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**Invisible literature, or Through the looking-glass in the library of Babel.**

Disseminating and curating born digital literary works in the public library's physical and digital rooms.

## ABSTRACT

The paper analyzes the two case studies, Bergen public library and Roskilde library's work with born digital literary resources, in light of conversation theory and facilitation theory by Gordon Pask and David R. Lankes. Following the idea of Jacques Derrida's deconstruction of marginalized areas, digital born literature is the point of thorough investigation from the perspective of its access, knowledge (by library workers and patrons), environment (spatial organization) and motivation (of its usability).

The research aim is to draw out best practices in organizing information and knowledge infrastructure for the born digital literary works in physical rooms and digital spaces of public libraries; to diagnose the difficulties and problems in physical and digital facilitation of this type of literature; and to find potential ways and methods to improve its visibility and accessibility by an average public library patron. Some of the highlighted issues discussed in the paper are the librarians' communication with the research communities and distributed archives, dissemination practices functioning for the purpose of archiving, creative use of physical spaces, library's presence beyond its walls via creative physical and digital facilitation techniques, digital literature as part of information competence etc. The developed models for facilitating born digital literary works in public libraries are demonstrated and analyzed. The paper is a kick-off research for further investigation of particular issues in digital literature, such as its knowledge organization, hybrid facilitation, preservation and special collection management, among others. The paper concludes with suggestions and advice on potential use of born digital materials and knowledge in public libraries, improvement of services particularly aimed at specific dissemination practices and facilitation as well as on deeper use of digital curatorial activities and curatorial work done for presenting digital born works at physical places. Post-digital environments and hybrid solutions are often discussed. The research is of qualitative nature and follows the two parallel projects at both libraries via interviews, document analysis and observation.

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THE LOOKING-GLASS IN THE LIBRARY OF BABEL.

Disseminating and curating born digital literary works  
in the public library's physical and digital rooms.

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## Preface.

### Afraid of the future?

Are we afraid of the future in 2010's? The writer of *Time*, Touré, means in one of his latest articles that we live now in an "era of tremendous anxiety...if we don't feel comfortable in the present and we're nervous about the future then we must take refuge in a romanticized past, finding solace in its relative innocence. The past can function as comfort food"(Touré, 2012). And if we look at the early 21<sup>st</sup> century culture at a glimpse, we see a lot of retromaniac tendencies: rebirth of vinyl and cassette culture, the constant recirculation of the music of the 60's to 80's, clothing trends reminding us of the beatnik, hippie or punk communities, never-ending allure of silent movies and films about heroes of the past. There is a growing popularity in a new trend to write "real" physical letters to strangers or to friends one makes first online. What is this nostalgia? Being tired of digital technologies? Yearning for the organic and the natural? Perhaps, it is one of the reasons, but more likely this thirst for the past is closely connected to the recent digitalization period and age of limitless internet access. Thanks to this access through our modern "looking glass" we can see and learn more and more of the past. The recent issue of *Deichmanbladet* borrows a term from the history of art to describe this tendency, "superhybridity": "Tidligere tiders moter, stiluttrykk og musikk, trenger aldri å føles fjernt for oss. Vi kan leve side om side med hele smæla, og gjøre fortiden til en del av samtiden" ("Expressions of fashion, style, music never have to be perceived as removed from us anymore. We can live side by side with all this, and make the past part of our present")(Michaelsen, 2014). This accelerating access to the past encourages our remixing culture, but also promotes remediation, making use of older media techniques, methods or trends to create new media.

### Media change and remediation.

Perhaps the reader will notice that the human culture's achievements are all interconnected, and cannot be viewed separately from the history and evolution of human thought. Media change will presuppose the fundamental law of both loss and gain. According to media scholar J. David Bolter, every new medium "appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real"(Bolter and Grusin, 1999). If we take a brief look at the history of information technology in general and its gradual transition to digital information technology, we see that it begins with the earliest tool, the spoken language or speech, which permitted humans



for millennia to transmit knowledge from generations to generations. Depending on situations, speech can be of advantage or disadvantage. But still it is, according to Derrida, a technology of presence, immediacy: the speaker and the listener have to be in the same place and at the same time. In our century we still use this tool quite often to communicate knowledge: meetings, conferences, seminars, talks, workshops, conversations, performances. With the help of new technologies we managed to remediate spoken language into radio, television, film, Skype conversations, Vimeo presentations, podcasts etc.

What speech in its original intention did not possess the writing and printing did: possibility to reflect, abstract, organize, concise; what writing eventually introduced was asynchronous communication, possibility to respond at one's own convenience. Writing made the listeners and readers for the first time virtual, not needed to be in the same place and at the same time. Manuscript culture of the Middle Ages invented various techniques to organize the written text by means of individual pages, chapters, paragraphing, spacing etc., while printing's major invention was the possibility to make multiple copies of the same text, to distribute it to ever more people and expand virtuality of access to knowledge. What printing permitted as well was dissemination of scholarship, criticism and authorship; it allowed to search through bibliographies to find similar ideas and enrich one's knowledge according to one's interest.

Jumping right in the middle of the 20<sup>th</sup> century we can observe the earliest developments of digital technologies, from that time on we started experimenting with creating text on computers and digital devices. Realizing these machines' higher speed for information transmission we were willing to make knowledge ever more available to ever more people and at faster pace. By the end of the century we achieved it thanks to web technologies, by early 21<sup>st</sup> century social media technologies, invention of iPhones and iPads gradually replacing the personal computer. Digital technologies gave us efficiency of receiving any kind of knowledge at low or no cost and at the highest possible speed we ever imagined. With soft texts, as scholars often call the writing created by means of computer-mediated devices or the writing remediated from the originals, so digitized texts, we lost what print had: fixity, stability, reliability of its medium; print could be stored, preserved for centuries and millennia. What makes the digital text so unstable is the fact that it is dependent on the electronic codes processed and manipulated by computer or other similar digital devices. Thus, what we see when we read or view something on the screen of our iPad, iPhone or laptop is not real, but only a configuration made up by means of sophisticated tiny engines, which we can call "virtual machines". We can call it a big step forward since with the

invention of digital information technology it is not only that we become virtual, but also the products of knowledge.

## 1. Introduction.

### 1.1. Proto-digital writings.

With the advance in developments of digital technologies various types of digital writing proliferated. Of course, most of us are familiar with the digitized versions of old books or historical manuscripts, often available online through various collections in PDF formats. But these are not the writings this paper is about. Since early 50's, exactly the time when we started our experiments with computers and digital devices, we also experimented with creating specifically literary writings by means of then available computer systems. Thus, in 1952 computer scientist Christopher Strachey created the so-called *Love Letter Generator* on the Manchester Mark I computer after some discussions with Alan Turing. The program he invented created short love letters based on the list of programmed word patterns, in which words would change randomly but grammatically and lexically correct. The letters were always signed M.U.C., Manchester University Computer. The example of such love letters would be like this:

"Darling Sweetheart

You are my avid fellow feeling. My affection curiously clings to your passionate wish. My liking yearns for your heart. You are my wistful sympathy: my tender liking.

Yours beautifully

M. U. C.

Honey Dear

My sympathetic affection beautifully attracts your affectionate enthusiasm. You are my loving adoration: my breathless adoration. My fellow feeling breathlessly hopes for your dear eagerness. My lovesick adoration cherishes your avid ardour.

Yours wistfully

M. U. C."(Wardrip-Fruin, 2005), ("Christopher Stachey Loveletters 1952", 2005).

Another computer scientist Joseph Weizenbaum created ELIZA list natural language processing program at MIT in 1966. ELIZA was one of the first chatterbots, but the difference was that it was a computer interacting with the human. This interactive program ran the DOCTOR or psychotherapist script out of list of patterned sentences and made an illusion of

human-human communication. Among many other versions, Michael Wallace made a javascript version of ELIZA, which can be talked to on our computers and Ipads (Wallace, 2014).

A decade later, in 1976 *Colossal Cave Adventure* interactive game was invented by Will Crowther in Kentucky on BBN's PDP-10 computer with data which included 79 map locations, 193 vocabularies, travel tables and various messages. What was so special about this game was that the computer simulated and described a situation while the user could type in what to do next: the user would become part of creating an adventure setting. This game exists in numerous versions nowadays (Adams, 2014).

### 1.2. Print hypertexts.

The post-war creative print was not isolated from the developments in technologies. Unconsciously many writers of print experimented with its format, often abandoning the traditional necessities for linear text, orthographic correctness, binding techniques and so on, and instead gradually incorporated features of computer programs into the static print. Literary studies themselves proclaimed the death of author in the 1960's after the famous manifestation by Roland Barthes. Now the reader was not only a consumer, but also a producer of the resulting text. One of such early experiments in print was *One Hundred Thousand Billion Sonnets* written by Raymond Queneau in 1961, the work consisting of set of poems printed on cards with each line on a separated strip. 10 lines are distributed among 14 groups in such a way that changing the line and the group will create 10 times 14 versions, which can take indefinite time to read them all through. One of many web-based versions was made by Beverly Charles Rowe ("One Hundred Thousand Billion Sonnets"). Other two experimental print works of literature were also created in the 1960's, Marc Saporta's *Composition No.1* and Julio Cortazar's *Hopscotch*. Saporta's work is a book in a box with loose pages: each page has a self-contained narrative "leaving it to the reader to decide the order they read the book, and how much or how little of the book they want to read before they begin again" ("Visual Editions", 2014). Cortazar's "anti-novel" can be read according to two different sequences of chapters. The book consists of 155 chapters, 99 of which are designated as "expendable" and can be freely used (or not used) by the reader to fill in gaps left by main chapters. Julio Cortazar devised a special table of contents, according to which the book "offers open-ended narratives whose presentation changes depending on the path that the reader takes" (Martin, 2014).

However, surprisingly the seeds for making such experiments in print literature have been initiated much earlier, not in the age of developing digital technologies, but in the Age of Enlightenment, when novel did get born, in the work of Laurence Sterne, *The Life and Opinions of Tristram Shandy, Gentleman* (1767). Just a couple of decades after Daniel Defoe and Jonathan Swift published their ever first novels, which established the genre for next generations, Sterne created a literary work full of digressions and amplifications. Digressions are sections of writing which intend to change the subject and divert the reader's attention to the background information or to better illustrate the point, from Latin "a going away, departing". Amplifications are "the particulars by which a statement is expanded", according to Merriam Webster dictionary. These literary methods were used a lot by many other writers and poets since Cicero and Plato, but in case of Sterne's novel they are excessively used and, moreover, they not only add value to the text, but often they themselves provide vital contexts without which the text wouldn't be clearly understood.

### 1.3. Scholarly writings and active reading.

Wasn't hypertext, coined by Theodor H. Nelson in the 1960's as "non-sequential writing - text that branches and allows choices to the reader, best read at an interactive screen...a series of text chunks connected by links which offer the reader different pathways"(Nelson, 1993), been a natural ingredient of reading and writing? Weren't we always active "readers", always appending our own individual reflections, connecting the nodes and links by associations, being guided by the references and annotations, always changing our mind? We've been already engaged in the hypertextual reading while writing and reading scholarly articles: while reading an article we encounter a citation bringing us out of the main text to another text, which supports or questions the argument; it is up to us to read it or not, to deepen our knowledge or not, depending on the context and situation. We can meet many of these other secondary texts, which can in their turn surface the main text if they give more relevant information. What is interesting about the scholarly article, it becomes much more difficult to locate and organize the contextual references in the classic print view: you will need a lot of books and encyclopedias surrounding and encumbering you. George P. Landow means that hypertext is liberating as a reading feature thanks to digital technologies, where it is better suited: "Scholarly articles situate themselves within a field of relations, most of which the print medium keeps out of sight and relatively difficult to follow, because in print technology the referenced (or linked) materials lie spatially distant from the references of them. Electronic hypertext, in contrast, makes individual references easy to

follow and the entire field of interconnections obvious and easy to navigate”(Landow, 2006). That’s why contemporary scholarly communication shared platforms, where scholars and scientists may not only organize their own citations, but also collect, compare and share other references, grow further on in the sciences and penetrate the humanities research. George P. Landow mentions as well the word *hypermedia*, which extends the notion of text and includes visual information, sound, animation and other types of media. These can mingle and get connected with the textual information and tightly gathered in electronic environment.

#### 1.4. Literature, narratives and storytelling.

In our media-saturated world “text is today’s Latin. It is through text that we elites communicate. For the masses, however, most information is gathered through other forms of media: TV, film, music, and music video. These forms of “writing” are the vernacular of today”(Lessig, 2008). We could add games and Ipad apps in mid 2010’s. And who knows, maybe more of other born digital artifacts and information products, which are being developed gradually in underground circles.

Coming back to the digital writing, since the birth of digital technologies in the 1950’s there have been some parallel developments in born digital literary artifacts, but they have never gained popularity or wide attention to be really discovered by the average public. They remained for a long time the interest of specialists in computer science, literary studies and web development. That’s why they couldn’t be presented here under a particular concept: the preference in this paper is to refer to them as born digital literary works, even though they have been called electronic literature, digital literature, hybrid literature or experimental literature. Somehow, the word “literature” confuses it all, in my opinion. Various definitions of literature are vague and incomplete. Moreover, they change over time under the influence of cultural developments. It is also worth mentioning that many works of literature reached their achievement and entered the “canon” long time after they had been published. Literature is based on the idea that some texts have more value than the others, and it is the reception of these texts that play a vital role in determining their place on the scale of importance. From Latin *literatura* is defined as “writing formed with letters”, however, some other definitions include spoken texts or songs, and not all written texts can be considered literature. Among literary theorists there is at least one agreement: the work of literature should display excellence in form and style. It is easy to agree with Simon Ryan that to define literature we’d better see what literature does, it “reflects society, makes us think about

ourselves and our society, allows us to enjoy language and beauty, it can be didactic, and it reflects on the human condition. It both reflects ideology and changes ideology, just like it follows conventions as well as changing them. It has social and political effects”(Simon, 2014).

Assuming that literature changes, has no clear boundaries and is under influence of the cultural environment, we can come to conclusion that literature can take up various forms of expression and make use of various available tools to be created, including digital technologies. Moreover, literary features and aspects can appear in non-literary texts, in technical texts, for example, in order to describe or explain the fact or situation. Another way to look at literature is through the theory of the narrative and storytelling. As N. Katherine Hayles argues “narratives may be as old as humanity itself, as suggested by the narratives structures emerging from pre-history through myth, epic poetry, and creation stories. One of the purposes narrative may have served in human evolution is its implicit ability to create models of other minds and, more generally, models of the world”(Hayles, 2005). I suppose, the look at literature as narratives can even confuse more, because narratives exist in films, performances, songs, videos and even in art works. They exist in computer games. We shouldn't be surprised, taking into account that literary aspects are millennia-old and tightly connected with language and our being. Literature has always been in transition establishing new platforms of expressions in the same way as language, from spoken word to manuscripts, from print to digital writing, and it will continue further from augmented reality environments to who knows what future developments will bring to us.

I propose to discuss born digital literary works here, sometimes referred to as digital or electronic literature, in light of its literary evolution and tight connection to the classic literature, not as an entirely new information resource and artifact. Perhaps the unsatisfactory tendency about this type of literature is that often in the cultural institutions it rather gets ignored, misunderstood, confused with e-book; so it remains mainly discussed, distributed, shared and disseminated in the narrow circles of scholars, computer scientists and underground artists. The possibility is that it can always remain underground in the same way as it happened to many other literary movements in the past, like Dada and Fluxus.

#### 1.5.Libraries as mining stations for digital content.

We live in an exciting age when new digital technologies appear year after year and change our cultural environment, communication and sharing of knowledge. Web, social media, the use of personal computer, Ipads and Iphones created new social and creative

spaces to consume, get informed, learn, interact, produce and create. Literature did not stay away from this development, it went side by side with these technologies. Literature the libraries offer to read is just a small portion of what exists now online and in the world, if one just knows where to find them. Is it somehow connected with our instinctual fear of the future and nostalgia for the past which exacerbate our present?

We have gotten a number of new interesting platforms in recent dozen of years: blogs, numerous social media channels, Iphone apps for every taste, interactive online environments like chats and video conferencing, video and audio streaming and podcasts, various types of software and graphic design programs. The web itself is a space where we can combine all known types of media from digitized manuscripts to multiplayer digital games and video art installations.

I am sure many could object that there is too much choice, too much “noise” among all this. Maybe this is the reason we become so “lazy” in searching new literature? I think, it means that libraries need to reconsider their policies of disseminating new kinds of literature to the public, especially in this abundance of choice, where it is so easy not to notice and pass by a remarkable work of art or literature. We need “librarians-miners” for the specific credible and quality information of multifarious forms and content in our globalized multi-faceted societies.

Prior to making my mind to write this paper I was getting curious about why library sector was distant from the field of born digital literature and generally from the field of experimental writing. After my volunteer position at the University of Bergen with the research groups in Digital culture and Electronic literature I encountered the brand new world of literature waiting to be discovered by an average library user. By studying the ELMCIP database (Electronic literature as a model of creativity and innovation in practice), assembled and organized by the researchers at the University of Bergen, as well as their collaborative practices with knowledge institutions in Bergen and their partnerships with the American organizations managing the electronic literature dissemination, I’ve been inspired to go on with my research to see what libraries, in particular the public sector, can contribute and benefit from the discourse on the digital literary works. Since works of digital literature are often published in open access and based “on a gift economy and developing a network-based literary culture built on the collaborative practices of a globally distributed community of artists, writers, and scholars”(Rettberg, 2013), it means an entirely different and easier acquisition model for the libraries. When it comes to the new library law in Norway, the country in which I am based, it emphasizes, as written in the newest report on public

libraries, “bibliotekenes rolle som møteplass, arena for kulturarrangement og debattarena...De oppgavene som beskrives innledningsvis er tilbud som kommer i tillegg til å tilby en bred og variert portefølje av medier” (“the library’s role as a meeting-place, arena for cultural events and debates...The tasks described initially are the suggestions which will bring a broader and more varied portfolio of media”)(Danielsen et al., 2014). If the big public libraries of Norway wish to follow this law and to pursue their demand of the national digital infrastructure to ease the access to the digital content, then disseminating and curating born digital artifacts both in public libraries’s physical and digital spaces have to be included in the agenda and thoroughly considered. In April 2014 the big public libraries of Norway wrote a report on literature support, in which they explicitly suggested new ways to disseminate literature in public libraries. Among these, they mention “en egen innkjøpsordning for digitalt produsert materiale – det som er «født» digitalt. Her ventes mange ulike uttrykk, dette ser en særlig blant barnebøker internasjonalt” (“a special acquisition schema for digitally produced materials – these which are “born” digital. Here are expected many different expressions, which are especially relevant for the children books internationally”)(Danielsen, Egaas, and Skillingsaas Nygård, 2014). At the same time libraries have for several decades experienced lack of physical space because of the traditional collection development, accumulating a lot of low-frequency print materials, which need to be dispensed to the national inventories in order to free more space for people and digital artifacts. In this paper I intend to investigate what this “liberated” physical space has to offer in public libraries.

More importantly, beside making ourselves more literate digitally as librarians and information professionals we have to assist our patrons with ever-changing and increasing knowledge of the digital world. The web provides more than just Google’s returned searches, there is a multitude of online resources not directly linked to well-known search engines. These must be dug out and presented to our audiences. When it comes to digital born literary works they are often found in these unknown closeted databases or inside the specific open access journals and magazines. Blogs provide often a much richer information context.

After a long reflection on the processes for facilitating the knowledge of born digital literary works to the public library patrons, I came to conclusion that the two concepts, dissemination and curation, would suit the thread of investigation. By dissemination I mean literally from Latin *disseminare*, “scattering seeds”; thus, spreading the existing knowledge to the audience in all possible forms. By curation from Latin *curare*, “taking care of something or someone”; thus, attend the presented knowledge and make it available, visible,



understandable to the patrons. Interestingly enough, the concept of curation is very qualitative: the word “a curate” as a noun means “someone who takes care or cures souls”, and a well-known old profession of a parish priest. Metaphorically this profession is tightly linked to the profession of a librarian: these concepts add new more qualitative values of our profession expand the way we facilitate knowledge. The methods and techniques of dissemination and curation some libraries do and can do will be presented in this paper.

#### 1.6. Works of digital hybridity.

As mentioned before, in this paper born digital literary works and the classical literature are not separated, instead they are viewed as the continuation of the literary tradition and evolution. Secondly, it is important to keep in mind the variety of existing genres in literature, each dependent on the tool or technology used (for instance, some works use javascript or Adobe program, the others integrate Google map or similar applications, the third take advantage of the email, sms, blog or social media platforms, the fourth combining game elements with hypertext structures, the fifth make use of QR, RFID codes or augmented reality devices etc.) The list could go on indefinitely in the same way as if we were to describe the contemporary condition of existing digital technologies. The central definition of such works is given by the ELO, Electronic literature organization, “works with important literary aspects that take advantage of the capabilities and contexts provided by the stand-alone or networked computer” (“Electronic Literature Organization”, 2014), often critiqued by the scholars for its narrowness. This definition is only a guideline to understand the nature of digital literature, but taking into account its history and context. Perhaps the look and study of some exemplary works of digital literature can be experienced before delving deeper into the ways how to disseminate and curate it (“Electronic Literature Collection Vol. 1”, 2006; “Electronic Literature Collection Vol. 2”, 2011; “Anthology of European Electronic Literature”, 2012). It is worth mentioning that these and similar collections do not exhaust the list of born digital literary works and their types, many often get self-published or published in individual art and literary magazines, for example. For the purpose of presenting them to our patrons we need to be able to find them and know about them through our curation processes.

#### 1.7. How, what and where: research aims and objectives.

In this thesis the two case studies are followed, Bergen public library in Norway and Roskilde library in Denmark. These are the only libraries in Europe I encountered which did

work in disseminating and curating works of born digital literature. It coincided with the fact that I live in Norway, and it was easy to travel between the two countries to organize the research and do the fieldwork.

The aim was to explore, study and analyze how individual cases functioned and what could be learned from them, what could be done more. It is best explained through the three key research questions:

1. How do the libraries manage organizing information and knowledge infrastructure for born digital literary resources, for both physical and digital environments?
2. What prevents the successful organization of this infrastructure? Why are born digital literary resources are still largely absent from the libraries' databases, catalogs, collections, web, web 2.0 and mobile presence? What makes it difficult to implement them into the public library knowledge base ecology?
3. What are the possibilities to improve visibility and accessibility of born digital literary works in public libraries?

These questions summarize the main reasons for the investigation, tracking the current state, problems and potentials of disseminating and curating digital literature in public libraries. Before setting foot in the field I knew that each site did a different kind of work, the analysis takes this in view. I also knew that the studied libraries approached the new literary works not long time ago, and they were learning themselves along the process.

The structure of the fieldwork has been planned carefully in advance and pursued the following objectives:

- To identify the main managerial and technical tasks each site does to curate BDLW (born digital literary works)
- To identify the problems, difficulties in organizing information, knowledge and discourse arena for BDLW
- To investigate the external factors (economic, local governmental, partnerships, technical expertise from outside, user orientation, probable pressures etc.) for curating BDLW
- To find out what the sites possess and lack in expertise to organize information infrastructure for BDLW and find the channels and affiliations which could fill in the possible gaps

- To explore the past, present and intended projects, partnerships and affiliations which provide information, knowledge on BDLW and organizational support or could do so in the near future
- To explore the collection and database development of case sites and to find out how they can be adapted to presentation of BDLW
- To explore how is the physical place used for presenting BDLW
- To explore what steps have been undertaken to implement BDLW into the libraries' digital space and to investigate the potentialities for this
- To find out the librarians' and other library workers' attitudes and opinions about BDLW curation and identify possible prejudices and expectations

My intention in the following chapters is to present what has been done specifically in the public library sector to address the issue of disseminating and curating born digital literary works. I hope to outline a sketch of the started work in some of the libraries as well as other knowledge institutions and related developments to provide some hypotheses and useful suggestions how to organize this new type of literature for its consumption, use, production and circuit among other traditional and new information and knowledge resources. This research project is a starting point and impetus to investigate the contemporary public library's new media ecology in general, which can inspire other scholars to take the next step in its analysis.

## 2. Theoretical perspectives and methodology.

### 2.1. Deconstructing the library.

Philosophically this research relies on several important concepts of Jacques Derrida's critical theory, especially his concepts of deconstruction, "the other", play of differences as well as "différance". These concepts relate tightly to the presentation of digital literature in the library setting, and the library itself can be deconstructed. Library and information science is permeated with the search for the universality manifest in the elaborated classification systems, catalogs, and various knowledge organization systems attempting to tame the subjectivity of language. This approach has been usually preferred in libraries to avoid communication failure, however it overlooked the diversity and specificity existing outside these systems. According to Derrida, Western thought has always been turned towards the center, which tends to marginalize, to exclude "the Other". This means that a

binary opposition is created (good/evil, for example), in which one notion plays a primary role, while the other the secondary one. What is considered secondary is defined in terms of its absence. However, such concepts like “good” and “evil” could not be thought of as separate from each other, because “evil” can only be understood if we know what “good” is: the concepts are interdependent. Thus, Derrida argues that “the identity of a thing is derived from the play of differences within signification – a play of presences and absences”(Leckie, Given, and Buschman, 2010), as Joseph Deodato explains. In his interpretation Deodato defines deconstruction as “a process of *decentering* aimed at releasing the free play of nonhierarchical, nonstable meanings within a text”(Leckie, Given, and Buschman, 2010). There are three steps in deconstructing something:

- a. Identify the binary oppositions, in which one is central, another is marginal
- b. Reverse the relationship by putting the marginal in the center
- c. Transcend the binary logic and allow the mutual interdependence

With the close analysis of born digital literary works curated in the libraries I have this process of deconstructing in the background to guide my research. The questions triggered by this philosophical terrain challenge the public library’s everyday practices and management in terms of accepting/denying information resources which show themselves to be of a different nature. This way of looking at the library is especially relevant due to its ambiguous relationship with born digital artifacts. If we see the libraries are still full of print materials, we can see a big gap in making efforts to have digital materials available. Yes, they are somehow there in form of some e-books, blogs, social media posts, online articles from magazines and journals, computers and Ipads for loan etc. However, what about various Ipad apps, digital games, art, literature, born digital interactive maps and exploratory educational materials and so on? And what if they were together with the already established digital content in the center of the library, while print just a minor collection of it? How to make traditional information resources and digital ones compete less with each other, but let them grow in harmony and symbiotic development side by side? This way of looking at what the library does with its collections can trigger new ways of acquisition, collection policies and methods for facilitating various types of resources. We, as librarians, can see deeper than into the close relationship between traditional and new media: they are interdependent and often influence each other. Beside our retromaniac tendencies, we tend to understand the history of media better now in 2010’s than a dozen years ago.

## 2.2. Interrelation of traditional and new media and responsibility to otherness.

Notice, for instance, the recent turn towards not only vinyl in music culture, but to a cassette. With the availability of modern sound systems providing clean digital sound some artists and fans still like recording on and listening to cassettes (even though a minority). *Deichmanbladet* interviewed the manager of the record company “Fysisk format” Kristian Kallevik and asked him why some people still do listen to a cassette to which he answered that “det som betyr noe er hvordan innholdet og musikken resonnerer med formatet. En kassett med sin innebygde kompresjon og sus kan gjøre seg veldig godt på mange utgivelser. Alle som jobber i et digitalt studio sliter med at utgivelsene blir for kliniske og kalde...Kassetten har en aura av noe opprinnelig, ufiltrert og ekte. Noe man har enorm tørst etter i dag”(“what is important is how the content and music recorded resonate with the format. A cassette with its embedded compression may appear of very good quality on many releases. Everyone who works in a digital studio are dissatisfied that the releases become so clinic and cold in sound...Cassettes have an aura of something original, unfiltered and real. Something we have an enormous thirst for nowadays”) (Josefsen, 2014).

Or what about such print works as Maria Fischer’s *Traumgedanken (Thoughts on Dreams)* created as a physical transposition of electronic hyperlink by connecting keywords and passages across the book with the help of threads of various colours, a kind of physically interlinked text?

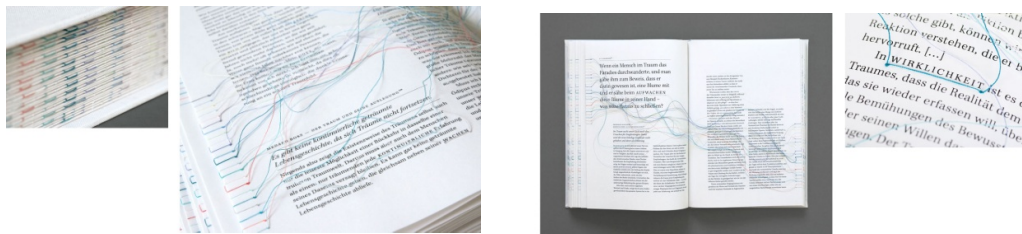


Figure 1 *Traumgedanken* by Maria Fischer

Obviously in this case digital media influences print in such a way that a totally new and original work of art and literature is shaped, a hybrid.

Derrida’s deconstructive philosophy can help not to fall in the wall of one-sidedness and declare the death of paper in favor of digital writing. In the same way we cannot defend the traditional media-centered collection development in the libraries not only because of the advance of digital technologies and resources created thanks to them, but also to the interconnectedness of these and other less-known media.

In this context I use the concept of “differance” coined by Derrida as well. It undermines the logocentric notion of language and demonstrates that the language is “caught up in a network of associations that extend far beyond one’s self and the present moment...Signs are not linked directly to immediately present objects or meanings, but derive their meaning through their relation to and difference from other signs”(Leckie, Given, and Buschman, 2010). Similarly, this concept can be applied to the way born digital literature relates to other literary works and resources present in the library. We, librarians, need to notice these relationships and tendencies: what we can do is to observe and analyze closely how such new media works as electronic literature find their niche in the library settings. “Differance” is deepening of deconstruction process, and it requires reconsideration of the library’s mission and vision, its management styles in order to start noticing the effects of Derrida’s concepts. The time affects the information object, how it is viewed and treated: if 100 years ago this or that type of literature was seminal, maybe in 2010’s it has less importance, while other works play more vital roles.

Beside these considerations, in Hope Olsen’s words, we as librarians have “responsibility to otherness, a responsibility to create space for the expression of other identities, other values, and other perspectives within structures of knowledge organization”(Olson,1993). In terms of knowledge organization systems she sees solutions in accepting tagging, social bookmarking, annotations and the use of adaptive technologies (such as multi-language LIS, for instance) and their application to the alternative resources and information objects. In the analysis of dissemination and curation of digital literature Hope’s “responsibility” is another guiding tool to observe and collect information about the way libraries treat electronic literature and how they see it matching their agendas in relation to their information organization systems, but also web presence, marketing and embeddedness towards to the public.

### 2.3. Knowledge created through conversation. Conversation theory.

When it comes to the more concrete theoretical approach in studying the case sites I’ve adapted the Conversation theory by Gordon Pask and R. David Lankes’ deepening of the theory through processes of Knowledge creation and its Facilitation described in his *Atlas of new librarianship*. The key statement of the *Atlas* is that “the mission of librarians is to improve society through facilitating knowledge creation in their communities”(Lankes, 2014). The Conversation theory implies that learning and knowledge are achieved through conversation. There is a serious shift from things and artifacts to human knowledge and, in

particular, the learning process. R. David Lankes goes to argue that “a library where people are learning and building their knowledge may have no books, no computers, no DVDs, and no building. What it will have is a librarian facilitating the process”(Lankes, 2011). And learning implies action: not necessarily shaping knowledge through passive sitting and reading books or watching videos, but by talking and doing. Lankes’ suggestion is to build a sort of a library of “manufacturing” metaphorically. He means by this to bring all the necessary materials, equipment not only related to books and DVDs, but rather dictated by the needs of the communities visiting the library: if they need a performing stage and high-quality recording equipment or manufacturing materials to create a kind of a laboratory that should be prioritized over traditional acquisition of materials. In light of active learning and knowledge creation librarians are supposed to collect processes and expertise and organize programs for people to participate in. In this sense, a librarian is a creator of a conversation. What type of conversation it is depends on the local community and its interests. Conversation occurs on different levels: between different organizations, teachers and pupils, friends, teams and groups, but also with ourselves. It should be noted that the knowledge created through conversations change over time and under the influence of new situations and interactions. It is impossible to fix a certain type of knowledge in a box and put it on the shelf for display. That’s why it is perhaps useless for librarians to collect increasing amount of data contained in ever changing types of artifacts and objects, but instead to partner with their patrons in creating a specific collection of not only materials but conversations aimed at their development.

If knowledge is created through conversations, we, librarians, need to know in detail what a conversation is. The following schema illustrates the elements of Conversation theory and how they participate in building up knowledge.

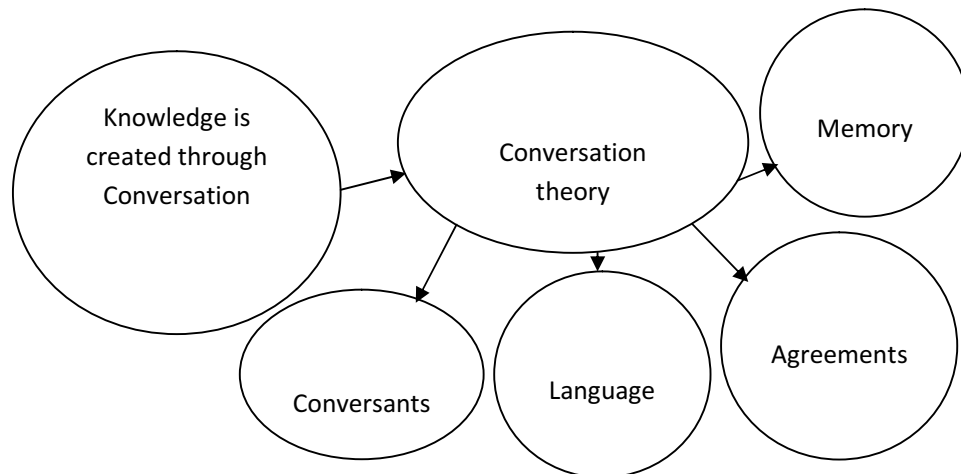


Figure 2 Conversation theory model

Conversants can be any cognizing agent which is able to take input and create a reasoned response: these can be within us, external to us, humans or non-humans. According to Lankes, librarians are supposed to be part of the conversation, always of service, visible and helpful to our patrons.

We need a language to communicate. However, we have Babel-like multitude of languages to communicate with. Lankes divides languages into a language used by conversants “with low pre-existing knowledge of a domain”(Lankes, 2011) or L0, and a more specialized language, which one acquires once one gets more understanding of the conversation and its field or L1. What is interesting in his discussion of language is that he provides a theory of communication systems built with the help of L1. For instance, most of LIS systems as well as classification systems and cataloguing taxonomies have been built with the help of this specialized language: this was done in order to organize information as effectively as possible. The library approach was always to bring the average patron to the efficient knowledge of L1 in order to be able to search the stored materials, information literacy. The following schema illustrates the evolution of communication systems.

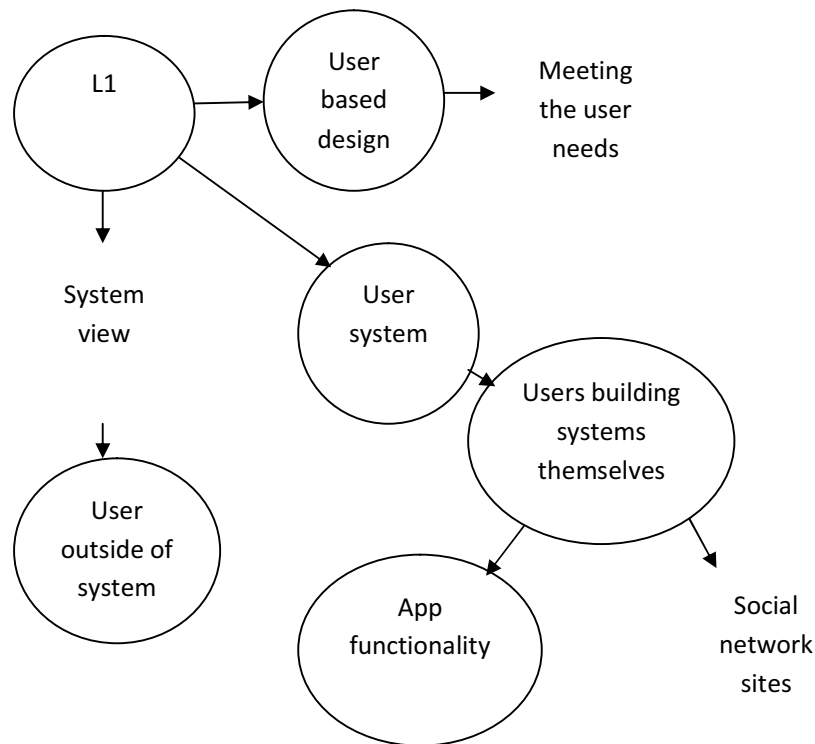


Figure 3 Evolution of Communication Systems

If the focus was on building a new system, the user’s needs were not considered. Many systems are developed independently of what the potential user can perceive of them. Many



libraries build such search systems, in which it is difficult for the patrons to orientate. Some libraries developed user-design systems to take into account the way the users try to solve problems, search artifacts, communicate etc. However, if a library adopts such a general user-centered system, it assumes that the majority's language is in the foreground, while we know that not everyone is using the same specialized language. It is especially relevant with the heterogeneous communities, like those in public libraries: each of them will have to adapt to a generalized language. Instead, Lankes demonstrates the effectiveness of building the so-called "user systems", in which patrons will build the system using the app functionality. For instance, if one needs a specific service in the digital space of a library one can always add an app, it will suit the patron's specific understanding and language use. Iphone apps and social network sites are exemplary in this approach. Thus, languages are different because of the diversity of population and the groups libraries can serve: to support the patrons' diverse language use we need a system which easily serves any of these groups.

The final element of a conversation is its agreement between the conversants. Agreements, according to Lankes, are "flexible – they can be added to, taken away, or changed from individual experience or conversations with others"(Lankes, 2011). Artifacts can be created out of these agreements, certain conversants can be distinguished in creating new ideas, but knowledge will still reside in humans. The awareness of interplay between artifacts, conversants, their conversations and agreements is the realization that library can do more than just collect artifacts. The availability of limitless choice in artifacts does not help the patrons: what is relevant and credible to your community out of this choice is perhaps the clue to knowledge organization approaches. In *The Paradox of Choice* by Barry Schwarz choice is presented in a deconstructed way: "adding more choices to an existing domain simply makes (our) lives more difficult as (we) feel pressure to choose the "best" possible option from an overwhelming array of choices"(Schwartz, 2003). In the end of his book Schwarz concludes with some suggestions to avoid "the tyranny of choice". Among these, choosing what to choose and focusing on the chosen while letting other many opportunities pass by as well as loving constraints and learning how to set limits on the possibilities encourage us to exert plenty of self-discipline. Not all of us can do it in the climate of expanding consumerism and online libertarianism of information resources: isn't it a good reason that we, librarians, must take care of tending this choice of opportunities? Lankes mentions that librarians can do it best not by expanding their collections, but by creating tools which facilitate creation of knowledge for the members. Tending means being in closer relationship with all the patrons of the library, knowing what they need: workshop,

blog, online learning environment, performing stage, Ipads and Kindles, programming software, 3D printers, devices which can convert VHS into digital formats and so on? It is especially vital when it comes to the dissemination of dynamic flexible online and digital material: how we can catalog some of the important facebook pages and blog posts is a less relevant question than how we can gather knowledge and people possessing it in order to grasp and distribute it.

## 2.4. Digital tables

Knowledge is accumulating previous agreements, compare them to the current ones and change itself. In order to be able to do analysis, comparison and other processes of knowledge creation we need another aspect, memory. According to both Pask and Lankes, the relationship of agreements can be demonstrated in the so-called “entailment mesh”, in other words a web of ontologies or graphical representation of agreements and their contexts. Our thinking and remembering is always relational: a word “bank” in isolation will not render a lot of meaning to us unless it is surrounded with other words in the sentence, which will point out to the context. We have lack of systems which can organize this memory. Lankes suggests a new form of a reference software system called “scapes” or digital tables, which can be suitable for the tangled relation-driven entailment mesh.

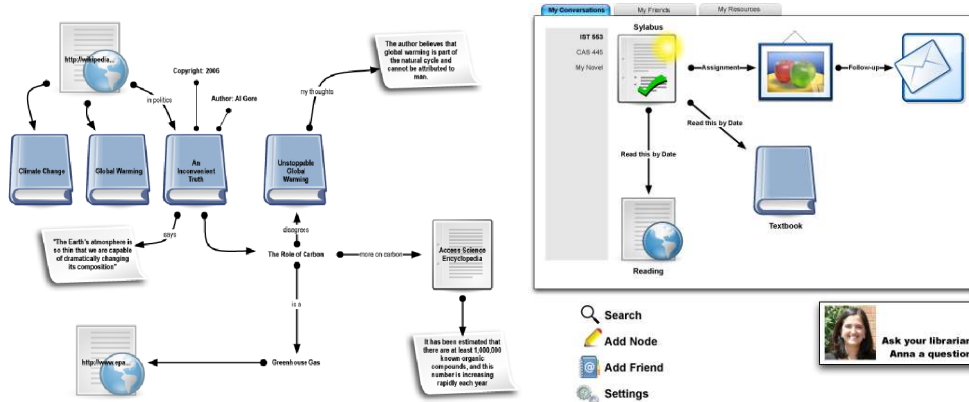


Figure 4 Examples of digital scapes by Lankes R. David

As can be seen from the graphic representation of scapes, these are basically shaped like tables with collected files of different formats and content: these are of particular topic or research. We can notice beside these files the personal thoughts of the scape’s owner, and, most importantly, the development and the context of the researched subject. An imagined

perfect scape (on the left) can be added to another scape (to the right) containing some external information (in the particular example, the assignment description, the course, syllabus etc.). Newly discovered materials can always be added and the less relevant ones deleted if necessary. Beside searching and gathering material, one can share one’s scape, communicate with “friends”, “experts” and “librarians” to deepen the search accuracy: what is important – they can see your knowledge model.

2.5. Means of facilitation.

This model is followed by the means of facilitating knowledge: after having understood how knowledge is actually created, we can provide the model of its facilitation through access, knowledge, environment, and motivation:

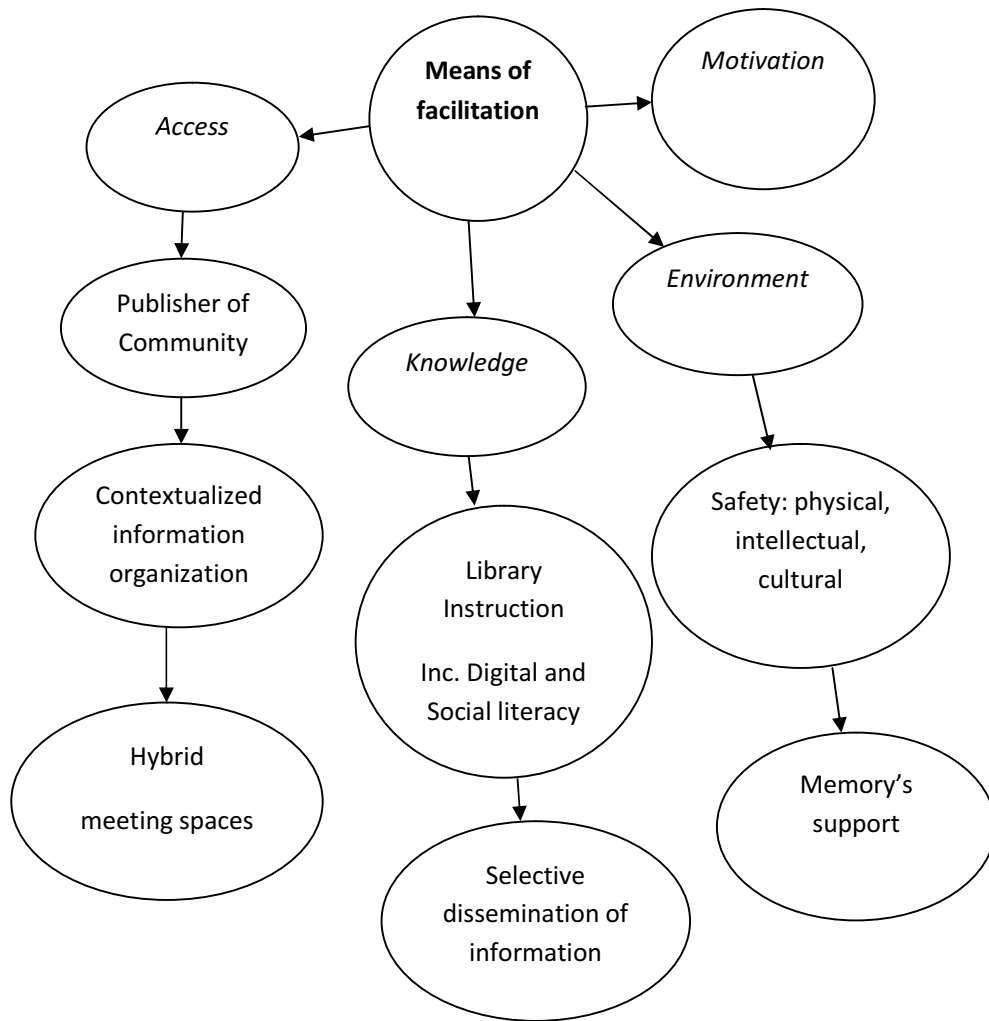


Figure 5 Means of Facilitation by David R. Lankes

Access can be provided through various channels nowadays, taking advantage of open access publishing systems and online conversations occurring either in various digital scholarship platforms or social media networking. It is not only that our patrons will need to get to other people's conversations, but to provide access to their own knowledge and artifacts. In this sense, acquisition processes will need to be reconsidered in terms of publishing on behalf of community's knowledge instead of purchasing it from external sources. Information organization is seen to be much deeper than cataloguing and description: contextualized systems of information are essential. The app functionalities, social networks and digital table model are some examples of expanding information organization in terms of conversation theory. Besides collecting members' collection and expertise librarians are to create hybrid meeting spaces for the patrons: physical and digital, synchronous and asynchronous. Online environment is looked upon as more than just a place to provide information, it is also a place to connect patrons to patrons, to engage them in conversations. Possibilities to access conversations and knowledge should be covered through various tools and channels. For example, streaming workshops and sessions can reach more patrons; recording them will give the possibility to attend them later by multitude of others; posting and commenting will enrich circuit of knowledge etc.

In order to access something one needs to know how. That's why information literacy must be provided beforehand and in line with access. If the patron is unaware of services and tools available at the library he/she probably won't try much.

Environment presupposes the patrons' safety to engage in conversation. Of course, physically it should be as comfortable as possible. However, the members are supposed to trust the library's professional care for their intellectual information, let it be knowledge artifacts or conversations, as well as librarians' respect of the cultural differences. If the encouragement for engagement in particular activities is demonstrated the patrons will be more at ease. An important aspect is to make a useful and practical space for collecting the patrons' memory: library's support is invaluable in its organization since no one can remember everything.

Finally, if the member has access, knows how to engage in knowledge creation, feels safe, but does not have enough motivation he/she is likely to fail to start a conversation. It is not that the library has to market itself in order to bring members to its building or its cloud space (which has to be done as well), but the library should try to come to other places as often as possible. If the patron sees that the library does such a good job as to move to the

place where the patron is situated to provide useful and necessary information (let it be physical or online space), the intrinsic motivation is encouraged, and the patron feels more attracted to use the library.

## 2.6. Research methods and techniques applied.

The research undertaken to study the case sites for my project was of qualitative nature, and it followed the aims and objectives outlined in chapter 1. The key collection technique was interviewing of semi-structured format to constrain the interviewees in answering and preventing them from one-word answers. The key informants have been chosen and contacted several weeks ahead of the start of the fieldwork at each site. It took two weeks at each of the studied libraries to follow the interview schedule. Since the focus of the research was very narrow, it was easy to find the right people to talk to. At Bergen public library these were several members of the “Digital arena” project as well as a couple of scholars from the University of Bergen, who were actively engaged in curating electronic literature in the library. At Roskilde library I was in communication with the small team working on “Literaturen finder sted” (“Literature taking place”) project focused on dissemination of digital literature in their library as well as marketing their facilitation process of this new artifact to other local libraries. Interestingly enough, there were very few librarians among these: only to 3 librarians out of 7 interviewees in Bergen and 2 out of 6 interviewees in Roskilde.

<b>Bergen public library</b>	<b>Roskilde library</b>
Cultural sociologist	Literature specialist/web designer
Curator	Literature specialist
Librarian catalog	Librarian e-resources and information literacy
Librarian acquisition	IT developer
Librarian digital development	Music librarian
Graphic designer and media professional	Communications manager
Literature researcher	

Table 1. Library staff and their professions.

As can be seen from the table above the professions of people involved with digital literature dissemination and curation are not necessarily related to librarianship (see more detailed description of this in chapters 4 and 5).

The questions in the interviews approached different aspects of each project, but generally:

- aims of the project and the way these aims related to the overall mission of the library
- managerial activities
- expertise
- external channels and relations with partners
- the use of the physical space
- implementation of the online and digital space
- visibility and accessibility of the born digital literary works
- benefits for the users

The answers have been recorded and thoroughly transcribed. The post-interview questions have been sent in form of e-mail questionnaires to deepen the knowledge.

Beside interviews, document analysis and observation were used as additional data collection methods. Observation was partial: in Bergen I went to specific events, so-called “Electronic literature reading series”; while in Roskilde I devoted some time for observing the use of the permanent digital literature exhibit. When I visited Literature festival “Ordet el løst” at Hillerød library (partially organized with the help of Roskilde library) I used observation method there. Document analysis was employed usually before and after interviews and consisted of studying press, online posts and documents such as blogs and social media use, self-published articles, contracts and reports and other varia extracted from conversations with the key informants. Studying documents allowed me to avoid personal bias, to compare with data collected from interviews and observation, and make the analysis more reflected.

Since the focus was on both physical and digital dissemination and curation practices, I devoted time to study the online work done by both libraries. In particular, their web-sites, satellite sites, blogs and apps, presence in social media, the way born digital literary works were represented in catalogs and library systems were all analyzed.

Both libraries had different sources for funding the projects, they engaged in different approaches to curate digital literature and had different focuses. However, similarly both of them had the temporary projects financed externally. These projects have both expired at

the time I started the fieldwork, but despite the expiration period people were still actively involved in maintaining the information ecology for born digital literature at both sites.

In addition the potential possibilities to expand and develop the dissemination and curation activities have been analyzed, taking into account the theoretical background of my research: in particular the question of what could be done better on various levels serves in terms of exploring the hypotheses for presenting a practical model for curating born digital literary works in public libraries.

### 3. Literature review: best practices and development in the field.

#### 3.1. Universities and Research centers as storage houses for born digital literary works.

The number of special archives and collections of computer-based literary works in some of the American university research centers can witness the awareness of its existence there. Among these, Harry Ransom Center at the University of Texas, known for its collection of innovative 20<sup>th</sup> century writing, possesses the special collection of Michael Joyce's input in digital writing, including early versions of his hypertext fiction (credited to be the first ever piece of born digital literature) *Afternoon: a Story*, published in 1987 through then established electronic writing publishing platform Eastgate system with the use of Storyspace. The work was then published and distributed on a diskette. Other works of born-digital hypertext were published through these platforms in the late 1980's and early 1990's, such as Stuart Moulthrop's *Victory Garden*, Shelley Jackson's *Patchwork girl*, and Deena Larsen's *Marble Springs*. These works are often referred to as the golden age of digital born literature. The Michael Joyce's archive is hybrid and includes both analog and digital materials. Ransom Center is gathering 39 other collections containing the born-digital material, among which 3 ½-inch disks (which were common until the late 1990s), 5 ¼-inch disks (which first debuted in the late 1970s) and even 8-inch disks (which were introduced in 1971) can be accessed and studied. Hardware in the collection ranges from a 28-pound "portable" computer from ca. 1983 to a 1999 Macintosh PowerBook G3. The center's program for preservation of born-digital materials expands and grows with the help of the technology of computer forensics (Redwine, 2010), and it is one of the few places in the world where older digital works of literature can be viewed and experienced.

The Maryland Institute for Technology in the Humanities (MITH) at the University of Maryland acquired a similar collection of another digital writing author of the period, Deena

Larsen. Among other things, computer hardware and storage media are collected as well (“The Deena Larsen Collection”, 2014). It is worth noticing that both centers are not archiving or library initiatives, but university centers with focus on research, technical innovation, scholarship, education, supporting new modes of teaching.

The only known library engaged in collecting materials on electronic literature is Duke University’s Rubinstein Library. They have acquired works and contextual materials by Stephanie Strickland and Judy Malloy. However, this initiative collects mostly analog information including journals, papers, drafts, posters, audio recordings and diskettes (“Guide to the Judy Malloy Papers, 1956-2010”, 2014). These are part of the library’s rare and manuscript collection. Matthew G. Kirschenbaum argues that “while the Ransom Center, Duke, and the University of Maryland all afford varying degrees of access to the electronic literature materials in question, the level of access varies and in all cases is more restrictive”(Kirschenbaum, 2014). One of the inconveniences is that one has to travel to these places in order to view and experience them on older media despite the fact they can be made available online or on contemporary media through newly available emulation and conversion techniques. In some cases, these works have been converted to a CD format for Windows, and there is work going on to create the Ipad versions. However, the “duplicates” lose the original “look and feel”.

### 3.2. Electronic literature showcases and exhibitions.

The dilemma of “archiving” versus “access” triggered several initiatives to showcase and exhibit works of digital born literature in the US as well as creating a few databases and online collections sponsored by ELO, Electronic literature organization.

The problem still exists in the fact that digital literature, contemporary or old, available on the web or not, is not being made visible to the audiences, but mostly cultivated and discussed in narrow scholarly and artistic circles of the underground and behind the research centers’ doors. If electronic literature had its golden age in the end of the 1980’s, then what age is it experiencing now? Both in 2012 and 2013 Dene Grigar, associate professor in Creative and Digital culture center at the Washington State University Vancouver, curated two exhibitions of electronic literature. These formed my initial interest and understanding of born digital literary work’s presence in the physical space. These are exemplary exhibitions in the field, and many libraries can learn some of these best practices.



In January 2012 “Electronic Literature” exhibit was mounted at the Modern Language Association convention in Seattle, US. Dene Grigar worked in collaboration with Lori Emerson and Kathi Inman Berens who took care to design and develop the exhibit, to select works which represented a broad “cross-section of *born digital* – that is, works created on and meaningfully experienced through a computing device...and highlight literary art produced from the late 1980s to the present” (“Electronic Literature Exhibit 2012”). The exhibit was carefully prepared and divided into three areas, each organized by one of the curators: works on desktop, mobile and geolocative works, as well as readings and performances.

Dene Grigar contextualized the first part of the exhibit, Works on Desktop. According to her curatorial statement, she aimed at presenting this type of literature to both new audiences and those who were well familiar with it. This challenge was overcome by her decision to create 10 computer stations subdivided not according to the genres, but instead creating unique self-defined themes for each of the station:

1. ELC 1, Electronic Literature Collection volume 1 (“Electronic Literature Collection Vol. 1”, 2006)
2. ELC 2, Electronic Literature Collection volume 2 (“Electronic Literature Collection Vol. 2”, 2011)

These two stations contained the well-defined and peer-reviewed anthologies of born digital literary works created by ELO, Electronic Literature Organization, in 2006 and 2011, and served as “good starting point for gaining an understanding of Electronic Literature” (Grigar, “Contextualizing Works on Desktop”, 2012). 121 works in both collections were presented at the beginning of the exhibit.

3. “Eastgate School” presented the earliest digital writings (1987-1995) published through Eastgate system’s Storyspace program. Dene Grigar brought from her “Elit Lab” (space for the development of digital stories and e-poetry as well as for research in theory and practice of electronic literature) at the Washington State University Vancouver two old computers, a Mac Classic of 1989 and early iMac of 1996 to present on them both a diskette version and a CD version of Michael Joyce’s *afternoon: a story*. According to Grigar’s observation, “studying the two versions side by side, we can easily see that Storyspace as a program is more obvious on the Classic than on the iMac since the CD masks much of the quality associated with the program. What emerges, therefore, is the idea that the computer and its affordances exerts a stronger influence upon our experience” (Grigar, “Curating the MLA 2012 ‘Electronic Literature’ Exhibit”, 2012).

4. Station “Experiments with Form” presented five works that played with the way interface design, coding, software and medium provided a new means of expression, and how these had an impact on the reader’s perception.
5. Multimodal narratives
6. Multimodal poetry  
 These multimodal stations combined works of fiction and poetry which employed various sensory modalities that the computing device could afford: visual, sonic, tactile, kinetic and kinaesthetic. Some of the works had several versions, because these had been translated from one program or software to another to avoid obsolescence. Grigar provided the context to research and study media conversion in digital literature.
7. “Vectors Projects” presented two works sponsored specifically by *Vectors* journal with focus on culture and technology at the University of Southern California (“Vectors”, 2013). Grigar chose this station to highlight the journal’s emphasis on socially important subject matters and support for these types of works.
8. “Literary Games” included works which involved the readers in a gameful interaction.
9. “Future Writers” featured works of students from the US and reflected on the vision of future generations in the field of digital writing.
10. “Invisible Seattle” station presented the project “Invisible Seattle Literary Computer project”, a local experimental literary project initiated in the age before the web.

Thus, she assembled various works of born digital literature by taking into account that the computing device is not just a tool, but, as oil for a painter, it is “the medium” in which the digital writers choose to work and express themselves.

Kathi Inman Berens organized the part of the exhibit devoted to mobile and geolocate works. As she explains the nature of these works in her statement, these are created by artists working in social media platforms like Twitter and Google Maps as well as with iOS, Apple’s mobile operating system. Through various Ipad, smartphone apps and QR code-based works the exhibition demonstrates how such features as touch interface, social media reflowability and locating works in the physical world by the use of mobile devices can contain narratives.

Finally, Lori Emerson curated the part “Performing E-Literature”, in which through live performances by some digital writing authors she intended to explore what it means to “read” or “perform” e-literature. Obviously, performing must be adapted to each digital literary work.

Besides sharing organization responsibilities among themselves, an amount of students have been invited and educated in the field of electronic literature so as to assist them in guiding visitors to the works and their contexts. A detailed web-site has been created (“Electronic Literature Exhibit 2012”) with the archive of featured works containing the directions and links (many of which were and are still available online). The web-site contained the presentation and curatorial statements for each of the parts of the exhibit, in-depth resource list on scholarship in the field, and list of organizations and journals working with born digital literary artefacts.

The curatorial practices have been borrowed from the arts, but only partially. Grigar explains that “*curating* literature – that is, what we do when we bring together literature for a live (synchronous) hands-on exhibit in a public space”, and juxtaposes it with the concept of “*anthologizing* literature – that is, what we do when we bring it together for a print or online (asynchronous) experience that involves a personal viewing venue”(Grigar, “Curating the MLA 2012 ‘Electronic Literature’ Exhibit”, 2012). The exhibit lasted for only 3 days, 5<sup>th</sup> to 7<sup>th</sup> of January 2012, however, it left a web-archive behind and one of the best examples in curating born digital artifacts in public space.

A year later, in April 2013, Dene Grigar and Kathin Inman Berens organized another exhibition, this time in the Library of Congress. “Electronic Literature and its Emerging Forms” was the most substantial part of the LC’s Electronic Literature Showcase, a program organized by the Library of Congress to disseminate and curate digital born literary works for the first time ever in the library building. In a similar vein, Grigar and Inman Berens created a web-site with the archive of featured works, curatorial statements and other varia, which served as a guiding online brochure, prepared audiences and extended their understanding and knowledge on the new type of literature. Since the exhibit was intended for a more general audience than the previous one, the curatorial statement included a much more detailed explanation of what electronic literature was. Grigar managed to show this type of literature’s natural connection to the evolution of the literature as a whole through a specific design of the exhibition mounted in the Whittall Pavillion, one of the most central rooms of the Library of Congress.

Taking into account the meaning of the physical building itself, Library of Congress, as the foundational institution for American culture and literature, which possesses riches of materials, the exhibition was divided into three areas. The works of most significant born digital literature were shown on 5 stations in the center (blue) of the Whittall Pavillion: large

iMacs have been installed on which works have been organized according to the themes, similar to the style in which Grigar divided the stations for Seattle exhibition earlier. However, in this case, the multifarious audience visiting the library had to be considered. The works of as varied nature, genre and approaches have been chosen in order to reflect on the versatility of the field.

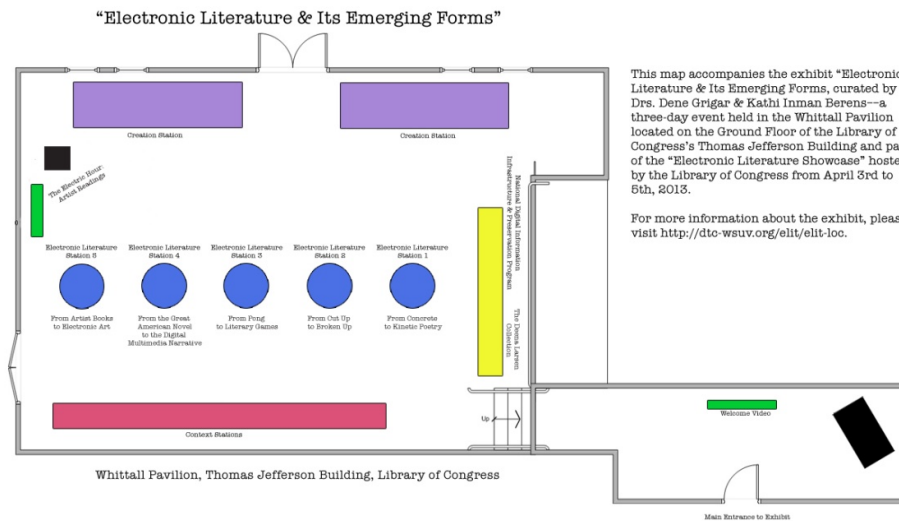


Figure 6 Dene Grigar's map of "Electronic Literature and its emergent forms" exhibit

The criteria of "literariness" has been approached in a much stricter and narrower way, to include more established classic works of electronic literature as well as less ambiguous and "on the edge" works. On the left hand side (pink) stations with prints, DVDs and other media were exhibited showing connections to literary experimentation in the past and helping to make the case of presenting digital born literature. On the right hand (purple), so-called "Creation stations" were installed where the audience could engage actively with the contemporary literary art, both print and electronic: working with tools and making "stuff" had a potential to bring people more intimately into the process of experiencing electronic literature.

The exhibit's idea was that works of art were not experienced in isolation, but in relation to each other and in harmony with the building's architectural spatiality and its organizational mission and purpose. In addition, electronic literature was not presented as some kind of new and futuristic artefact, but rather connected to the literary and artistic tradition. As Grigar notices in her statement, "No matter the medium—orality, writing, print,

electronic, mobile—give an artist something, anything, to create with—air, animal skin, paper, computer screen—and she or he will find a way to use it for making art. This impulse is, after all, a feature of our humanity”(Grigar, “Electronic Literature and Its Emerging Forms”, 2014).

Bringing the digital born literature out into the public space where people could get acquainted with it, learn it and engage with it is what makes this literature more visible and accessible. These two exhibitions curated by Dene Grigar and her team took advantage of some of the best physical and digital spaces to facilitate the knowledge about it. Another good aspect about this curatorial work is that the detailed information about the exhibits does still exist online for further investigation, scholarly or of general interest. The presence of the web-sites for both events are good illustrations of what curatorial work can consist of in particular cases.

### 3.3. Curating the ambiguous: setting up the contexts.

In Europe I could think of only one exhibition in which digital born literary works have been disseminated and curated in similar ways, but with its own distinctions. Generally, in Europe there is less scholarly research in this field, and it is usually tightly connected with the field of Digital Humanities or with the world of arts and digital technology experimentation. Interestingly, many European artists engaged in creating some sort of digital literature do not intend to call it “literature”, and reserve themselves from defining their artefacts in this or that way. This makes working with electronic literature a more ambiguous activity in Europe, and searching for the right organizations becomes more difficult since in Europe there is not an institution or consortia similar to the American ELO (Electronic Literature Organization). Various projects are funded by the European organizations of culture like Humanities in the European research area (HERA), but many more are locally funded and organized, thus, less known.

In terms of curating digital born literary artifacts the exhibition “In Words Drown I” sponsored by the Danish Arts Council (Statens Kunstråd) and organized by Mille Højerslev Nielsen at Roskilde library in Denmark in November-December 2012 is a unique example. Even though I am going to devote the whole chapter on Roskilde library’s work done in connection to disseminating born digital literature, here I’d like to situate this exhibition’s activities in light of informing libraries and librarians of what it may mean to curate experimental literature in the public library. Nielsen’s work functions as another framework,

in addition to Dene Grigar's, for realizing visibility and accessibility of this literature in the library rooms. Mille's background in visual culture and work for Roskilde Music festival informed her approach to digital literature. In the book "In Words Drown I 2012", published as the accompanying material to the exhibition itself, she explains her understanding of curatorship and presents the model of working with digital born works in the library physical space. Taking the inspiration from the original meaning of the word *curare*, "taking care of something", she develops the concept further by arguing that "er kuratering ikke alene et udstillingsmedie, hvorigennem man kan diskutere værker og placere dem i kontekst, men også et medie, hvori man kan undersøge selve konteksten" ("curating is not only a medium of exhibiting, in which one can discuss works and place them in a context, but it is also a medium, where one can explore the context itself")(Nielsen, 2012). It is not only presentation of artifacts themselves that counts, but the aesthetic experience, criticism, discourses in the field and in other areas of arts, sciences and society in general, according to her theory. Everything in such a curatorial work has a meaning, all nuances are thought of carefully and studied beforehand. Strictly speaking, Nielsen set up seven rules for working carefully with the born digital literary works so that they were understood:

1. Focus on "reading", "reading strategies" or "reading experience". Reading literature is seen to be an experience in itself, independent of its format; it is visual and creates images to us while we read or when we write it.
2. Focus on media: all works presented in the exhibition must be in other formats than print.
3. Focus on art genres and experiments in the arts. The exhibition has to encourage the presentation of cross-aesthetic projects combining various fields of arts and culture. In the same way as the arts borrow techniques and themes from literature, so literature can borrow these from the arts.
4. Creation of new communities, new ways of meeting and shaping debate around literature.
5. Focus on space, first of all the text's space: to give the writers and literature extra space to be expressed in, the space in which literature can be experienced physically, sensually and bodily, the space where literature can have a multitude of visual potentials.
6. Focus on the library space, first of all its physical rooms. Library is different from a museum or a gallery because it is even more democratic: usually all categories of people visit public libraries; in libraries the art comes to the public rather than vice versa, like in

museums. Library is not usually built to house exhibitions, that's why the exploration of the library space for these purposes is a challenging task.

7. To ask a provoking question and make audience think: what is literature and who is the writer? (Nielsen)

In Nielsen's understanding, curatorial work is more than just a presentation of ideas, "som kurator læser jeg ikke kun kunst, men også mennesker" ("as a curator I read not only art, but also people")(Nielsen, 2012). It is the curator's responsibility for creating the narrative path for the audiences so that they could not only understand, but also relate to other areas of human existence, reflect on society and become a little bit more intelligent.

The works of Danish-speaking authors have been presented in the exhibition, which lasted for 3 weeks in the Roskilde library. The criteria for choosing the particular authors were guided by the following:

- most users of the Danish public libraries understand Danish better than any other language
- the existence of many local and national artists and writers practicing writing for digital media or interested in experimental writing
- the curator's extensive knowledge of network of writers and their writings
- strong visual potentials in these authors' previous works
- reflection of various literary backgrounds, activities
- different age and gender

#### 3.4. Seeding and harvesting knowledge.

In *Communication as Dissemination, or Speaking into the Water* John Durham Peters compares dissemination practice with the metaphors of seedtime and harvest. We have artifacts, information resources, experts, knowledge, institutions and scholars somewhere there inside in the library's collections and among its people (those who work and those who visit it), but a lot exists outside the library walls. The problem lies in how efficient we, librarians, are in finding the relevant resources, presenting them to the public and taking care of achieved results. In Peters' words, "the other to whom we speak is never fully known; neither are the consequences of our words"(Peters, 2005) in light of facilitating knowledge. In the same way when the seed is cast the harvest is never assured. Moreover, between seeding and harvesting a challenging period goes: all depends on the external participation and impact on the seed (weather, amount of water, sun and warmth, wind, good soil and so

on). His contribution to my investigation of disseminating and curating in public libraries comes out of his analysis of relations among the participants in communication. It is best seen through the following table.

	One space	Many spaces
One time	I. Dialogue	II. Broadcasting
Many times	III. Attendance	IV. Dissemination

Table 2. Communication as Dissemination in time and space, according to Peters J.D.

Setting two variables of time and space we can analyze what type of communication can occur then among people. I'd like to focus on the notion of space in this table. Thus, if we come once to a certain space, an auditorium or a performing room in the library, a dialogue-like communication happens in the form of speech, presentation, reading and so on. If this type of meeting happens regularly and in the same place, we can call it attendance, like a course, class, club, workshop etc. In online environment we can attend the same web-sites, social media channels and blogs to extract the information which interests us. It is becoming more complicated the more spaces are added, and this is very crucial in the age of digital space: forms of communication when people are present in the same time (cell II), but dispersed in space or when they are scattered around different times and spaces (cell IV). In the first case, the simplest example is broadcasting in television or radio, but we could add other various means of communicating by means of digital media (video conferencing, Skype, chat, forums, email lists, scholarly online publishing etc.). In the second case, while situated in different spaces we can visit different times through existing historical resources residing in libraries, museums, books, journals, works of art, and in their artifacts. A good example of this is a documentary recorded in 1970's and seen by different people; or a presentation of exhibition streamed on Vimeo seen by different people after the exhibition terminated.

Peters suggests to take the dissemination (cell IV) as the norm for communication and infect other types of communication (cells I, II and III) with it. Being aware of different kinds of dissemination techniques, let it be a dialogue, a broadcast, attendance or study of online collection, we can facilitate knowledge by using different tools. This can allow us to reach a broader audience and attract people who have never thought of being part of the particular conversation. The suggested theory of participation in communication can aid in preparing a good curatorial activity for the born digital literary works in public libraries. And probably we shouldn't be discouraged if some of our projects did not meet the expectations, because in a



democratic and liberal society, which practices freedom of speech “a mere dissemination of ideas, regardless of their effect or audience, is itself a powerful political and moral potion”(Peters, 2005). If we take into account 4 different areas of dissemination practice mentioned above, the work done is not lost, but it will find its audience sooner or later, here or there. Peters’ borrowing of ancient proverb from the New Testament could be true: “the best action is done without regard for the consequences”.

### 3.5. Distributed archives.

One of the most efficient ways of disseminating information, knowledge and conversations is exemplified by the scholarly communication, particularly, its peer-to-peer distributed archive model. Libraries have a lot to benefit both from their resources and practices. Often there is invaluable knowledge residing in this communication, the focus of which is specialization. And often they are not largely available, because no one took care to get interested in what they did. Scholars, artists and specialists in the humanities fields can be deeply delved into their projects and creations, and they are often disseminating their knowledge only among themselves. The precious heritage they collect can be preserved, but it can remain unavailable to the rest of the world. Such content can be shared for the benefit of both the artists and the public: the public libraries play crucial role of intermediaries in this case, and the librarians working there could better embed themselves in scholarly institutions and groups to extract the interesting and relevant knowledge. The distributed archive uses a bottom up model: collecting resources and knowledge through individual participants and their resources. This model requires permanent “seeders”, “individuals responsible for keeping the content available at all times”, according to Alessandro Ludovico. Seeding, “in peer-to-peer terminology, means that in order to “own” something, one has to “share” it”(Ludovico, 2013). Collaboration becomes means for making one’s own presence and history. Ludovico shares his own experience of managing the independent art magazine *Neural* and collaborating with other similar magazines through the “Mag.net – Electronic cultural publishers’ network”(“Post Digital Print | the Mutation of Publishing”): in his opinion no independent magazine, publisher or artist can cover fully the subject of digital culture; therefore, collaborating is necessary to share the experiences and practices, to allow richer and less-biased debates. Initiated through email lists and meetings at the conferences the managers of a dozen of magazines produced “The Mag.net Reader” series in three volumes, a self-published open access collection of articles covering the most interesting issues related to each of the producer. According to Ludovico’s confession, the golden rule of this

collaboration was the awareness that not everything should be done collectively. Instead, they “established and maintained informal rules regarding the syndication of content, and the commissioning of content from each other...; met in person several times, and took turns giving workshops from which everyone learned, on topics such as Internet retail payment, print on demand, library subscriptions, etc”(Ludovico, 2013). Among other things, the successful was sharing of resources, not only the knowledge in the form of published articles, but also organizational practices and strategies, technical facilities, distributors and sales outlets.

A similar collaborative practice I found among the scholars and researchers of the Digital culture and Electronic literature groups at the University of Bergen in Norway. Their web-based database of electronic literature, ELMCIP Knowledge Base (“ELMCIP Knowledge Base”, 2014), the European anthology of electronic literature released in web version, on CD and USB (“Anthology of European Electronic Literature”, 2012), as well as publication of various collections of articles such as “Remediating the Social”(Biggs, 2013) were all the results of several years in collaborative research conducted through peer-to-peer archive of scholarly articles, participation in a series of conferences, sharing monthly and yearly experiences. The research group of ELMCIP project is still very active, and currently collaborates with several other international groups and institutions, mostly independent, to create a shared online platform for sharing their research, collections, experiences and other useful knowledge in the field of born digital literature. In the next chapter I will give a deeper description of their activities in relation to the case study in Bergen.

Libraries can manage to get transformed by:

- adapting exemplary practices from such scholarly and artistic communication to their own system of knowledge acquisition
- entering the network of independent, open access and self-publishing, and supporting it
- involving the network of readers (among which can be many artists and writers) to share their knowledge
- providing the space, facilities, collections of both materials and expertise to these communities

### 3.6. Online-based curatorship.

Vienna-based net-art group CONT3XT analyzed online curatorship. Even though the group has not existed since 2012, it left an online archive of interesting work, and some of it reflected on how internet-based art could best be disseminated and curated. (Hochrieser, Kargl, and Rinagl, 2007). This group defined curation of net art as something more than supervision, contextualization and exhibition of artworks in off spaces (physical spaces). Surely, presenting digital born works of art in physical location such as a museum or a library brings context and adds a more intimate and immediate dimension in understanding this type of art. But since it is enough to have internet access and a computing device to experience online-based art, CONT3XT sought for alternative ways of curating. They looked at the nature and origin of net-art, and it turned out that it emerged thanks to the “participation of an audience with diverse approaches to the Internet, which comments on, transforms and disseminates artworks in many different ways”(Hochrieser, Kargl, and Rinagl, 2007). This audience gave way to a new discourse, which developed through its reception process: in order to continue one had to participate in the discourse. Thus, the group had three online-based projects:

- Publiccurating (“PUBLICCURATING—METHODS RESOURCES THEORIES”, 2014), which existed for 2 years (2006-2008) and collected methods, resources and theories about the curation of new media and internet-based art.
- Tagallery (“Collaborative Online Exhibitions”, 2014) was an experimental “online exhibition room” based on social media technologies, folksonomy, linking and tagging.
- Circulating Contexts discussion list (1<sup>st</sup> of June to 31<sup>st</sup> of August 2007), a platform for discussing 5 commonly shared topics in curatorial work for new media and internet-based art.

The emphasis was on the curator as part of the public discourse: the CONT3XT group intended to make visible online and visualize the curator’s activities and practices prior and after the exhibition. This would allow a deeper understanding of the exhibition itself, but also it would contribute to the relational research and filtering processes.

### 3.7. Innovation in physical and digital dissemination of media art.

The Ars Electronica Center in Linz (Austria) is perhaps Europe’s most established institution for disseminating best practices in digital art, science and technologies. The center

is a Museum of Future with its focus on such areas of investigation as biotechnology, genetic engineering, neurology, robotics, prosthetics and media art. The exhibits and events in the center often test ways “in which we might be interacting and communicating with our surroundings and other human beings in the very near future”(“Ars Electronica”, 2014). The development groups of the center employed a variety of methodological tools to engage the visitors beyond the level of interaction with the artifacts by setting the focus on their participation and hands-on experience. Beside various exhibitions on the way how technologies change the humanity, the center organizes participatory exhibits, such as the recent “New Views on Humankind”, for example. It contains four laboratories in which the visitors learn about machines and robots, the way how humans perceive the world and how the brain functions; but also BioLab and FabLab, where they can themselves try to clone plants and to fabricate a robot. The Deep Space 3D Auditorium gives numerous opportunities to experience photographic images, films, animation sequences, 3D applications and media art in high-definition on a huge 16x9-meter screen: among the featured presentations one could see Piazza del Duomo in Pisa in 3D resolution, investigate the old maps or see the way how Earth looks from the space. The center organizes annual media art festival, Prix Ars Electronica Showcase, and has the world’s largest digital media art collection archived within the last 30 years, neatly organized for each year since 1979.

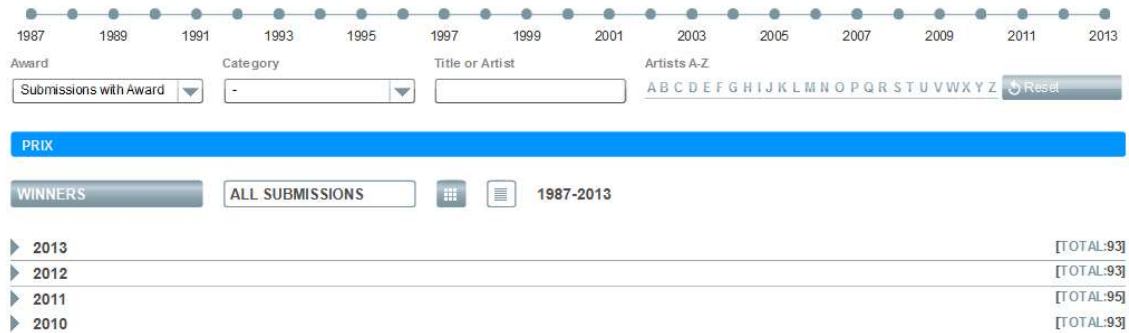


Figure 7 Ars Electronica archive

All the artists submissions starting from 1987 can be searched and viewed online. The winning projects are documented more extensively with audiovisual media and other contextual information. Basic description of the work, the biography of the artist, the links to the official URL and credits contain the descriptive metadata. In addition Ars Electronica manages picture archive, print collection and a database of lectures and talks presented at the center and viewable online. The managers of the archive are always on the lookout for new methods to enrich and improve the collection of media art. They have collaborated with the Contemporary art museum of Japan in creating experimental virtual “second life” type

electronic archive, where one can fly and experience the works of digital art (not in use). They also experimented by engaging visitors to participate in building the archive: visitors were provided with QR codes for their mobile phones to access basic information about the works presented, but the application also gave space for visitors to fill in some extra information. According to the center's view this type of documenting works could add additional layer to their archive by presenting the visitors' engagement with the artifacts. For some of their large-scale exhibits in physical rooms the center used RFID (radio frequency identification) technology. Ars Electronica's methods and techniques for presenting, disseminating and collecting works of digital media art could be of use for libraries which have the agenda to become more innovative and attractive to their patrons. It is worth keeping an eye on what they do, because they are always engaged in new projects.

### 3.8. Dissemination and curation is archiving.

When it comes to the digital space the most comprehensive archiving initiative is Internet Archive. Their attention is drawn not only to digitized books, CDs and DVDs, but also to such dynamic materials like software and web-sites. For instance, their worry about the lack of initiative to collect the radio and television programs in the 21<sup>st</sup> century means that a lot of the end of the century culture can be lost for the future. This paper investigates disseminating and curating practices with some focus to archiving, especially unstable media (which is a born digital work), and how it can be best organized on a local micro-level. Internet Archive's presence is important to know for other memory institutions: the smaller libraries and archives, museums could freely and easily collaborate with the Internet Archive and the local web-archive initiatives to manage to elaborate their preservation frameworks a little bit more into the future. Disseminating and curating often is not part of archiving agenda, but, according to the scholars at the University of Bergen's Digital culture, these are very much connected: if dissemination and curation practices have been done in a qualitative way the works and knowledge they contain would be taken care of for the use in the future. The activity of spreading information across various channels via various platforms, both physical and digital, can assure the longer-term existence of the knowledge. The Internet Archive's collection of older software is a good example of how we can deal with the obsolescence of technologies. Even though, not a cure for the danger of obsolescence, by providing an instant access to millions of programs, documentation, images and multimedia as well as linking to various emulation communities, the communication is spread all over the world among a variety of practitioners in different fields: the knowledge on the history of

software is sustained and developed through communication. Moreover, the possibility of preserving most of the information on the software increases with the amount of platforms, computing devices and hard drives storing this type of information: the more people are using these resources the more chance to preserve them. In addition, physical artifacts, like real hardware and technologies of older times, can exist in several locations around the world. Therefore, collaborating and founding a community is vital for archiving the most fragile digital resources.

### 3.9. Beyond today: quality control, physical media and hybrid solutions for archiving.

The problem of archiving digital media and internet-based works has yet to be seriously approached: we are acquiring more and more knowledge through increasingly ephemeral forms of containers. The ultimate container of it all is the hard drive. How much information it can store and how long it can function without being damaged hasn't been tested, and there is no evidence for that. According to Tom Samonite and Michael Le Page, "the storage density on hard drives is now over 200 gigabits per square inch and still climbing fast. While today's drives have sophisticated systems for compensating for the failure of small sectors, in general the more bits of data you cram into a material, the more you lose if part of it becomes degraded or damaged"(Samonite and Le Page, 2010). Another issue they address is the quality assurance and control of big data: their hypothesis is that most of the information residing on different digital channels is of no practical use for the future. This "noise" gets continuously recycled into new information products. Considering that the current approach to preserving digital media is through copying it through back-ups to as many locations and in as many different formats as possible, it is unlikely that the most useful resources will be saved for future. On the contrary, the most popular web-sites, digital applications and information resources will have better chances to survive. This evidence creates a certain pressure for independent organizations, individual scholars and smaller publishers, for instance, to copy and back-up as much as they can and spread the knowledge through the distributed archives. But the truth is that paper will have more chance to survive than the digital media: why not to use paper to store digital data for centuries using the bar codes like QR or RFID? And in the end, isn't it librarians' responsibility to assist with quality control, dissemination of credible information and organizing its storage for future generations?

There exist several interesting projects on short-term and long-term preservation of digital information, which are to be of interest to the librarianship regardless of mission and current policies: resources are not only there to exist for today, but also for tomorrow's

generations. Have you ever heard of the Rosetta project and the creation of the Rosetta disk, “a three inch diameter nickel disk with nearly 14,000 pages of information microscopically etched onto its surface”(“The Rosetta Project”, 2014)? The purpose of the project is to collect “parallel” information in texts, grammar, vocabulary for over 1000 languages spoken on earth and preserve it on the small microetched disk able to withstand a variety of environmental conditions and independent of any platform or format. The information is presented in physical rather than digital format and reminds of the advanced microfilm technology: each page is a physical one and can be read with the help of optical magnification. The disk is held in a steel spherical container that additionally protects the disk from environmental damages. To enhance the preservation possibility the producers created a special mass-produced version of the disk for sales to follow the archive principle of “Lots of Copies Keeps Stuff Safe”. The project was inspired by the famous Rosetta stone, which had the same text inscribed in three different scripts (Demotic, ancient Greek and ancient Egyptian hieroglyphs). Thanks to this stone scholars were able to decipher the structure and meaning of the Egyptian hieroglyphs by analyzing them in parallel with the other two scripts.

The production of such new technologies to preserve data can be of inspiration to continue investigation of new ways in archiving the valuable and dynamic information. In the case of born digital artifacts, and particularly digital literature, which are often dependent on various media platforms, programs and hardware the question of archiving is much more complicated. What means to archive born digital materials has usually more to do with back-ups and distributing copies, but generally speaking, this type of cultural heritage is the most fragile and most exposed to become lost and never rediscovered. Rosetta project does not suggest the use of the similar technologies for other forms of information resources, but it rather pushes the boundaries of how we, caring for the credible knowledge, can engage in infrastructures of knowledge organization which go beyond format-dependency and computing device strategies. Instead this paper suggests to think of some hybrid system, easily transformable to the digital format, but independent of it. In the following chapters I’ll address the question of archiving several times when I reflect on the libraries’ approaches to “save” electronic literature for the future generations.

#### 4. Bergen public library case study.

##### 4.1. The project for digital inclusion, creativity, learning and debate

The focus of my investigation at the Bergen public library was the project “Digital arena” initiated in the beginning of 2013. It’s been funded by the National Library of Norway for the period of three years, until December 2015. According to the detailed description of the project presented to the National Library by Sverre Helge Bolstad, the manager of the digital development group at the Bergen public library, and Leikny Haga Indergaard, the Bergen public library’s director, “Digital arena” is supposed to “utvikle biblioteket som arena for kurs, debatt og rettleiing knytta til nye medier, digital kultur og teknologi. Gjennom samarbeid med frivillige organisasjoner, teknologibedrifter, utdanningsinstitusjoner og andre partnarar skal biblioteket legge til rette for inkludering, kreativitet, læring og demokratisk debatt i og om den digitale verda. Biblioteket ynskjer å utforske ein ny type fomidling av kunnskap og viten ved å nytte potensialet som ligg i kunnskapsnettverk og læringsfellesskap” (“develop the library as the arena for courses, debates and facilitation of knowledge connected to the new media, digital culture and technologies. Through collaboration with the non-profit organizations, technology companies, education institutions and other partners the library will facilitate inclusion, creativity, learning and democratic debate in and about the digital world. The library wishes to explore a new type of disseminating knowledge and science by taking advantage and potential that exists in the knowledge networks and learning communities”)(Bolstad, 2012). Through this project Bolstad managed to connect different local communities, which had the necessary expertise and knowledge in various fields of digital culture. The library promised to be the place for facilitating these connections. Realizing the fact that knowledge is a dynamic and evolving essence residing in various interest and research groups, and not always in the acquired print and traditional media materials, Bergen public library (BPL) aimed at disseminating these groups’ activities for the benefit of both sides and the public good. The project also had more specifically library-oriented aims:

- To reduce the digital divide among different categories of citizens
- To facilitate the creative processes which could contribute to the development of culture and its diversity
- To build up connectedness among people, groups and organizations of similar interests and those wishing to learn



- To facilitate meetings, learning activities and debates for the particular communities and institutions
- And ultimately, to develop one's own competence with the digital tools, dissemination and curation practices, and networking.

When it comes to the project's mission of digital inclusion, the library means that "Frå behovet frå å "berre" kunne lese må ein ha ein digital kompetanse for å kunne nytte den riktige teknologien, og å kunne navigere i flaumen av informasjon. Biblioteket som aktiv formidlar av kunnskap må ha fokus på verktøy og tenester i større grad enn før for å kunne bidra til digital dannelse og auka informasjonskompetanse" ("Considering the "simple" need of being able to read one must have digital competence now to be able to take advantage of the right technologies in order to navigate the flood of information. The library, as an active facilitator of knowledge, must focus on tools and services even more now than before in order to contribute to the digital education and to develop information competences and skills"(Bolstad, 2012). For this purpose, the library developed several interesting activities, from "Senior gaming – computer game for the elderly" and "Laptop club for immigrants and foreigners" to "Programming course for children with LEGO Mindstorm" and "The course in using social and e-media", among many others.

The mission of digital creativity addresses artists, amateurs and other creative-minded people who wish to develop something in the digital environment. Taking into account the recent growth and development in various digital publishing and distribution channels, from blogs and social media to specialized platforms and open source software, the library decided to provide the patrons with the necessary knowledge in this field. For this purpose, the so-called Digital workshop-room has been offered for free use: a specific room with all necessary digital equipment available in order to create something new and artistic. The room and its equipment could be reserved by any groups or individuals for their courses, workshops and learning activities. Thus, through different local collaborations, the library organized numerous activities, from "The course in self-publishing e-books" and "The workshop in web and app development" to "The workshop in 3D printing" and "The course in recording, editing, sharing of music, video and film".

The third mission of the project is to facilitate debate and learning about the digital world among different interest groups and organizations. For this purpose, Bolstad emphasizes the library's role as a connecting reference institution, which should take use of marketing methods to attract various partners to collaborate.

Among these, Digital culture and Electronic literature research group (or as they call themselves ELMCIP group, in accordance with the name of their recently created database ELMCIP) at the University of Bergen were among the first to connect. According to the document (Bolstad, 2012), it is Jill Walker Rettberg, a professor of Digital culture, who is to give the field's expertise and advice and eventually to assist in making the activities devoted to this research group. The ELMCIP group (Electronic literature as a model of creativity and innovation in practice), which is an unofficial name to those members of the group who are closer related to the research in electronic literature, in particular, has been organizing a number of events, workshops and seminars in different art venues in Bergen, including Bergen public library, long before the project "Digital arena" started off in 2013. Thus, in May 2011 the group launched ELC 2, Electronic Literature Collection volume 2 ("Electronic Literature Collection Vol. 2", 2011), combined with presentations, talks, discussions and reading of some works from this and previous collection at the library ("Lansering Av The Electronic Literature Collection 2", 2011). In June the same year the group organized an international workshop about databases and bibliographic standards for electronic literature (Mestad). Since the project "Digital Arena" started in 2013, the ELMCIP group was an instant partner, and continued organizing a mixture of different events, which later turned to be called "Electronic literature reading series". These events were of mixed nature, and not always necessarily involved the actual "reading" of the work, but included conversations, discussions, lectures and hybrid forms of performance and reading, or combining all these forms of dissemination. Usually these events took place once a month in the library's "Auditorium" room on the underground floor, the room containing a big film screen, the best acoustics, all necessary technologies for performance and rather large 50-60 seat area for audience. The room is half-dark and reminds of the typical black box theatre spaces, in which everything is set to focus on the stage: in the sense that reading literature has always been a rather intimate, silent and personal activity, "Auditorium" matched this idea and aesthetics.



Figure 8 Auditorium at Bergen public library

#### 4.2. ELMCIP and CELL research groups

The Digital culture and Electronic literature research group were themselves participating in a project, the name of which they unofficially adopted to the part of their group, ELMCIP, funded by HERA (Humanities in the European Research Area) for 2010-2013 (“ELMCIP, Electronic Literature as a Model of Creativity and Innovation in Practice”, 2014). According to the description of the aims and objectives of this project, they intended to analyze how particular creative communities, such as those interested in born digital literature, formed and shared their knowledge through the online media, and how such type of literature manifested itself in traditional cultural contexts. Even though the project involved 6 other, mostly educational, institutions, the research group at the University of Bergen had the project leader, Scott Rettberg, and made the most substantial work. The particularly fruitful outcome of the whole project was the creation of the ELMCIP knowledge base on electronic literature, which is still maintained and referenced far beyond the project framework (“ELMCIP Knowledge Base”, 2014). The database is open access, it traces activities around the field of electronic literature and digital art all over the world. According to Scott Rettberg’s recent report, this database is “collecting and connecting bibliographic information and archival materials about the literary production in this field. As this information is linked and cross-referenced in various fields in the Knowledge Base, the relations between objects and actors in the field of electronic literature become explicit, perceptible, recognizable, and communicable”(Rettberg and Rasmussen, 2013). The focus is not only on collecting, but also on connecting information, which draws back to the idea of scholarly digital communication. An interesting fact is that ELMCIP does not gather information only about artefacts, such as creative works and written articles; it revolves as well around various contextual information, such as events, other archives and collections, publishers and journals, artists and scholars, and teaching resources. All of them are linked and cross-referenced, which makes the platform an ideal space for studying and analyzing particular relationships and connections in the field, but also for deepening one’s research and knowledge. The strong point of the database is in its references: the more references one entry has, the greater the possibility to do research; since the field of born digital literature is not that spread out and its practitioners and scholars usually know each other, most of the entries are interconnected somehow with this or that resource. Another reason for creating the relation-based database is the nature of publishing born digital literature. It is different from the traditional publication methods: this type of literature could be released on a CD-ROM, or published in an online magazine, exhibited in a museum or a gallery, or

presented as a live performance, it could have several versions (print, desktop, Ipad and Iphone), some of them could employ hybrid tools to be created (both print and digital technologies) etc. By mapping out, in addition to works themselves and the critical writings referencing them, “the diversity of cultural events, and most importantly by making the connections between them visible, we provide new avenues of understanding creative, critical, and cultural practices as existing within a dynamic ecosystem, a literary ecology”(Rettberg and Rasmussen, 2013).

### Public Secrets

**CREATIVE WORK**

**Author:**  
Sharon Daniel  
Erik Loyer

**Year:**  
2008

**Appears in:**  
Electronic Literature Collection, Volume Two

**Publisher:**  
Vectors: Journal of Culture and Technology in a Dynamic Vernacular  
Electronic Literature Organization

**Web URL:**  
Public Secrets (Vectors)  
Public Secrets (Electronic Literature Collection, Volume Two)

**Language:**  
English

**Publication Type:**  
Exhibited at gallery or event  
Published on disc, CD, or DVD  
Published on the Web (online journal)

**Exhibited at:**  
Electronic Literature Collection, Volume 2 Launch

**Record Status:**  
Flash

**Tags:**  
Flash collaboration documentary socioblogical ethnographic political critical/political/philosophical

**Description (in English):**  
Author description: The expansion of the prison system is possible because it is a public secret - a secret kept in an unacknowledged but public agreement not to know what imprisonment really means to individuals and their communities. As the number of prisons increases, so does the level of secrecy about what goes on inside them. The secret of the abuses perpetrated by the Criminal Justice System and Prison Industrial Complex can be heard in many stories told by many narrators, but only when they are allowed to speak. After a series of news stories and lawsuits documenting egregious mistreatment of prisoners in 1993, the California Department of Corrections imposed a media ban on all of its facilities. This ongoing ban prohibits journalists from face-to-face interviews, eliminates prisoners' right to confidential correspondence with media representatives, and bars the use of cameras, recording devices, and writing instruments in interviews with media representatives. Women incarcerated in California are allowed visits only from family members and legal representatives. Inmates are not allowed access to computers, cameras, tape recorders or media equipment of any kind. Such restrictions preserve the public secret. For the past three years, I have visited the Central California Women's Facility [CCWF] as a legal advocate. I work with a non-profit, human rights organization, Justice Now (<http://jnow.org/>). Together we have been documenting conversations with women prisoners at CCWF, the largest female correctional facility in the United States in an effort to unmask the well known, yet still secret injustices that result from our society's reliance on prisons to solve social problems. Given the ban on conversations with the media, I would not have had access to the women who have contributed to Public Secrets without the support of Justice Now. As a "legal advocate" I am allowed to record my conversations with the women and solicit their stories, ideas, and opinions.

**Technical notes:**  
Flash

**Record Status:**  
Not yet reviewed

**Critical writing that references this work:**

Title	Author	Year
Collaborations in E-It	Stephanie Strickland, Nick Montfort	2011
Digital Poesi, Æstetisk Analyse og det Mediales Rolle i Kunstværkers Kommunikation	Mette-Marie Zacher Sørensen	2013
Escaping the Prison House of Language: New Media Essays in the Electronic Literature Collection, Volume 2	Scott Rettberg	2010
Flukten fra språkfengselet	Scott Rettberg	2010
Language as Gameplay: toward a vocabulary for describing works of electronic literature	Brian Kim Stefans	2012
Works, Works? Works!	Laura Borràs Castanyer	2011

Figure 9 "Public Secrets" entry in ELMCIP database

The above illustrated example is the entry of a work *Public Secrets* by Sharon Daniel and Erik Loyer. It has only critical writing which references this work at the bottom, each can be followed and read. On the left-hand side one can follow any of the threads one wishes, from reading more about the authors or the publishing journal to visiting the Electronic literature

collection volume 2 (where this work appeared) and view all other works published in the same collection. The user of the database creates his/her own model of navigating the resources, according to his/her preferences and needs.

It is important to mention that ELMCIP group is tightly connected to the CELL (Consortium on Electronic Literature) organized by ELO (Electronic Literature Organization) and their project, which intends to create a shared search engine for electronic literature databases. There are seven members, each having its own collection or a database: the idea of the CELL project is to come to agreement to use the shared metadata standard, taxonomies and content fields for the semantic description of the field of born digital literature. The final result is going to be a web-site which aggregates information from all seven and other potential databases in the autumn of 2014. The ELMCIP group's database is the richest one, because it contains a lot of contextualized information, unlike many other collections. Therefore, their participation is critical. The project is under development, and most of the discussion goes on through email lists, Skype conferences and occasional physical meet-ups. ("CELL, Consortium on Electronic Literature", 2013). Their approach for creating a specific field search engine based on aggregation of various folksonomies is something the library sector could investigate in order to apply to their own online systems. I will return to the CELL project later when I will discuss the digital space for disseminating and curating digital literature.

#### 4.3. Electronic literature ecosystem in Bergen.

At this point, I would like to situate Bergen public library's practices and activities related to born digital literary works. As can be seen through the above description, there is no single entry to my investigation: everything is connected to each other, has influences, and there is a high degree of collaboration between a variety of entities. However, my focus was on the library, and how it related itself to the manifestation of this new type of literature.

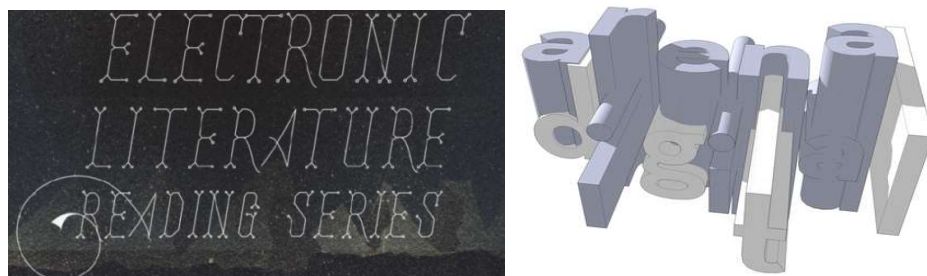


Figure 10 Poster for "Electronic literature reading series" in 2013/ "Digital arena" logo

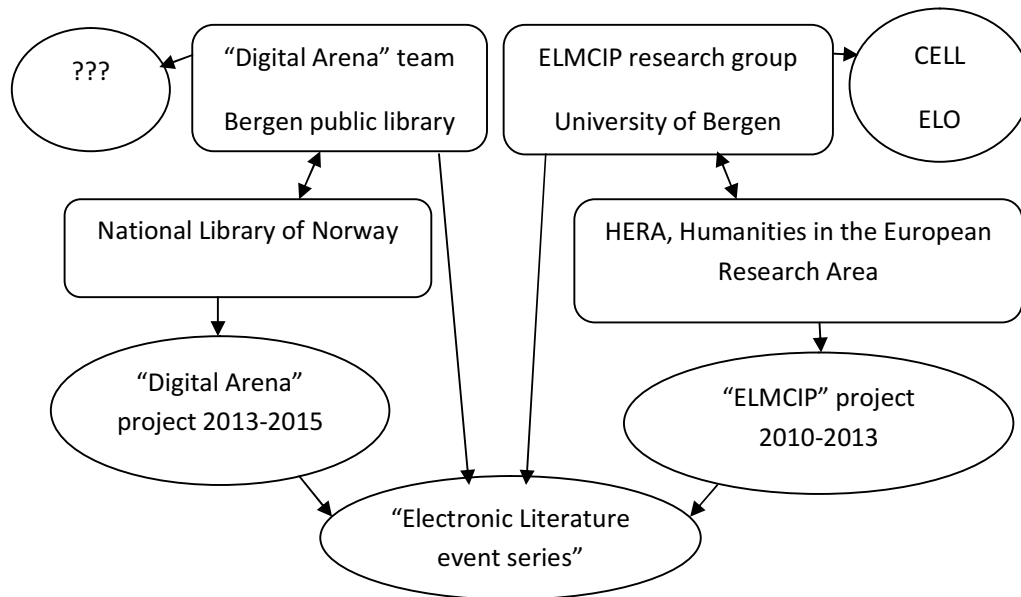


Figure 11 Electronic literature event series in Bergen in the context

On the other hand, my attention was attracted to the activities which had the most relevant relation to the born digital literature at the Bergen public library, and this was the so-called “Electronic literature event series”. As can be seen from the illustration above, the monthly event wasn’t organized purely by the library, but in close collaboration with the ELMCIP group at the University of Bergen. According to the “Digital arena” mission to facilitate learning and debate about the digital culture for the interest groups and organizations, this event fits perfectly with it: the library invites the research group to help organizing events about digital culture; ELMCIP group decides to focus on electronic literature because of their own recently finished project. Both the library and the researchers from the University get funded from different organizations and for different reasons. While the library’s reason is to increase the debate on digital world and culture, the researchers’ reason is to develop their research, knowledge and network as well as take it beyond the University’s walls. What distinguishes the university researchers and their practices is the specialization of their field aimed at other researchers and those interested in it. Surprisingly, it was not a University library, but a public library that hosted the group.

In November and December 2013, when I did my internship with the research group at the University of Bergen, I got thoroughly acquainted with scholarly communication and collaboration practices in the electronic literature environment. The researchers mentioned that the high level of fluidity in activities provided them with a multitude of possibilities to experiment with disseminating and curating techniques. They often have visiting scholars, PhD researchers to give lectures, seminars or teach temporarily in the field of digital culture; local workshops and small conferences are organized by them at Bergen cultural venues to discuss the field and demonstrate new developments; many of the researchers engage in hybrid projects with other scholars and do co-research; master students in Digital culture are involved in various extra-curricular activities in assisting the projects; the ELMCIP group members often travel outside Norway to the places where there are activities related to the e-literature, often the US; the email lists, Skype video conferencing are often scheduled for communicating with the scholars abroad. Informal atmosphere among the researchers at the University of Bergen gives a unique opportunity to observe their spontaneous workflow and practices: often some crucial information one can obtain while having a dinner in the restaurant or a beer in a pub. Thus, after each Electronic literature reading series event at the BPL I had the chance to communicate with the artists/authors: some of them were not inclined towards thinking of preserving their works for future generations at all, as I have discovered through some of these informal conversations. They were rather thinking about creativity, nature of their work, its aesthetics, fulfilment and other art-related issues. It struck me that it was absurd to present these works of art in the library space, while none of the library workers ever gave any advice or ideas about how to save this work for future. In my opinion then it was the librarian's responsibility to do an innovative research. Scholars, artists do not have time for thinking about this issue because they want to create new works, this is their mission. What is the librarians' mission? In R. David Lankes' words, it is to facilitate knowledge creation in the communities. Another strikingly interesting thought which visited me often during the internship was the perception that neither the library nor the researchers did a good job in advertising and marketing their events: this remained an open question which was left to be studied during the fieldwork in 2014. It was also during this internship when I got to know the other project, "Litteraturen finder sted", engaged in similar activities in Roskilde, Denmark. Even though, I noticed quite a busy collaborative life between the ELMCIP group and their American colleagues, there was very little contact with the rest of Norway, Denmark and Europe: I decided to investigate what was the reason for that. Already then I knew that the classic librarianship was turning into an embedded

librarianship, or consultant-“helicopter” librarian orientation: the library could not collect and know all the information available, but instead it could collect organizations and people who possessed knowledge about them. Making the process of embedding in other communities, collecting the expertise and disseminating credible information for its representative curation in the library one needed to have a better sharing digital communication platform: neither the library nor the research group had it developed, neither for their internal purposes, nor for external partnering. Thus, the use of conventional media channels and physical meetings had to suffice. Final observation of my internship period was that the ELMCIP Knowledge base was not much in use by the BPL, and the research group itself were in difficulty to manage its maintenance: the lack of clear rules about editing and revision of the entries in the database, the lack of the more automatic system, and the absence of the maintenance group devoted to keep track of the database’s changes were some of the reasons why the ELMCIP collection, no doubt having a lot of credible information, still could not assert itself to be a reliable resource for libraries. In order to find a credible resource in ELMCIP database, it takes time, good expertise in the field and ability to be critical and to relate the field to the library’s aims and ambitions: the BPL’s librarians were the key to opening up this field to the average audience in Bergen, and perhaps to the rest of Norway. The conclusion of my internship was to study what the library did and could do in order to maintain and increase the presence of born digital artefacts of literary value in its physical and digital space.

Upon my second visit to Bergen public library in February and March 2014, when I collected the data for this thesis, it coincided with the fact that both the BPL and the research group had gone through management reorganization: BPL’s Digital arena team’s leader, the project manager and the head manager of the digital services Sverre Helge Bolstad, left his position after several years of building up a network of organizations and people to participate in the Digital arena project; the ELMCIP group leaders, Scott Rettberg and Jill Walker Rettberg, who were key persons in managing collaboration with the library, left for the project in the US until autumn 2014. Even though, there have been found good replacements for these people, it was an unfortunate coincidence, which could easily affect the continuation of the collaboration. At the same time the ELMCIP project has been just finished in the end of 2013, and the researchers stopped receiving funding from HERA (Humanities in the European Research Area), while the Digital arena project entered its second year.



Despite the unfortunate reorganization of management on both sides, the people who replaced the posts were able to continue with the workflow, and the project received even more attention and care after the replacement happened. Thus, the researchers at the University of Bergen decided to continue with the Electronic literature events at the BPL during the spring season, despite the lack of funding, and organized a program for monthly events from March to June 2014.



Figure 12 Poster for Electronic literature events 2014 spring

Five artists working in the field of born digital literature have been invited to participate in these events with their works in the season of spring 2014, two of which were members of the ELMCIP group.

#### 4.4. History of electronic literature events at Bergen public library.

Before delving into the details of this session, I'd like to trace a short history of E-lit events at the Bergen public library. Due to the fact that these events started taking place at the library even before the project Digital arena was initiated, the title of the events always changed, it was not very well documented in the ELMCIP Knowledge Base or in the library archive: some of the more interesting information could be found in social media channels, which were not linked to the library web-site or the ELMCIP database. The sporadic and spontaneous nature of these activities, taking its source of inspiration from a variety of events and workshops practised in different cultural venues before, characterizes the researchers' approach to communicating the field to the library audience. In addition, it is coloured by their digital communication in disseminating scholarship about e-literature via different projects and online channels, involvement with researchers of different fields, and,

perhaps most importantly, by their own often disparate areas of research. In many ways, each event is somehow dictated by the interest of a particular scholar in their environment. Another observation is that there are quite sharp irregularities in the way how some events are documented more richly than the others, but also how during some periods there are more events than at other times: all these considerations play an important role to understand the somehow chaotic “scholarly” approach towards the dissemination of e-literature in the public library.

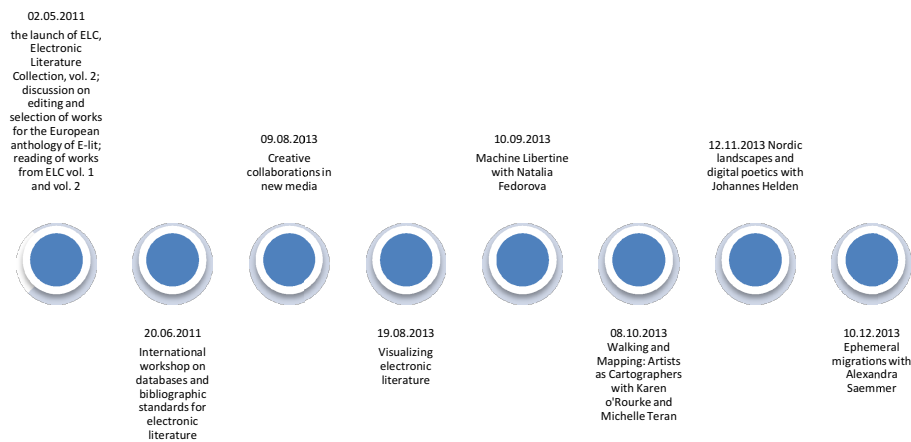


Figure 13 E-lit events at Bergen public library 2011-2013

The timeline above shows all the archived and known events related to electronic literature, which took place in the Bergen public library between 2011-2013. As can be noticed, 2012 does not feature here at all, and most of the events took place in the second part of the 2013 (the year when the library initiated the project Digital arena). 2011 is having only two events, but of important essence, since the problems of relating digital literature to the library was at its most discussed. The 2013 events have a more performative and public “reading” format in combination with lectures and workshops.

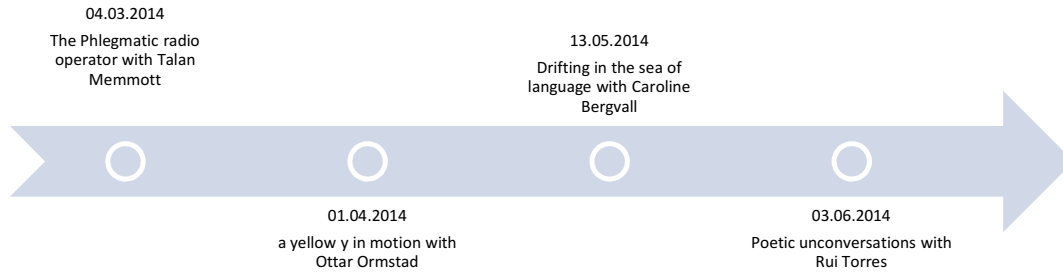


Figure 14 E-lit events at Bergen public library in 2014

In 2014 the monthly event tendency continues in the same way as it was in 2013 with the exception of the first two months. The next timeline illustration demonstrates how these events could be affected by the initiated and terminated projects by both the library and the research group.

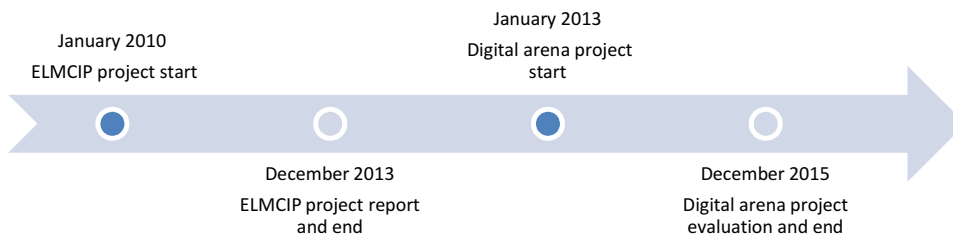


Figure 15 ELMCIP and Digital arena projects 2010-2015

It is clear to understand the relative absence of the ELMCIP group and their activities in the BPL before 2013: the later events came to be associated with the research group joining the Digital arena project. One can expect the monthly events to continue at least until the end of 2015, when the project will expire. Before 2013 the ELMCIP group and the whole team of Digital culture research at the University of Bergen were very busy organizing various other events and exhibitions, talks and seminars mostly at the University venues, but also a lot at Bergen museums, galleries, concert halls and cafes. BPL was just one of these cultural venues the research group sometimes chose at those times. Thus, the absence of electronic literature at the public library of Bergen in 2011 and 2012 does not at all mean their passivity at other arenas. The following figure illustrates just how active the researchers

were during those years.

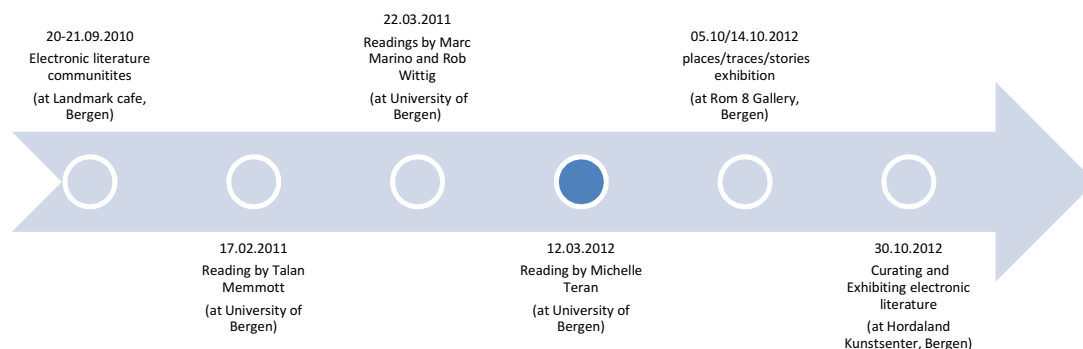


Figure 16 E-lit events outside Bergen public library 2010-2012

The ELMCIP researchers were tightly engaged with other members of the ELMCIP project (The University of Amsterdam, Blekinge Institute of Technology, The University of Ljubljana, The University of Jyväskylä, University College Falmouth at Dartington, New Media Scotland, and the Edinburgh College of Art) and jointly organized the seven major conferences in the field of born digital literary artifacts within 2010-2012 at various locations in Europe to strengthen this research in this part of the world. So, beside the conference on Electronic literature communities in Bergen in 2010, which was the starting point of the following events, the next 6 conferences took place outside Norway. Each of them had a particular focus: publishing, education, relation to new media, the content and characteristics of this type of literature, performative aspects, and best practices. The final conference in Edinburgh was a concluding meeting, the result of which was the publication of the exhibition catalog/article collection (Biggs, 2013). These conferences are very well documented in ELMCIP database (“ELMCIP Events 2010-2012”).

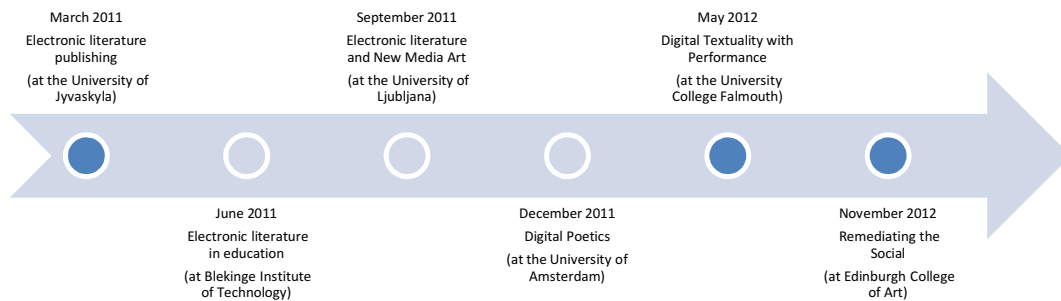


Figure 17 ELMCIP conferences 2010-2012

Beside all these activities, the research group participated in the ELO (Electronic Literature Organization) Conferences in 2010, 2012 and 2013:

- 2010 “Archive and Innovate” at Brown University, US (“Archive and Innovate”, 2010).
- 2012 “Electrifying Literature Affordances and Constraints” at West Virginia University, US (“Electrifying Literature Affordances and Constraints”, 2012).
- 2013 “Chercher Le Text/Locating the Text” at Universite Paris 8, France (“Chercher Le Text”, 2013).

Thus, we can see that the period of ELMCIP project (2010-2013) was a rather busy time for the Digital culture research group. No surprise that they did not hold as many events at the Bergen public library. They have disseminated and collected, though sporadically and not thoroughly archived, massive amount of research on the digital born literary productions. The study of the documents, databases and online archives, the projects and various events give insight into different overlapping areas in which the librarians could be engaged. Surprisingly, very few library workers participated in these numerous events. Was it the fear of the future? Or the feeling that the subject of investigation was way too specialized? Perhaps the lack of technological and contemporary literary expertise? The lack of relevant competences or substantial funding? Or maybe the absence of the right human resources? Having a very close physical proximity to the University of Bergen and the easy possibility to link the resources for a combined work, the Bergen public library seemed to be still very busy to thoroughly engage in the facilitation of such an unfamiliar artifact as born digital literature. That’s understandable if we consider that the public library serves not a specialized audience, but all various categories of people. So, the resources they acquired had to reflect somehow all these categories. Thus, the project Digital arena provided an extra dimension in

the library by attracting quite numerous teams and groups from Bergen to create conversations and activities in the field of digital world and development, in some ways to turn some specialized areols on.

#### 4.5. Locating the key organizers and participants in disseminating E-lit at BPL.

During the fieldwork in February-March 2014 I interviewed the key library workers, who had more or less closer relation to the work of curating and disseminating these types of works. The first impression was the appearance that they were much affected by the fact that the management of the digital services in the library was changing. Almost all of the interviewees mentioned a good work done by Sverre Helge Bolstad, who, unfortunately, left the position. In February 2014 his position was taken by Mari Jore, with the background in cultural sociology. Though she was not quite new to the processes in the Digital arena project (she worked before as a project coordinator and was part of the Digital arena team), due to the fact that Bolstad was not available for the interview this time, I had to find out what she learnt and knew of the project. Another position was created to divide the responsibilities. This position was taken one month later, in March, by Herdis Moldøyen, who had background in applied linguistics from the Norwegian University of Science and Technology in Trondheim, and work experience from the area of content development for the digital media such as e-press. Thus, Jore was a project manager and Moldøyen a digital services developer. Moldøyen took the post after my fieldwork in Bergen, so I had no time to interview her but in online environment. Since Electronic literature events were a collaborative activity, I decided to interview the main person from the research group, Judd Morrissey, who temporarily replaced Scott Rettberg and Jill Walker Rettberg. His background in curatorship, beside the practices in research and literary performance and digital art, was of help to Jore and Moldøyen to bridge the library and the research group. The parallel narrative similar to that of Jore was a continuous reference to Rettberg's work done successfully in the past to launch the whole field in Bergen. Other two members of Digital arena team, Per Øyvind Vold and Håvard Legreid, one trained librarian with focus on computer games agenda and another with the knowledge on media and graphic design combined with the science of documentation and experience from research libraries, were interviewed as well. The Digital arena team was not big, and contained only these four people (Jore, Vold, Legreid, Moldøyen), among researchers from the ELMCIP group Morrissey was the most connected to the library. In addition, the head of the acquisition department, Ørjan Persen, the main cataloger, Nina Karlsen, and the literature curator, Erlend Nørdvedt have been interviewed.

Each of these additional interviews gave a better understanding of how the library cataloging systems functioned, what were the policies for acquiring materials, and the way how traditional literature was facilitated in the library. These other subjects of investigation related closely to the focus on digital literature and its presence in the library.

The formation of the Digital arena team happened quite organically out of some library workers from the former digital department who had the most relevant competences and skills. The team sees very positive at the results already achieved by the whole project. Among these successful achievements the following figure out prominently in the team's perception:

- The establishment of a permanent place for collaborations between several partners
- The provision of tools, technological and organizational
- Creating and maintaining good relationships with the collaborators
- Huge interest and attention from the public and patronship
- Development phase and experimentation

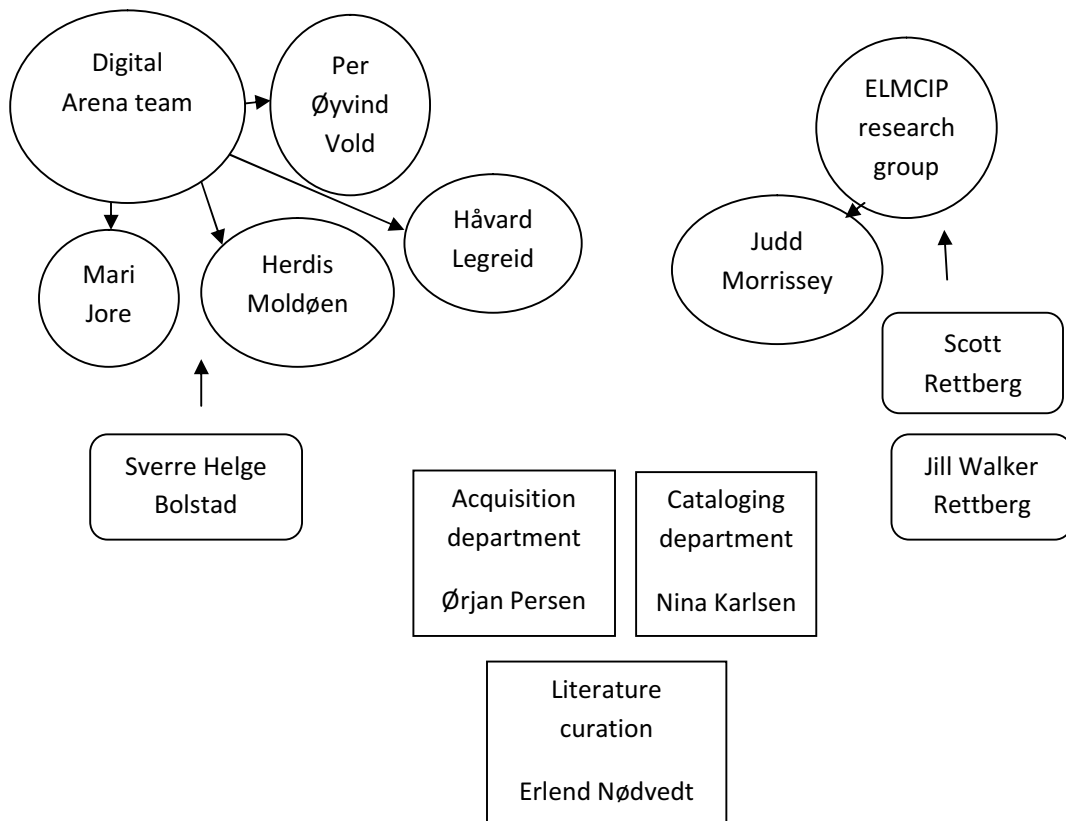


Figure 18 Fieldwork participants for Bergen public library's "Electronic literature events"

#### 4.6. Facilitating the unknown. Bringing the academic to the public.

Since the team did not have a particular attachment to the Electronic literature events, and managed the Digital arena project as a whole (including many other activities), they did not have a strong focus on digital literature: this was also due to the fact that just a few of them were working with quite a lot of events.

Judd Morrissey provided me with a more specific image of the results achieved, more related to electronic literature. Since the library invited the ELMCIP group to participate in the project, he expressed on their behalf his gratefulness and support, particularly pointing to the opportunity given to them “to disseminate new writing practices to the general public”(Morrissey, 2014). In his opinion, the works of born digital literature were mostly exposed to the narrower circles of scholars and artists, and the challenge is to bring it out into a more public discourse. Though, an original idea of Scott Rettberg, in Judd’s words, “it is a much more interesting opportunity to reach there (BPL) the general public”(Morrissey, 2014).

Håvard Legreid from the Digital arena team mentioned also some less successful achievements:

- The insufficient usage of the library services (events, workshops and performances)
- Challenges in disseminating experimental technologies to the average user
- Workshop and course areas are small and need to be extended spatially

He mentions that “some of the activities included the technology which was rather experimental and perhaps yet immature to be taught and facilitated to the library user”(Legreid, 2014). According to him, there was a curious parallel between a big interest towards the new events expressed by the public and a relatively lower usage and participation in them. Per Øyvind Vold illustrates this problem with an example of the ELC (Electronic Literature Collection) volume 2 installation and presentation in May 2011: he thinks that this presentation did not work at all because of “the people’s misunderstanding and lack of interest” in this type of literature. Perhaps something like a sophisticated piece of contemporary art, this was something strange and unfamiliar. The problem with this installation was that people had nothing to relate it to, to compare it with, people have more “relation to games or print, but not this experimental artefact”(Vold, 2014). He sees the problem in the very concept and nature of born digital literature, it has to be explained more carefully and regularly to the average audience. He also drew some conclusions about less



appealing appearance of e-literature from the fact that this type of art is perhaps very underground and artistic for the average eyes. He also compared it with the popularity of computer games, and was not sure if electronic literature would ever deserve its popular place among public library users, at least not in the forms he had seen it. I'd like to add that, after my observation of Electronic literature reading series events in 2013 and 2014, I saw quite a few average library members visiting these events: the little crowd consisting mainly of the researchers from the University, some invited guests from abroad, scholars and artists, students in Digital culture.

Though the sub-project "Electronic literature reading events" has a lot to share with the overall aim of the Digital arena and the library as a whole to include the citizenship of Bergen in participation of events aimed at creating a debate on digital developments in the library space, Mari Jore signaled that the priority was still given to the first part of the project, namely, to bridge the digital divide and educate the variety of citizens in digital competences and skills. Particularly, the digital inclusion of such categories of people like children, seniors and immigrants is given a definite priority: the librarians are most active in facilitating this type of knowledge, particularly, educating the citizens in the more or less basic digital skills, and providing a creative framework for digital education of children. Legreid mentions the library's inspiration from the American concept of "maker space", providing not only literacy, but also "space to make things and create in the library's walls and between the shelves, to allow the patrons to use technologies and media which they can't afford to use in privately"(Legreid). In terms of teaching digital literacy, it is not only librarians' responsibility anymore: in BPL communication and expertise collection plays a more important role. The courses and workshops are organized by different teams and groups, but the library workers function rather more like the consultants, advisors, space providers, experts and people collectors. In the same way, the space, technology and infrastructure is provided to the ELMCIP researchers to use their knowledge tools for disseminating their specific research into the public sector. In this sense, the Bergen public library helps the marginalized users of media to participate in the public discourse and make their own voice. On the side of the ELMCIP research group, to get the funding from the University, they need "to emphasize the academic nature"(Morrissey, 2014) of the E-lit events at the library: they are supposed to mirror their research developments. Because of this academic nature, it is not always easy to attract the public library user, the image of which is much more heterogeneous than in research or University libraries.

#### 4.7. Harvesting competence in digital born literature.

The management and organization of the Electronic literature events at the library comes mostly from the Digital culture research group. The format (varying from a performance, exhibition to reading and lecture etc.) and the content depend on the individual choice in terms of the current research and interests of the scholars. Morrissey, as the actual curator of the events, prefers to work “less compartmentalized and invite different ideas”(Morrissey, 2014). He believes that the broader approach by inviting different audiences and showcasing different research and type of born digital literature can present the field in a more understandable and holistic way. The research group would wish to feature more activities at BPL, but they are limited in time and space, because the library organizes many other events. Thus, at the moment they could use the Auditorium room for 2 hours monthly and various physical spaces for occasional and temporary exhibitions and installations. Of course, digitally they have more possibilities to address the potential audiences through social media channels and the library’s web-site, but these are mostly used for a moderate amount of marketing and basic dissemination of the events. It is not only the content and the type of event that the scholars organize on their own, but also all the logistic activities such as finding the participants, providing accommodation and travel expenses for those artists and scholars who come abroad, suggesting the technology and media provision and so on. On the side of the Digital Arena team, they provide the research group with the necessary technologies and media in case the scholars do not have enough of their own devices or specific materials, but mostly it is rather a consultant-oriented position and space facilitation. Beside this, the librarians record all the events on video and share them on the blog and other social media, write articles and reviews for the library web-site, blogs and Facebook, and market the events online beforehand. However, the physical posters are created by the research group. In Vold’s view, the format of reading series events is a better method for facilitating the knowledge on e-lit to the public than the installations and exhibitions, because they involve more ways of explaining and demonstrating the works.

Thus, in terms of expertise, the library takes advantage of the scholarly group’s deep knowledge of electronic literature, its contextualization and relation to other similar fields and communication of what this field is. At the same time the library team has the unique opportunity to learn not only a new artifact, its producers and creators, their research and publishing model, but also the various ways to curate it in the library space. When it comes to the ELMCIP group, their focus is only on presentation and curation of electronic works of

literature within the physical space of the library, as Morrissey emphasizes. However, that was not always the case: in 2011 the focus on archiving and existing databases of electronic literature slightly moved the topic on the board of discussion. Due to the lack of optimal solutions the focus changed within the last two years. Still, the ELMCIP knowledge base remains a rich collection of born digital literary works, but the dissemination of the materials collected there is not practiced by the BPL. The opportunity is enormous for public use. The librarians could extract knowledge, which could fit their agendas and their patronship much closer. However, the library team goes as far as to offer only services of stewardship and consultancy in relation to the Electronic literature events. Per Vold sees partially the problem in having very low level of digital literacy among the library's staff: it is necessary to be literate for themselves before engaging actively in the processes of dissemination and curation of highly experimental digital products like e-literature. Vold thinks there is lack of a formal education in the form of trainings, workshops and lectures organized on a national level, by institutions like the National Library. After analyzing the expertise exchange between both sides, I notice that there is rich potential in the informal knowledge residing among the scholars of the ELMCIP group and their database. The Bergen public library does not seem to react actively enough to learn more from this group, and I presume there is lack of robust leadership among the members of Digital Arena team, and the lack of the focus or priority for the digital literature, which would feed the mission and motivate a more ardent participation and engagement of the library.

#### 4.8. Creative and economic use of physical space.

With a variety of events, the BPL experiences lack of space: that's why it started an experimental project with the architecture students to transform the large central room on the first floor. This project is finished, and now in May 2014 the so-called Youth Room (UROM) is open for various activities, mostly for debates, performances and exhibitions.



Figure 19 UROM at Bergen public library

This room has been designed and shaped by the architecture students, who used the user-center approach and analyzed what the young people prefer to have in a comfortable library room where the activities for making and creating knowledge is the priority.

Thus, a new attractive and modern large physical space is added to the BPL, beside its Auditorium on the underground floor and other various smaller spaces across the whole building. The ELMCIP group expressed enthusiasm in using this room for extending their monthly Electronic literature series events in the Auditorium. The strategic position of UROM (the middle intersection space on the first floor, where people often cross from one to another room, and situated in proximity to the music department) adds to its attractiveness and potential usage: it is having several open spaces without walls where people passing by could get easily interested in the activity taking place there. The organic position of the furniture invites people to sit wherever they wish and provide a relaxing atmosphere. In contrast, Auditorium is situated downstairs in the underground section, next to the classroom for the courses and the magazine/newspaper section. However, it is rather hidden from the rest of the library, and to make the event visible one has to market heavier and more often in other library spaces. The ELMCIP scholars collaborate with the designers to create the physical posters which then get printed and distributed in various cultural places of Bergen. Beside this and social media there has been little work done to advertise and attract audiences to the Electronic literature events neither on the side of the scholars nor on the library's part. Morrissey and the research group plan to use the UROM for longer-term screenings or installations of digital literature. It is still unclear how permanent can the room be used, considering that many other groups would like to use it. In Jore's opinion, reserving the room and its screens for temporary exhibitions is more realistic: the presentation of works of artists coming to Electronic literature events could be curated in the room some days and weeks in advance. Morrissey has more ambitious ideas about the hybrid use of digital and physical spaces in the library with the help of QR, RFID and AR codes. He is especially in favor of a newer AR (Augmented reality) code for use as mobile and Ipad apps ("AR Code", 2014) by means of which visitors could detect a work of digital literature distributed throughout the building. AR code, in contrast to QR code, can trigger the works of literature in response to physical locations, images or objects. These technologies, if marketed and curated carefully, can be attractively used especially by younger generations, more fluent with the new media. In addition, the problem of space can be partially solved with QR and AR codes. An interesting implementation of AR code has been done by an experimental writer Amaranth Borsuk in her work, *Between Page and*

*Screen* (Borsuk, 2014). Here, instead of using Ipad or mobile phone as a platform she uses a print book containing no words, but black and white geometric patterns, which, when seen by a computer webcam, produce written words of poems reflected on a computer screen.



Figure 20 *Between Page and Screen* by Amaranth Borsuk

The library is already quite extensively equipped with computer screens. Adding more of them with the intention to present works of born digital works can happen rather unnoticed by the library patrons. Therefore, a specific curatorial program has to be elaborated for each exhibition, event and activity involving the technologies: tech devices are as abundant and easily available for private use nowadays as any type of information. The library, as the institution for the discovery of new knowledge, is also an institution for the discovery of new ways of acquiring this knowledge. The library has to be a place where continuously newer technologies are presented, used and employed. To make a definitely different approach for curating a specific collection or selection of works one can take advantage of the new technologies and facilitate them to the public. For instance, to highlight the exhibition on electronic literature one could use bigger screens and position them in outstanding areas signaling that there is something special. The related artifacts from traditional media presented beside could also add the context and explanation to the idea and intention of the exhibit. The April event *a yellow y in motion* by Ottar Ormstad at BPL was not only enriched by the lecture presented by PhD scholar Patrica Tomaszek on print and kinetic visual poetry, but also it prepared the audiences a week in advance for this event by means of a small installation about Ormstad's work in the central room of the library. The installation contained a large computer screen displaying his digital poem *When*, some of his print works, brochures, images, artist statement, some description of the work and varia as well as the poster inviting for the upcoming event. Positioning the context has to take space, and the exhibition's relation to the institution needs to be taken into consideration. Carefulness is a

core word for curatorial work, as we have noticed in the best practices of Grigar and Nielsen. It requires a detailed observation of relations how the exhibited works match each other, its environment and how they relate to the audience. If the four means of facilitation (access, knowledge, environment, motivation) are not harmonically planned and organized, the exhibition can easily fail the expectations.



Figure 21 Ottar Ormstad's installation at BPL, April 2014

#### 4.9. Online space to extend offline. Labyrinths of discovery.

Facilitating born digital literature only in physical space would limit the opportunities of reaching a larger audience. We have various online channels and platforms where this knowledge can be presented. In my opinion, it is especially crucial in the case when the events take place at irregular times, and there are a lot of people who never visit the physical library in our digital age. Often reaching these people via online space can bring them to the physical rooms: online curatorial work and marketing plays an important role, and these tasks are a necessary continuation of the work done for the physical environment. The library web-site is the key entry for many of the library users: they check for information which interests them and can easily find some other relevant sources before they come to the library itself. BPL has a lot of information to present to different categories of people, the web-site's main page cannot afford to present everything at the same time. Thus, something will be easily visible and something will have to be sought for more extensively. The most recent and updated information about upcoming events, extracts from blogs, news and tips are represented on the main page. The users have the possibility to view a slide version of different entries in the featured categories, which creates a dynamic picture of what is going on in the library. Electronic literature is featured under the section "Spill og digitalt" ("Games and digital stuff") and particularly under the section of "Digital arena". The events for electronic literature are collected there starting from the most recent one. Each event is

described in different ways, including external links to the artists' web-sites or the publishers/organizations he or she is related to and a multitude of other different online material.

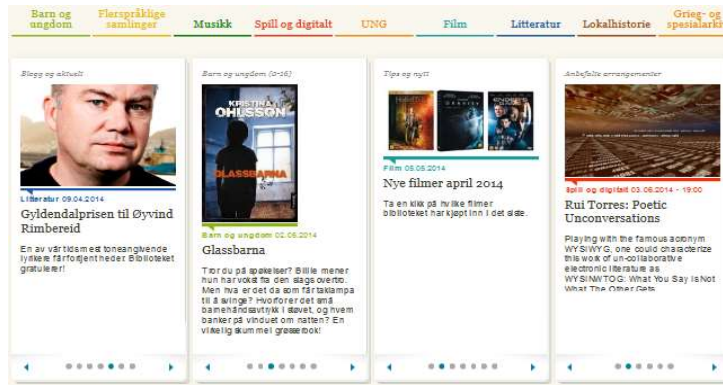


Figure 22 The main page of the BPL's web-site. Accessed 24th of May 2014.

## Spill og digitalt

Spill er morsomt og utviklende og har endelig funnet veien inn i biblioteket. Vi har både klassiske brettspill, konsollspill og håndholdte spillmaskiner til bruk i biblioteket og en del spill du kan låne med deg hjem.

**Spilltips og nye spill**

Her finner du tips, anmeldelser og omtaler av spill og informasjon om nyinnkjøpte spill.

**Digital arena**

Møteplass for digital kultur og teknologi

**Spillrommet**

Spillrommet ligger i UROM, 2. etg. Her kan du spille konsollspill og PC-spill sammen med venner og ukjente, eller lese din digitale spillkultur i behagelige omgivelser.

**Digitalt verksted er midlertidig stengt**

Fra 10. mars er Digitalt verksted stengt pga byggarbeid i UNG-rommet. Rommet åpner igjen i løpet av sommeren.

## Electronic literature events

Electronic literature events at the library in cooperation with Digital Culture at the University of Bergen

*Hendelse*

**Rui Torres: Poetic Unconversations**

Playing with the famous acronym WYYSMYG, one could characterize this work of un-collaborative electronic literature as WYYSNWTG: What You Say is Not What The Other Gets.

[Les mer...](#)

(Hovedbiblioteket, Auditoriet, fra 03.05.2014 - 19:00 til 03.05.2014 - 20:30)  
— Om biblioteket

*Hendelse*

**Caroline Bergvall: Drifting in the Sea of Language**

Electronic Literature Reading Series and Bergen Public Library present internationally acclaimed poet, Caroline Bergvall.

[Les mer...](#)

(Hovedbiblioteket, Auditoriet, fra 13.05.2014 - 19:00 til 13.05.2014 - 21:00)  
— Om biblioteket

*Hendelse*

**Elektronisk litteratur - "a yellow y in motion"**

Ottar Ormstad forteller om sin vei fra konkret til elektronisk poesi, og viser sine videoer.

[Les mer...](#)

(Hovedbiblioteket, Auditoriet, fra 03.05.2014 - 19:00 til 03.05.2014 - 20:30)  
— Om biblioteket

Figure 23 The page for "Digital arena" and "Electronic literature events" at BPL's web-site.

Most of the events are recorded using the streaming service Bambuser, and these video recordings are then directly published on the Bergen public library's Bambuser account, which is linked to the library's web-site and, particularly, to the page related to electronic literature ("Bergen Bibliotek Bambuser", 2014). The library does not actively participate in editing these recordings for marketing and disseminating reasons: the videos are usually published in raw original versions, which can last for 1,5 hour. The problem with sound and image often occurs while viewing the sessions, which can cause not only irritation and disturbance, but also make the potential patrons leave this area of interest. The quality of the presented materials, including its online versions, has to be carefully prepared and curated so that to keep the interest for further discovery. The conversations with the Digital

Arena team about this issue brought me to understanding that the Bambuser streaming service solution was not the best as well as the recording camera was not of the highest quality: they had to search for better technical alternatives, even if not entirely free of charge.

Most of the collected reviews and recorded videos have been shared to the library's social media channels, including their Facebook profile ("Bergen Offentlige Bibliotek", 2014), and linked to the Electronic literature research group's Facebook page ("Code 157", 2014).

According to Legreid's opinion, it is up to the ELMCIP group to decide how to archive the Electronic literature events at BPL: if they wish them to be edited and made shorter or presented through other channels it has to be communicated to the Digital Arena team. The Bergen public library does not have a satisfying technical infrastructure to archive the dynamic resources, such as born digital literary works. Legreid separates the concept of preservation from the concept of facilitation, and finds no good available solution for a better way to collect information related to electronic literature. For him, it is a question of future, and it is in hands of the bigger organizations, like National Libraries, Europeana and specific projects to handle the issue of archiving born digital artifacts. When a framework is created the BPL can adopt its model. His tendency is towards marginalizing digital literature, calling it "in the period of its groundbreaking research for the future of literature as a whole"(Legreid, 2014), or trying to relate it to contemporary installation art and suggesting to search for archiving initiatives in the world of museums: his particular hint is on the idea of representation of the work of art. The lack of technical expertise in the library is due to the generation gap: many library workers are old and are of classic librarianship mentality. A connected issue is the LIS education. Since the libraries experience lack of high quality digital literacy the question should be directed towards institutions where future librarians and information professionals are taught, suggestions for improving the curriculum programs should be mentioned so that to orientate the students in LIS for changing library environments on the national and local level.

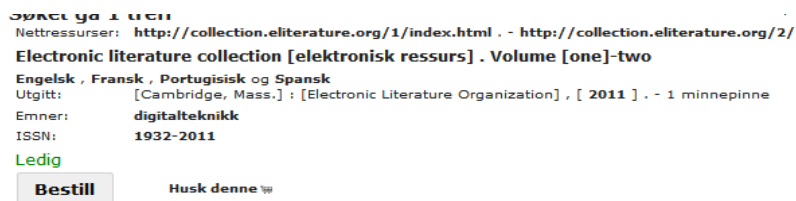
The three most known collections of electronic literature (ELC vol 1 and 2, and Anthology of European Electronic literature) are freely available online, as CD and Flash USB publication versions. The Bergen public library's catalogue contains information on online and USB publication. It is obvious that USB is preferred to CD as a physical medium for collecting the born digital literature, even though it is not tested as the safer medium for long-term preservation of digital data.





**Figure 24 Left: ELC vol 1 and 2 USB publication. Right: Anthology of European Electronic literature USB publication**

Even if both physical and online versions of these collections are registered in Bibliofil, the library cataloging system, it is deeply buried in the catalogue among other resources, which makes it less visible. The representation of electronic literature fits better the idea of a special collection, which has to be highlighted and given a special place both in the physical and digital space of the library. It is a unique resource, and people don't usually search for it like for other more common resources (crime novels, health books and DVDs), they would rather discover it as something new and interesting: so they have to be placed specifically to attract their attention both online and offline. The way Bibliofil functions, the library catalog is rather for the internal use than for the users. It contains very little useful information, such as basic description of the artifact: its format, language, type of a resource, publisher, subject, ISSN number. No picture is provided, and the links to the web-sites featuring the collections are hardly visible and written in a smaller font.



**Figure 25 The catalog entry for "Electronic literature collection vol. 2" at BPL**

According to the library cataloger, Nina Karlsen, Bibliofil is not flexible enough to give a more detailed and attractive description. They use the existing cataloguing rules from AACR2 (Anglo-American Cataloguing Rules) to describe any available resource regardless of its format. She expects a better flexibility with the newly suggested cataloguing system RDA (Resource Description and Access), and implementation of a new library system after the model of KOHA at Deichmanske Oslo public library.

Morrissey, on the other hand, does not see the solution of archiving electronic literature in setting it in databases or library catalogs; he thinks that “neither shelves, databases are enough or maybe not the most perfect ways to present this kind of dynamic knowledge”(Morrissey, 2014).

While the library and archive initiatives do not provide any useful solutions for representing and collecting digital literature resources, the specific project CELL (“CELL, Consortium on Electronic Literature”, 2013), in which ELMCIP group takes part, is at the moment in the process of developing a new unified and shared search engine/database for electronic literature. The work on developing a detailed and careful taxonomy of fields extracted from the seven existing databases on e-literature is under development. The key taxonomy based on a cross-analysis of vocabularies used in NT2 (Nouvelles technologies, Nouvelles textualités), ELMCIP and ELD (Electronic literature directory) databases has already been suggested by CELL this spring. The next step is for each member database to coordinate a discussion of the terms in the list, addressing the following questions as stated in an email by Sandy Baldwin, the director of the Center for Literary Computing at the West Virginia University and one of the key members of ELO (Electronic Literature Organization):

“ What terms to include? Do we need more? What list captures range of media? What is the form of each term? For example, CD-ROM or CDROM, and so on?”(Baldwin, 2014).

Interactivity Modalities	Platform/Software
Historical Period	Country of Origin
Disciplinary Field	Artistic Movements
Media –support (Materiality)	Formal Characteristics
Languages	Year of Publishing

Table 3.CELL Taxonomy Fields.

The above table is the recent representation of the fields under discussion. Each field contains a lot of terms, and the members of CELL are now in the period of making important decisions cooperatively about which terms to include. The communication is mostly online-based and in form of email lists, Google docs, Moodle platforms, Skype conferences and occasional face-to-face meetings. In my opinion, it is very useful for the libraries to keep an eye on what is going on in the development of this taxonomy.

In February 2014 the Bergen public library has written the so-called Action plan for 2014-2015 for the digital services and development (“Handlingsplan for digitale tjenester, 2014-

2015”). Among its priorities I could distinguish the following activities which could relate to a better work of facilitating digital literature:

- Upgrading the library’s web-sites to make them more responsive, easier to search and navigate, under the supervision of BPL’s web editor Kari Mestad and the Digital arena project manager. Beside various things, there could be created a special E-lit space on the library web-site, where the work of curating and disseminating of E-lit could continue online through publishing reviews, articles, links and other varia of specific works of digital literature, integration for interactivity, forum and commenting could be facilitated.
- Initiate the usage of library apps and info-screens the way it has been done at the Sølvsberget Stavanger library in 2013. Funded by the National library of Norway, the Stavanger library in cooperation with CapGemini, technology outsourcing company, and the IT Master students created a new Windows 8-based library application to make the library’s online services and facilitation more available and easier. The library Windows 8 app is made for online version and in the form of touch screens installed in the physical space.

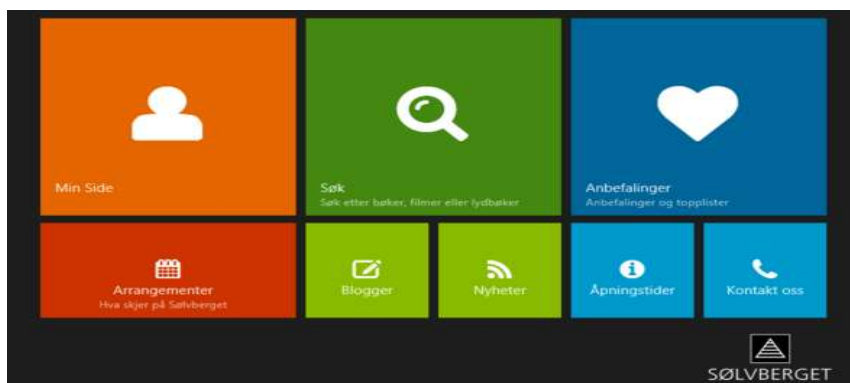


Figure 26 Stavanger library Windows 8 app

Among its functionalities, high level of personalization services, possibility to find a variety of links to other databases and online content related to the resources as well as the ability to share content via e-mail, social media and Windows 8-supported platforms make this app an extension of the library’s existing work on facilitation of knowledge.

- To create a better online space for collecting podcasts and audio/video streams.
- To increase the librarians’ competence and skill development

The current visibility and accessibility of born digital literary works and its contexts at the Bergen public library is not sufficient, both the librarians and the researchers realize that and have plans for enhancing their activities to facilitate this type of knowledge. Morrissey suggests using a double approach of disseminating works of more experimental and academic nature beside the historically tested and more basic stuff; to organize events at which a mixed audience can be invited, people not only from e-literature environment, but also from the contemporary literary and arts communities, traditional media and computer science scholars and amateurs, for example. Jore wishes to get the E-lit events more often out of the “closeted” Auditorium into the other physical spaces of the library as well as beyond the library walls. A perfect example could be the BCL WOW (Broward County Library Without Walls), whose e-services manager Stephen Grubb repackaged and marketed the library electronic services to suit the increasingly mobile society (“BCL WOW”, 2014). Grubb and his team created a new library mobile app and QR code system available in different well-used and busy public areas, like the airport and the harbor, to make a variety of library e-services available on site, from downloading the e-books and music to receiving language instruction and job search coaching, among others. Reorganization happened at the core of the library, and “the massive rebranding effort started with a fresh logo and went on to the creation of a new website, library card, welcome brochure, and social media strategy”(“BCL WOW”, 2014). The result was an increasing usage of the library’s services via its digital space. The BPL’s cataloguer, Nina Karlsen, pointed to the uncertainty about the social media use for facilitating the library services and content: “I think people start getting interested in something, but when they discover the limitations they quit it and find something even much newer and more efficient. I think all these new possibilities with social networking is very unstable”(Karlsen, 2014). In conversation she challenged the universal view of the social media hysteria by questioning its dissemination among most of the library patrons. There are people who do not use particular social media channels or prefer not to use them at all: we need to reach these categories of people as well. The spread of multitude of digital platforms, sharing systems, social media channels, Ipad and smartphone apps facilitating them, the growth of blogging can easily create specialized silos of groups, unnoticed and invisible to the public. If libraries are to disseminate information, knowledge and those who create them they have to cover all available channels, beyond the popular ones, like Facebook, Twitter and Instagram, and be all the time on watch for the upcoming ones. According to Nancy Dowd, it is important to set specific goals and plan a social media presence: the right people, who are sensitive to the social networking and having good

marketing skills, have to be employed for a specifically managed social media team. Smart direction and strategy in social media determine how successfully accessible and usable would be the disseminated knowledge. In referring to the director of Technology for Crowley Ridge Regional Library, Ben Bizzle, she encourages the librarians “to think visually, and mix in a little fun stuff with the real content”(Dowd, 2013). Among some of her principles in creating interest in social media are:

- Fast and laconic sentences, easy to grasp
- Interesting and curious facts and trivia
- Changing the posts, reviews, comments regularly
- Linking the social media stuff back to the library’s web-site, blogs, catalogs
- Have fun

As Bizzle says, “you will never be able to convey anything with any depth or detail, so don’t try...Make them laugh and pull their heart strings”(Dowd, 2013).



Figure 27 From Ben Bizzle's DropBox repository for collection of library-related pictures

## 5. Roskilde public library case study.

### 5.1. Active librarians: in the footsteps of alternative literary publishing system.

Roskilde public library, the main library of the Zealand region in Denmark, took part in an intensive collaborative project “Litteraturen finder sted” (or “Literature taking place”) with Århus public library and Århus University between 2011-2013. The activities associated with this project transformed Roskilde public library within a couple of years and went on beyond the project framework into 2014 with plans to expand curating digital literature in the library’s established permanent physical place for this type of knowledge.

As the name of the project implies, its mission is to develop concepts and practices to facilitate the knowledge on literature which exists outside the book and print format, such as born digital works and performance literature, but not only with the focus on the format issue. The libraries’ awareness of the existence of these alternative and experimental genres of literature taking advantage of the new technologies was the starting point for the project. Realizing that libraries are the central institutions for literature facilitation and curation for the public, the project team started delving into questions of the contemporary literary publishing world with its evolving shift from commercial to open access market. In the same way as the music and newspaper publishing was changing due to the digital boom so was the traditional book publishing in its changing period. “Litteraturen finder sted” (LFS) team focused on the ways to present literature produced within this new changing publishing climate, which gave more freedom to the users and consumers to create or collaborate with authors in the production process. Online environment with its multitude of possibilities to engage in less expensive self-publishing models gives awareness of alternative directions where this new type of literature can be created and distributed. Roskilde and Århus public libraries were interested in this literature production models and the way how the libraries could benefit from them and participate in them. According to LFS team, “brugerne kommer tidligere ind i “fødekæden” og oftere som aktiv medskabere end som traditionel passiv slutbruger. I mange tilfælde går forbrugerne helt uden om de traditionelle distributionskanaler, og ofte spiller forbrugeren både rollen som skabende, formidlende og distribuerende” (“the users now come earlier to the “production chain” and more often as active co-creators than the traditional passive end-users. In many cases the contemporary consumers of literature go beyond the traditional distribution channels, and often these consumers play the roles of creators, facilitators and distributors”)(“Litteraturen Finder Sted”, 2014). Their particular attention is drawn to such easily navigated digital platforms as

blogs, for example, and how anyone can create a sophisticated and interesting literary material there. However, their knowledge of more complex platforms and the existing producers/consumers and their communities on the local (Danish) level gave them an opportunity to bring them in closer connection to the libraries and make a case. The central questions for LFS team at both libraries were:

- Where do the libraries situate themselves in light of contemporary open access, self-publishing models which produce literary works not available in print and other traditional formats?
- How do libraries collaborate with these alternative publishing channels, writers and producers/consumers?
- How to treat the new type of literature, such as digital and performance-based, without looking at it as a problem for the libraries?

The project was divided into two parts: digital literature (curated by Roskilde library) and performance literature (curated by Århus library). My investigation was of the first part of the project, namely, the Roskilde library's work with the born digital literature. The Roskilde LFS team let me know that they initially refused using the word "electronic", because it implied e-books in people's minds: the word "digital" seemed better to represent the nature of literary creations based on the use of digital technologies and media. Though not entirely satisfied with this term either (often they seem to prefer the word "experimental" or "hybrid"), it still remains the main term. Søren Pold, a professor in digital aesthetics and design at Århus University, who wrote an evaluation report on "Litteraturen finder sted" project, explained that digital literature, in comparison with e-book, is "et meget bredere fænomen, som har spillet en stor rolle i forhold til den kunstnerisk-litterære udforskning og udformning af computeren som skriftteknologi" ("a much broader phenomenon, which has played an important role in relation to the literary and artistic exploration of the computer as the writing technology")(Pold and Glaz Serup, 2013). He also adds literature created on the basis and for other digital devices (I-pads, I-phones) and collaborative online networks such as web 2.0.

For Roskilde library's LFS team the main task with the project was to explore the library and librarian's new roles in facilitating digital literature. The librarian becomes a curator who finds the best solutions to bring the library space and the born digital literary works together for the public: "vi kan i mindre grad peje efter forlags og anmelderes anbefalinger og må i højere grad selv påtage os rollen som litteraturbrugernes guide, der finder værker og i dialog

med forfatterne og andre aktører på litteraturområde søger løsninger på, hvordan værkene bedst formidles” (“we can follow the publishers, critics and reviewers and their suggestions less, and we can instead take ourselves the role of the literature guide by engaging in a dialog with the writers and other actors in the literature area and search for solutions together how to disseminate the works in the best way”)(Roskilde Bibliotekerne, 2014). The small team of Roskilde LFS project (3 people) experimented with different methods and tested different technologies during the two year project. They were supported financially by the Danish Ministry of Culture (Kulturstyrelsen) and received support in expertise and knowledge from Århus University. Besides they were tightly engaged with the artists and writers in digital media and had several successful collaborations with them. Roskilde LFS team had good understanding of both literature and technologies: the two of them had education background in literary studies as well as in web design, computer science and IT, while one of them was a trained librarian. The combination matched favourably.

The following table illustrates activities the Roskilde library did in the framework of “Litteraturen finder sted” project and beyond it:

June/July 2011	Poetry Hall with “Poetry Wall” at Roskilde Festival
November 2011	Leoporello installation at Roskilde library
June/July 2012	Poetry Hall with “ <b>Blæk</b> ” (“ <b>Ink</b> ”) at Roskilde Festival
<b>From July 2012</b>	<b>Mobile Reading stations (iMacs and iPads) at Roskilde library</b>
September 2012	Study trip to the US
November 2012	Participation at “Remediating the Social” ELMCIP conference in Edinburgh
November/December 2012	“In Words Drown I” exhibition at Roskilde library
From January 2013	Exhibition Kit with digital literature to other Danish libraries
20 <sup>th</sup> of March 2013	Closing of the project with the conference and report in Århus
January/February 2014	”Fra kærestebreve til visuelle fortællinger”(“From love letters to visual storytelling”) exhibition at Roskilde library
April 2014	“Ordet er løs” (“The Word is loose”) literature festival at Hillerød library

Table 4. “Litteraturen finder sted” activities 2011-2014.



From the beginning the project had the focus on creating a multimedia environment which could serve as space for facilitating knowledge for the technically demanding digital literature. This space would have the two functions:

1. To present the existing canon of born digital literature
2. To actualize the interactive elements of digital literature through specific exhibitions, installations and specific-made works

## 5.2. Experimental librarians: testing out digital geekery.

Through the team's experimentation and collaboration during their work done for both Roskilde festivals (2011 and 2012) they came up with the two solutions, which became the harvested results of the project: the interactive literary work *Tilfældigvis er skærmen blevet blæk* or known for its nicknames as *Ink* or *Poetry machine*, created by the Danish writer Peter Clement Woetmann in collaboration with sound and digital artists; and the permanent space for mobile reading stations (both IMac computers and Ipads) at Roskilde library for users to experience and interact with born digital literary works. Before these solutions have been adopted at the Roskilde library's physical space, in 2011 the Roskilde LFS team organized a Poetry Hall for 2011 Roskilde Festival, a room in which the festival guests could gather for a peaceful reading pause or play with the interactive digital work *Poetry Wall* created by the Danish writers Jesper Sternberg and Vagn Remme specifically for the Poetry Hall. The work was designed and developed with the assistance of CAVI (the Center for Advanced Visualization and Interaction) at Århus University.



Figure 28 Poetry Hall



Figure 29 Poetry Wall

*Poetry Wall* was a staged environment with the projected screen on the black wall. If one or several people moved in front of the screen the light dots registered the participants and were used as a sort of a mouse to interact with the screen, but instead of the hand the screen reacted to the movements of the body, and some words were generated and turned

up at the screen wall out of the pool of words. The words gathered together depended on the interaction and the number of people involved, but often they referred to the festival context and had poetic value. For Roskilde LFS team it was important to create a work which related to the participants, the event and its environment. The reading involved not only those who performed on “stage” of *Poetry Wall*, but also those who observed. Thus, a totally different reading experience has been tested prior to *Ink* (“Den Interaktive Poesivæg”, 2014). Two other events took place as part of the project at Roskilde festival in 2011:

- *Poesibanko* (“Poetry Bingo”), a performance concept involving active readers to listen to the reading of the work and fill in the bingo boards at the same time
- *Roskildedrømmen* (“Roskilde Dream”), the documentary film involving the festival guests

The final report on “Litteraturen finder sted” from July 2013 describes “Poetry Hall” at Roskilde Festival as “fungerende i sammenhæng med resten af rummet, mennesker kunne opholde sig og passere igennem, så man naturligt kom til forholde sig til formidlingselementerne uden at det nødvendigvis var en aktiv beslutning om at gå ind i et særligt rum afskåret fra resten. Et miljø uden vægge ville sikre, at ”rummets” indhold ville kunne opleves i hele biblioteksrummet” (“functioning together with the rest of the room, where people could stay and pass by in such a way that they related themselves naturally to the facilitating elements without necessarily entering a specific space shielded from the rest of the room”)(*Litteraturen Finder Sted. Afsluttende Rapport*, 2013). According to evaluation and reports the *Poetry Hall* was visited by many people from the festival, some of them came just for a short break from concerts, others lingered for social events which created a literary atmosphere and facilitated new experiences in literature. The success was due to the care undertaken in order to consider the context of the physical space and its visitors. The conclusion made by Søren Pold reflects the concept the LFS team wished to take with them into the library space: “...når litteraturen finder sted på Roskilde, må den godt være social, kollektiv og interaktiv, den må gerne være humoristisk og legend, men der er også samtidig et rum for den litterære pause og bogen” (“when literature takes place in Roskilde it can be social, collaborative and interactive, but also preferably contain humor and game elements, however at the same time a space for the literary pause and book”)(Pold and Glaz Serup, 2013). The following months the LFS team worked out several concepts and ideas about how such space could be integrated in the Roskilde public library. Specifically they were interested in solving these questions:

- How would they integrate digital literature in the library space so that it attracted interest and curiosity and at the same time encouraged its social use?
- How would they present the processes, interactive and programmable features of digital literature to the library patrons?
- How could they situate digital literature in light of media change?

Two concepts were developed within the autumn 2011: “literary interaction” and “tracking reading”, which generated the idea of creating a two-part installation in the library space: one the one hand, the installation was supposed to present digital literature with the focus on the way how this type of literature is created by highlighting various processes through involving the users to interact and participate; on the other hand, the installation demonstrated the selection of the existing works. Beside these two concepts, LFS team wished to engage artists and writers to give occasional presentations and performances, and they initiated an idea of creating their own specific collection of digital literary works.

In November 2011 they experimented successfully with a new installation space in the department of fiction. This contained 11 leporello books (printed material folded in harmonica style with the folds alternating between front and back, known also as concertina folds) and short online-based videos relating to each of leporellos. The videos were made by a Danish artist Thomas Seest. Each leporello book had a small chip installed on its back, chip reader was place on the back of the old book positioned in front of the screen: by placing one of leporellos over an old book one could watch a short video related to the content of the leporello book.

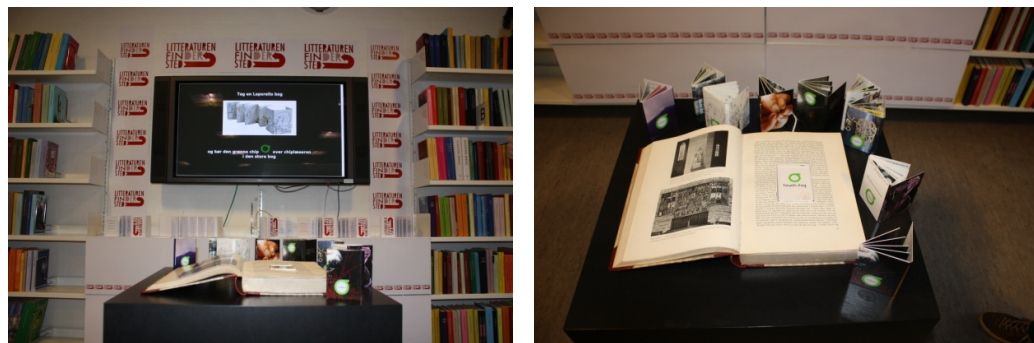


Figure 30 Leporello installation

The care was taken to provide a clear explanation on the screen how the installation functions. According to the evaluation, the installation was very popular among the library users, young and old. Specifically the rare hybrid combination of an old book, folded

brochure-like leporellos with the chips and the screened films attracted people's curiosity to come and find out what it actually was. The team of librarians from LFS project confided that it was the easiest and cheapest installation they had, and with the use of fantasy one could create a number of different exhibitions with the help of chip technology, particularly in order to encourage the user interaction or attract the attention to a piece of work ("2 Udstillinger Af Elektronisk Litteratur I Biblioteksrummet", 2014).

### 5.3. Developed models: Poetry Machine and Mobile reading stations.

For the next Roskilde Festival in June-July 2012 the Roskilde library LFS team presented a new literary installation created in collaboration with CAVI Center and scientists from Århus University, *Tilfældigvis er skærmen blevet blæk* ("Accidentally the screen has become ink") or simply *Blæk* ("Ink"). The installation contained a large screen, computer, receipt-printer and three books with embedded electronic sensors.



**Figure 31** *Blæk (Ink, or Poetry machine) installation*

The idea of this work was to show the users the recurrent feature of digital literature, the user's participation and co-creation of literature: one has to do some activity with the digital tools in order to give it a meaning. Through the user's interaction one comes to understand digital born literature in "Ink". Thus, to create a new poem one has to lift one of the books. The set of words would appear on the screen. One can choose the desired words by pressing in the middle of the book. Three people can co-create a single poem at the same time, which adds an extra social level to experiencing "Ink". In the end, the poem is printed out on a receipt-like paper: this gives a physical dimension of the digital born work. According to LFS

team observations “Ink” was experienced differently at Roskilde festival and in the library: while the festival guests were very fast to take advantage in using it, the library patrons wanted first to look at its elements and study a bit how it functions. Despite its big size, played sound and central location it did not distract the neighboring areas and departments of the library, according to the observations. LFS team means that this type of installation can catch an eye and come into a conversation about the future of book and literature. “Ink” challenges our understanding of what literature is, and sets focus on the literary process rather than the product, particularly in the digital environment. At the same time it demands some performative and even bodily interaction in order to create sentence after sentence: lifting books in different directions in order to choose the right word. In Søren Pold’s words “Ink” functions best in the rooms where the context is considered and the environment is taken care of, “hvor der er l orden at “performe”, hvor installationes lyd kan tolereres, og hvor der er et stabilt flow af publikum... fungerer den altså godt ind i et biblioteksrum – eller endnu bedre, når biblioteket optræder ud af huset til events, konferencer, festivaler etc – og opfylder kriteriet om at introducere digital litteratur i biblioteksrummet på en måde, hvor det ikke lige så godt eller bedre kunne ses på nettet, derhjemme” (“where it is OK to “perform”, where the sound of installation can be tolerated, and where there is a constant flow of public...it also functions very well in the library space – or even better when the library gets out of its physical building to events, conferences, festivals etc. – and meets the criteria of introducing digital literature in the library space in a way which can better represent it than in online space”)(Pold and Glaz Serup, 2013).

“Ink” did not stay long inside Roskilde library. From the end of 2012 up until these days it travelled as part of the exhibition kit to different Danish libraries, beyond Zealand region. The exhibition kit could be reserved by any library through the LSF team in Roskilde for the period of 5 weeks totally free of charge. In this way, it introduced the concept of digital literature and the ways and methods to disseminate and curate it to librarians and patrons of smaller libraries in Denmark. According to LFS team, many of these libraries became very curious about “Ink” and other work done by Roskilde library to facilitate knowledge on new literature.

Beside “Ink” LFS team prepared mobile reading stations for disseminating existing works of electronic literature in the library. These included a podium with two large iMac computers with the headphones, where the users could stand and view works from the existing collections, such as ELC vo.l 1 and 2, ELMCIP European anthology of electronic

literature and “Litteraturen finder sted” collection, the last created by the LFS team themselves. Some digital works, which were not part of any collection, could also be viewed from the desktop. There was installed another podium with print-based experimental fiction and books, which placed digital works in the context. There were several stands with iPads placed beside, these contained literary apps. The whole area was tagged with the banner “Litteraturen finder sted”, which caught people’s attention. The concept of using podiums, and making large iMac PC distinguish itself from the rest of the screens in the library indicated clearly to the visitors that this was a special area. The expensive and new digital technologies were something that the library users would like to try out. In order to make the patrons more caught up by the installation, LFS team decided to place it in the most central room of the library, the area behind the Information desk, where most people would pass it this or that way. The stations were close by the music, children and fiction department. The iMac screens, if not in use, were showing a particular digital work chosen in advance by the LFS team.

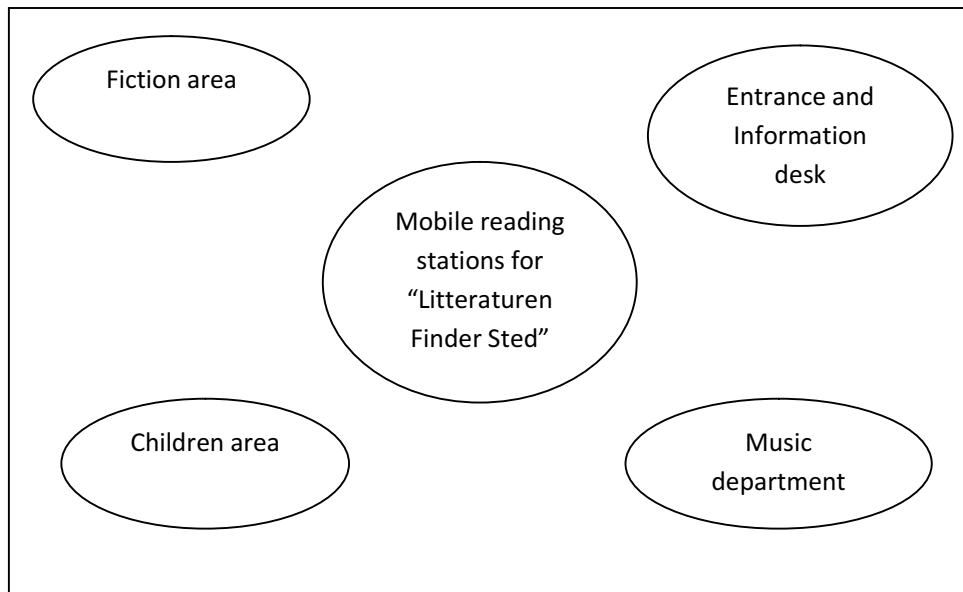


Figure 32 Ground floor of Roskilde library. The strategic position for LFS mobile stations

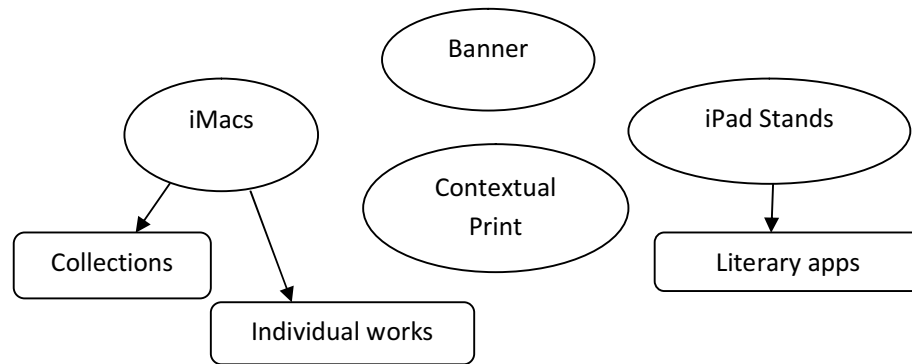


Figure 33 The physical position of LFS mobile reading stations

In the same way as “Ink” these mobile stations could be loaned by smaller libraries in Denmark, but limited only to the Zealand region. The Roskilde library provided them free of charge and with the detailed instruction for use.

“Litteraturen finder sted” collection was made only for iMac screens for use in the public space as well as in CD and USB Flash versions in order to have it catalogued in the library system. It contained a few digital born literary works, mostly by the Nordic writers, and considered to be more or less known and established in the field. Beside the works themselves, the collection had also the video recordings of some of the most interesting performances and events in relation to digital literature in Denmark. The Roskilde LFS team decided not to create any web place for this particular collection, because most of the works existed online independently or published in different platforms. However, the main reason was that the Roskilde library wanted to attract audience to come to the physical place in order to experience digital literature.

#### 5.4. Intimacy of reading, Ipad and Iphone focus.

Considering the increasing usage of iPads and other similar computer devices by users and its wide-spread availability on the market, the Roskilde library took this platform for facilitating existing knowledge on literary apps in the library’s physical room. Such multipurpose devices had a lot of potential for their usage as unique platforms for reading:

- Can be used anywhere beyond the working table (sofa, bed, public places, nature)
- Can be perceived as the replacement of the print material due to its similar size and touch screen options
- Beautiful compact design

- One device – entire personal collection of digital publications
- A well-organized online platform for purchasing commercial products, compatible with major content providers
- Compatibility with all major existing file standards, including EPUB for reflowable information
- The screen’s resolution is becoming nearly indistinguishable from that of printed paper – less strain for eyes
- Possibility to access a variety of innovative digital products, such as extra material through apps, games, knowledge organization platforms, social media channels and born digital material

Ipad has a lot of advantages to be aware of in terms of disseminating knowledge on digital literature. Many authors create works specifically for this platform. The Roskilde LFS team had a wealth of Ipad literary app facilitation not only presented at the LFS permanent installation with Ipad stands, but also advertised on their web-site, through social media and blogs as well as their publications, such as so-called "Catalogue of Ideas for libraries in disseminating performance and digital literature"(Campostrini et al., 2013). Among these disseminating practices the following tendencies should be noted here:

- Roskilde library does a rather sporadic and less organized facilitation for the library patrons in online environment
- To get best acquainted with the digital literature for iPad as a library user one is better to come to the library’s installation space
- Roskilde library functions as an unofficial advisory center for other libraries in relation to digital literature and specifically Ipad literary apps: the information is given in detailed description in specific documents addressing the library workers ( a sort of "how-to-do manual" to facilitate information literacy in terms of digital literature)

The Ipad literary apps vary in nature. Roskilde library presented works which amplified and extended the more traditional e-book content of the well-known literature with interactive, visual and sonic features, such as Jack Kerouac’s *On the Road* containing such extra features as links to the biographies of the characters, pages from the journals Kerouac wrote on his own trip, images of some real people associated with the book, interactive map tracing the trips described in the novel, audio recordings of the author himself reading excerpts etc ("*Jack Kerouac’s On the Road*", 2014). T.S. Eliot’s *The Waste Land* app contains



comprehensive interactive notes and footnotes with detailed descriptions of the symbols and metaphors in the text as well as 35 expert interviews filmed by BBC and filmed performance of the poem by an actress Fiona Shaw synchronized to the text, all to expand the written text by means of other media and tools (“The Waste Land for iPad”, 2014). The library presented a lot of literary apps for children, such as *Alice for the iPad*, which employs an innovative technique which senses velocity and orientation of the iPad (Stevens, 2010), and William Joyce’s *The fantastic flying books of Mr. Morris Lessmore* containing unique games, innovative interactivity and original composed music (“Morrislessmore the iPad App”, 2014).

The more experimental and original born digital works for iPads have been regularly exhibited at the Roskilde library. For instance, interesting complex works from P.o.E.M.M. (Poetry for Excitable Mobile Media) project explore new ways of computational writing and investigate how such features like interactivity, variability, computation and network connectivity can be better understood and supported technically. These works also engage users in deep questions about their reality, values and relation to each other, those ancient philosophical questions which triggered us since ancient times, but applied to our contemporary situations and to digital environments. The artists and designers of P.o.E.M.M. consider iPad the perfect device for transferring their ideas and implementing their experiments, because tablets “promote a more intimate interaction style than a desktop, and a much better reading experience than a mobile phone or PDA due to the larger, high-resolution screens that render text beautifully...the two-thumbbed interaction style they encourage provides interesting possibilities for interactions that enhance the reader’s engagement with the text without distracting her from it”(“P.o.E.M.M.”, 2014). In relation to traditional practice of deep and close reading, which had an evolving practice for many centuries, the way how the new digital technologies can approximate themselves and fit into the requirements and conditions of undistracted reading has a promising solution towards applying innovative digital technologies to the classical reading practices.

However, the Roskilde LFS team understands that they are situated in a period of testing a number of different works. That’s why their approach is in including a rich variety of born digital works which point to the “literariness”, narrative structure with deeper meaning and storytelling features embedded in them. These are the reasons they were guided by facilitating knowledge on such literary apps as *LIMBO*, *Pry*, and *Strange Rain*. These apps do not contain a lot of text as we would have expected from a traditional literary work, but

instead they take advantage of other tools to build traditionally literary features such as storytelling and narrative. For example, *LIMBO* has only one word in the whole work if not to consider its title (“LIMBO”, 2014). The library took care to study the context of these works and managed to facilitate it to the library audiences in order to create a challenging idea to reflect on: particularly they posed the question of how game, art and literature could relate, or how the lack of language could make it exist through animation and actions taken through interactive functions. Through articles written by scholars, work presentation and their own short reviews on the web-site and blogs created a “thinking” space for library users.

Beside digital works for desktops and Ipads the Roskilde library facilitates the circuit of so-called sms-literature produced entirely for the mobile telephones via an sms-service. The works are published through an established Danish publisher Sms press and enabled for free access at the libraries in 30 danish counties through a Licensguide by the support of the Ministry of Culture (Kulturstyrelsen). Thus, any members of most public libraries in Denmark can freely access the sms-literature. This type of literature takes into account the compact format, the time factor and the idea of a short message before it is being created. As the Sms press describes, the story unfolds gradually, message by message, usually around 1 to 5 messages a day, within several days or weeks. The reader can sometimes become part of the story and answer the messages, therefore decide the directions in which the story goes. One of the most important concepts of sms-literature is the reality concept of mobile possibilities, implying that reading this type of literature involves the feeling of active and reality-enhancing events, which the medium of sms enables to transfer to a reader (“Sms Press”). In Europe it is quite a new concept, but in Japan the market of so-called “keitai shousetsu” (“mobile phone novels”) has become mainstream within the last years: in 2007 the five of ten best-selling titles in Japanese literature were “keitai” novels, including number one title, *If You*. While the Danish Sms press releases stories created specifically for the mobile phone sms platform, the Japanese writers often translated the print into an sms-version. Even though sms-literature wasn’t directly connected to the LFS project, it existed in the Roskilde library as an additional layer of literature beyond print.

#### 5.5. Learning librarians: going where born digital literature lives.

The end of 2012 was a busy period for the Roskilde LFS team, because they undertook a study trip to the US institutions and communities engaged with electronic literature and took part in a final ELMCIP conference, “Remediating the Social” in Edinburgh. These trips enriched their competences in curatorial practices and added an international perspective to

their work. At the same time they discovered new ways for disseminating born digital artifacts and acquired a new baggage of practical knowledge in this field. Visits to New York public library, MoMA Museum of Modern Art, Brown University with its famous virtual “cave” environment and Massachusetts Institute of Technology (MIT) with Nick Montfort’s the Trope Tank lab as well as more underground venues like Kelly Writers House and their connections with independent archive initiatives (“PennSound”) (“UbuWeb”), conversations and interviews with scholars, artists and practitioners in the fields of digital literature, creative writing, literary arts and librarianship as well as curatorial work for underground literature and art provided the LFS team with a variety of hints, suggestions and best practices to sum up for their own project. In their blog [www.netlitteratur.dk](http://www.netlitteratur.dk) the team wrote about their experiences, reflections and ideas on implementation of certain practices inspired by the trip. Some of these had a more or less direct influence on the pattern of their curatorial work at home in Roskilde library later on:

- Filling in the gap in the knowledge of the international production and scene of electronic literature; discovery of a rich variety of born digital literature available for facilitation in the Danish libraries
  - some scholars and writers they met pointed them to the alternative and less known directions and places where they could find the most relevant resources and works for the library settings
- Getting a closer acquaintance with the “hybrid” nature of contemporary literature and encouragement to look at born digital literature as part of literary development and evolution historically and artistically
  - a number of scholars and practitioners disliked the terms of “electronic”, “digital” literature or writing because of their broad connotations (since anything can be now considered digital and electronic, from blogs to programming, from digitized classics to amplified and more experimental apps)
  - many contemporary literary works contain different media, blending performance, print and digital technology in one piece of work
  - refusal to assign a specific term, tag, genre or style
- Taking into account that electronic or digital born literature is in its development/transition phase : this requires a stronger and more careful curatorial work playing more with the contexts and backgrounds

- Guidelines and explanations are necessary in different forms (from written to conversational) for introducing a less familiar work in the library setting
- Paying attention to newer platforms for presenting literary works, such as Ipads, Iphones, Augmented reality devices etc.
- If there is possibility, bring the older media (computer devices, vintage software, diskettes etc.) to present the historical works created for electronic environments in the past (1970' to 1990's)
  - since these media and platforms are limited for use and often obsolete, the context information about them in print and video can be facilitated
- Creating exhibitions and installations which demand of the viewer to integrate with the works
- The concept of media “life/death cycle”: one type of media gets irreversibly replaced by another one, as history points to
- Paying attention to the way the contemporary publishing system functions, the way it changes, and to a variety of alternative publishing models arriving thanks to digital environment and open access movement
  - there are a lot of interesting new literary materials getting born on the peripheries of publishing
- Getting closer in contact with some of the members of ELO (Electronic Literature Organization), their work and perspectives
- Organizing events in the library setting in order to create a new discussion and attract a potentially-interested community
  - events have to be organized in close collaboration with artists and writers and with maximum attention to the artists’ intention, needs, view and structure
  - the libraries have to be interested themselves in these events, and they have to be closer involved with the artists/writers
- Paying attention to creativity residing among the youngest generation, more fluent with contemporary technologies
- Video- and audio- recording literary readings, performances and events (with quality editorial work for dissemination)
  - for preserving and archiving knowledge
  - for educational purposes
  - for digital continuation of conversations and reflections

- short events, short videos, short recordings – building up knowledge of smaller pieces of information
- always include them on the library’s web-site
- Raw information vs. Guided information
- Focus on the controversial, attractive, new, unusual in library’s events and discussions, exhibitions and installations: something one won’t want to miss, something one won’t find in another place, something one will discover
- Librarians functioning as close listeners and easily adjusting moderators during events and exhibitions, not as passive facilitators and consultants
  - good observation and psychology skills
  - ethics and good knowledge of society’s problems and engagement
  - thorough discourse analysis
  - conversational and communication skills
  - good knowledge of performing actors and the public’s interests
  - showing that the library cares for the issues discussed to create extra motivation

#### 5.6. Librarians to libraries: bringing knowledge on digital born literature.

Upon their arrival back to Roskilde they immediately engaged themselves in collaborative curatorial work of the exhibition *In Words Drown I* (November-December 2012), which became a sort of best practice of curating experimental literature in Denmark thanks to the active participation of visual culture curator from Copenhagen’s Den Frie Udstillingsbygning, Mille Højerslev Nielsen. An important contribution of this exhibition to both the Roskilde library’s work with curating digital literature as well as to this thesis’ background in overviewed best practices was covered in more detail in Chapter 3.

In March 2013 both Århus and Roskilde LFS library teams organized a concluding conference for the project “Litteraturen finder sted”, which presented the achieved results of the project and pointed to the solutions that could be used in the future. An important aim of the conference was to give an existing knowledge about born digital literature to the library personnel in Denmark as well as to entice them to work with its facilitation and dissemination. In 2013 Roskilde library already started a loan and reservation services for the mobile reading stations with iMacs and Ipads and “Ink” installation to other Danish libraries, which provided more practical knowledge facilitation to librarians in terms of working with such new concepts in the library space. Th LFS team as well as some invited scholars to give

the presentations (Alexandra Saemmer from France and Daniel Shelson from the US) described their best practices for curating born digital works and general criteria for selecting these works for the particular library spaces and events. The presentation was alternated with the demonstrations of some electronic literature works, the digital installations could also be experienced during the breaks and after the conference in the halls. The work embracing the LFS project has been communicated in various ways to the Danish librarianship and “er der blevet udviklet en større bevidsthed og sensibilitet i forhold til disse litterære fremtrædelsesformers egenart; hvad er det, hvad kan det, hvad skal man være opmærksom på i omgangen med det, hvordan kan det læses, videreformidles, opbevares og distribueres” (“a larger awareness and sensibility developed in relation to the manifestations of this type of literature; what it is, what it can be and do, what should one be attentive to in working with it, how it can be read and experienced, disseminated further to external patrons and through digital channels, archived and distributed”)(Pold and Glaz Serup, 2013). A list of suggestions, examples and best practices have been also published in the so-called “Catalog of ideas to libraries’ curating performance and digital literature” (*Ideer til bibliotkernes formidling af performance litteratur og digital litteratur*)(Campostrini et al.), both in print and digital version. Documentation on the project has been collected on their blog, [www.netlitteratur.dk](http://www.netlitteratur.dk), where more detailed information on their work in curating and on the digital literature itself could be accessed:

- articles, reviews, events, comments, diaries, reflections
- evaluations
- audio- and video recordings
- links to important collections, databases, organizations and individual works and practitioners
- current developments and ideas

The project has been present on [www.litteratursiden.dk](http://www.litteratursiden.dk), the Danish web-site on developments in literature overall, and in local and national press of both library-related and more general content. In this way, the libraries (Roskilde and Århus) fulfilled roles of publishers and producers of content in relation to new literature.

Within 2013 and up until now, spring 2014, Roskilde library continued working with curating digital literature beyond “Litteraturen finder sted” project in its permanent place, including smaller events and installations, spreading knowledge and literacy to smaller Danish libraries, a larger exhibition “From love letters to visual storytelling” in

January/February 2014 (“Fra Kærestebreve Til Visuelle Fortællinger”, 2014) and assisting Hillerød library in organizing a literature festival with focus on experimental literature in April 2014, “The word is loose”(“Ordet Er Løs”, 2014). It is quite noticeable that in their recent activities they pay more attention to an experimental nature of literature as a whole rather than of born digital literature only, and to works of art which function on the border between literature and art, technology, music, theater, handicraft etc. It is as if the Roskilde LFS team derived from Kenneth Goldsmith’s ideas on “digital” breaking borders in literary genres and possibilities: “In spite of the successes of modernism, literature has remained on two parallel tracks, the mainstream and the avant-garde, with the two rarely intersecting. Yet the conditions of digital culture have unexpectedly forced a collision, scrambling the once-sure footing of both camps. Suddenly, we all find ourselves in the same boat grappling with new questions concerning authorship, originality, and the way meaning is forged”(Cottrell and Goldsmith, 2013).

#### 5.7. Expanding “Literature taking place” internationally.

The Roskilde library latest exhibition is called “Italian drawings”(“Italienske Tegninger”, 2014), and presents a huge 3 x 4 meter electronic book, which the users can view interactively by turning pages. The book is created by the scholars of Roskilde University as part of their project which focuses on user-friendly curatorial formats. The drawings of Italy are made by one of the University’s lecturers during his trip through Rome, Florence and Venice.

The originally Danish-written “Ink” or “Poetry machine” has been recently translated into English with the title “Ink After Print”, and the LFS team is ready to bring it and present to the ELO (Electronic literature organization) yearly international conference “Hold the Light” in Wisconsin, US, 19-21 June 2014 (Fritsch et al., 2014). The conference’s subtitle is “Identity, change, commitment”, within three days the University of Wisconsin Milwaukee hosts 24 specific sessions, keynote speeches, performances, readings, artists’ talks and discussions on the following issues, among others:

- Digital literature’s preservation, publishing, representation and description
- Digital literature’s modes of production
- Teaching electronic literature and experimenting with electronic writing in education
- Electronic literature for children
- International context of born digital literary works and their collections

- Electronic literature in Social media
- Narrative, structure and poetics of digital literature
- Sonification and sound experiments in E-lit etc.

In order to answer the question of what distinguishes the electronic literary writing the conference hosts a big Media Art Show at the Golda Meir Library at the University of Wisconsin Milwaukee, which will demonstrate 49 recently created works. According to the preliminary program schedule and organizers' addressing note there will be a rare convergence of so many writers, artists and scholars practising or studying the field of digital born literature from all over the world, which is a unique opportunity to learn and curate live rather than online around what's new in the field (*ELO 2014 Preliminary Conference Schedule*).

One of the most recent and ambitious ideas the Roskilde LFS team have is the plan to start a new project with the help of the fund from one of EU programs. The project is supposed to be a financial and knowledge/expertise support for a natural continuation of "Litteraturen finder sted" project. Martin Campostrini, the LFS project manager and the main person in the library's digital development department, has already drafted a sketch of preliminary application, which he calls "Turn On Literature: Libraries and cultural institutions as link between digital literature and citizens in Europe". The research question for the project is how cultural institutions can introduce new born digital literature to the public. The background issue is drawn from their observation and work during the previous project: libraries and other memory institutions "lack experience and training in exhibiting and communicating the new genres that do not fit into the book's distribution pattern"(Campostrini, *Turn On Literature*, 2014). The draft focuses on the professionals working in the cultural institutions, methods and techniques they can learn in order to facilitate new digital knowledge, and most importantly how they all can collaborate online and offline in order to exchange ideas on best practices and share knowledge on curatorial work and work in dissemination. According to the draft, Roskilde library suggests to collaborate not only with other European libraries, museums and archives, but also with the artists, authors, scholars and scientists to create new digital works of literature and new ways of facilitating them to the public. An ultimate aim is to create a well-functioning European network, which could become a platform for the future of literature as a whole. The platform is supposed to work as a joint space (online and physically) for collecting and exchanging best practices in working with born digital literature in libraries and similar



cultural institutions. If online it can be done easier, the emphasis is still on the physical dissemination of best practices through touring exhibitions, installations, performances and other hybrid literary productions across the network.

5.8. Asserting credibility of born digital literature.

As can be seen from the illustration of the way Roskilde LFS team is situated below, the three members, Campostrini, Petersen and Volhøj, were closely connected in developing the project. They all were involved in different management areas of the Roskilde library prior to the project, Campostrini working with the digital development and web-design, Petersen with reference librarians, and Volhøj with information literacy in terms of e-content. Although all three of them started getting together in 2010/2011 for the smaller project “Open Work”, in which they performed a research on the condition of contemporary literature: particularly, the changing circuit of publishing including open access and self-publishing models. Their focus was gradually changing into the research on a variety of experimental and digital born literature in Denmark, its trends and features and their relation to the world of libraries. The three of them saw a lot of different web-sites and social media channels, online platforms with existing electronic literature, they were surprised to see a lot of web 2.0 scholarly communication and collaboration in this field.

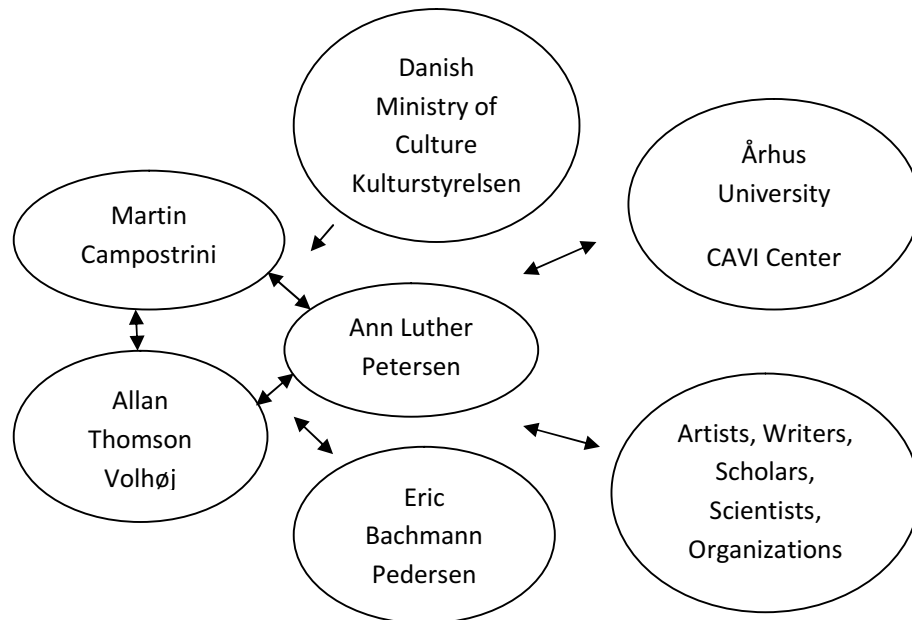


Figure 34 Roskilde "Litteraturen finder sted" team in context

In Martin's words, they "saw that this world of digital literature was totally disconnected from the libraries, and (they) were worried that this type of literature is more exposed to disappear without a trace"(Campostrini, "Interview with Martin Campostrini", 2014). Both Campostrini and Petersen had an educational background in literary studies, which had a lot to say for their care for the way their library could facilitate the current trends in literature. Volhøj joined them because of his interest for digital literature and his knowledge of artists and writers in Denmark who experimented in the field. Volhøj's background as a trained librarian and experience in communication , acquisition and discovery of e-resources beside his participation in information literacy programs made him an attractive co-worker to join the small team.

Roskilde library perceives the LFS project as a success. One of the reasons was that no one had big expectations, and everyone involved looked at objectives realistically and pragmatically. They were well aware of their goals. For instance, Roskilde library made an effort to facilitate net-based resources from a large community of poets and writers in Denmark on digital poetry to the library patrons, but soon found out more disadvantages: what disappointed them was that the presented works were "drowned" by the contextual discussions and conversations among the artists and writers. Instead they decided to focus on the physical aspect of presenting selected (most relevant, credible and interesting) works which would move the patronship of Roskilde library, in particular, and then make an extended curatorial work online. However, the primary way of working with digital literature was to present and carefully curate them in the library's physical locations. As the outcome of their 2-year project they established several national and local collaborations with artists, writers, scholars and institutions; created several unique exhibitions, installations and literary works; they brought knowledge about digital literature to more remote parts of Denmark, informed and educated librarians in forms and ways of curatorial activities. The most important achievement, according to them, is the creation of a permanent physical space for born digital literature in Roskilde library with mobile reading stations, Ipad stands and "Ink" interactive poetry machine, regardless of projects and funds. Communication of their knowledge and achievements to the library communities in Denmark is another big success: such small modern libraries like that in Hillerød got very interested in working more with the digital literature in its locales. They tried, tested, experimented and established their own concepts, methods and techniques for curating electronic literature, and they are still actively engaged in doing research in the field.

In the same way as in Norway, the Danish Ministry of Culture (Kulturstyrelsen) encourages public libraries in Denmark to focus more on the meeting place than on collection development. In this way, the implementation of the LFS project entirely satisfied the library's overall mission and even expanded it by communicating knowledge beyond traditional literature using primarily the public space. If the library's main function was always to bring new knowledge, Roskilde library continued doing so not only through building collections, but through events happening between the shelves. As Volhøj explains, digital literature is "not something that many people are aware of right now, and that's why they are not looking specifically for this type of information. We, as library, have responsibility to show new literature, its existence and variety to the audience, to be a kind of selection jury accountable for its credibility and relevance"(Volhøj, 2014).

Beside their other library tasks, the LFS members devoted one full day a week for the project and its development. During this time they discussed, made agreements, tests, purchases, planning and communication with the collaborators. They divided their responsibilities and created the roles among themselves: Campostrini was more busy with the new technologies, media, devices and their usage, application and development, Petersen was engaged in harvesting and discovering the literary works, while Volhøj was "a sort of catalyst, the one they employed to demonstrate, to explain, to communicate to the patrons and colleagues about the digital literature"(Volhøj, 2014). Often the management and work style in relation to the project varied and depended on the nature of a particular event or activity. The most challenging part of managing the project was communicating literacy in terms of digital literature to their colleagues not directly involved in the project, especially the reference librarians and those working directly with the public. The LFS team did not consider this until almost the end of the project, the result of which was that many librarians did not clearly understand how to handle the exhibits and installations of the born digital literature and how to facilitate basic information about it to patrons. Therefore, information literacy and communication of knowledge about the new type of literature became a new priority task eventually not only in Roskilde alone, but for the whole region and on a national level.

#### 5.9. The most visible place? Physical center and digital periphery.

In terms of physical space, according to Petersen, they had to go thorough space management and analyze the areas of the library. Most of the rooms in Roskilde library are open, with minimum of walls and borders between the departments: in choosing the right

place for the digital literature exhibits one had to consider how it could relate to other departments and how it could affect people there. As Petersen notices, “there are different things you can do in a room which is totally dedicated to digital literature than in a space surrounded by other rooms in which other activities and agendas take place”(Petersen, 2014). Even though the Roskilde library had a large Auditorium, they did not want to present digital literature in a hidden place: the idea was to keep it in the most visible place so that most patrons could experience something new with each visit. Therefore, changing exhibitions and its content was important to keep the patrons all the time curious. After the analysis, observation and discussions the LFS team subdivided the library space into three areas, according to the level of noise and business: quiet, medium and loud. They put the digital literature installations in the medium zone not to have it way too far away from the Information desk and the entrance and at the same time in an area where people could concentrate and focus on experiencing the works. Nevertheless, mounting the exhibition which had sounds challenged the idea of a library as a silent building. In the case of Roskilde library the challenge wasn't that big since they already had a little performance stage with music instruments in the music department for visitors to use. For each new exhibit they had a new attractively written statement, instructions and a guide for use; the area for digital literature was marked with the red-colored banner which read “Litteraturen finder sted” so that the patrons could associate the exhibits with the project and ask more questions from the staff. Designed furniture, podiums, stands were built thanks to collaboration with some designers and furniture companies, while the technology in use was larger and stood out definitely from the rest of digital tools in the library. In Volhøj's opinion the technology was expensive, but it was “a one-time investment, because through these tools and platforms you can show a multitude of electronic literature and art, while in print you have to purchase each individual artifact”(Volhøj, 2014).

Digital presence of electronic literature is not thoroughly elaborated by the Roskilde library. The LFS team pointed out repeatedly that cataloging and archiving this type of literature was never their priority and they stressed that the project's aim was to communicate and disseminate qualitatively the knowledge on born digital literature to the average audience. In their opinion, the issue of preserving and archiving E-lit is not the public libraries' responsibilities, but those of national and state organizations, universities and European or international projects (such as CELL initiative in the US) which can provide a necessary framework and a model. In case such a model is created, the Roskilde library would need more human resources, financial support and more partners to engage in

archiving initiative. Meanwhile, the Roskilde library is aware of obsolescence of media devices, programs, software and hardware. Nevertheless, as Volhøj says, it is worthwhile looking back at the old music information containers (vinyls, cassettes, tapes, minidisks, CDs) as well as old media which could play these: all this music is now easily convertible into a digital format, is streamed online on various platforms and apps, and can be downloaded online to various digital devices. Knowing how to convert and making the containers (physical or digital) as well as media devices as flexible as possible is supposed to be the foremost rule of awareness in terms of archiving. The Roskilde LFS team collects all the information about the exhibits, events and performances online at the library web-site in the format of a collection of articles with links and basic metadata description.

More detailed information with insights, reviews, opinions as well as a collection of published articles, reports, papers, interviews, links to the existing collections and databases of digital literature, individual works not included in the collections, journals and magazines with focus on E-lit, organizations and institutions who collaborated with LFS team, are all archived on their WordPress-based blog [www.netlitteratur.dk](http://www.netlitteratur.dk). The use of social media channels like Facebook and Twitter helps them to advertise their presence to the audience which do not visit libraries regularly, but which otherwise would be interested in the activities related to digital literature.

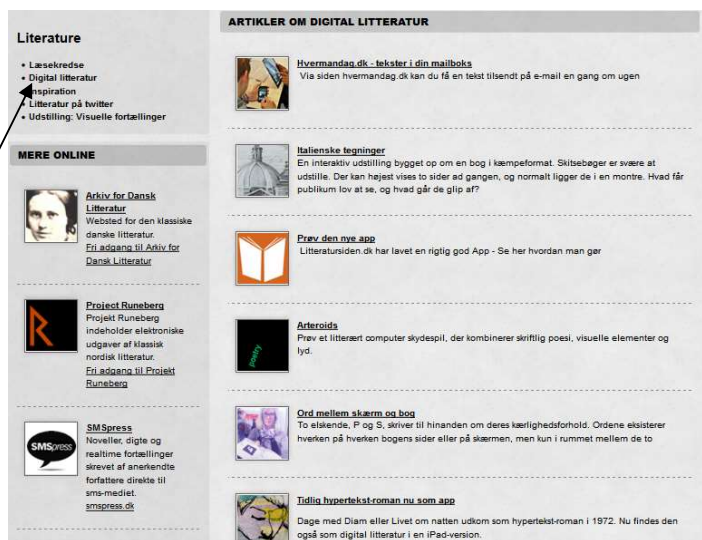


Figure 35 Digital literature at Roskilde library's web-site I

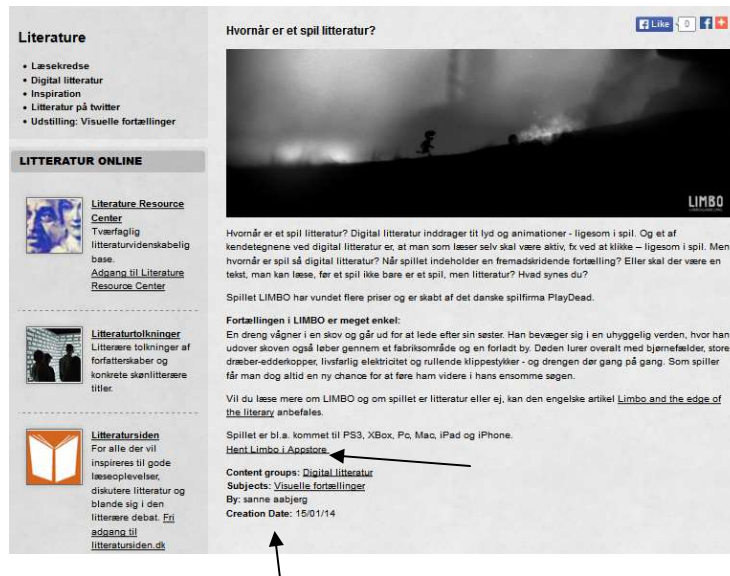


Figure 36 Digital literature at Roskilde library's web-site II

Some events are recorded, edited and made available at youtube channel and [www.litteratursiden.dk](http://www.litteratursiden.dk) as short “highlight” featured streams. Some collections of electronic literature are catalogued in the library system as CD and USB versions, such as ELC, ELMCIP and LFS collections. According to Eric Bachmann Pedersen, responsible for the Roskilde library system maintenance, database and web-site development, their library system is still old-fashioned and follows their version of MARC format, not interoperable with formats from other libraries. He does not believe that Dublin Core or similar metadata standards could qualitatively replace MARC in order to describe electronic literature in detail because of Dublin Core’s too broad taxonomy fields. In his opinion, they need a totally new system, but their system is not independent, and is integrated through a variety of services such as interlibrary loan. This makes it more difficult to start renovation of the system, because it touches other libraries. The change should come from the state initiatives. Born digital literature is a special information resource, and it should be treated then as a part of a specific special collection in the library. Therefore, the Roskilde library is not in favour of putting individual works of this type of literature inside the library catalog for fear that they would simply get “drowned” there by the amount of other information. On the contrary, it is necessary to develop and enrich both the physical site and digital space uniquely for electronic literature:

- Engage the visitors in trying out various works in exhibits
  - by providing guidance and support to the visitors at the place
  - by providing knowledge and literacy frameworks to all library workers

- Wake up not only curiosity, but encourage further knowledge discovery, consumption and production to both visitors and librarians
  - by setting a framework and model of interacting and working with individual resources and exhibits
  - by welcoming and motivating community formations around the exhibits and events
- Organize more varied and hybrid exhibitions and events, in which traditional and experimental, digital and traditional can mix up
- Finding a more organic and natural concept for the phenomenon of born digital literature
- Having a specific web-site, blog, online social media platform and app devoted entirely for digital literature
  - link them to the library's main web-site and other important institutions and organizations in the field of literature and digital arts
  - update regularly news, trends, research and other information on digital channels
  - curate both physical and digital exhibitions, not necessarily connected with each other
  - change exhibitions, installations, works and events
- Select the relevant information resources and works out of the flood of databases, online scholarly communication channels and less known OA magazines
- Relate born digital literature to contemporary reading practices
  - by studying distant, close, passive and active reading
  - by accommodating reading needs to the space management of the literature exhibits (more silent or loud spaces etc.)
  - by classifying information resources and works in the field more relevant for public or private use

Roskilde library used all the above-mentioned methods to increase visibility and accessibility of born digital literature to a great extent. There is a lot left to be done for a better quality and easier facilitation. One challenge lies often in the versatility of the works of electronic literature: one piece does often function entirely differently from another, demands a different audience, space, media devices, technologies and different levels of curatorial work. Another challenge is communicating digital literature to as diverse and remote audience as possible through the existing and upcoming digital channels, platforms

and linking data: being updated with the new digital developments is crucial in order to organize well suited knowledge facilitation.

## 6. Conclusion.

Both case studies demonstrate that we, librarians, cannot separate born digital literary works from the historical continuity and evolution of literature as a whole, but we are to treat these works in our dissemination and curation practices as part of the same discourse. Literature has become hybrid, writers and artists took advantage of newer media and technologies to express their ideas, but they remediated their works by mirroring TV, press, radio, film, visual art, theatre and performance. It wasn't because they were afraid to start something totally new, but because they started off by pulling off the existing creativity such as kinetic poetry, hypertext, computer games, narrative theory, digital art, programming etc. On the contrary, electronic literature seems to address issues of the present and future, what it means to read and write deeply meaningful works created for computing devices. For librarianship it is an issue of adjusting its own profession to curatorial practice to disseminate and facilitate these dynamic works visibly for its patronship through exhibitions, installations, digital communication and archiving, using the library building as a meeting point for events and performances. For this curatorial practice librarians need to strengthen their expertise and competence in digital facilitation, their knowledge in the nature of born digital literary works, of resources from which to extract the credible and relevant works and their contextual information. Skills in marketing and advertising are crucial if the libraries wish seriously to lift up the unknown and marginalized to the library users' knowledge discovery alternatives.

Bergen public library's series of electronic literature events with focus on performances, live readings and workshops and Roskilde library's successful production of a permanent department for born digital literature through installations, exhibitions and presentations both reflect on the history of information technology and derive strategies for facilitation from the existing electronic literature communities as well as from the curatorial practices in the world of museums and arts. Both libraries stumble upon the issue of how this type of literature needs to be communicated to the audience considering its content, intention and format of transmission. Therefore, those library workers who manage electronic literature knowledge ecology have to acquire the necessary specific literacy and expertise in order to



be able to disseminate reliable information and resources. Bergen public library is situated in especially favorable environment due to the close proximity and tight engagement with the scholars from the University of Bergen who are managing the research in the field of electronic literature as well as the database ELMCIP, the most extensive and detailed collection of materials on E-lit in the world. The librarians of Bergen public library receive a good amount of assistance from these scholars in terms of advice, expertise in the field and technical issues. At the same time they learn more themselves about electronic literature and what it contains, about its community, its projects, archives, databases and collections. In contrast to Roskilde library, the librarians of Bergen public library do not necessarily need to travel away from Norway in order to lift up their competences and knowledge. Roskilde library team for the project "Litteraturen finder sted" had to find experts, scholars and artists on their own. Partially due to their background in literary studies, interest in literature and technology and a well-mapped network of local and national practitioners in experimental and born-digital literature the team in Roskilde had a more motivating force to do their curatorial work. Roskilde group had a rather compact project schedule with well-defined roles, aims and activities. Besides, they learnt a lot on their own and thanks to various collaborations with Danish artists, writers and scientists. The study trip to the US, where they got acquainted with the prominent research in the field of born-digital literature and art, their participation in the ELMCIP conference in Scotland gave them the opportunity to situate their own practice in the context of the international community of electronic literature as well as to build up a broader network for expertise-enhancement, knowledge sharing and potential collaborations.

Both libraries are aware of disadvantages of digital technologies, namely, of their unstable nature, interoperability and obsolescence problems. Therefore, none of the projects were prioritizing the archiving or preservation of the curated and disseminated works. Most of what they did was thoroughly communicating the existence, variety and specificity of born-digital literature to the public library patronship. The use of the physical space is the priority, digital facilitation comes afterwards or as an extension to what is being communicated physically. The use of classic digital platforms and channels such as library web-sites, blogs, social media is preferred. There is not enough work done in this area, and both Bergen and Roskilde library need a better content management system to organize the accumulating information on their events, activities and works exhibited. What is a pity is that some of information disappears or exists only on some digital channels. It is due to lack of human resources who could have been more often engaged in editing, maintaining and updating

digital facilitation. Linking and integrating various online resources in relation to the events or exhibits is another often ignored function by both libraries. I think, the libraries can learn a lot to be more market and advertise oriented from such online sellers as Amazon, for instance. Including options such as “similar products” and “informal comments and reviews” could broaden communication of e-lit among larger audience and give them the opportunity to compare this relatively unknown literary expression to other more traditional works.

Librarians working with electronic literature have to consider more than if they were working with print literature:

- hypermedia content (containing not only a written word, but a blend of other types of media in a single work in an unexpected combination)
- hypertextual active reading mode (demanding not necessarily a full concentration, like in a traditional book, but distracted concentration and ability to multi-focus on a variety of displayed information and on different media platforms)
- interactivity mode (demanding the users to actively participate in building up the stories hidden in digital works; this mode demands more investment of oneself in treating the work of literature in order to understand and experience it)
- technological barrier (many works of electronic literature are built by means of different software and programming languages and therefore will make a potential user uncomfortable in approaching a new work; opening a new work of born digital literature is also opening a new computer platform, therefore, librarians need to make this contrast for the users as smooth as possible)
- context, specific and historical (setting the works of digital literature in the context of the history of literature or the history of a particular technology involved in creating this work can provide a better explanation and clearer understanding of the work itself; a good example has been done by both libraries through connecting specific print literature to the electronic works; the context can be anything else than artifacts: information on the artists and their group, conference or workshop, performance, reading of a work, a lecture, interview with the authors etc.; the secret about the context is that it makes people to think in relations and link certain ideas to certain facts and memories)

It also helps to appropriate born digital literary works to the theory of narrative and storytelling using no matter which information tools. Narrative is a millennia-old technique to create a model of how other humans can think and act. Therefore, telling a specific story is a mode of creating a virtual environment, or something what does not exist but in our minds and imagination. Electronic literature is not unique in it, but only follows the ancient idea of storytelling.

Born digital literature should be treated as works of special collection, and librarians of both Bergen and Roskilde library agree about it. As a special collection it has to stand out from the rest of library content both in physical and digital environment. People do not usually come to library building or web-site to search for works of E-lit, and those who search for them (mostly specialists and scholars) address the communities and databases they are connected to. Electronic literature is scattered across a multitude of online resources like databases, scholarly communication platforms, magazines, journals, conferences etc. Some of them are self-published and are only available on individual author's web-sites. Despite the development of recently initiated CELL (Consortium on Electronic Literature) metadata standard and shared database for description and classifying resources on E-lit in the US (the work is in progress until the end of 2014), there isn't yet a well-developed database which covers most of works, collections, research and other information in the field. Therefore, it is necessary for librarians to work with information mining, finding and selecting the right resources for disseminating them in the libraries. There exist quite a lot of good-quality credible databases, web-sites, blogs and conference/festival presentations online related to digital born literature. Public libraries could learn from University and specialized libraries such as the Norwegian [www.helsebiblioteket.no](http://www.helsebiblioteket.no) (which facilitates digital information related to the research in medicine). The norwegian electronic health library provides free access to specific resources for medicine professionals and students: guidelines, magazines and journals, databases, procedures, systematic reviews of national and international origin. The well-defined taxonomy of subjects gives the user opportunity to search for materials related to a specific subject. The both case studies, Bergen and Roskilde, did some work in disseminating information on E-lit digitally, mostly on their own web-sites and partially on the blogs. However, the work needs better organization, archive approach and more details and links to the resources.

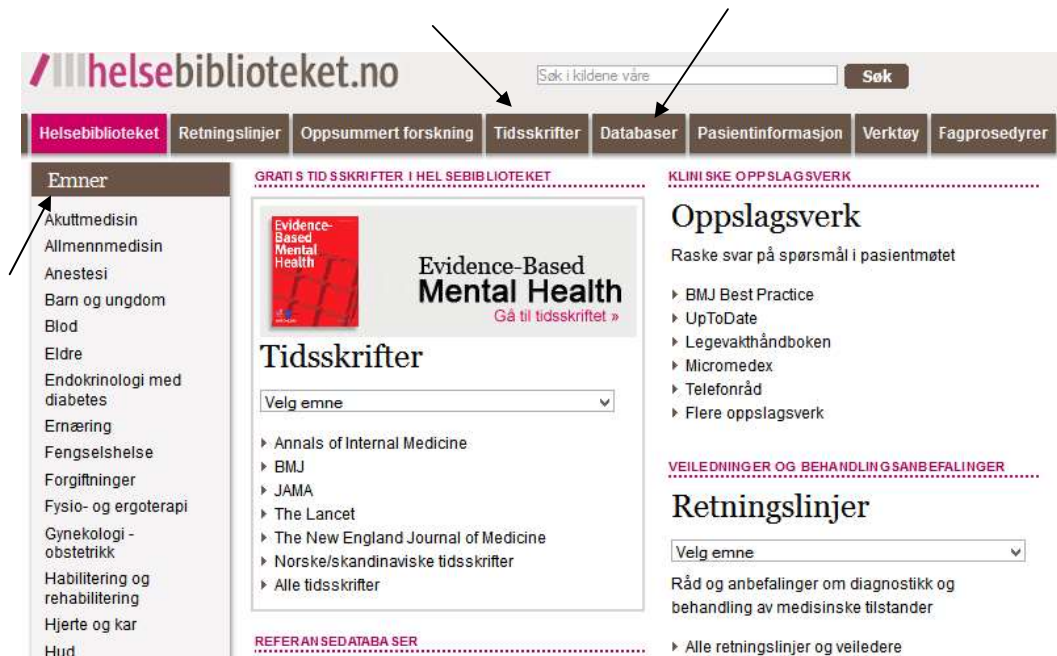


Figure 37 Helsebiblioteket's main web-site page

First of all, there is not a clear indication on the main web library page that there exists information on born digital literature. On the web-site of Bergen public library one has to go through the link “Spil og digital” (“Games and digital stuff”) and Roskilde library features this information in the section of “Literature”. If libraries are to catch their patrons’ attention and make them discover digital literature they have to organize a much more easily available and interesting way to communicate about it to them right from the very first web page:

- create a specific attractive and visual link to digital literature on the front (most visible) page of the library web-site
- link blog and social media entries to this web page and vice versa
- update regularly news, reviews, event/work descriptions, interesting facts and current trends to make patrons constantly aware of this type of literature
- use funny, humoristic, unusual and catchy images, videos or other ways (like “try this work” or “answer these questions”) of facilitating information on digital literature online
- make it easy for patrons to notice and use the information, do not go into details, but name instead four-five highlight facts or sentences, focus on priority in dissemination
- list a number of databases, journals and online environments on e-lit and present them visually

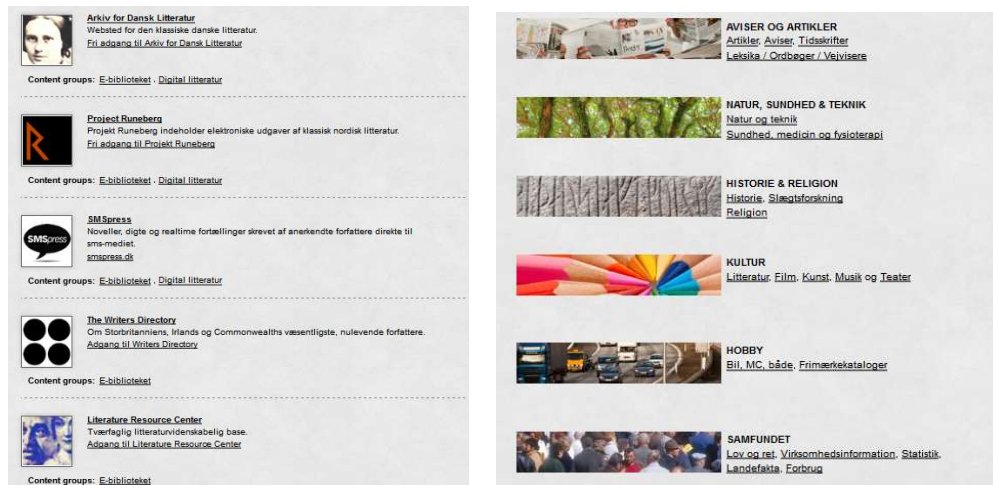


Figure 38 E-bibliotek (E-library) at Roskilde library's web-site

- to provide more detailed information libraries can link to the specific blog or a satellite web-site to avoid overcrowding of information on the library's main web-site
- librarians and some patrons can collaborate and produce articles, reviews on born digital literature from different perspectives
- libraries can provide online space either on their main web-site or on one of the satellite sites/blogs where patrons could share their experiences, opinions, comments about works and events of e-lit in the shape of online forums
- to video stream events, make short documentaries and edit them for online facilitation (patrons are also there after the event took place)

Following the concepts of dissemination and curation, librarians are there to spread the knowledge, but also to take care of its growth, development and directions. Since physical and digital are interconnected, it is necessary to take care of both environments. It is necessary to analyse and see how one environment influences another in order to create the right ways and techniques for facilitation. Both Bergen and Roskilde library managed to communicate the discourse on born digital literature to an average public to a certain degree and in different ways. The clear tendency is on presenting new digital media in the physical environment and expanding information and knowledge about it digitally.

<b>Bergen public library</b>	<b>Roskilde library</b>
Library functions as a host institution for organizing and managing events about electronic literature	The mission is to create a multimedia environment in the library's physical space
Librarians and library workers function as consultants with the major task to facilitate communication and collaboration among event organizers and managers	Exhibitions and installations are primary methods for curatorial work
Research group "Digital culture" from the University of Bergen provides the ideas, structure, nature, management, logistics, processual activities and advice for dissemination of works and curatorial practices	Experimentation with technologies, literary works, new media and library space dictate the activities
The content of the events and activities on electronic literature derive from the interests and research focus of "Digital culture" university group	Environment, community and contexts play integral roles for the types of exhibitions
Scholarly communication (digital-based research platforms and spaces as well as physical meetings and conferences) plays an integral part in e-lit dissemination for the library's events	Librarians and library workers enhance their technical and field-related competence through study trips, conferences, workshops, sharing knowledge and bringing knowledge and competence to other libraries
Electronic literature event series contain only a small part of the whole project "Digital arena" the library takes care of; the library sets smaller degree of priority for these events than for those connected with basic digital inclusion of citizenship	Practical collaboration with artists, scholars, writers, web designers and computer scientists help to create innovative and original works, such as <i>Ink</i> and <i>Poetry Wall</i>
Without the financial support from the National library of Norway for the project "Digital arena" there wouldn't be possibilities to include the discourse on E-lit on a more or less regular basis (monthly	Direct state support for the specific project "Literature taking place" ("Litteraturen finder sted"), direct engagement with the Århus University researchers as well as background and interest in the literary development

events)	provided with means, network and motivation
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Table 5. Highlights in management of curating born digital literary works in Bergen public library and Roskilde library.

The foremost difference between the two libraries and their methods of facilitating knowledge on digital literature is the degree and amount of responsibility they have. In case of Bergen public library, most managerial organization, technical and field-related expertise is exercised by the researchers from the university group. Therefore, the overall attitude towards electronic literature as artifact or knowledge is more distant and explained in their perception of its sophisticated, unclear nature, reminding somehow the contemporary art installations with its metaphoric/symbolic language. Meanwhile, Roskilde library project team was engaged in studying and analyzing the changing nature of literature from the very beginning. Experimenting and self-learning, having background in literary fields, all contributed to their more independent methodology of curatorial work. Their attitude towards born digital literature is several steps more advanced and viewed through the prism of the current research in the field, investigation of reading practices and realization of literary hybridity. Roskilde library looks at digital literature as one of possible literary expressions. Roskilde library's interest in changing publishing system and analysis of alternative publishing models strengthens their experimental work. It is clear to see their pragmatic roots in establishing collaborations specifically in the local and national environment, where it is easier to focus and aggregate.

Born digital literature and other born digital materials and knowledge is quite an experimental information resource for public libraries and therefore there is need for more research in the ways how libraries can easier embrace "born digital" for dissemination and facilitation. This paper is one of starting points to investigate the research questions more in depth. Action research fits specifically with this field, and there are different directions one can take on the way. In Europe there is little evidence about "born digital" cultural heritage, because it has been getting born for the last couple of decades, and it is often looked upon as highly experimental, marginalized and immature field. Born digital literature, in particular, has been little addressed by the library and information science, and I haven't found any other libraries or memory institutions working curatorially with this knowledge. Some of the following problems can become potential research questions in the field of digital literature:

- The lack of library and memory institution communication, co-practice and collaboration in terms of “born digital” knowledge
  - Particularly in Europe there is need to organize consortia, library communities or teams which focus on born digital literature
  - There often exist some practices in dissemination and curation of electronic literature in some memory institutions, but they are locked in silos, both physically and digitally: exchanging best practices, ideas, methods and products openly can enhance visibility of this type of knowledge and competence in interacting with it
- Libraries do not take enough initiatives to investigate the nature and usefulness of “born digital” knowledge
  - There is more necessity to embed some librarians in other communities and organizations to harvest knowledge, competence and people who possess them (such as “Digital culture” research group and their ELMCIP database in Norway, for example)
  - Certain research groups, centers, institutions, museums, independent scientists have already done some interesting work in the field (CELL metadata and shared database project for electronic literature, for instance)
- There is constant tension between librarianship and marketing
  - There is a lot libraries can learn from marketing methods to enhance their services, particularly if there is something as new as E-lit
  - Digital marketing is as important as the physical one (there is need to introduce specific strategies for social media presence, blogging, library web-site management etc.)
- The lack of flexible and instinctive online communication platforms for sharing knowledge on born digital literature
- One can start going not only beyond library walls, but also beyond desktop walls into mobile locative environments supported by Ipad and Iphone media devices and with the help of QR, AR and similar technology
  - The Ipad technology can adopt a variety of creative materials
  - Library can be present in remote areas or in areas with many potential users



- Hybrid post-digital environment is a whole new cultural development worth observing and studying
- Information literacy includes literacy in born digital knowledge
  - This literacy embraces both librarians and patrons
- Thinking and developing framework for born digital archiving is one of the most crucial questions for the future of born digital cultural heritage
  - Whose task is it then to take care of knowledge and preserve it for future generations if not of librarians?
  - There exist a number of studies, practices and experiments which involve code and software independent preservation techniques

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