. The lent material should be approached and understood as being more than a mere vehicle or vessel conveying something beyond the material. The material itself is a meaningful part of that which is provided and thus integral to why and how it is provided and, consequently, borrowed. When libraries introduce entirely new types of materials they also seem to be reinvented or invested with new values and practices. One way of investigating this kind of reinvention is to trace various value chains, as was done in the previous chapter. Borrowing and lending a particular material makes a

difference to the values created in the library community, and to what librarianship is and entails. The x in the x-lending library does seem to matter. An important conclusion follows, that x-lending libraries cannot be specified or defined as being one particular type of service, or implying one particular type of librarianship. Different materials mean different libraries and librarianships; there is no single x-lending library recipe to be found.

In conclusion, regarding whether library services are most suitably defined according to the book-centric or the provision-centric mode, this thesis shows that such a strict distinction does not seem feasible. On the contrary, the findings indicate that both modes are different descriptions of the same material perspective. The community library can be construed as being based on a generic model of provision through lending, and as being dependent on material circumstances such as what is being lent specifically. The first position of defining libraries by a dependent relationship to books and certain cultural values can then, in the context of this thesis's analysis, be understood as a material view of libraries shaped by the prevalence of one specific type of x-lending library: the publication lending library. Thus, declaring that libraries should be understood either as dealing with books, or as a community service model for material provision, would be missing the point made here. The differences between tool lending libraries and publication lending libraries, as presented in the results, are indications of a unifying rather than segregating material definition of libraries.

This thesis has stemmed from, and been motivated by, the problematic lack of a useful theoretical framework or sufficient theoretical concepts. To achieve the aim of providing a deepened understanding of x-lending libraries through case study of tool lending libraries, the need for a number of new concepts has therefore arisen. First, to even arrive at stating the aim, three concepts regarding how to categorize and contextualize libraries were introduced. *Community library* is used in the thesis to refer to any library that is operating on a local level and to a general public, regardless of the libraries institutional belonging. Stemming from that, the *library community* is the socio-geographical, material context that is interdependent with the library; it is both a location and consequence of the library. Third, the concept of *x-lending libraries* itself was proposed. The x-lending library is a solution to the issues of how to distinguish types of lending services without differentiating them by dichotomies such as old–new, traditional–non-traditional, or cultural–practical. The resulting investigation then arrived at a proposition for how to understand and analyze the complex relationships between library, material, and community, on the local level, from a perspective of values: *library community value chains*. This offers a scalable, theoretical concept that can be employed to discuss how library services can be understood as connected to aspects of community such as upkeep and wellbeing,

and how these in turn connect back to support of the community library. These four concepts are a substantial contribution of this thesis. Hopefully they can be of use or inspiration to future research, for which some suggestions are given in the closing section.

8.1 Limitations and Critical Reflections

The production of this thesis, including the collection of data, has happened during a clearly transformative time with regards to the area and object of study. In 2008–2009, almost no one I discussed the research project with had ever heard of libraries lending anything other than the well-established publication types: books, magazines, music, film, and games. This began to change in the early 2010s and much has happened since. First, several of the library types which have been collected under the x-lending library umbrella in this thesis, seem to have spread and become considerably more common. The number of tool lending libraries, for instance, has likely increased manifold, as mentioned in paper 3. Sweden, where I am based, now has several services that lend out tools, clothes, and sports equipment, all established in the last few years. Second, to associate library services with issues such as consumerism and movements such as sharing, was much less common at the project start than it is today. Hence, asking the same questions to tool lending library staff and managers today, as were done in 2011 and 2012, might well yield different answers with regards to the grounds for offering such a service, such as its social and societal rationale. Equally, patrons might also have provided slightly different accounts today, on how they see the library and their borrowing from it. Regardless, the results should provide relevant insights on how new and emerging library services can be experienced and perceived by its community.

As mentioned in chapter 4, the thesis was initially planned to also feature a quantitative survey. The original intent was to triangulate data from at least these two different sets of data and from different types of libraries, not only tool lending libraries. Such a mixed methods approach is one strategy for obtaining richness of data (Fidel, 2008). However, as the study progressed and grew, and the materiality of tool lending libraries emerged more clearly, the decision was made to focus solely on that. The desired richness of the investigation was now instead obtained from the complex multitude of accounts delivered by participants, and the extensive exploration of their potential theoretical implications. While the interviews made out the bulk of the data and thus the foundation for analysis, they were complemented by observations further adding to the richness of the case study.

The decision to write a thesis by publication has had both advantages and disadvantages to the project. This decision was related in part to the initial plan above, to include more methods and study objects, which could be

presented in papers devoted accordingly. The result now, to compartmentalize the qualitative data over three distinct papers, possibly results in a somewhat fragmented presentation of study data. It could perhaps have been more coherently presented as one solid mass of study data in a single monographic publication. While the main findings would likely have been the same, it would have freed up space to flesh out even more detailed analysis, exposition, and discussion. It would also have simplified somewhat the exploratory structure of how different parts of the study and text relate to each other, without the solidified publication-products to consider. Still, writing a thesis by publication has aided making the empirical data distinct. For example, dedicating the third paper to a journal with a scope largely committed to librarianship and other professional perspectives in LIS, has been helpful for chiseling out the library perspective on the thesis's subject.

8.2 Future Research

The present project has presented a theoretically generalized discussion drawn from a small number of local cases that have been explored in depth. A number of paths for continued, relevant research can be identified.

First, additional contexts of different x-lending libraries can be similarly studied, to continue developing both the empirical and theoretical understanding proposed here. Crucially, publication lending libraries need to be included in future empirical studies, alongside other, newer x-lending services. Methodological diversity is encouraged here also, in order to triangulate and investigate the bearing of these qualitative explanations for larger populations. This can ultimately lead to the development of more complex conceptualizations of libraries as models for borrowing-based provision services, than have been presented here. Further, in relation to the critical reflections in the previous section, it is important to continue study of x-lending libraries for the sake of following current developments. Much has happened only in the years since the data in this thesis was collected.

Second, for more specific LIS-theoretical inquiries into the subjects presented here, knowledge organization in *libraries of document-things* is an area ripe for study. The subject of tools and other non-publication library materials as documentary, and even more so their relationship to information, have only been touched upon in this study. Gorichanaz (2015) argues that “researchers must investigate further the experience of documents from diverse perspectives” (p. 5) – a diversity to which this thesis has made a small contribution. The thesis landed in not seeking out the ontological document; instead, the role of library materials in documentary practices has been discussed. In addition to document studies, other areas of knowledge organization oriented inquiries could be made into the type of contexts presented here: cataloguing, metadata, indexing, retrieval and so forth of

tools and other x-lending materials. This potentially offers a rejuvenation of the type of scholarly topics which used to be more prominent in LIS, when academic discovery of how items and collections can be treated in the library setting was less charted.

Third, the strand of this project that deals with library value, in a larger context of public policy, can also be explored further. Potential changes or extensions of the library ideals of democratic citizen involvement have been hinted in this work: building instead of reading, hands instead of head. Did libraries after a century return full circle, to now empowering citizens in doing work with their hands, what workers were once to be saved from by becoming literate? Another approach on libraries, policy, and value, concerns their institutional belonging and financing. This thesis has treated public libraries and independent libraries without meaningful distinction, under the same concept of community libraries. Future research should investigate and compare what the organizational setups entail: what difference does it make for x-lending libraries to be politically governed and tax-funded, or community managed by volunteers? This would add to the understanding of x-lending libraries a fifth of Eriksson and Zetterlund's (2008) categories of library designations in the library geography: organization/institutional belonging. Further related to the discussion on society, policy, and value, is also the emerging area of *platform society* (van Dijck, 2016) studies, dealing with critical analysis of platform-driven practices currently represented by services such as Uber and Airbnb. Libraries here offer an opportunity to be explored as platforms for exchange, communication and community building, a continuation of the library-as-model perspectives discussed in this thesis.

Fourth, deepened and more nuanced inquiry into a spectrum of facets regarding how patrons experience the library as a social setting should be conducted. As library researchers we seem to willingly fall into the trap of a form of *community-determinism* – social community places as an inherent positive. Accordingly, when libraries such as those in this thesis are found to represent lively, active social settings, I would argue that we as library researchers (me included) struggle to maintain analytical distance and a broad openness. It seems we are more open to ascribing constructive implications to a library with a strong community presence; less open to discussing any negative, even neutral, implications. For comparison, research on consumer behavior has found that making or maintaining social relationships are not to all consumers liking (Delacroix & Guillard, 2016).

Fifth, the topics discussed here offer obvious touching points with sustainable development. Library and information science research should approach sustainable development not only as environmental sustainability, but in its

whole complexity, which in turn requires complex multidisciplinary solutions (Nolin, 2010). A service lending tools has, aside from the environmental gains of less production, potential economic and social bearings. A good example in this project, relating to both economic and social dimensions, is the patrons who reported that the library had been vital to them to become self-employed. Topics of community development are indeed often connected to sustainable development, and the interest in the role of libraries in the sustainable society, both locally and globally, is rapidly increasing.

Finally, further exploration of materiality and library community is encouraged. The temporal aspect of materiality (cf. Shove, Trentmann, & Wilk, 2009) is potentially a fruitful line of inquiry. An investigation focusing on time could explore the historicity of a library place, its collections, and so forth. Library materials are then given meaning and context through the progress of a community's development and its people's lives.

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APPENDIX 1: PATRON INTERVIEW GUIDE

(Questions, phrasing, and order may vary depending on situation.)

Your background as a patron

How did you learn about the TLL? When was that?

What was your first impression?

Your use of the TLL

What do you usually use the TLL for?

Please think of a time you borrowed a tool, a typical tool-loan

Describe the background circumstances, what did you need it for?

What caused the need for this [tool] in the first place?

What were your options on how to get the tool?

How did you decide how to get it?

So you go to the TLL – please take me through what happens there

The tools

How specific are you beforehand, on what you are going to borrow?

Have you ever *not* known exactly what tool you needed?

What do you think of the collection of tools?

Do you usually leave with what you thought you were gonna borrow?

Have you ever left with something you did not first think to borrow?

Will you ever borrow tools other than from the tool lending library?

The TLL as place & service in the community

What service will you get at the tool lending library?

What are the staff like?

What will you talk about?

Libraries

Do you ever go to ‘regular’ public libraries, other than the TLL?

Which library, branch, main?

How does it compare to the tool lending library?

How does being a patron compare, the services and so forth?

If you think of other public functions and services of the city, how do they compare to the TLL, or how does the TLL compare to them?

How does it compare to being a customer in a hardware store?

If you could add or change anything about the tool lending library, what would that be?

To summarize and round off

Why borrow tools? Why go to the tool lending library? Why not buy or rent them?

APPENDIX 2: STAFF INTERVIEW GUIDE

(Questions, phrasing, and order may vary depending on situation.)

The patrons

Who comes to the TLL?

Why do people use the TLL?

Do people generally know what they need? Or think that they know?

Do they usually leave with what they first asked for?

Are there different reasons why different people borrow, do you think?

When is the TLL *not* a person's first option, what could be the reasons?

What sort of relation do you have with the patrons?

What will you talk with them about?

Role and value

What sort of community/neighborhood is the TLL located in?

What role does the TLL play in the community?

Could this kind of thing work anywhere?

How do you think the public views the TLL?

Librarianship in the TLL

Describe your work, what is it that you do?

How long have you been here?

What do you like about this job?

How does your work compare to other librarians' work?

What sort of skills do you need, what makes a good tool librarian?

How do you think your work compares to selling tools?

What do you think of your collection of tools?

Have you ever talked to library people that did not know about the TLL?

Have you ever seen any sort of criticism of the concept?

What are the biggest threats and challenges you are facing?

What are the opportunities you are seeing?

If you could add or change anything to the TLL, what would that be?

To summarize and round off

Why have a tool lending library, what's the point?

And why should people use it?

APPENDIX 3: MANAGER INTERVIEW GUIDE

(Guide below was used for branch location managers; a slightly modified version was used for system-wide managers overseeing all branches.)

Background

Briefly describe the [neighborhood name] branch

Briefly describe your work

What is the role of this particular branch?

Do you see this library as part of a community, neighborhood? What's its context?

The tool lending library

What's the role of the tool lending library in the branch, what's its purpose?

What is its role in the community?

How is it managed?

Financed?

How does the tool lending library compare to the "regular" library?

Same thing, just different materials?

Do they have the same patrons? Cover same demographics?

Could any branch have a TLL? Why [neighborhood name]?

Could a concept like this work anywhere? Or will it depend on the place and community?

How does it relate to and affect the market do you think, like hardware stores?

Tools and libraries

Have you ever talked about the tool lending library with someone who didn't know

about it?

How would you describe and explain it?

Motivate it?

What motivates *a library* lending out tools?

What makes it a library? Why is it not framed as some other public function?

Compared to a collection of books and other "traditional media",

A collection of tools, what is that?

What sort of material is *the tool*?

Lending and borrowing

What does it mean to the community and its residents, that there are public libraries

where you can go and borrow things?

What difference does it make, do you think?

Rounding off

Any questions or comments?

APPENDIX 4: ADVISORY BOARD MEMBER AT INDEPENDENT LIBRARY INTERVIEW GUIDE

(Questions, phrasing, and order may vary depending on situation.)

Role

Please describe the TLL, what is it?

Why do you have a TLL, what's its purpose?

Is it part of some larger project, movement, or mission?

Community

Do you see it as part of any community or neighborhood?

What role does it play in that community?

Could this kind of thing work anywhere? Or does it depend on the community?

Setup

How is it structured? With the volunteers, board.

What is it that you do?

Library and public services in general

How does the TLL compare to a regular public library?

What's the difference do you think, between being an independent public charity vs. if the TLL would be part of a city service such as the public library?

What role or position would you say the TLL has in the larger perspective of various public services?

PART III

THE PAPERS