



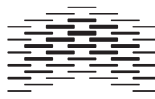
BOBCATSSS 2017 TAMPERE

**IMPROVING QUALITY OF LIFE
THROUGH INFORMATION**

PROCEEDINGS



**UNIVERSITY
OF TAMPERE**



OSLO AND AKERSHUS
UNIVERSITY COLLEGE
OF APPLIED SCIENCES



**Hanzehogeschool
Groningen**
University of Applied Sciences

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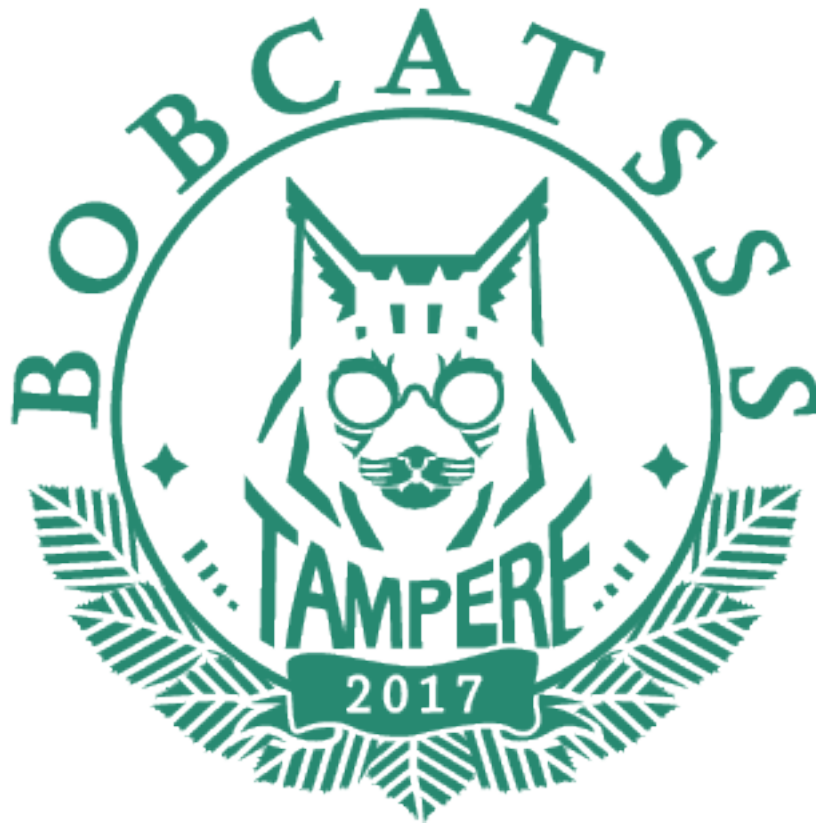
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**BOBCATSSS 2017 TAMPERE
IMPROVING QUALITY OF LIFE
THROUGH INFORMATION**

PROCEEDINGS

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PREFACE

The theme of the 25th BOBCATSSS was “Improving Quality of Life Through Information”. The theme covered three topics: Libraries, Information and Interactive media. We believe that all those topics can improve the quality of our lives and by combining our knowledge and expertise we can make this rapidly changing world a better place to live.

We received exactly 100 abstracts, which were carefully reviewed in a two-phased peer-review process. 57 of the received abstracts were under the theme Library, 24 under the topic Information and 19 under the theme Interactive media. Of the 100 abstracts 77 were accepted and 71 were finally presented at the conference. These proceedings include all of the 46 papers, 17 posters and 8 workshops that were presented at BOBCATSSS 2017.

The 25th BOBCATSSS was organized by teams from University of Tampere, Oslo and Akershus University College, and Hanze University of Applied Sciences. This year, we had over 270 participants from 29 countries attending the symposium. Of course, the conference wouldn't have been possible without the authors, keynote speakers, participants and sponsors, so thank you all!

The organizing team of BOBCATSSS 2017

DISCLAIMER

The opinions in the papers do not necessarily reflect the opinions of the organizing team of BOBCATSSS 2017.

FOREWORD

To celebrate the 25th anniversary of BOBCATSSS, Ruud Bruyns, also known as Father Bobcatsss, gave a speech at the closing ceremony. A part of the original speech has been adapted into this foreword.

During many IFLA conferences, colleagues from library schools and I discussed about possibilities of getting students more involved in international affairs. In 1993, Frederik Muller Akademie, part of the University of Amsterdam, organized an international conference at the National Library in Budapest.

Although the first conference in 1993 cannot be regarded as an official Bobcatsss symposium, we have always considered 1993 as the start of Bobcatsss. We sent invitations to several befriended library-schools in Europe. Seven schools accepted the invitation.

The conference itself was entirely prepared by our students. The conference was such a success that the representatives of the eight library-schools accepted my proposal to organize such an international conference every year.

The theme of the first official Bobcatsss symposium in 1994 was "The Future of Librarianship". During this symposium, a letter of intent was signed and Bobcatsss was officially born. It was Pertti Vakkari of Tampere who suggested the name of Bobcatsss. Besides the acronym of the European cities involved in our cooperation (Budapest, Oslo, Barcelona, Copenhagen, Amsterdam, Tampere, Stuttgart, Sheffield and Szombathely), the name also stands for a wild animal, well known for its aggressive attitude. An image we thought should be very necessary to change the image a librarian had.

How do I see the future of Bobcatsss? Libraries as institutions, where focus is on information to be found in books, are disappearing. Instead, libraries will be seen as institutions where people will be served by all kind of objective information.

Ruud Bruyns

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P A P E R S

AUTOMATED CONTENT ANALYSIS: THE MORE EFFICIENT UNDERSTANDING OF THE INFORMATION

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Keywords: automated content analysis, information selection, text analysis, text mining

Abstract

The internet and electronic contexts contributed to the easy information access to those who did not have the opportunity. Earlier there were two major reasons of failure of getting free information. The one reason is there were not any document collections e. g a library, the other reason is they did not need information even if it would have provided better quality of living. The mass spread of internet, the social media, news portals and other internet services are gradually reducing those circles who appear in the informational society as outsiders. Nowadays the problem is not that there is not enough available information or the devices are not capable of cheaply and effectively spreading the information to the society; but the problem is impossible to see all the available information. We can presume where we can find the information we are looking for but we are distracted from valuable and useful information.

In my research, I was trying to find solutions how we could deal with growing amount of information highlighting the important information so that the human subjectivity has no influence on the results. I think the solution is the automated content analysis. In my study I collected the possible automated content analyzing tools and I also developed methodologies. I hope that with the overview of the topic thoroughly, with the presentation of the methodologies used in practice and its details I can raise awareness of the potential in the automated content analysis tools and my study can provide help to those who would like to get to know the existing and future methodologies. In order to demonstrate the possibility in the automated content analysis thoroughly and understandably I used methodologies in practice and tested them on existing information data.

Introduction

The concept of content analysis has existed for a long while and for example it was used in the World War II to decode the communication of the enemy but it served well in all of the military conflicts. During the Cuban missile crisis, the method of content analysis was used to fathom the intentions of opposing parties.

Nowadays the automated content analysis can be the most important method of the researchers, and that is why I chose this for the topic of my review.

I try to represent through an example what content analysis is. Between 2010 and 2012 they made an experiment in Moscow with the aim of surveying the influence of a 520 days long journey to the Mars on the physical and mental status of the crew. In this experiment a Hungarian research group also took part under the leadership of Dr. János László, who passed away not so long ago. Six volunteers were locked in a 72 square meter simulation container, and they were observed from outside. The email and video messages between the crew and the outside world were analyzed with the method of automated content analyses as time went by and they were interested in how stress affects their communication styles. They analyzed the frequency of the predetermined key words and the context of them.

This is only one method of the innumerable other automated content analysis methods. The automated content analysis method builds on the traditional content analysis methods but only in a few cases are their methods accordant because the traditional content analysis method builds on your sense organs and thinking. On the contrary, in the course of the automated content analysis the computer does the evaluation, with this help you can apply such solutions that would never come to your mind with manual content analysis or would last long.

Nowadays most of the written texts appear in electronic format for example news on a news portal or a belletristic art work and this eases the process of the automated content analysis but this method is often used for reviewing historical documents, too and most of these documents are not digitalized yet. Fortunately, there are more optical character recognition software on the market, which are capable of converting a photo of a document into digital characters, and since the automated content analysis can tolerate a minimal error rate, in most of the cases it is not a problem, if the optical character recognition is not completely accurate.

In this study, I am writing only about written text analyzing deliberately, because my research focuses on this field. However, the automated content analysis can be used for other kinds of contents. When analyzing pictures for example the high definition digital image of the brushstrokes of paintings can be compared with hundreds

of others, and based on these the work arts belonging to the same artist can be matched. Besides these, voice and video recordings can be analyzed with this method, for example for analyzing the intonation and the volume; it can be revealed if the speaker tells the truth about something.

The automated content analysis is such a new field of science that there is no comprehensive specialized literature that can represent the thorough field of applications and methodologies. The researchers are groping; you cannot find teaching materials to tell you when and what algorithms to use. The discipline started developing with the appearance of the first computers when the capacity of the computers reached the point that the evaluation process was reduced from days to hours.

As I earlier mentioned in this paper I am focusing on printed texts, especially on the news portal analysis. The applied techniques can be used for other typed of content analyzing, and it is the special feature of the automated content analysis that there is not a universal solution that can be used efficiently for all types of contents. The fundamental principle is the same with analyzing news or a literary work but the applied technique must be altered according to the aim.

After applying the algorithm, one of the most important tasks is to control the validity and reliability of the results. There is commercially available software which are capable of doing some form of automated textual analysis – first of all with statistical methods. However, we do not know exactly how they work and that is the reason why we do not have the possibility for correction as we do when we use to specific database tailored programme. My case can be a good example when I was working on my own content analyzing software program. I created an algorithm that saved all of the articles from the web news portals for six months into a database. After that, another algorithm split the text into words, with the help of an outer web page, they stemmed the words, and the gathered the coherent expressions. There is commercially available software which is able to do this but I could not have followed the entire process, I only could have seen the results and I could not have controlled the partial results during the process. The other problem is with the ready-made content analyzing software is that they are compatible only in one language; they cannot be applied to all languages universally because of the unique language features. Exceptions are the simpler software working with statistical methods for example the word counter software.

The aim of my research is to map all of the possible automated textual analyzing methods and to get to know their working. I would like to give a general idea which helps the researchers who see potential in it and would like to widen their toolbars. It would be impossible to cover all of the areas where the automated content analysis could be used that is why I specifically focused on the web news portal. In my research, I show the preparation,

the process of the automated content analysis and the practice of the different solutions and I am going to show almost all of the technical descriptions through an example. Throughout my research, I got to know automated textual analysis methodologies and based on these I created software working in practice and I made an actual analysis on a huge sample. Although these software is not perfect and I am programming on a hobby level but I managed to find such results that I can show the process of the automated content analysis not as a dry, technical description.

The process of content analysis of texts

1. The choice of the text

- This can be a digital text for example the articles of news portals or a collection of expressions like the Hungarian National Text Collection of the Research Institute for Linguistics of the Hungarian Academy of Sciences;
- written texts that can be digitalized with optical character recognition software;
- even voice recordings can be the source of content analysis because there are solutions which can be transformed into written texts with high accuracy and you can also use subtitle track.

The automated content analysis I made, plays an important role in this paper that I made in order to try the known methods in practice and make them palpable.

My source was the total articles of three news portals of several months that is 40.540 articles altogether. I saved these articles into a data base in an automated way so that I opened the RSS channels of the news portals and with the help of a script I saved all the contents with date and title. From April to June I only saved the articles of Index[1] and Origo[2] and from July I started to save the articles of Kuruc[3] news portal, too, because I thought that an interesting contrast can be revealed opposite the other two news portals. All of the three news portals publish articles in Hungarian, the Index is left-wing, Origo is right-wing and Kuruc is extreme right-wing sympathizer. I started collecting data from 1st April and finished to 31st October.

2. The purification of the text and making it interpretable for the computer

- While analyzing any kind of written text it will include certain elements that do not belong to the text. In a book for example that can be the page number, the title of the chapters, the topline and the footer or the references; advertisements in the articles of the news portal; the names of the authors and other elements of the website.
- You have to be very careful with text coding, because

several types of coding are used for publishing electronic texts within a language. This can cause problems when analyzing texts together from different sources. These codes are UTF-8 or ISO-8859. You have to merge the texts with different codes before uploading them into the data base.

- After you can find the actual content in the data base, you have to filter the words and characters that are irrelevant to the research. I for example excluded all the articles and punctuations.
- If it is relevant to the content analysis you have to give the computer what whole sentences, capital letters and proper nouns are. It is difficulty because computers cannot understand if the full stop means the end of the sentence or an abbreviation. It can be a solution if we regard the full stop when a capital letter or nothing else stands after that. The result may not be reliable because the capital letter may be a proper noun within the sentence.

3. Formulation of the questions we are looking for answers with the help of the automated content analyzing and what information we would like to get from the text.

I chose a topic that I knew I can find a lot of articles on the three news portals and during my 7 months' data collection period articles would be published, so I would have enough source to work with. This topic is the immigration waves. I was interested in how they write about the events in this interval from April to October, in what contexts they are writing about the immigration and if there is a difference how the three news portals write about the events.

4. The choice of the possible automated content analysis methods

You cannot find a list with all of the possible methods. However, the automated content analysis took over most of the classical content analysis methods, but there are infinite possible methods with the computer. That is why I enumerate the most characteristic ones:

- **frequency analysis:** this is the simplest method, we count the letters and how many times it occurs in the text.
- **analysis of the relations between variables:** with this method, we can map certain data occurring together e.g. we can see how two people think about a given topic so that we examine the context of the words of the topic in each person's case.

With this method, I took the word 'immigrant' with its all possible synonyms and handling these identical, I examined the expressions, with which they regularly appear together. I quantified them and created two groups:

- one contains the names of countries and nationalities
- the other contains the specifically negative expressions e.g. terrorist or suicide assassin

I examined 25 expressions that go with 'immigrant' and its synonyms monthly on each news portal. Here are the most common ones: *terrorist, terrorism, Germany, Hungary, Turkey, government, immigrant reception, Union, quota*. Then I chose the ones with negative contents, and I represented them in a diagram. The results are only from July because this is the month when I had data from all of the three news portals.

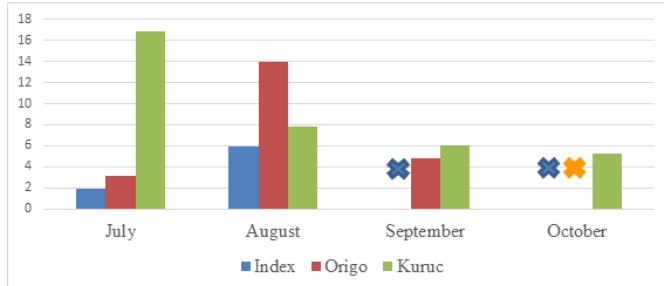


Figure 1: the usage of expressions evoking negative emotions (%)

(The rates of the news portal are not correlated to each other but they show the percentage of the expressions with immigrant and synonym are unequivocally* negative on each news portal.)

It is visible on the diagram that far the most negative expressions are used on Kuruc, the second on the ranking is Origo and on Index they used the fewest expressions evoking negative emotions, in September and October there were not any negative expressions with immigrant and synonyms context. The most negative words were used in August when the Olympic Games were held in Rio and presumably because of the security measures were often used the negative words *terrorist, terrorism* and *emergency*.

The second group I created contained the names of countries and nations, but for simplicity I made no difference between countries and their nations. This way I handled Hungary and Hungarians as one expression. You can find seven countries and their nations in the articles in connection with immigrant and synonyms in the same context. These are: *Hungary, Germany, Turkey, Syria, Afghanistan, Greece, Iraq*.

* <http://szotar.sztaki.hu/search?searchWord=unequivocally&fromlang=eng&tolang=hun&outLanguage=hun>

In my research, I made more demonstrations, this time I am going to introduce only some interesting ones. I examined how many articles appeared about the countries as time went by on each portal.

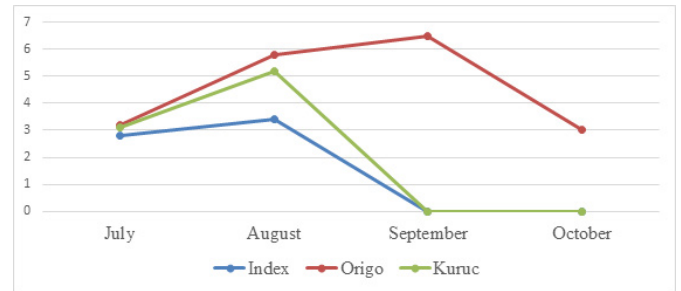


Figure 2: Occurrence of Turkey

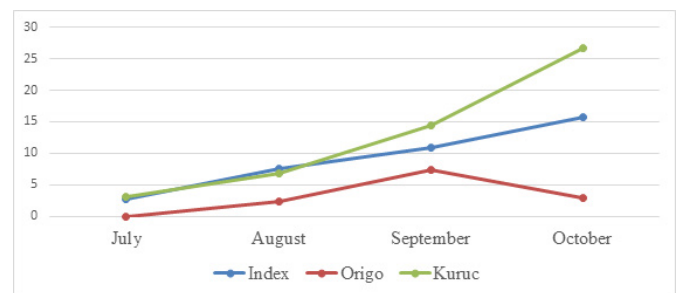


Figure 3: Occurrence of Hungary

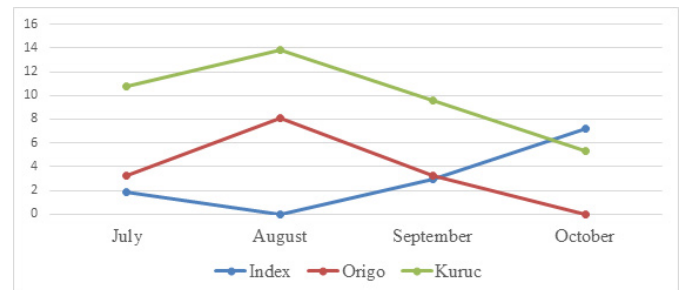


Figure 4: Occurrence of Germany

Now I am continuing the presentation of the possible automated content analysis methods.

- **Contingency analysis:** with this method, we examine the connection between the expression occurring closely together e.g. we can see how often a pair of expressions occur in the articles in a given text part or their occurrence together exclude any other pairs.

I myself created such an algorithm and I am going to list all of their occurrences based on frequency, and hopefully it will be revealed which news portal prefers expressions with other expressions e.g. in what content they use the names of public members. I have not finished running this algorithm but I am going to write more about it in my study.

- **Clustering:** when we find too many occurrences together then we get an uninterpretable aggregation. This time we can use clustering i.e. we gather the coherent words having similar meanings and at a later stage we handle them as identical. We do not examine them each what words they are related with, but we consider the very similar pairs identical. This is a little bit similar to library classification.
- **Contextual organizing:** this is the method when we examine the context of the expression and we try to find synonymous words, expressions and how many common features each expression has in the context. The more common features there are between the two contexts of the different words, the more they can be regarded as synonyms. For example, if the dog and pup regularly occur with kennel than we can set in the content analyzing software if it happens a lot of times, it can regard them as identical nouns.
- **Dictionary based analysis:** this is a simple method but from computer aspect it demands quite a lot of resource. The point is that we take a thematic dictionary which covers a topic area and all of these words are compared to the texts of the content analysis.

I used this method to see the percentage of the positive and negative articles on the three news portals. For me the positive article is about the birth of a baby giraffe and the negative is about a bank robbery.

For the first step, I invoked the free *Szószablya*[4] webpage. It is being developed at the Budapest University of Technology and Economics. On the surface of this page you can type any words, and it gives you the stem and the part of the speech of the word. With the help of a script I entered 9 million 331 thousand words in arrays of 100 and this way I had a data base with the stem and part of the speech of each word.

I needed this for my adjective dictionary. I chose fifty words with manual method that are easy to categorize positive or negative. Like *prize winning, loyal, reliable* on the other hand *radioactive, unfair, fascist*. Adjectives can be positive or negative depending on the context - I learned that during the creation of the dictionary and I did not expect the articles to have positive or negative content based on the adjectives so it became an experiment to see how this solution works.

After creating the positive/ negative adjective dictionary, I compared the 40 thousand articles to the 9 million words and I got positive and negative word numbers in the articles. I consider the article positive or negative if it contains at least 5 adjectives from my dictionary and at least 60% more positive adjectives than negative or vice versa.

The method proved to be surprisingly reliable, the algorithm was able to trace the articles to be positive or negative, the error rate was 5 %. But it was revealed that

my adjective dictionary is too small to be adaptable to so many articles, so my program found only some hundreds of articles containing adjectives from my dictionary.

Here are the results:

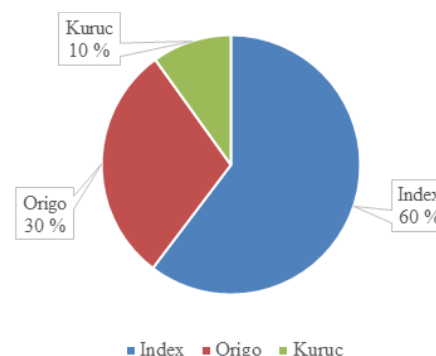


Figure 5: The division of the positive and negative articles on the three news portals

This is not a surprising result, the statistics contained the scientific, cultural and sport articles, too. If it had only the political and economic news, the diagram would be different.

Since I had been collecting the published contents of Index and Origo from April and from Kuruc from July plus the number of the articles on the 3 portals were not the same so I had to find a solution to make them comparable. I calculated how many articles are published on each portal in a month then I weighted the values so that the positive and negative adjective numbers are comparable.

Here are the results:

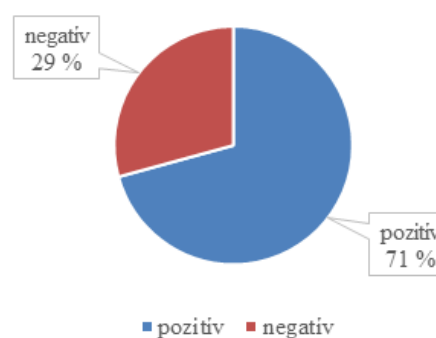


Figure 6: The division of the positive articles on the three portals after weighting

5. Running the algorithms on all the articles and the storage of the results in the data base

You have to pay attention to store the results so that they can be used numerically e.g. the nouns with should be 1 in the data base and the adjectives number 2 etc. It is always easier to work with numbers e.g. you enter the results into Excel you find it easier to make diagrams, demonstrations when all of the attributes have a number.

6. Checking

One of the most important thing is during the automated context analysis that you should not believe if one algorithm works with a text group it will also work with another. It is worth doing some of the calculation manually too and you have to check the reason of the salient results.

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[1] URL: <http://index.hu> (15. december 2016.)

[2] URL: <http://origo.hu> (15. december 2016.)

[3] URL: <http://kuruc.info> (15. december 2016.)

[4] URL: <http://szotar.mokk.bme.hu/szoszablya/searchq.php> (15. december 2016.)

AVAILABILITY AND ACCESSIBILITY OF EDUCATIONAL INFORMATION TO LEARNERS IN SELECTED HIGH SCHOOLS IN SOUTH AFRICA

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Abstract

Despite achievement by the South African government in increasing access to education, the goal of quality education is yet to be realized in South African schools. Inadequate provision of learning resources and constrained access to educational information by learners remain daunting. Underpinned by the jurisprudential theories of freedom of speech as augmented by theory of access, the study investigated the educational information available and accessible to the learners in selected high schools in the Fort Beaufort education district, Eastern Cape Province of South Africa. It attempts to establish the reality of availability and accessibility to educational information in the selected schools. A triangulated approach was adopted to collect data from Grade 12 learners, teachers, and librarians.

The results showed that learners experienced accessibility constraints to some among the ten categories of educational information listed in the survey instrument. Respondents admitted six of the educational information were accessible in the schools, however, they were not sure of the accessibility of information on requirements for admission to universities, guidance and counselling information e.g. career guidance, information on sex education and Information and Communication Technologies (ICTs) education. To ensure adequate access to and provision of educational information, it is recommended that engagement of librarians to facilitate robust collection development and support access to the educational information become imperative. This will require an articulated legislated school library policy.

Introduction

The information revolution has brought about a lot of improvements on every aspect of human endeavour. The revolution is characterised by a multiplication in the quantity of information available in time and space and the possibilities of access to such information using multimedia technologies (White, 2009; Khan & Shafique, 2011; Kadiri & Adetoro, 2012). These developments have impacted on all sectors of human engagements of which the knowledge industry is not an exemption. Information has always been vital to knowledge acquisition and educational information especially as it is imperative to the attainment of quality education (Sarriluoma, 2006). Formal learning has metamorphosed from teacher-centred form of learning to learner-centred as a result of the possibilities of access to various types of information by learners themselves coupled with the need for learners to engage in critical thinking and experience social transformation (Ranaweera, 2008; Chipeta, 2008). Thus, learners cannot achieve beyond their level of access to educational information.

Besides, learners cannot fully exercise their right to education if they lack access to educational information. Adorno and Cardia (2013) asserted that access to information is indispensable to the translation of citizens' legal right to living rights, of which the citizen's social inclusion and participation in transformation of the society are fundamental. Further, education quality is highly dependent on information-rich environment and learners' ability to explore the maze of information available within and outside their immediate learning environment (Ranaweera, 2008; Abdoll & Barberton, 2014).

The level of achievement in the Senior Certificate examination in the Fort Beaufort Education District of Eastern Cape has been worrisome. The report from the Department of Basic Education [DBE] (2013) revealed that in the last three years, Eastern Cape had recorded the lowest pass rate in the National Senior certificate (NSC) examination. The same report also indicated that the Fort Beaufort Education district, which is the area of this study, had the lowest NSC examination pass rate in 2013. The result was below the Province and National average pass rate of 64.9% and 78.2% respectively (DBE, 2013). Availability and accessibility of educational information by high school learners in the District is in no doubt a factor to be considered if a positive change is to be expected.

Research Objective

The objective of the study is to find out the types of educational information available and accessible to Fort Beaufort Education District high school learners.

Research Questions

- What are the types of educational information available to the Fort Beaufort Education high school learners?
- What are the types of educational information accessible to the Fort Beaufort Education high school learners?

Literature Review

Ugah (2008) in a study on the availability and accessibility of information sources and the use of library services at Michael Okpara University of Agriculture found that information resources were neither available nor accessible to the students and when these resources were available, they were not accessible to the students. Also the students affirmed that their use of information resources was greatly dependent on the availability and accessibility of the information resources.

Adeoye and Popoola (2011) discovered a high level of availability and accessibility of information resources for teaching staffs in schools examined in their study. Contrariwise, they observed that information resources in some of the libraries were kept from the reach of students while they were made available and accessible to teachers. This was seen by these researchers as an aberration in library practice because everyone should be entitled to access all available information resources in the library. They also reported that each of the variables; availability, accessibility and use of library information resources had a significant positive correlation with the effectiveness of teaching staffs. Similarly, the availability of relevant educational information and proper accessibility of such information by learners would encourage improved performances among learners. Adeoye and Popoola (2011) however noted that some of the libraries were underdeveloped as regards the facilities available in the library and the arrangement of materials within the library.

Owate and Okpa (2013) in an assessment of the availability and utilization of school library resources in some selected secondary schools in Rivers State, Nigeria discovered that library resources were not available in most of the schools. Findings revealed that where a library existed, the library resources were inadequate. Seven of the eight secondary schools that were studied did not meet the minimum standard requirement for a school library. Also, none of the schools had a post for a school librarian as the libraries were run by a library clerk or full time teacher especially English teachers without any library training background. The study further revealed that students had access to the library only during school hours. This was attributed to the fact that there was no qualified librarian to man the activities of the library. However, both teachers and students in the studied schools affirmed that the use of library enhances learning and the development of a reading habit in students.

Ishola and Obadare (2014) reported a high level of availability and accessibility of information resources in the academic libraries assessed. Surprisingly, responses from students revealed that the students found it really challenging to access and use needed information. As reported in the study, the constraints include: inability to get relevant materials, delay in receiving requested materials, spending personal financial resources to buy substitute materials, inability to access the Internet, low speed of internet services and cost of access to the internet as great barriers to their use of information resources. Further, lack of computer competency, frequent request to pay for online resources, poor retrieval skills, irrelevance of retrieved information, and shortage of time to search needed information and the belief that the library resources were obsolete were identified as challenges to the use of information resources by the students.

Theoretical Framework

This research borrows from Jurisprudential theories of freedom of speech (Oltmann, 2009) and Ribot and Peluso's (2003) theory of access. The study holds that access to information is a function of the combination of availability and accessibility of needed information coupled with the ability of learners to benefit from the information. This implies that if learners are to have access to educational information, relevant educational information resources must be available in schools and beyond this, be made accessible to the learners.

Methodology

The study population is the Fort Beaufort Education District Grade 12 learners. The estimated population size of the Grade 12 learners was 1905 as obtained from the Eastern Cape Department of Education. The study adopted multi-stage sampling technique. The sample size was calculated using "Raosoft" sample size calculator with an error margin of 5%. A confidence level of 95% and an estimated population of 1905 Grade 12 learners yielded a sample size of 320 learners. A mixed method approach was utilized to obtain data from 331 grade 12 learners and 29 teachers. Data collected was analysed using the statistical package for social science (SPSS) in order to answer the research questions.

Profile of the learners' and non-learners' (Respondents)

The respondents comprised 331 learners and 29 educators. 158 (47.7%) of the learners were males and 173 (52.3%) females while the non-learner respondents were 9 (28.6%) males and 20 (71.4%) females. It is also significant to note that majority (96.1%) of the learners prefer

to access information in English language.

Data regarding availability of educational information within the school were collected from the educators, while the learners were requested to indicate the accessibility of the listed educational information within their school. Results are presented as follows:

Table 1: Availability of educational information as indicated by Educators

| Educational information available | Overall Mean item score | Mean Item score for the schools | | | |
|---|-------------------------|---------------------------------|-------------|-------------|-------------|
| | | JAB | NTA | SAK | WIN |
| Information on class room assignments and homework | 4.07 | 4.17 | 4.00 | 4.25 | 3.71 |
| Information on requirements for admission to universities for further studies | 3.93 | 4.00 | 3.50 | 4.13 | 3.71 |
| Guidance/ counselling information e.g. career guidance | 3.79 | 4.00 | 2.00 | 4.25 | 3.43 |
| Information on all the subjects taught at school | 3.76 | 4.42 | 4.00 | 2.88 | 3.57 |
| Information on sex education | 3.76 | 3.83 | 2.50 | 3.88 | 3.86 |
| Information on skills and vocational education | 3.66 | 3.83 | 1.50 | 4.00 | 3.57 |
| Information on reading culture | 3.52 | 3.50 | 2.50 | 4.00 | 3.29 |
| Information on developing literacy skills | 3.52 | 3.50 | 2.00 | 4.13 | 3.29 |
| Information on soft skills e.g. leadership skills, communication skills, confidence skills etc. | 3.45 | 3.58 | 2.00 | 4.00 | 3.00 |
| Information and Communication Technologies education | 3.07 | 3.08 | 1.50 | 2.63 | 4.00 |
| Pooled Average | 3.65 | 3.79 | 2.55 | 3.82 | 3.54 |

Readily Available Available Rarely Available Not Available Not available at all
 5 4.5 3.5 2.5 1.5 1.0

As indicated in Table 1, the listed types of educational information were available. However, information on soft skills and Information and Communication Technologies education were rarely available as revealed by the mean item scores 3.45 and 3.07 respectively. The undesirable state of the pedagogical application of ICT in high schools has been reported in previous studies (Aduwa-Ogiegbaen & Iyamu, 2005; Ajayi & Ekundayo, 2009 and Ndlovu, 2012).

The researcher further requested for an indication of the medium through which the different categories of educational information were made available at school. The result is presented in Table 2 below.

Table 2: Medium of availability of educational information in the schools as indicated by Educators

| Educational Information | Medium of Availability | | | | |
|---|------------------------|------------|------------|-----------|-------------|
| | Print | Electronic | Verbal | Others | Total |
| Guidance and Counselling information: Such as choice of career in tertiary institution | 15 (51.7%) | 2 (6.9%) | 18 (62.1%) | - | 35 (120.7%) |
| Information on all the subjects taught at school | 20 (69%) | 6 (20.7%) | 12 (41.4%) | 2 (6.9%) | 40 (137.9%) |
| Information on requirements for admission to universities for further studies | 19 (65.5%) | 5 (17.2%) | 10 (34.5%) | 1 (3.4%) | 35 (120.7%) |
| Information on classroom assignments and homework | 20 (69%) | 3 (10.3%) | 14 (48.3%) | 1 (3.4%) | 38 (131.0%) |
| Information and Communication Technology education | 12 (41.4%) | 4 (13.8%) | 11 (37.9%) | 4 (13.8%) | 31 (106.9%) |
| Information on sex education | 16 (55.2%) | 2 (6.9%) | 17 (58.6%) | 2 (6.9%) | 37 (127.6%) |
| Information on life skills and vocational education | 14 (48.3%) | 3 (10.3%) | 15 (51.7%) | 5 (17.2%) | 37 (127.6%) |
| Information on soft skills e.g. leadership skills, communication skills, confidence skills etc. | 14 (48.3%) | 17 (58.6%) | 1 (3.4%) | - | 32 (110.3%) |
| Information on reading culture | 16 (55.2%) | 4 (13.8%) | 14 (48.3%) | 3 (10.3%) | 37 (127.6%) |
| Information on developing literacy skills | 15 (51.7%) | 4 (13.8%) | 15 (51.7%) | 2 (6.9%) | 36 (124.1%) |

*(The percentage added up to more than 100 percent because the educator could choose more than one option)

Table 2 revealed that electronic channels were not so much utilized, while the verbal and the print medium were mostly the format of available educational information. This is consistent with the discovery on the state of Information and Communication Technology education in the schools as indicated in Table 1. Scholars have advocated the need for a redress in ICT education in high schools (Aduwa-Ogiegbaen & Iyamu, 2005; Ng, 2012; Ndlovu, 2012).

In line with the theoretical framework of this study, which stated that access is a function of availability, accessibility and ability, the researcher sought to find out the accessibility of available educational information to learners. The learners were requested to rate their access to the ten categories of educational information at school. The result is shown in Table 3.

Table 3: Types of educational information accessible by learners

| Educational Information accessible | Overall MIS | Mean Item score for the schools | | | |
|--|-------------|---------------------------------|-------------|-------------|-------------|
| | | JAB | NTA | SAK | WIN |
| Information on classroom assignment and homework | 3.92 | 4.04 | 3.90 | 3.87 | 3.77 |
| Information on all subject taught at school | 3.71 | 3.73 | 3.74 | 3.58 | 3.82 |
| Information on developing literacy skills | 3.64 | 3.61 | 3.64 | 3.49 | 3.98 |
| Information on life skills and vocational education | 3.56 | 3.82 | 3.38 | 3.66 | 3.30 |
| Information on soft skills e.g. leadership skills, confidence etc. | 3.54 | 3.54 | 3.45 | 3.49 | 3.89 |
| Information on reading culture | 3.51 | 3.62 | 3.58 | 3.44 | 3.18 |
| Guidance and counselling information e.g. career guidance | 3.36 | 3.77 | 3.04 | 3.38 | 3.30 |
| Information on admission to universities | 3.29 | 3.65 | 3.18 | 2.92 | 3.50 |
| Information and communication technologies (ICTs) education | 2.98 | 3.34 | 2.54 | 3.13 | 3.11 |
| Information on sex education | 2.94 | 3.37 | 2.97 | 2.48 | 2.80 |
| Pooled Average | 3.45 | 3.65 | 3.34 | 3.29 | 3.87 |

| | | | | | | | |
|---|---|------------|----------|----------------|-----------------------|-----|---|
| 5 | ← | 4.5 | 3.5 | 2.5 | 1.5 | 1.0 | → |
| | | Accessible | Not sure | Not accessible | Not accessible at all | | |

Judging from the overall mean item score in Table 3, the respondents indicated that six out of the ten categories of educational information listed in the survey were accessible. However, learners were not sure of the accessibility of Guidance and Counselling information e.g. career guidance; Information on admission to universities; Information and communication technologies (ICTs) education and Information on sex education.

Discussion of Findings

No matter how straight to the point any information is, if accessing it proves difficult, it may reduce its worth to information users (Weiler, 2005). This explains why it is not sufficient for educational information to be available; accessibility of the provided information is just as important as its availability. In the assessment above, findings revealed that educators claimed all the ten types of information were available in the schools, however, learners seemed to be ignorant of the availability of some of these information in their school. The ease of access of available information to learners should be taken as seri-

ously as the provision of the information. Weiler (2005) pointed out that the present generation of learners are more concerned with the ease of access to information than they are concerned about the accuracy of the information. Naturally, people would settle for the use of information they can easily access rather than the ones that seem to take forever to access. Therefore, there is the need for educators to create awareness about educational information available in the school.

Among the listed educational information educational information in the assessment above, Information on soft skills and Information and communication technologies (ICTs) education were indicated as rarely available in the schools. It was also discovered that the use of electronic resources was wanting in the schools as reflected in the investigation on the medium of availability of the education information. This reiterates the need for the integration and application of ICT in the education of high school learners as widely advocated in literature (Aduwa-Ogiegbaen & Iyamu, 2005; Ajayi & Ekundayo, 2009; Ndlovu, 2012; and Ng, 2012).

Further, attention should be given to the accessibility of Guidance and Counselling information e.g. career guidance; Information on admission to universities; Information and communication technologies (ICTs) education and Information on sex education in high schools as respondents in this study claimed they were not sure of access to these information in their school. Previous researchers have also reported the lack of the abovementioned information in schools (Ajayi & Ekundayo, 2009; Balogun, 2011; Ndlovu, 2012; Dabula & Makura, 2013 among others). It has been affirmed that the lack of career guidance and counselling in high schools is a major reason for the difficulties learners face in their transition from high school to college (Mochizuki, 2011; Soumeli, 2012; Oye, Obi, Mohd & Bernice, 2012; Dabula & Makura, 2013).

In conclusion, the availability of educational information in high schools influences the quality of education learners would be able to receive from the school. Meanwhile, accessibility is the proof of availability, hence, it would be ironic to claim an information is available when it is inaccessible. Research has also asserted that use is a by-product of availability and accessibility, meaning, the use of an educational information resource for learners' academic development is dependent on its availability and accessibility (Ugah, 2008; Adeoye & Popoola, 2011; Ani, 2013). Beyond the increasing school enrolment in South Africa (World Bank, 2012; OECD, 2013), there is the need to ensure adequate provision of needed educational information and proper accessibility to provided educational information by learners in schools if quality education must be attained.

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BANNED? TOLERATED? SUPPORTED?

THE APPEARANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY DEVICES IN PUBLIC EDUCATION

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Abstract

A significant part of the questions that define the 21st century derive from the differences of generations, the world views that have changed through the years and the differences in values, which can be correlated, among other things, with the attitude towards new technology, the transformation of families and the behavioural patterns that the individuals create for themselves. In my research, I would, among other things, like to highlight the importance and usefulness of the application of online and offline devices in classes. Nevertheless, I would like to offer alternatives to a more effective and smooth usage, with the help of applications that help learning and serve educational functions and that can be found on different platforms, possibly by studying applications that are possible to use in institutions of public education with more modest infrastructure.

The answers of the eighty-seven (87) teachers and sixty-nine (69) students are the basis for the analysis of the ICT devices, how useful are those and the possible needs in public education. The texture of the two is the same in big part, all two ask from private life, knowledge of devices, using devices in school and home, personal opinions, the teachers' attitude and using library. The most common contra is that they can be used more than one things at the same time they can distract the students' attention from the curriculum. The bringing of the critical thinking in public education and the competency-based teaching can be viable when the teachers recognize the needs of the education reform.

My research made the view of the Hungarian education and our National Curriculum, a national comparison is part of one of my future projects.

Introduction

The continuous change in the world around us is increasingly present in our everyday life due to the speedy flow of information. We are exposed to continuous change, expectations we are expected to give instant reactions. This has a huge influence on us, our personalities and studies, too. The technical inventions are following this acceleration but the question is if the educational system is able to keep pace with these changes. In this paper, I am trying to find answers to these questions.

In my presentation, I am going to analyse the most prominent results in the short time available.

Questions in researching, hypotheses

The teachers are using only a limited segment of ICT tools in the lessons in the secondary schools. In my opinion most of the teachers do not take the advantages of the wide range of ICT tools, most of them do not enrich the lessons for example with slide shows in the frontal teaching. Although the ICT tools are present in the everyday life but during lessons some of them reject them.

The educational institutions are facing difficulties. The ICT tools, which can make the lessons more interesting and efficient, are not cheap. Only a little proportion of the students use their smart phones or tablets available for learning. The free applications that can help you learn have a narrow circle of users and teachers do not allow to use them in the lessons. The free applications are full of advertisements.

The technique of research:

My research has started with reviewing and analysing the national and international literature. That was important for me to examine this topic with empirical techniques too, because the development of informatics and technology are faster, than the appearance of literature, and this way I got the most accurate and most immediate answers from the experiences of the latest technologies.

I asked teachers and students from public education to fill out an electronic questionnaire that I made with Google. They all got full anonymity, that was important for me too.

The answers of the eighty-seven (87) teachers and sixty-nine (69) students are the basis for the analysis of the ICT devices, how useful are those and the possible needs in public education. It's necessary to compare the answers from the two groups, because the different standpoints and expectations are have to complied. For the easier comparison, I had made those questionnaires with overlaps to I can evaluate them later quickly. The texture of the two is the same in big part, all two ask from private life, knowledge of devices, using devices in school and home, personal opinions, the teachers' attitude and using

library. More about that I will return in a later section of my dissertation.

The review of the answers of questionnaire, the comparison of the opinions of the two groups.

I want to focus on to using ICT devices in daily routine instead of analysing the answers of questionnaire in detail. I want to point at the importance and utility of using online devices on lessons with my research. Another part of my dissertation has a task to acquaints the available applications with educational functions on different platforms those who can use it, example teachers.

I want to highlight some interesting questions from my questionnaire survey. I have to emphasize those questions which ask about the knowledge of using ICT devices in private life or school lessons. This table (Table 1.) shows the answers from the teachers and students for the question of knowledge of ICT devices in details below. Both groups have the highest numbers at the opportunity of "using in private life" smartphones and PC-s. Using there results we have to make more attention to use these devices in public education. The smartphones, PC-s, tablets versatile usability can improves public education's efficiency. The students get visual impulses thanks to these devices, the lessons can become interactives and this can cause more attention from students.

I surveyed what the teachers and students think about each ICT devices or using them on lessons. I made twelve allegations, those can see in the following table with replies.

Table 1. Opinions about the allegations of the ICT devices.

| | Teacher | | | | Student | | | |
|--|---------|----------|-------------|----------|---------|----------|-------------|----------|
| | Agree | Disagree | Do not know | No reply | Agree | Disagree | Do not know | No reply |
| Smartphones and tablets can be useful more ways these can distract students from learning. | 37 | 39 | 10 | 1 | 44 | 21 | 0 | 4 |
| Using PC-s is unnecessary, because don't cause big difference against traditional education. | 1 | 84 | 1 | 1 | 4 | 62 | 0 | 3 |
| Using projection of sketch for presentation on lessons isn't recommended because it can distract students' attention from the teacher. | 5 | 73 | 8 | 1 | 17 | 50 | 0 | 2 |
| Teacher doesn't need to show more information with projection, because it doesn't have positive efficiency. | 1 | 84 | 1 | 1 | 4 | 31 | 0 | 4 |
| Using interactive boards is unnecessary and make hard situation for teachers. | 5 | 76 | 5 | 1 | 10 | 55 | 0 | 4 |
| Using interactive boards helps students to listen more time and make lessons interesting for them. | 78 | 2 | 4 | 3 | 58 | 5 | 0 | 6 |
| E-books aren't useful in education, using them don't change the efficiency of learning. | 2 | 72 | 11 | 2 | 19 | 46 | 0 | 4 |
| E-books and digital databases for studies can be cost saving for schools and families if these expand in public education. | 59 | 9 | 17 | 2 | 51 | 15 | 0 | 3 |
| I would rather use cam if I have chance to do it on lessons to record the work or do project with it. | 56 | 18 | 11 | 2 | 29 | 37 | 0 | 3 |
| It can be important for public education to appears e-book readers in massive numbers in public education system. | 44 | 19 | 23 | 1 | 35 | 31 | 0 | 3 |
| The installation of smart devices into education can makes hard situation for teachers, because of this we shall ignore this move. | 11 | 60 | 15 | 1 | 32 | 34 | 0 | 3 |
| The installation of smart devices into public education makes notable advantage. | 57 | 13 | 15 | 2 | 32 | 33 | 0 | 4 |

The allegations connect some interesting to data. As it seems my allegations when I speak negatively from ICT devices made clear disagreement from the teachers and the students think the same.

These cause questions example: Why ICT devices using for help is forbidden on some lessons? Why don't use more times interactive boards where it appears? Why the teachers reject using smartphones?

Teachers have realized that the twentieth century's education method has obsoleted they need new ways and devices on lessons, they have to change the homework, but this isn't dominate in real life. For example, another question from my questionnaire, after I researched and analysed the literature of generations and used my own experiences. I made ten allegations from 'Z' generation's students. The answers can be seen in the next table.

Table 2. Opinions from the allegations of Z generation.

| | Teacher | | | Student | | |
|---|---------|----------|----------|---------|----------|----------|
| | Agree | Disagree | No reply | Agree | Disagree | No reply |
| Nowadays students need life filled with impulses. | 81 | 4 | 2 | 54 | 10 | 5 |
| Nowadays students typically do everything when they think it must be done. (Just in time) | 58 | 20 | 9 | 56 | 8 | 5 |
| Nowadays students can focus more than one thing in the same time. | 57 | 27 | 3 | 41 | 23 | 5 |
| Nowadays students make quick decisions. | 53 | 23 | 11 | 29 | 36 | 4 |
| Nowadays students motivated by rewards and prizes. | 65 | 16 | 6 | 56 | 10 | 3 |
| Visual impulses are more effective for nowadays students. | 86 | 1 | 0 | 60 | 6 | 3 |
| Nowadays students easier begin anything than their ancestors. | 24 | 48 | 15 | 29 | 36 | 4 |
| Nowadays students prefer public life than private. | 56 | 19 | 12 | 41 | 24 | 4 |
| Nowadays students didn't become smarter than their ancestors just start to thinking on different ways. | 73 | 9 | 5 | 53 | 11 | 5 |
| More important for nowadays students the visual teaching, learning things experimental way and learned things installation into his life. | 63 | 12 | 12 | 49 | 16 | 4 |

Both groups had this question. I was interested what the students think about their generation, and how the teachers see the next generation they work with it. Most of the composed allegations got the same numbers from each groups, expect the 7th allegation: "Nowadays students easier begin anything than their ancestors." According to stereotypes nowadays students better sense of initiative and more open-minded like their ancestors. They ask easy and quick, and make decisions faster against problems. The questionnaire's participants disagreed these allegations above.

There are real contradictions if we start from the Z generation spends more time online in virtual spaces. They rather type an email or text SMS than pick up phone to call. This prove my allegation wasn't correct. There was a question about the possibility and importance of using ICT devices on lessons. The biggest part of the teachers' group thought that ICT devices could be useful in lessons. Most of them doesn't have a chance to use them, but the massive numbers of smartphones can be the expectation.

The students don't accept the teachers' group opinion about this question. They think the smartphones and tablets are unnecessary on lessons. This caused by they use their smart devices for joy like connecting to social media, take photos, play games, they don't use the full competitive of these devices.

There was a question for students. There were twelve possible ICT devices but they chosen most the interactive board and they want to use PC-s, and projectors too. They need it to get out from the lessons' monotonicity for seconds.

Summary

I have three devices on my list, those appear most of the schools. The teachers and students don't have to have those and them make more efficient studying in school. Of course, these are Pc, projector and interactive board. These are the most used devices on lessons, but there are same teachers who have the chance to use interactive board, but they don't. There was a question for students that 'What ICT device your advice for your teacher to use on lessons to improve those?' The 77% picked the interactive board, 80% thought it can makes lessons better and make studies easier. The 87% of answers disagreed that the interactive board can makes hard situations for teachers, but still is an ignored device.

For the question about "How often do you want to use ICT devices?" both picked the „more times a week" answer. Concluding from students' device using habits, they need ICT devices on every lesson.

I realized a contradiction after I analysed their answers. They realized that use PC-s, projectors, interactive boards is necessary and ICT devices can be useful too. The 66% of them agreed to use, but my personal experiences are they don't use these.

Outlook

Category 1.: Opportunities with browser Mozaik education

There are few compilation for course books, but with a little search everybody can find interesting documents. Example the by created the Mozaik course book family. This can build from basic to expert with logical following books with more information and pictures, explains on the website. There are two different options one for teachers and the other for students. The site needs tablet to be useful, but I think this price for high quality and quantity of teach will return in the future when we thinking on university or collage.

WordHippo

WordHippo is a site for English classes. For first see it looks like any other dictionary, but it isn't. It can search words, if we know how many words it contains, or we know only the first and last words. Also looking for synonyms fill out half words. As we see it can makes tasks for student lesson. Luckily it need only PC and internet.

Category 2.: Applications

Integrate smartphones, tablets into classwork with free apps. No matter what kind of operation-system do you run, there will be an application for almost everything.

Duolingo

Another language learning help but the only mistake is only Hungarian-English is able. If you want to learn other language you first need to increase your English to expert. We can collect little coins for finishing tasks. The system will be useful for History, example studying dates.

Precautions for possibility

There can be a wrong side to using ICT devices on lessons, because those can be useful many ways and distract attention. Half of the teachers thought the same way and the other half have opponent opinion. This mistrustful can contains the teachers can't use devices well, don't know these devices' potential and finally somehow students can use them better than teachers.

Students can't be the only reason to ignore these ICT devices. There are so many way to block websites with passwords etc. For example some software Net Nanny, Norton Online Family, McAfee Safe Eyes. Parents also have the responsibility to teach home their child/children how to use internet safe and useful.

These reforms can be if the teachers will realize how important this could be. My opinion is we shall start with the next teacher generation, because elder teachers can't change their way to teach, but they are important for the next generation to share their experiences with the newest. I want to change the method of education and to see different to Z and Alfa generations with my dissertation.

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BIBLIODEBOUT: A COLLABORATIVE LIBRARY IN A SOCIAL MOVEMENT

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Abstract

An unexpected political mobilisation leads to the occupation of a large number of public squares in French cities from the end of March to July 2016. In those Nuits Debout, a collective starts up BiblioDebout, a participative library working on a gift basis. Through participative observations and text analysis of the collective's mailing lists, this paper studies how BiblioDebout expresses a specific relationship between knowledge and power, and, therefore, emancipation. BiblioDebout is utopian, egalitarian, emotional and experimental, and so on could be an inspiration for public libraries willing to renew with their political vocation.

Introduction

Several institutions, like Eurostat (Eurostat, 2016) or INSEE (INSEE, 2010) in France, have established that participation in the political life is a criterion of quality of life. This participation is based on the citizen's capacity for action and on their recognition as stakeholders involved in the democratic process. Their electoral weight can help to their recognition, but in France today, more than the electoral process, the participatory process is considered in better place to empower people and to make them take part in the governance and decision processes.

This citizen capacity for political action was, in France, the subject of a contestation movement named *Nuit Debout*. From the end of March to July 2016, some public squares were occupied, becoming the theatre of debates on various subjects (from work conditions to ecological questions, as well as education, security, constitution...). If this movement begun in reaction to the Work Law, proposed by the socialist minister El Khomri, it was created with the willingness to retrieve a democratic ideal of debate and public space, drawing a communal desire to work together for a better life in society.

This movement gave birth to a participative library, *Bibliodebout*, especially active in Paris, Lyon and Toulouse. This paper studies this space of documentation and information, which spontaneously came along with a mobilization centered on the capacity for action and the participation in building democracy. If the quality of life depends on our capacity for action, we ought to ask which resources participate in its development, and question the role of knowledge in an empowerment project.

French libraries were built on an emancipation project, which was based on the knowledge democratisation. Currently, this principle, that admits an inequality between the emancipator (the librarian) and the emancipated, is going to be transformed. In this paper, we aim to verify if *BiblioDebout* is a fulfilment for another practice of emancipation. This way to think and practice emancipation could be a bit utopian, more egalitarian, maybe emotional, but also experimental.

To verify those hypotheses, we conducted participative observations in the *BiblioDebout* of Lyon. Following the hashtag #*BiblioDebout* on Twitter and the *BiblioDebout*'s mailing lists, we observed the exchanges between members, their questions and doubts throughout the movement. We accumulated data on organizers, participants, visitors of the library, their interactions, the building of the content and the discussions about it.

Literature review

For the political philosophy, the relation between knowledge and power is often thought as dependent on each other. For Aristote, the "skholè" (spared time for study, which gives the French term "école" (school)) is the condition to political actions (Aristote, 1996). Only the elites, who have time to study, could act in politics, as they possess the knowledge to make thoughtful decisions. On a more contemporary point of view, for Foucault the genealogical and archeological study of our society allow us to understand the "dispositifs" working inside to not be just dominated by them, but to be able to change them and to go against them (Foucault, 1976).

Even if this dependent relation is pretty clear, there are some controversial about the actual possibility to transform this dependence in a real action. For Platon, it is by the sacrifice of serenity and contemplation that the one who have seen the ideas will accept to free the others and, eventually, to become a philosopher king (Platon, 2008). On a different point of view, contemporary criticisms of the relations between knowledge and power are studying essentially the power limits. In this way, Habermas (Habermas, 1987) said that the power is, before anything else, in the transmission of ideas and arguments in acknowledged public spheres. For Bourdieu to know and to identify what is dominating us is not enough to act; knowing does not set free and does not offer power. Lastly, for the Spanish philosopher Daniel Innerarity, in a knowledge society as the one in which we live in this 21th century, it is impossible to say that knowledge is helping to take a decision and we have to admit that ignorance and forgetting are also conditions of the political action (Innerarity, 2015).

If these criticisms offer to question the conditional relation between knowledge and politics, they have the default to be more interested by the power than by the knowledge. On the other hand, two authors bring a glance at the power and the knowledge in a conditional and transformed way. For John Dewey, to act inside the society, it is necessary to possess knowledge, which we can build only collectively, in the individual appropriation thought process, already turned toward action and relative to participation (Dewey, 2009). In other words, it is by participation that we develop the knowledge and the power of action. The experimental dimension of Dewey allows to link in a double condition the two terms.

In France, Jacques Rancière suggests another approach in which the emancipator is as much knowledgeable as the emancipated. Thus, the emancipator offers to the emancipated development conditions for his emancipation, more than knowledge itself (Rancière, 2010). In this way, knowledge and its acquisition are already an act of emancipation and a political action. The notions of equality and liberty are summoned as an articulation between knowledge and power for these two authors.

Methodology

In this article, we will observe the relation between knowledge and power, between equality and inequality, between freedom and domination, through a participative library organized within a political mobilisation.

In order to verify our hypotheses, we conducted first participative observations. We took actively part seventeen times in BiblioDebout Lyon, with others bibliodeboutistes[1]. Our observations were made in Lyon, in a BiblioDebout group made on the Paris model. In Lyon, the BiblioDebout was created 14 April 2016 at the Guichard square, became wandering 1 June and finally stopped 22 October 2016. Eleven of our observations were between its creation and the mobility period, six were during its wandering period. This group held a long time, in a particular way, because when the square of Nuit Debout Lyon was evacuated, the BiblioDebout became nomadic and moved itself in different places and events in Lyon and its suburban areas. It was not possible for us to come at all the operations and to observe every day, from the opening to the closing of BiblioDebout (BD). That is why our data are more qualitatives than quantitatives.

Moreover, we followed the national mailing list of BiblioDebout and the mailing list of BiblioDebout Lyon. In this one, there were few exchanges, which were mostly organizational, for example to confirm the dates or to mobilize people. Sometimes, a report was made to relate the last operation. The national list was more used to organize the Paris' library, to tell relate every night's interactions, but also to debates on a national plan on some difficulties points (selection of books, problem with people, etc.). We have begun to follow this list 21 April 2016 ; today, in December 2016, some messages are still sent. We wrote three messages on this list: once individually (Raphaëlle Bats) to take part in one of the conversations about the documents, one to communicate about the dates of BiblioDebout Lyon (Marilou Pain) and once as a binomial to inform the participants of this article. We studied qualitatively the text of the two mailing lists by going through the 381 messages.

Finally, the BiblioDebout's website[2] was another source of information about the events.

Results & Discussion

It is important to remember that our results are not quantitative, but qualitative. The sources coming from the observation will be noted (BD Lyon, date) and the sources coming from the study of the mailing lists will be noted (Mailing List, Paris or Lyon, date).

1. The time and the space

We observed three phases of the BiblioDebout.

Firstly, we observed a construction and installation

phase with many exchanges on the creation of the collection, the interactions, etc. this phase lasted from the end of March to the end of April to Paris, and to the end of May to Lyon. During this phase, the BD establishes itself in the square and tries to build its nest: tarpaulins, cartons, bags, duvets, carpets, pallets. Sometimes, near a bench, sometimes the place is taken by another group[3], sometimes the BiblioDebout is near the subway station, sometimes it is near another commission, Infokiosque (in Lyon) or Poésie Debout (in Paris), etc. We can see that, during this phase, questions about the visibility of the BD, especially about its accessibility to be used and its independence more or less extensible regarding the other commissions.

In Lyon, the first installation was near a little free library installed on the square since several months. This little free library was organized by the neighborhood committee and with the agreement and funding of the town council. An unpleasant exchange between the little free library committee and the BD has shown that the participative libraries can come one after the other without being alike. The first one is not engaged and came without mediation (the little free library is left to the use of people who pass without "librarian"), when the second one (BD) thinks itself in a mobilisation and the Bibliodeboutistes embody this mobilisation by the knowledge.

Afterwards, the first phase has been followed by a struggle phase, especially in Paris, from the end of April to the end of June, where the reports are focused on the interactions with forces of law and order. In general, it is a nomadic phase, clearly affirmed in Lyon, where the BD follows an itinerant Nuit Debout which does not occupy only one square anymore. It is less affirmed in Paris, as the BD is described in the reports as moving, but more like the movement of bibliodeboutistes in the manifestations or simply struggling to get to the square. The BD is not anymore installed and occupying, it is nomadic and moving.

Finally, the BD finishes itself in a third phase in which the exchanges are mostly concentrate on the future of BiblioDebout: what could we do with BiblioDebout after Nuit Debout? During this last phase, the BD thought itself in other places than those of the original protest. In result of the protest itinerance observed in the previous phase, this phase is the one of the relation with other protests, other mobilisations. In Lyon, we followed the events around Commons or free softwares or around the TAFTA-CETA[4] (BD Lyon, September to October 2016). In Paris, a link was made with The ZAD of Notre Dame des Landes[5] (Mailing List, Paris, September 2016).

This repartition in three phases shows that BD is neither soluble in Nuit Debout, neither impermeable to Nuit Debout. It exists in a continual exchange with its environment, which is a real difference with libraries, always claiming their neutrality (R. Bats, 2016).

This engagement, in the time and in the space, both conceptual and physical, is a key node to understand what

BD mobilizes. Moreover, the BD is thought in a long time, in contradiction with the current societal evolutions rather linked to the immediacy. This is certainly because the BD does not seek to save the actual democracy or the liberties we have, but more to build democracy from a perspective that does not refuse utopia. “[The Utopist] prefers to engage in the sketch of new cards of the possible, to experiment life possibilities, to decodify the plots of the social order to recompose its territories and to redefine the organiser words of the consensual discourses. Our first conviction is that utopia is a question of an irreducibly political experiment.” (Archipel des devenirs, sd). In this way, BD is placed in the field of experimentation, in which knowledge and power are strongly intertwined.

2. The actors

The donors are either passers-by who deposited one or more document/s, or institutions (publishers, association, public institution, especially libraries). The passers-by, anonymous, bring books of their own library or deposit documentation related to their engagement. In this way, a man of about forty years, a trade unionist, puts down brochures on the history of trade unions and social security (BD Lyon, May 2016). Publishers made spontaneous donations or were contacted by BD members. If the most part of the collectives making donations are known by their engagement (BSF[6], la Petite Rockette, etc.), others are not considered inherently committed.

In this way, an academic institution will give a stock following the liquidation of a student association (Mailing List, Paris, April 2016), a TV will give digital files of one of its programs (Mailing List, Paris, April 2016), a school publisher will give several boxes of textbooks (Mailing List, Paris, April 2016). We can wonder whether these gifts are a reflection of a commitment of the institution in question, or rather, through these institutions, the manifestation of individual approaches, people who recognise themselves in the BD and in the movement. This is particularly the case for the donation of documents from a TV, for which it is specified that it is an informal donation (Mailing List, Paris, April 2016).

The visitors are also anonymous, taking part or not in the Nuit Debout: curious people passing through, regulars people more or less active in the movement, non-conformists persons finding in the mobilisation a little community, etc. This leads to quite different interactions depending on the level of engagement in the mobilisation, the desire to know more about the protest or natural curiosity. From the young man who took a book on Indochina because it is a family story (BD Lyon, April 2016), to this homeless person who was looking for books on foxes (BD Lyon, April 2016), passing by a couple who, looking at books of philosophy, had this exchange: she, “Sartre, is a moron no?” and he, who began to explain existentialism (BD Lyon, May 2016), the palette of visitors and their relationship with books is multiple.

The organisers are for the most part librarians. In Lyon, only three persons are not librarians, ex-librarians or aspirant librarians. In Paris, in one of the exchanges on the mailing list about contents, it was asked to put aside their librarianship analysis (Mailing List, Paris, 2016). However, these librarians are all present on the BD as individuals and not as professionals. Through their presence, they question the political vocation and the political engagement at the heart of the profession of librarian. This vocation, on several occasions (Lahary, 2005; Merklen, 2013) erased to the profit of a quotidian form of management, seems to be seized again by these librarians, who found in another form of the library the possibility to express their vocation.

Non-librarians are often librists[7]. The junction between the two bodies takes place at the level of the Commons, the sharing of knowledge being considered as a mode of action. Among the non-librarians of Lyon, one of them has a real consideration for librarians. He will say several times to visitors: “BD is Nuit Debout with the expertise of librarians” (BD Lyon, April 2016). Indeed, this library expertise is not mobilized on BD, as it could be in the library of Occupy Wall Street, which has been cataloged for example. The books could not circulate and the organisers noted, “Unlike the People’s Library, Oakland and the Puerta del Sol, BD has books of lesser quality but which circulate more”(Mailing List, Paris, April 2016). On the other hand, this library expertise was mobilised at other times in the interactions with visitors. To this young man who asks if the BD has the discourse of Jaurès on the crisis of Morocco of 1905, which the BD did not possess, librarians explained the functioning of public libraries, advise him and direct him to the public libraries (BD Lyon, June 2016). The expertise will also be found, as will be seen later, in two fields: in the selection of the documents and in mediation.

Over this description of different actors, we can see an acknowledgement of each expertise met on the BD. Donors have their expertise, visitors too, librarians too. In this way, the BD offers a place where the knowledge is not proposed by expert, but organized by expert. This equality face to the knowledge is changing the recognition of role of everyone in the collective creation of the society. In this case, the library is not at the service of the community, but it is the community itself.

3. The interactions

On the other hand, visits are more or less important depending on the weather (several exchanges on the list shown that rain, cold and wind are (rightly) considered as a barrier to BD attendance); on the phase (installation, struggle or future), on the places. The more the occupied square is empty, the less the library is frequented. The reports often deplore the low level of participation at Nuit Debout and consequently the low involvement in the BD. One of the organizers ends by saying: “It’s not even with one’s own group anymore; it’s going to end up in a buddy’s flat” (BD Lyon, June 2016). But, if the visitors were

relatively not many, the interactions were strong. The visitors came rarely only to consume books. They have the will to discuss with the organisers. The speaking and the exchange are truly at the heart of the project.

There are several levels of discussions: either between the visitors and the organiser, or directly between the visitors. We could notice a waterfall effect created by the BD, having a document or a practice of the BD as a first part. In this way, a presentation of the Piratebox[8] to a father and his daughter leads to a debate between them and two other visitors on the community in our society irrigated by Internet (BD Lyon, April 2016). An institution said: "A BD modest in books and in gifts but wealthy in exchanges, smiles and sudden downpour" (Mailing List, Paris, June 2016).

The interactions are about different subjects:

1. Either linked with the mobilisation. Thus, a young man asks counsel to the organisers, explaining that he was searching to improve his political culture and searching for a publication about anarchism (BD Lyon, May 2016). Some donors were also worried about the utility of their donations to the mobilisation (BD Lyon, April and May 2016). The political discussions are about diverse subjects: taxes, education, community, today's syndicalism, liquid democracy, etc. On the BD, books offer an exchange opportunity, while books in the library are more an opportunity of chosen solitude. The individual experience of reading is here counterbalanced by a community experience of the discussion. This occasion to do society and sociability is largely missed by the public libraries, which centred the social question either on solidarity and job hunting support (Bats, 2015), or on conviviality from the individual's point of view (especially in the case of the library as a third place).

2. Or linked with the BD itself. Each observation gave us the occasion to meet visitors touched by the principle of the BD. "It is beautiful what you do!" (BD Lyon, April and May 2016). The questions about the functioning of the BD were followed by discussions about the value of exchange and gift. At the same time, visitors are unsettled by this gift experience and by the possibility to take a book without compensation. The gift has several meanings and implications at the BD level. On one hand, one of the organisers speaks about "knowledge desacralisation" (BD Lyon, April 2016), putting not only a knowledge at disposal, but putting it at disposal absolutely free and without mediation, without the librarian's authority who is not necessarily the donor. On the other hand, as the organisers announce it: "The BiblioDebout is a Common" (BiblioDebout, 2016). Giving is difficult to perceive in a market society and the experience of the BD is exemplary on this point. The BS wants itself as an implementation of the knowledge commons principles.

In this sense, the perception of a common in a world essentially of the market is not easy to understand for the visitors. Some of them wanted to pay with coins or ciga-

rettes (BD Lyon, April 2016), others said that they do not want to take a book without giving another one (BD Lyon, May 2016), some took the document promising to return with a gift (and some of them did so) (BD Lyon, April and May 2016). The Paris's BD has known what its organisers their underground passenger, namely a visitor who, under the covert of giving a document, collects a large number of the rather new ones. The exchange dynamics is especially unbalanced that this visitor is suspected of reselling the books. After several exchanges, sometimes sharp, and over several months, with this unexpected visitor, the organisers thought they have succeeded to make him understand the principle of gift and counter-gift. If the experience of giving can be contagious, the contagion is facilitated in an environment already open to the idea, as it is for the people who attend Nuit Debout. For others, experience without explanation does not seem to be sufficient.

Otherwise, the question for BD to make activities was asked, especially conferences and readings both to link the BD and the mobilisation, and to highlight unknown texts. Opinions are divided on this subject in the BD. In Lyon, one of the organisers thinks that the mediation must be as limited as possible so that the book is the most desacralised (BD Lyon, April 2016). In Paris, on the other hand, mediation was considered as another action within Nuit Debout, often in partnership with other commissions: poetry, museums, etc. "For Sunday, I propose a reading of a text by Marguerite Duras on the painter Aki Kuroda published in "Outside"" (Mailing List, Paris, June 2016). Beyond the elitist aspect of the chosen text, the question posed is the possibility of escaping prescription in participatives libraries. If he does not constitute the collection, does the bibliodeboutiste direct visitors' readings through activities and mediations? In other words, can we completely escape the authority of the expert, whether professional librarian or not, who organizes a service of knowledge in the service of a mobilization?

The mediation is not the only way chosen to convey the gift example and the type of mobilisation bring by the BD. Consequently, on the BD or on its website, the goal is to reveal what can be done. "We need of a new consciousness of the importance of these "things that are commons for us"." (BiblioDebout, 2016b)

This awareness is first proposed to the other through interaction and discussion about BD. Thus, some visitors announce that they want to do or imagine the benefits of doing a BD on another place than Nuit Debout, or as another way of understanding the libraries of their country, China in this case (BD Lyon, April and May 2016). The interaction continues on the internet with the publication of the organisers' reports. In the mailing list, organisers tell each day the night before and their experience as Bibliodeboutistes, interactions, bad weather, clashes with the forces of law and order. Regularly, the other organisers propose to publish these testimonials[9] on the website[10]. We find here two things: on the one hand, the need to build a common story, which creates a strong

solidarity between the individuals taking part in the BD (organisers or visitors). David Lankes recalled in 2015 the importance for public libraries to create such stories, especially in times of political crisis (Lankes, 2015). Finally, we find in the publication of these reports the idea that affects are one of the levers of political action and must be aroused by images to which we can identify (Lordon, 2016). By bringing to see what is usually invisible or hidden from the media, the BD creates new affects and potentially new commitments to Nuit Debout, to the commons, to knowledge.

4. The collections

The BD proposed printed books or leaflets, and digital documents, via a Piratebox. Documents are mostly for adults, but very soon, some books for children or teenagers were added to the collection. For the content, the organizers of BD called to “prefer books that make sense in a such events: books that help you to build your own involvement, that give you to think and to feel, and that you would like to make read to other participants of Nuit Debout.” (BiblioDebout, 2016b). Finally, books proposed with different contents:

- Political books in direct link with the mobilization, on work, ecology and democracy, etc.
- Pratical leaflets in link with strike actions.
- Humanities books, not directly linked with mobilization, but of which content that is considered as useful by visitors to develop a political culture (BD Lyon, April 2016). Books of classical philosophy (Aristotle, Platon, Rousseau) have a great success (BD Lyon, May 2016).
- Books for entertainment: literature, comics, historical books, that are not in linked with Nuit Debout, but that, for participants, are still useful for experimenting the process of gift and the commons (BD Lyon, May 2016).

Because the BD is participative, the collection is depending of gifts. As we have seen gifts are related to commitment to Nuit Debout or very opportunistic, as this family giving 4 boxes of books after the grand-mother’s passing (BD Lyon, April 2016). The selection of books is questioning participants. When the four boxes have been given, the organisers decided not to keep books they did not want, as books about Sarkozy ou Pasqua[11] (BD Lyon, April 2016). Later, they decided to keep out of the stand a leaflet, very closed from the ideas of Nuit Debout, but considered by organizers as incentive to violence (BD Lyon, May 2016). If the Bibliodeboutistes have authority to define the limits of the legitimacy of documents, the debate was important on what is to legitimate or not. This debate was particularly vigorous after the following events: first, the visit of the Nuit Debout by a right-wing French intellectual, Finkelkraut, who received a very bad welcome on the occupied square, second the publishing of a paper in a left-wing paper[12]. Despite the paper was written by a participant of BD, the journal changed the title for « Bibliodebout, sexist book, romances, have we

to censor books given?” (Richard, 2016). The mention of censor, the reaction of mass media to the rejection of Finkelkraut led to a debate amongst the Bibliodebout: “[We need to discuss] the orientation we want to give to Bibliodebout, particularly, following the recent debates (do we have to select or not, political orientation or not, ideal library or not...)” (Mailing List, Paris, April 2016). Two opinions are developed. In one hand, the mobilisation is in the heart of BD, so it is legitimate to censor books that are in opposition with the ideas of Nuit Debout (new form of democracy, equality, hear what invisible people have to say, etc.). In another hand, the gift experience is in the heart of the BD, so the political value and scientific or literary quality of books are less important than the direct experience. This last opinion will be the more present in the BD, even if some visitors don’t understand this, as this woman asking “You have no racist book, isn’t it? You would refuse it, isn’t it?” (BD Lyon, May 2016).

Conclusion

The participative library BiblioDebout was giving access to knowledge, and, in the same time, proposing a political experimentation. This is inspirational for public libraries. If empowerment is condition for quality of life, so our libraries should be interested to propose to their community a shared and equalitarian project, to produce pictures and affects able to build political action, and to think about their own commitment towards society. BiblioDebout helps to question the political vocation of Public Libraries, a trendy topic in France today. To take on this role, the public libraries would have to redefining their neutrality, Increasing participative projects, not only « making society », but « making community », and finally redefining the role of institution in being not what is setting, but what is moving.

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- [2] <http://biblio-debout.org/>
- [3] By the group « Falafel debout »...
- [4] These two treaties gave birth to meetings and mobilisations in the 2016's fall in France.
- [5] Zone à Défendre : Notre Dame des Landes : mobilisation against an airport construction on a swamp near Nantes.
- [6] Bibliothèque Sans Frontière / Libraries without Borders: a charitable organisation which provides books.
- [7] We call « Librists » persons engaged in the defence and the promotion of free softwares.
- [8] The BD of Lyon and Paris placed quickly a Piratebox during the operations. It is an electronic device constituted of a Wi-Fi router and a flash drive that allows users to deposit or withdraw files anonymously and locally.
- [9] Anonymous.
- [10] See reports published between April and September on the website: <http://biblio-debout.org/index.php/2016/04/>
- [11] Two right-wing political men.
- [12] In the *Nouvel Observateur* (Nouvel Obs).

BIBLIOTHERAPY AS A METHOD TO ENSURE QUALITY OF FOLLOWING UP AND TREATMENT OF FAMILIES DEALING WITH NEUROPSYCHIATRIC DISORDERS

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Keywords: bibliotherapy, psychiatric disorder, quality of service, user needs, information, therapy

Abstract

This is a paper about improving life quality using bibliotherapy as a method of therapy and meeting user needs when dealing with neuropsychiatric disorders.

This paper argues that bibliotherapy as a method will provide an angle to address the needs of a family receiving news that one of their members got a psychiatric disorder. First I will take a look into what bibliotherapy implies and then how it could be used to inform and assist different people involved. Secondly, I will argue for the benefits of bibliotherapy to ensure the quality of following up and treatment when diagnosing neuropsychiatric disorders. The argumentation is based on different studies concerning the use of bibliotherapy with psychiatric patients.

The initial source of this essay is a personal experience of dealing with neuropsychiatric disorder. It addresses the acute needs for information, treatment and emotional processing that occurs in such a situation.

It touches the impression this author has of how Norwegian health institutions informs and assists their patients and their families, asking if there is a quality checked standard for following up and treatment. The impressions are based on personal experience with three different hospitals, and through informal conversations with other adults and youths who has gone through the same process.

The paper concludes that there is room for improvement in the Norwegian system, and that bibliotherapy as a method would ensure the quality of following up and treatment when dealing with neuropsychiatric disorders.

Introduction

In ancient Egypt Pharaoh Ramses II owned a library where its portals bore the inscription “The house of healing for the soul”. The concept of book reading having a positive impact is old, but perhaps not very well known. Mental health is a vital part of life quality, so therefore it is expedient to look into the potential of bibliotherapy. It is interesting to explore the general effect of reading books, which mental problems can be improved by bibliotherapy and under what conditions will bibliotherapy have the best results?

I have chosen to explore whether bibliotherapy can be used as a method to help people dealing with neuropsychiatric disorders. The initial source is my personal experience of having family members with different diagnosis, and the frustration from other people in the communities I’ve been part of since receiving the news of the disorders. Although the focus of this paper is ADHD, *Attention-Deficit/Hyperactivity Disorder*, and the Norwegian system, I hope this will inspire to explore using bibliotherapy with other neuropsychiatric disorders, and in other countries.

Method

My first goal is to define what bibliotherapy is. Secondly, out of personal experience and attained research, pinpoint the needs of families dealing with neuropsychiatric disorders, and specifically ADHD. I have searched for written studies where bibliotherapy has been used for people dealing with ADHD, looking for positive or negative results, and will present some of the findings. Finally I discuss how bibliotherapy can be used as a method.

Bibliotherapy

There are many definitions of bibliotherapy. The word itself contains *biblio*, meaning books, and *therapy*, defined as a treatment of disease, disorder or disability. In other words bibliotherapy is using books to help people with various problems. There are great variations of bibliotherapy, due to the flexibility of the concept. It spans from reading a self-help book with little or no intervention from a therapist, to having an active therapist who uses books as a tool in therapy. Zipora Shechtman (2009) addresses the two major schools within bibliotherapy: the *cognitive* and the *affective* approach. He gives the following two definitions:

- “In principle, cognitive bibliotherapy is a self-help intervention in which the absence or minimization of the therapist is a major characteristic.” (2009, s. 23).
- Affective bibliotherapy uses fiction and other high-quality literature to help the reader connect to emotional experiences and human situations through the process of identification.” (2009, s. 26).

Nilamadhab Kar (2012) has written an article reviewing numerous studies where bibliotherapy was used. He concludes: “Bibliotherapy has the potential as an intervention strategy to be useful in various psychiatric and physical conditions. However, it is rather used on an irregular and nonsystematic basis. There is a need for further studies on its effectiveness in various conditions in different cultures through clinical trials with robust methodology.” There are variations of bibliotherapy spanning from reading an information pamphlet to a comprehensive program including several books and sessions with a therapist. Bibliotherapy isn’t one particular method, and it can be combined with other methods like creative writing, group sessions or individual sessions with a therapist, telephone and/or e-mail contact, read aloud sessions, play therapy, medication etc.

There are two important aspects of bibliotherapy in this context: the flexibility that allows for tailoring to people’s needs and the fact that there are written documents involved.

The needs of families dealing with ADHD

Today’s modern society requires a high function from every member on every level and any age. Everybody needs to be at their best in school and workplace, in their relationships and even on their spare time. There is a pressure and an expectation to behave according to social norms (McLeod, 2008). For those people who discover that they, or their children, have a disorder that makes expected function difficult, it is devastating. The concept of having a normal life and the idea of having same opportunities as others is shattered. There is need for reorientation, reevaluation of values and dreams and to find out how to address the situation for the best possible outcome.

In Norway most patients are diagnosed by public hospitals. All regional hospitals and some local hospitals have psychiatric clinics. The children are relegated to psychiatric clinics for children and adolescents, and adults to psychiatric clinics for adults.

Personally I’ve dealt with four different clinics in Norway, and had to adjust to both my children and myself having neuropsychiatric diagnosis. I’ve had to learn the about three different conditions, and the co-morbidity effect of these. Initially I thought my needs were simple: I need to know what the diagnosis is and how to deal with it, and also I needed some emotional support; to understand why this has happened to my children and an acknowledgement of the difficult situation the family was in. It turned out that my needs were not simple. We came across health professionals giving vague answers, and even contradicting each other. There were no standard for giving information or following us up. The clinics chose different approaches for giving information, and

neither provided much emotional support. As it turned out; the interest group *ADHD Norge* became our main source of information and emotional support.

Parents need for information and support are documented. In a study called *Information Needs of Parents of Children With Attention-Deficit/Hyperactivity Disorder* the authors Sciberras, Iyer, Efron and Green (2010) found that more than 80 % of parents dealing with ADHD searched for information about symptoms, causes, associated problems, benefits of medication, side effects of medication, behavioral management, educational strategies and social skills. Most of them asked health professionals, but books and internet were also frequently consulted.

Parents' emotional situation is difficult. Linda L. Eddy (2013) writes about subjective well-being among parental caregivers for children with special healthcare needs. She names that behavioral problems in children and a high level of caregiver burden causes negative effect on psychological and physical health (2013, p. 165). Several studies documents that taking care of children with special needs, have an impact on depression and life satisfaction (2013, p. 164).

Children with ADHD

Debby M. Zambo (2006), who has been a teacher for students with ADHD, claims that it is imperative to inform these children about their disability. "Self-awareness is important because it can be the first step in eliminating many of the negative perceptions and expectations students with disabilities develop about themselves." (Zambo, 2006).

The children themselves have expressed their wishes in a study performed by Puvanendran and Nagaraj (2014). They wish to be heard by their health professionals and teachers, and furthermore to improve their social skills; keeping friends, be more confident and dealing with their anger. Only 31% reported having a good understanding of ADHD, and 36% reported being unhappy or very unhappy about their condition.

In many ways have the same need for information and support as their parents.

Other relevant factors

The Norwegian Health Department (Helsedirektoratet) issued guidelines for diagnosing and treatment in 2005, which were revised in 2014. The guidelines states that information about symptoms, causes, development, treatment and prognosis shall be provided to the patients and their families. The children themselves are specified as a group in titled to information and education about ADHD (Helsedirektoratet, 2014). As before mentioned, I myself had problems getting information and the explanations my children got were brief, and sometimes caused confusion. Recently I'm under the impression that several par-

ents have received a two day course, which some found to be helpful and others not. As for adults with ADHD there was a study by Solberg, Haavik and Halmøy (2015) about patients' satisfaction. They found that only 35.7% of patients were satisfied, naming information as the strongest predictor for satisfaction.

In this context it is important to be aware of the unfortunate situation these families are in. Attention-Deficit/Hyperactivity Disorder is defined as "A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development" by American Psychiatric Association (2013). Sciberras et al (2010) point out: "Although the causes and treatments have a strong evidence base, ADHD remains a controversial area around which sensational discourse often appears in the media. This can be confusing for parents." The internet provide important information, but you might find various hypotheses about the condition; as a nutrition disorder, as a result of poor parenting or teaching strategy, making it difficult to figure out what true or not. One issue with internet is that a lot of information is in English. There are written documents from scientists available and even lectures on YouTube but most of them are in English. As a Norwegian parent I considered myself lucky to find a YouTube clip with an excerpt from a lecture held by Russell A. Barkley that had Norwegian subtitles (2013). Barkley is a clinical psychologist who specializes in ADHD, and he explains the condition in an understandable way. Information seekers have quite a few obstacles sorting out reliable, current and easy understandable sources, especially those who struggle to comprehend English.

Bibliotherapy as a method to ensure quality of following up and treatment of families dealing with neuropsychiatric disorders.

As before mentioned; bibliotherapy as a method is flexible, and it can be combined with other methods. Thus bibliotherapy can be used to address various needs.

Long, Rickert and Aschcraft (1993) investigated the effectiveness of providing written information about techniques for managing oppositional child behavior as an adjunct to stimulant medication. "Results indicated significant differences favoring the experimental group on standardized measures of the intensity of behavior problems in the home, parental knowledge of behavioral principles, and teacher ratings of behavior."

There are several programs of parent-child intervention therapy. They are often time consuming and requires resources. For parents that don't have enough time or the opportunity to attend frequent sessions, Julie Christine D'Amico (2015) conducted a thorough study of the effectiveness of a bibliotherapy version of a parent-child intervention therapy. She found a significant decrease in child disruptive behavior, but not reduced parental stress or increased sense of competence. She concludes that the study indicates a potential support for the use of bibliotherapeutic versions of parent-child intervention therapy.

Both these studies addressed behavior problems. However bibliotherapy can be used to address stress and life satisfaction. Sarah B. Anderson (2015) conducted a study giving a self-help book about mindfulness to parents of children with ADHD. She found that scores on stress, parental distress and dysfunctional parent-child interaction was reduced. She concludes: "The statistically significant positive outcomes of mindfulness-based psychoeducation for the parents of children with ADHD provide a valuable addition to the growing body of alternative treatment options desired by many parents of children with the diagnosis."

As for the children a method using bibliotherapy has been described by Debby M. Zambo (2006). She used readaloud with a group of children in school. She makes a point out of using picture books as visual stimulation in combination with verbal storytelling as they tap into various learning styles. She used the books for social learning, as children could identify with the characters in the stories. She recommends using time to address the issues of children with ADHD: "So even though readalouds may take away from direct instruction of academic skills their value is gained by the social and emotional support that they provide." (2006).

I found the following statement significant: "Students with ADHD often miss things the first time around so reread books and repeat information." (Zambo, 2006). There could be that the study about adult ADHD patients' satisfaction by Solberg, Haavik and Halmøy resulted so poorly because the information giver has not been able to ensure repetition. Given that a lot of parents of children with ADHD have the same condition, the opportunity to have the information repeated is paramount.

Unlike verbal courses and lectures, bibliotherapy requires written material, which ensures that all receivers of the material will get the same information. Thus one can provide evidence based facts to counteract confusion and disinformation. Furthermore the material might serve as base for therapy sessions, whether individual or in groups. Perhaps the most important aspect of giving information to children, adolescents and adults with ADHD, and to their families, is to provide the opportunity to repeat and discuss the information with a health professional. Linda L. Eddy writes that "Such families could conceivably benefit from education and support

interventions that provide forums for learning as well as for receiving support from healthcare providers and other families experiencing similar issues." (2013, s. 168). She also states that "... it is clear that programs that work for families of children with disabilities need to be sensitive to differing family needs and flexible enough to accommodate change over time." (2013, s. 169). I believe bibliotherapy is such a flexible method who can be tailored to suit the different needs of parents, and children and adults with ADHD, while at the same time ensuring the same standards of information.

The Norwegian health care institutions provides a structure that makes them very suitable for standardization and for quality studies in how to best address the needs of people with ADHD and their families. A study in using bibliotherapy as a method in Norwegian Health institutions would probably provide significant and useful findings.

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CONTENT CURATION FOR HEALTH AND WELL BEING: A WAY FOR MDS AND PATIENTS TO SURVIVE “INFOBESITY”?

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Keywords: content curation, MDs, patients, blended learning

Abstract

Medicine has changed much during the past decades towards highly specialized and technological approaches based on huge amounts of information. Patients-Doctors relationships also have changed.

Knowledge management in medicine is becoming more and more crucial in the context of “infobesity” from published scholarly journals and/or available on the Web. Information literacy of students and trainees in universities remains poor requiring education to make them independent and life-long learners according to OCDE/UNESCO. In their professional life, MDs are required to perform CME/CPD to stay abreast of medical knowledge. Patients have now access to similar amounts of information through media and the web.

Content Curation tools allow finding, selecting, elevating and sharing specific and relevant information, adding human specialist value compared to algorithmic standardized engines.

We report on usage of the curation tool Scoop.it for teaching and learning immunology and related fields in higher education. Using this tool, it is possible to create, individually or as a group, editorialized Web Magazines and to build searchable Content Hubs, both in an attractive format. Finding information using crawling engines, combined with interest groups, social networks (Facebook, Linked-in, Twitter...) is easier and wider than with previously usable dedicated tools. Furthermore, collection of information in the cloud allows retrieving it again months or year later.

Implementation of Content Curation provides benefits for teachers, researchers, trainees, in the context of blended-learning projects, and for patients in their health literacy approaches as well as challenges.

Background and purpose

“Health and Well Being” is the generic term used encompassing Medicine, diagnostic, therapeutic and preventive and Quality Of Life defined by WHO as HRQOL. It is a major global concern of international supranational bodies such as ICSU (International Council of Scientific Unions) which developed recently a special program in the context of urban environment, where most of the population is now concentrating (Bai et al., 2012).

Medicine has indeed changed much during the past few decades, coming from an individual face to face practice to highly specialized and technological approaches based on huge amounts of information. Patients-Doctors relationships also have changed much from one shot interaction to year’s long support of chronic or rare diseases.

Knowledge management is an old concern in Medicine to remain updated and deliver the best care to patients but is becoming more and more crucial in the context of information overload or “infobesity”, term coined as early as 1993 (Sauvajol-Riolland, 2014) from published scholarly journals and/or available on the Web. Knowledge management relied classically on published primary sources such as textbooks, articles published in specialized specific scientific journals covered by databases of published literature and patents. In the 90’s, documentation professionals insisted on the concept of “grey literature” encompassing difficult to reach materials such as reports, thesis, as well as information from secondary and tertiary sources (Alberani et al. 1990). More and more resources are available but to find relevant information, medical professionals, either trainees or practicing as well as patients end-users usually depends almost exclusively on search engines based on algorithms such as Google which reliability has been obviously discussed.

Paradoxically, Information literacy of students and trainees in universities remains poor and requires education to make them independent and life-long learners according to OCDE/UNESCO (Nutbeam, 2000). During their practical and research training, contrarily to previous generations, medical students are now unable to digest every information in biological, medical and social sciences, inducing hyper specialization prejudicial to transversal medical research and global support of patients. Furthermore, all along their professional life, they will need lifelong-learning and CME/CPD to stay abreast of medical knowledge.

Patients have now access to similar amounts of information through media and the web but their ability to digest and understand it is diverse. Individuals and patient’ associations opened their own blogs. One of the tasks of practicing MDs is answering questions from patients and interpreting material available from various sources.

Content Curation tools have developed widely during the past years. They allow finding, selecting, elevating and sharing specific and relevant information, adding human specialist value compared to algorithmic standardized engines. Although not completely new in research information management but previously based on paper supports, curation is a concept appearing in the US in 2009, and in France in 2011. The word comes from English curator, people in charge of collections and exhibitions in museums. Curation associates collection of relevant information, first aggregation and selection of information, then editorialisation, commenting, tagging and finally sharing (Dale, 2014). The number of web curation tools exploded in the past few years, with various applications such as Pinterest, Pearltrees, Tumblr, Sharezy, Flipboard. Paper.li... Among at least 50 tools available now, we chose Scoop it which is the best in our opinion for “serious” information.

Methods

We report on usage of the curation tool Scoop.it for managing “serious” information, for teaching and learning immunology and related medical fields in higher education. Using this tool, it is possible to create, individually or as a group, editorialized web magazines and to build searchable Content Hubs, both in an attractive format. Finding information using crawling engines, or simply browsing the web, combined with interest groups, social networks (Facebook, Linked-in, Twitter...) is efficient and wider than with previously usable dedicated tools. Commenting, tagging is easy. Sharing through social networks and e-mails is nearly automatic. Furthermore, collection of information in the cloud allows retrieving it again months or year later.

Other topics curated by colleagues, researchers and students will be exemplified. Comparisons will be made with material available using the same or other curation tools.

Results

Twelve topics gathering more than 25k scoops over 40 months, compared to 200k of results with Pubmed or Google scholar Google on the same topics, cover published literature, either classical or OPEN, and grey literature from blogs, websites, social networks as well as press releases allowing a very rapid access to recently published relevant information. The audience is steadily increasing, with over 175K views, and more than 70K visitors for the most successful topic entitled Immunology (<http://www.scoop.it/t/immunology>), covering basic immunology (5,8K scoops, >101 K views) since 2011.

Immunological basic sciences, Biotechnologies, BioTherapies are covered by the following topics besides Immunology:

1. From Flow Cytometry to Cytomics, <http://www.scoop.it/t/from-flow-cytometry-to-cytomics> (3,9K scoops, >18,5 K views)
2. Immunology and Biotherapies, <http://www.scoop.it/t/immunology-and-biotherapies> (5,7K scoops, >14K views)
3. Mucosal Immunity <http://www.scoop.it/t/mucosal-immunity> (2,9K scoops, 7.5K views)
4. History of Immunology. <http://www.scoop.it/t/history-of-immunology>
5. Immuno-Pathology is covered through topics:
6. Autoimmunity, <http://www.scoop.it/t/autoimmunity> (2,5K s, 6K v)
7. Allergy (and clinical immunology), <http://www.scoop.it/t/allergy-and-clinical-immunology>
8. Rheumatology. <http://www.scoop.it/t/rheumatology-rhumatologie>
9. Neuroimmunology. <http://www.scoop.it/t/neuroimmunology>

Individual teachers, researchers and consultants also maintained similar content hubs about their personal research interests such as:

10. Immunotherapies <http://www.scoop.it/u/KM>, curated by Krishan Maggon, consultant for pharmaceutical industry who opened and maintains daily 10 successful topics covering various domains of application of molecular immunotherapies
11. Immune-monitoring <http://www.scoop.it/t/immune-monitoring-1> a clinical research topic focusing on developments of new biological parameters to monitor patients receiving monoclonal antibodies and cellular biotherapies, curated by Marcelo de Carvalho, Immunology Professor at Université Lorraine
12. Type I Diabetes, <http://www.scoop.it/t/type-1-diabetes-by-remi-creusot> another research topic curated by Remi Creusot, assistant professor at Columbia University, centered on his research project on type I diabetes

Complement and PNH today (JL) <http://www.scoop.it/u/john-lambris> topics on complement curated by John Lambris Dr. Ralph and Sallie Weaver Professor of Research Medicine in the Department of Pathology & Laboratory Medicine at the University of Pennsylvania, Philadelphia, PA.

Other topics have been opened in the context of international activities in European (UEMS, EFLM) and supranational bodies (IUIS, ICSU), for collective sharing of medical information related to continuous medical education, continuous professional development approaches and life-long learning (<http://www.scoop.it/t/cme-cpd>), to Laboratory Medicine (<http://www.scoop.it/t/medical-biopathology-and-laboratory-medicine>), as well as Health and Wellbeing viewed through the Biocluster of ICSU (<http://www.scoop.it/t/icsu-biocluster>).

During their training, some University Lorraine master students were asked to open topics to discover the con-

cept of curation, to practice knowledge management, and develop their information literacy and curiosity.

Curated Medicine, Health and Wellbeing with Scoop.it

On Scoop.it, recommended topics are proposed and classified in 5 relevant domains

Medicine (2M views, 159K scoops, 125 recommended topics such as immunotherapies and Cancer, Alzheimer, Breast cancer, Autoimmune diseases, diabetes, heart diseases, telemedicine, drugs curated by only 100 curators,

Health (10M views, 632K scoops, 546 recommended topics), M patient, patients, e-health, fitness, silver economy, AIDS, veganism, nutrition, alternative medicines curated by more than 450 curators

Well Being (1.7M views, 62K scoops, 134 recommended topics) with 120 curators

Biology (2.4M views, 101K scoops, 110 topics recommended) plants and microbes, animals, microbiology, virology, flow-cytometry, in vitro diagnostics... is much more covered than medicine with basic non-human biologists, about 100 active curators and can be compared with the **Science** domain (4M views, 213 K scoops 154 topics recommended) and 150 users.

All those topics contain medically relevant material from basic and clinical research covering pathogenesis of diseases, diagnostic procedures, medical devices, therapeutics, and prevention. Chronic and rare diseases are particularly in demand, and the societal impact of medicine appears clearly when following information related to some topics (allergy, autoimmunity, vaccination...). Curators appear to be scientists and researchers, even patients themselves but some Health topics are covered by lay people, and address a general audience

Curated Medicine, Health and Wellbeing with other curation tools

Pinterest (Hansen et al., 2014)) the most successful curation tool is difficult to evaluate as far as medical topics are concerned, as well as to quantify their real content. Due to its general audience, topics as allergy, biology of reproduction, cancer... seem predominant. The images support does not allow going further easily into written details and content. Tumblr also uses images and vignettes, with same drawbacks.

Flipboard is very attractive according to its format. Some medicine and immunology topics are covered by Flipboard curators but the tool seems more devoted to marketing purposes. A magazine "Medical Journals" has almost 12000 readers.

Pearltrees is much used by college teachers in France for instance than by researchers or patients, although its structure and format seduces many users

Discussion

In the last century, scientific information was mainly based on textbooks and scholarly journals. They can be traced in libraries or more and more directly through search engines and scientific information databases, via university subscriptions or Open access. In the medical field researchers, practitioners and patients use mainly PUBMED and Google Scholar. Other resources with societal coverage are much more difficult to find.

Scoop.it can bring even more interesting possibilities than other tools available. Thanks to the efficient and powerful crawling engine, the curator has access to many resources from published literature, grey literature, press releases, international journals reviews and magazines, and web resources such as Youtube, Facebook... These resources are authored by various stakeholders, researchers, companies, but also individuals, groups and associations, administration, policy makers, politicians, deciders... reflecting the diversity of people interested in the topics as well as the societal aspects of information. Aggregation and selection is done manually by the curator(s). Networking with people sharing common interests increases the amount of highly relevant resources. It is also possible to work as a group of curators with some plans (education, business), allowing to share the effort and improve results. The curator(s) should comment, tag the selected materials in other words elevate or mash up information, modifying titles, illustrations, adding comments, links, etc It is also possible to create its own posts, with personal pictures or microblogging and to add PPTs through connections with Slideshare material. Diffusion and sharing is the last part of the task through e-mails, Facebook, LinkedIn, Google+ posting,... and newsletters.

Two main applications of a Scoop.it curated topic exist: First, publication on the web of editorialized attractive and illustrated virtual magazines covering actuality of a field, which can be browsed easily on screen. Second, building of searchable open content hubs in the cloud. Indeed, an embedded search engine allows finding “a posteriori”, even years after publication information collected in those specific databases. This is a major asset of the Scoop.it curation tool.

Various usages of this curation tool can be described. Individuals, interest groups or companies can maintain a topic, which can be openly accessible or remain private, as a personal safe for findings. However, most end-users prefer their findings to be openly accessible to everybody and develop their thought leadership on their preferred topics. Teachers, researchers and students can open topics in the context of their training particularly when they are involved in research projects and in practical training in hospitals.

Benefits and opportunities of Content Curation

Implementation of Content Curation in Universities and

Research Centers provides benefits, mainly in the context of blended-learning projects and many opportunities (Antonio et al., 2012; Flintoff et.al., 2014; Ungerer, 2016). Medical teachers and researchers end-users can stay abreast of information, in their personal continuous e-learning and education. They can build share with colleagues and offer students focused and dedicated topic contents hubs. Used to social networks or not, they will join a network of specialists and communities of interest at a global level. It will help them find serendipitously research ideas at the frontier between specialty fields. They might build leadership in their field of competence.

Medical student end-users and trainees will practice reading primary (published articles) and secondary information through the internet to become information-literate, able to surf the information wave. They can elaborate personal content hubs and portfolios of their personal research for master and PhD training, and develop their curiosity to prepare for future professional applications either in University, research centers, industry or personal practice.

Patients will have access to specific information from relevant sources, curated by professionals allowing their empowerment as future e-patients, improving their access to trusted information (Cataldi et al., 2016).

Challenges of Content Curation

Challenges exist for a wide usage of such tools in research and education. Investment in using a tool relies on its permanence. Curation softwares apparently improves but appear to last.

Curation ie selection, and more editorialisation in context is a journalist-like time-consuming work. Search information is a « day to day » duty for scientists and researchers like « walking the dog » but time is lacking for many medical researchers, teachers and practitioners to implement a regular activity.

Curation in an open information ecosystem is a responsibility because medical information is more sensitive than others, having direct implication on health.

Return on investment for the curator remains low in the context of open sources and absence of recognition of blended learning in teaching duties in most university settings. Curation has no clear economic model compared to secondary information medical journals, based on medical advertisements.

In this context, it should be recalled that human dependency of curation is a major asset compared to algorithmic tools, but individualism of researcher, ultra focused on their narrow research topic limit this approach and paradoxically reluctance to share of some teachers limits the curation approach to some individuals.

Conclusion

Scoop.it was implemented as a knowledge management, science and societal watch covering and highlighting various topics of medical information. It appears as very efficient for knowledge management of serious information. Sharing the information is easy and the attractive presentation helps followers access selected open materials.

This curation tool can be used for various purposes: teaching, researching, learning, thought leadership and marketing, by individuals, teachers, professionals and companies.

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CONTINUING EDUCATION CERTIFICATION IN LIS: ISO 9001 AND ISO 29990

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Abstract

The continuing / further education and training sector is becoming a more and more relevant and economic sector for companies, but also for (public) services, non-profit organisations, and universities. Therefore, over the past decade “Quality” has become a core responsibility also in this field.

The certification of the quality assurance mechanisms of CPD institutions on the basis of the ISO 9001 and ISO 29990 standards are a possibility of the proof of a systematic quality management system. The certificates are awarded confirm the organisation that they meet the demands of their customers under standardised and controlled conditions. The late 1980s the introduction of industrial quality concepts such as Total Quality Management – TQM becomes more and more popular but mostly for producing companies. But especially the last revision of ISO 9001:2015 considers the growth of service businesses and their needs for quality management (ISO, 2015). Beyond this, since 2010 the ISO 29990 standard exists. It is a quality management system standard especially for providers of education and (further) training services (ISO, 2010). The main benefits are: Enhanced customer satisfaction and improved customer loyalty leading to repeat business, increased revenue and market share obtained through flexible and fast responses to market opportunities, integration and alignment of internal processes which will lead to increased productivity and results, enhanced business performance and better cost management, providing confidence to interested parties as to the consistency, effectiveness and efficiency of the organisation, consistency in the delivery of your product or service etc.

Introduction

Scientific further education and training in LIS (Library and Information Science) has various aims in addition to meeting current requirements, including:

- Maintaining the competitiveness of libraries and information facilities;
- Furthering individual careers;
- Making further education and training available that is tailored to meet current needs and future requirements;
- Expanding skills and expertise;
- Transferring knowledge in practice, and
- Being future proof and of strategic import. (ZBIW 2012)

Further education and training in librarianship has a long tradition in Germany. A lot of universities nowadays offer e.g. further education and training courses, certificate courses, single modules and single seminars. Integrating a library science further education and training facility in a university with modern infrastructure and experts in theory and practice guarantees the use of modern teaching methods and know-how transfer for practical use. But continuing education at universities is not subject of the national accreditation system in Germany.

In Germany, in August 2016, the first institution in further education in LIS has obtained the ISO 9001:2015 and ISO 29990:2010 certification. ISO 9001 is the most comprehensive ISO norm in scope. It mainly focuses on confirming process conformance from the initial development of a product / service. ISO certification is expected to help organizations to enhance quality and efficiency, improve communications, achieve competitive advantage and reduce operating costs. (ISO, 2015) The ISO 29990 standard aims to improve quality of learning services and facilitate comparison on a worldwide basis. Learning services for non-formal education and training, the basic requirements for service providers, will also enhance transparency and allow comparison on a worldwide basis of learning / continuing education services, offering a single alternative backed by international consensus to the huge variety of national service and (management) standards which now exists in the field of non-formal learning (continuing education). (ISO, 2010)

Further Education in LIS in Germany

For universities offering library science courses and study degrees further education and training have been one central task together with research and teaching degree courses. Most of universities nowadays offer e.g. further education and training courses, certificate courses, single modules and single seminars. Career and study

are often no longer separate. Courses of study are more and more likely to be taken whilst working these days.

The library science further education and training market in Germany is constantly growing and will continue to do so in future. It's hence becoming ever more important for both facilities such as libraries and for industry that the relevant further education and training offered remains comparable and that certificates awarded have positive career effects. Certificates of completion are awarded for courses of study as a matter of course. This doesn't necessarily apply to all forms of formal study. Courses ending in certificates for those passing them will in future increase in importance as they exactly meet this requirement. There are many benefits for employers (libraries):

1. Employee loyalty

Further education and training measures in which the employer is involved can prevent good staff educating and training themselves and then moving on to a new job.

2. Personnel development and motivation

Expert knowledge and behavioural competence are improved. Employees also feel more appreciated and will display greater motivation in their future work.

3. Recruiting

Offering applicants support in studying for certificates while working can be beneficial to recruiting.

4. Stimulating library development

Participants bring fresh ideas into a library and thus act as innovators in their field or department.

5. Linkage to a university

Students act as links between library and university. The library thus has access to the latest developments and research results. (Georgy, 2016)

Quality Management in Study Degrees – Accreditation in Germany

As an operative instrument of quality assurance all structured study programmes have to be accredited in Germany. In 1998, accreditation was introduced for the new academic degrees (Bachelor and Master). The accreditation procedure is based on the European Standard and Guidelines (ESG). The "Foundation for the Accreditation of Study Programmes in Germany" is responsible for comparable quality standards in the frame of a decentralised German accreditation system.

The German Accreditation Council is a central institution which

- “defines minimum standards for accreditation agencies and processes to meet,
- accredits agencies and supervises their performance (task fulfilment),
- ensures that there is fair competition between the agencies, and
- represents German interests in international quality assurance networks.” (Accreditation Council, n.y.)

Every study programme (Bachelor / Master) normally must be accredited before starting and reaccredited after five or seven years. In case of successful accreditation a faculty normally gets a contribution by the own university. Furthermore, it is possible to accredit two, three or more study programmes in one package, called „cluster accreditation“.

There is no German accreditation by a LIS society like the German library association (Deutscher Bibliotheksverband). That’s a main difference to the U.S. where a voluntary, nongovernmental accreditation by ALA is possible and plays an important role. If an international accreditation is wanted a second accreditation must be issued by an international agency, mostly subject-specific: in LIS e.g. by CILIP (GB) or the ALA (USA). And the faculty has to pay these fees additionally.

For further development of quality assurance in the higher education sector, in 2007 the Standing Conference resolved to enhance the programme accreditation through the implementation of a system / institutional accreditation. It is a multistage procedure made up of different elements to determine the effectiveness of process quality concerning the entire university. A positive system accreditation certifies the university that its quality assurance system in the field of teaching and learning is suitable

- to achieve its qualification objectives,
- to ensure the quality standards of its study programmes and
- to create a quality culture, which is supported by broad quality awareness throughout the university.“ (ACQUIN, 2009)

The main requirements are:

1. The university can demonstrate plausibly that it is using a quality assurance system covering the whole higher education institution, and can prove that at least one study programme has already been the subject matter of the system.
2. No negative decision has been filed against the Higher Education Institution in a institutional accreditation procedure during the last two years. (ASIIN, 2016)

But the German Accreditation System is limited to study

degrees. It does not include the different types of courses of further education. So further education institutions at German universities and higher education institutions need other / complementary quality standards.

ISO 9001:2015 and ISO 29990:2010

ISO 9001:2015 sets out the criteria for a worldwide quality management system. It can be used by any organization / company, regardless of its field of activity and size. Actually, over one million companies and organizations in over 170 countries are certified to ISO 9001. ISO 9001 is based on the following quality management principles:

- a strong customer focus,
- the motivation and implication of top management,
- the process approach and continual improvement. (ISO, 2015)

So ISO 9001 helps to ensure that customers and stakeholder get consistent, good quality products and services.

ISO 29990:2010, “Learning services for non-formal education and training – Basic requirements for service providers”, also enhances transparency and allows the comparison on a worldwide basis of learning services. Knowledge and knowledge management are becoming a key factor in successful corporate management and education is increasingly being regarded as a business-oriented service. Learning and further education are part of a worldwide, global become more and more important. In the meanwhile you also find a lot of for-profit learning services in further education. Enterprises establish their own (private) universities or are in a direct contact to universities. (ISO, 2010) Thomas Rau explains about the ISO standard 29990: “The purpose [...] is to create a suitable framework for preparing standards in the field of non-formal learning services. Core elements are ensuring the quality and effectiveness of the education or training and improvement of knowledge transfer, whilst also enhancing the transparency and comparability of the range of learning services provided. ISO 29990 will help learning service providers improve their ability to consistently provide quality services, improve organizational effectiveness, and reduce overall business costs.” (ISO, 2010)

ISO Certification in the Field of LIS Further Education in Germany

In Germany, in August 2016, the first institution in further education in LIS have obtained the ISO 9001:2015 and ISO 29990:2010 certification: ZBIW – Zentrum fuer Bibliotheks- und Informationswissenschaftliche Weiter-

bildung, TH Koeln, Institut fuer Informationswissenschaft (Library and Information Science Further Education and Training, TH Koeln, Institute of Information Science).

Benefits

The following benefits are formulated by Certification Europe (2012). And these benefits / success factors are discussed in the context of LIS further education institutions.

- Enhanced customer satisfaction and improved customer loyalty leading to repeat business
- In Germany most of the universities in LIS offer further education. In times of e- and distance learning satisfaction and loyalty of customers become more and more relevant.
- Increased revenue and market share obtained through flexible and fast responses to market opportunities
- In LIS further education is becoming more and more relevant to be a driver in innovation – on types of courses (e-learning etc.) as well as on topics and technologies like virtual reality, devices.
- Integration and alignment of internal processes which will lead to increased productivity and results

Further education at universities becomes more and more a attractive source of revenue of external funding. An effective and efficient process management is therefore essential. And secondly the definition of processes makes work easier for all employees and they can focus on key contents like programme content of seminars.

- Enhanced business performance and better cost management

The pricing of non-public services and products in the EC must be based on market terms and must be made in accordance with the market economy investor principle. To remain competitive with private seminar providers you have to lower costs and focus on enhanced transparency and attention to value maximization to customers and stakeholder.

- Providing confidence to interested parties as to the consistency, effectiveness and efficiency of the organisation

A certification is providing confidence on the conformity of the products / services to the customers, the marketplace and all other stakeholder like university administration, executive board and ministry.

- Consistency in the delivery of your product or service

A good quality management ensures that the courses always are of the same quality. All lecturers and speakers are part of the quality management. They

have to prove their know-how and expertise in didactics.

- Improved communication, planning and administration processes.

Special attention will be paid to improve the internal communication and building up a methodical knowledge management. Knowledge maps of all employees e.g. can be of benefit.

Especially the ISO 29990 brings some more advantages like: (Quality Control (QC) Certification, 2013)

- Evaluating criteria for education

It is compulsory to build up a systematic evaluation management. That is more than to create an evaluating form – the evaluation must be adapted to the type of course / seminar. So sometimes the trainer may conduct additionally an oral evaluation or talk personally with each participant as a way to get supplementing information.

- Globally comparable benchmarks for existence of quality

Cooperation and networks become more and more important in order to realize e-learning and possibilities in distance learning (MOOCs etc.) If you can confirm the ISO certification you are a reliable partner in these cooperation projects.

But there are also some disadvantages:

- Extremely high expenditure of time

Normally institutions of further education at universities have a relatively small core staff. So the certification means an extraordinarily great additional effort for every person in the institution without neglecting the daily business. And you need a year or more to prepare the certification.

- Requirement of a lot of persuasion

If you will start the process of ISO certification it requires a lot of persuasion to convince staff and stakeholders of the long-term concept's advantages. In fact, you can see the advantages and benefits in two years at the earliest.

- High expense

The university does not pay the costs and there are annual costs every year for a reaudit.

Conclusion

An ISO certification in further education in LIS and at universities in Germany is rare. The paper shows, there are a lot of benefits to meet the challenges of a certification. But it is important to integrate all employees, stakeholders and teachers. And it is a greater need in persuasion to all of them. But at the moment, in Germany it is the only way to prove quality in further education at universities.

The ZBIW hopes to find cooperation partners in future outside of Germany to exchange about quality management in LIS further education.

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COOKIES AND PRIVACY: WHAT DO THEY DO WITH OUR PERSONAL INFORMATION?

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Abstract

There are several techniques to gather information from users and get the tracking of them, in order to obtain browsing habits, tastes and preferences, even to the point of unmask and identify specific user profiles. In this background research we will present the different mechanisms which are based on web analytics and practice of tracking users in order to explain and exemplify with real searches how we could obtain information through cookies and other alternative techniques and then show how it violates the privacy of individuals when they perform certain actions, such as surfing in the internet or visiting a online shop.

Background and purpose of the study

Nowadays, Internet plays a fundamental role in society, and is currently one of the main pillars of the economy. Much of the investments in the Internet are made from the online advertising sector, and one of the ways of carrying it out is through a variety of techniques to gather information from users and get them to crawl in order to obtain browsing habits, tastes, preferences and even identify and unmask specific user profiles.

In this sense, the use of cookies is a clear example of data collection technique widely extended in the digital ecosystem. Today, the vast majority of websites and pages aimed at commerce and electronic advertising make heavy use of browsing cookies for this purpose.

This functionality is in continuous development, and there are numerous examples of the use of these options of monitoring habits of navigation in the network that will be exposed as examples in this article, so that we could see how it violates the privacy of individuals when they perform certain actions, such as surfing the internet, fill out forms, register on a website or an online payment.

Methods

To perform this study we have focused on using a cookie inspection tool called Cookie Inspector, which allows us to see the data that is stored in each visit and to prove the policy of cookies used by each website we visit. Three websites have been selected as outstanding examples for the explanation of the main goals of this study.

The personal information and the privacy

At the present time, any citizen can oppose that their personal data are used for other purposes than those previously justified, but there is still a clear awareness of the use made of them as well as the control exercised by cookies in our personal information. This brings us to ask questions such as: are we really aware of the use that is made of the data we offer? Are we aware of what we accept in cookie policies? Do we know the legislation that regulates it and we have mechanisms that allow us to preserve our privacy on the Internet?

The answer to many of these questions is no, since there is a long way to do in this area. Meanwhile, that legal vacuum is taken advantage of by countless companies that use our information for their economic achievements and goals.

The importance of privacy

In contrast to other areas of life where privacy is better defined, in the field of the internet is not so much. Is slipping from our grasp the information that we are really giving away when we search the internet, because sometimes we ignore that what we write can be traced, or we simply do not know if we are accepting or consenting to the use of the information we are offering in the web browser. In other words, the internet is a public place in which anyone can access in order to carry out any recreational, educational or professional action, but also illegal actions to take economic advantages.

We can define privacy on the Internet as the control of the information that owns a certain user that connects to the Internet, interacting of diverse services in line with which it exchanges data during the navigation. It should be noted that there is currently no real privacy on the Internet, because there is still a primitive computing structure.

On the other hand, when this information is revealed or made public we are talking about an invasion of privacy or violation of the person privacy. However, there is violation of privacy unless somebody use our information for something illegal. At first glance, the concept may seem simple, but what we mean by something illegal? For example, Gavison (1998) says that the collection of information is not a violation of privacy. The collection of information results in a loss of privacy when our degree of secrecy or anonymity is compromised. Therefore as long as the principle of respect for persons is maintained, the collection of personal information can indeed be ethical. However, a collection of personal information is unethical when they use your private information to suggest you some ads related about your preferences, or the prices of something increase because you searched information previously about it.

Therefore, we emphasize that maintaining privacy on the internet is an important part in our daily lives to avoid any misleading activity or unlawful behavior that allows to track us.

Control mechanisms about personal information

There are several techniques that allow us to track what is done on the web in order to carry out economic activities based on our personal preferences or data that are stored.

In this environment it is difficult to determine what may pose a threat to our privacy or what not, since the limits are very narrow if we do not know exactly who we are offering private or personal information or what supposes private information about yourself.

For example, every time that a web page is viewed, the site collects information about the user: the name of your computer, the time of the request and the address of the previous web page you were viewing. On the other hand, to buy something on the web we must publish personal information such as name, address, and credit card information. This information stays encrypted and saved inside cookies.

Thus, an example of these control methods are the navigation cookies, which collect our navigation information in an apparently harmless way. Although they require informed consent, the vast majority of users accept the policy to continue browsing, since the vast majority of them guarantee that it can continue only if they accept the use of themselves. In many websites, the uses of cookies are morally acceptable, while in others, and violate the privacy of individuals.

About cookies and their functions

A navigation cookie is a legitimate file that is installed on the users' computers and stores the trail of information that the user has been leaving in their browser. This information is useful to the user as it facilitates navigation, but can be retrieved and used for multiple functions that expose our privacy.

Cookies has been created to facilitate the interaction between browser and server. They are widely used and the vast majority of internet providers are collecting data from cookies. In this respect, cookies are generated and modified by the server, but they are only stored by the browser and transmitted between browser and server at each interaction.

Cookies can store a wide range of information, such us all the information previously provided by the user to a certain website or all the information given to the search engine during our search process. This information may including personally identifiable information: username, home address, e-mail address, or telephone number, previously revealed by the user. Besides these information attributes there are other types of data that can be stored in cookies:

- Credentials, like for example user names and passwords
- Preferences and interface customisations or personalisation
- Session data and data from the site (cached data)
- Tracking information about users

Cookies can be categorised as non-persistent cookies or persistent/permanent cookies. While non-persistent cookies are temporary cookies and expire when the browser is closed or when the session times out, the permanent cookies are usually stored at the browser memo-

ry of the user or even in the hard disk of the user's computer being outside of user's control.

Non-persistent cookies could be helpful to store status information when we are moving between pages of the same site, because it maintains the site usability. But, persistent cookies presents a higher storage capacities, because they are stored outside the browsers and are therefore more difficult to erase. Furthermore, they sometimes contain enough information to regenerate deleted cookies. In other words, this kind of cookies presents more serious ethical problems, because silently they capture and collect data without consent about our visits, ignoring the information that is transferred between the computer and the network.

Advantages and disadvantages of using cookies

Cookies keep track to user identification and authentication, like for example avoiding re-identification when we enter for a second time in a site that needs to register. This could be a good option to remember the password, but we have to keep in mind that this could threaten the safety and security. Also, they facilitate the statistics and are a method to calculate the number of visits in a website. In this way, cookies are a benefit to quantify and evaluate the efficiency of ads, making possible to determine how many unique users visited a site as a direct response to an ad or to provide targeted advertising depending on the behavioural targeting. In this field of improving management advertisements, the adaptation to user profile is a very important aspect that cookies solve it. The fact that browsing cookies are stored may serve, for example, to display preferences in ads, products or services. Sometimes this fact can be annoying in our search process.

How do cookies work?

As we will see in the following examples, cookies can store information provided by the user, as well as other data obtained from the browser. One of the most used is the one that affects the method of arrival to the web, as well as statistics of google analytics or navigation language.

Example 1. The purchase of a flight

In this first example, just by searching for a specific flight in the Vueling Company, we see that we have stored information about our search: language, origin and destination, displayed prices and other identification data. This information is stored so that on a second visit it will be possible to recognize the same user and the prices they saw.

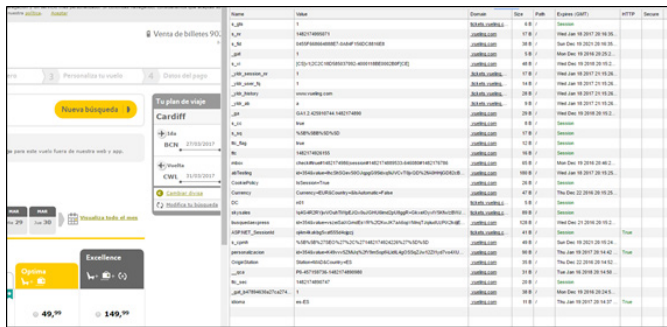


Figure 1. screenshot of vueling cookies

Example 2. The visit to an online shop

In the case of an online shop, the language/country preferences, shopping list and transactions information would be stored in persistent cookies. Also, how the user has reached the web (type of device, type of browser, type of access) as well as the Google Analytics ID. In this case, the expiry date of the persistent cookie of this website is until 2026/12/17.

| Name | Value | Domain | Size | Path | Expires (GMT) | HTTP |
|-------------------|---|----------------------|-------|------|--------------------------|------|
| _ga | GAX12R1guz52wvOL6e9N165gflav17237.3 | acc.componente | 43 B | / | Sun Mar 12 2017 01:00:00 | |
| _ga | GUA12.962193410.1482175448 | acc.componente | 29 B | / | Wed Dec 19 2018 20:26:23 | |
| ABTasty | wpR3D16121920240745113%20wpR3D1482175447461%20wpR3D0na%20c... | acc.componente | 176 B | / | Sat Jan 13 2018 20:26:23 | |
| _ft_user | 1000002721296319_10000000041247450_fake | acc.componente | 49 B | / | Tue Dec 19 2017 20:26:23 | |
| accept_cookie | 1 | www.pccomponente.com | 13 B | / | Wed Mar 29 2017 21:26:23 | |
| pccomponenteurl | ahR9chMMLy93d3cucQjB21w6258wRcy9j20v | www.pccomponente.com | 54 B | / | Session | True |
| _omagppw | true | www.pccomponente.com | 12 B | / | Wed Dec 01 2027 20:24:0 | |
| _omagppw | true | www.pccomponente.com | 12 B | / | Wed Dec 01 2027 20:24:0 | |
| _idm_ua-3033616-1 | 1 | acc.componente | 19 B | / | Mon Dec 19 2016 20:24:0 | True |
| AUTSPF | 86c4f59d1127a3d46e59993ca34e48 | acc.componente | 37 B | / | Tue Dec 20 2016 20:24:00 | |
| _gafr | 0=43e4e6982359dc7=1482175447.5=ALN_MdKxkdnT0aUwRnTBBIE81 | acc.componente | 75 B | / | Wed Dec 19 2018 20:24:0 | |
| ABTastySession | refereer%3Dhttp%3A%3Awww.google.es%3A%3Awww.google.es%3A%3Awww.p... | acc.componente | 120 B | / | Mon Dec 19 2016 20:24:0 | |
| hmsid | 8953ea91036e94ee20309545133e4d | www.pccomponente.com | 38 B | / | Thu Dec 17 2026 10:24:07 | True |
| _idm_ua-3033616-1 | 1 | acc.componente | 21 B | / | Mon Dec 19 2016 20:24:0 | |
| __utmsid | c96ac3c93208eeebdb1b6f8a8a9f9 | www.pccomponente.com | 44 B | / | Tue Dec 19 2017 20:24:07 | |
| __utmt | 4311a508ba9b3816a753696762748e51482175441 | acc.componente | 51 B | / | Tue Dec 19 2017 20:24:02 | True |

Figure 2. Screenshot of pccomponentes.com

Example 3. Advertising Cookies on random pages

In order to decide which advertising is best for a given user, the search preferences are taken into account, but also the user's connection IP, to apply geo-targeting criteria in order to optimize the advertising campaigns



Figure 3. Screenshot to show a personalized advertisement

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COOPERATION NETWORKS AMONG RIGA CENTRAL LIBRARY AND ITS BRANCH LIBRARIES - A CASE OF ORGANIZING EXHIBITIONS DURING 2015

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Keywords: Riga Central Library, cooperation among branch libraries, network of libraries, exhibitions

Abstract

Riga Central Library has 26 branch libraries spread all across the city of Riga. Even though each branch library operates in different times and places, they are tightly bound in their operations. This research will explore the internal and external cooperation of the Riga Central Library and its branch libraries during 2015, in the process of organizing exhibitions.

In order to carry out this research, surveys will be conducted. These surveys will be sent out to the heads of the library branches. Once the results are gathered and analyzed, a network will be built based on the data.

The results of this research might aid libraries in organizing future exhibitions. By having access to a comprehensive map of relations, these branches can see which other sources they do not utilize to their full potential and can then take appropriate actions.

The network of cooperation is affected by different criteria – involved parties, geographical location, the size of libraries and their spaces, heads of libraries and other criteria.

Introduction

In larger organizations, which are split into separate parts, one can notice a phenomenon, that the organization is effective, because even if it is separated, it is yet unified. Riga Central Library has 26 branch libraries spread all across the city of Riga. Even though each branch library operates in different times and places, they are tightly bound in their operations.

Information on the Internet becomes more and more available, so libraries need to think of ways how to attract visitors and potential users of the library. One way is to turn a library into a cultural center by organizing cultural events. The organization of exhibitions is not only a way to display the sources and materials available at the library and to attract new readers to the library, but also a way to give authors and artists a place to exhibit their work. This research will explore the internal and external cooperation of the Riga Central Library and its branch libraries during 2015, in the process of organizing exhibitions.

The purpose of this research is to determine whether and how often the Riga Central Library and its branch libraries cooperate in the process of organizing exhibitions during 2015, whether they be book exhibitions, art exhibitions or other kinds. The author of the paper will also attempt to determine what kind of cooperation exists with external entities: individuals or organizations. The ratio of internally organized exhibitions and externally organized exhibitions will be examined.

The author of the research mainly used the creation of accessible information and information resources on the internet and study materials. Research is described in four parts: in first part is given description of used theory; in second part is given description of situation, in third part the author describes the research methodology; in fourth part is analyzed collected data in context of social network theory.

Theoretical Base

Cooperation in any expression means interaction of at least two elements with each other for a common goal. Social Network theory will be used in the analysis of cooperation of Riga Central Library and its branch libraries. The theory determines that social networks are build based on interactions and relationships of human groups or organizations, and cooperation is based on reaching common goals.

Homophily explains situations when two entities that are similar to each other have a connection. In the case of cooperation of libraries, homophily can be described as cooperation between two or more libraries in different criteria – geographical location, heads of libraries (sev-

eral libraries can have one head), the size of library and vastness of space, and other criteria.

If two branch libraries cooperate and stress each other as partner, the bilateral connect and make it as a strong bound. Cohesion exists when two entities have a strong connection – marked each other as partners – and their work and decisions can be affected by the decisions of other partners (Kadushin, 2012).

Kadushin (2012) agrees that social network analysis helps uncover the hidden and see the whole picture from a different angle. Organizations, that have several branches can work in two ways – they can be closely associated with a superior branch, or may operate independently. In both ways there is a hierarchy, but its intensity depends on operations and adopted regulations of the organization. Riga Central Library has 26 branch libraries, that can work independently and at the same time as a part of a big organization.

Description of situation

Riga Central Library was established in 1905 and at the moment it has 26 branch libraries and two external service points. This network covers whole Riga and gives inhabitants and guests of Riga access to information resources and manage cultural function. In organizing different kind of events, libraries transform into cultural centers where both inhabitants and interested person are invited.

Organizing exhibitions in libraries is one way to invite interested people to library, not only to one particular moment when the opening ceremony happens, but also later when it is still possible to see exhibition. It is a planned project where the library plays a big role in it as the place of exhibition, and also librarians, artists, authors, visitors and other people as the creators of the exhibition and their visitors.

Riga Central Library and its branch libraries are in one network, but at the same time they can work independently. This way each library can organize exhibitions independently, but in some situations all kinds of cooperation among libraries is included. However, if this cooperation among libraries is not existing, then there are better conditions to cooperate with external partners (such as schools, kindergartens, youth centers, artists, photo artists, authors and others).

This research will be describe the cooperation among Riga Central Library and its branch libraries in organizing exhibitions in 2015, including cooperation among external partners. Exhibition types and resources used in this paper indicate the portion of cooperation of external partners.

Methodology

To identify cooperation among Riga Central Library and its branch libraries in organizing exhibitions in 2015, the questionnaire was made and sent to all branch managers. Questions in questionnaire will help realize frequency of cooperation among libraries and with external partners. Questionnaire includes seven questions, from which the first question was to write down the name of the library that is being questioned. In the second question libraries needed to point out branch libraries with whom they have had cooperation in organizing exhibitions in 2015 and to specify how often the cooperation occurred. Author divided answers into four groups – “did not cooperate”, “1-2 times”, “3-4 times” and “5 and more times”, realizing the possible situation where managers of libraries have difficulties to remember the correct number of times they have cooperated and also if libraries cooperate less than one time in two months. Third question will give an insight of how often in libraries in 2015 book exhibitions, art exhibitions and other kind of exhibitions occurred (dividing answers “often”, “average”, “rare”, no answer/hard to tell”). These answers will analyze what kind of exhibitions are more often organized. In question number four the managers of libraries pointed out up to five external partners with whom they had cooperated in 2015, the frequency of cooperation and the type (book/art/other kind of exhibitions). The fifth question reveals the most common ways to create cooperation in organizing exhibitions, revealing if the initiative is taken by library or authors, personal contacts of employees or if it is long term relationship. The sixth question reveals how big portion of exhibitions is made by the resources from the library. Answers to this question is connected with the impact of external partners and their investment. Author also wanted for libraries to think of future and possible cooperation, so in the seventh question managers will stress out branch libraries with whom they did not cooperate in 2015, but would like to cooperate in future.

Riga Central Library and its branch libraries together make count of 27, but there are only 22 managers from which five managers manage two branch libraries at the same time. The questionnaire was sent in October and November of 2016. There were 27 questionnaires, but only 15 answers from which 12 were valid. About three branch libraries answers were not conducted because one library was under reconstruction for almost all of the year 2015, but one manager of two branch libraries was on the vacation for the whole period.

Answers about 12 libraries were gathered together, analyzed and the networks were drawn using programs *Gephi* and *NodeXL*.

Analysis of the results

The results of 12 Riga central library branch libraries were conducted, analyzed and the network was drawn (Figure 1). The external partners to each branch library are also added (institutions of education, authors, artists, photo artists, hobby groups and others). The created network is a partial network, that is open (there is a possibility to supplement and grow).

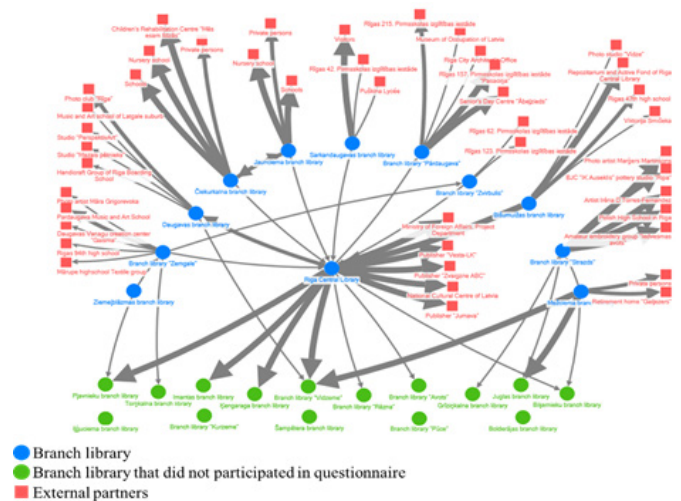


Figure 1. The network of Riga Central Library and its branch libraries (Meldere, 2016)

Only the branch library “Pārdaugava” did not point out any other branch libraries, however Riga Central Library pointed out branch library “Pārdaugava” as partner. Other libraries pointed out at least one other branch library or Riga Central Library as partner. That proves that branch libraries cooperate in organizing exhibitions. The biggest count of cooperation with branch libraries is for Riga Central Library. In this situation Riga Central Library proves their central role, that is not only given by other branch libraries.

Bilaterally cooperation in organizing exhibitions was stated between few libraries. One of cases was between *Ciekurkalna* and *Jaunciema* branch libraries, and that is possible because both branch libraries have one common manager. In this network cohesion is also shown, because libraries that are close geographically also tend to cooperate (see Figure 2).



Figure 2. The network of Riga Central Library and its branch libraries based on geographical location (Meldere, 2016)

However, the branch libraries pointed out several external partners in organizing exhibitions in 2015, there is a big portion of using resources of libraries in organizing exhibitions. In libraries the most common type of exhibition are book exhibitions, that also explain the big portion of using library resources in organizing exhibitions. One of the criteria, that affect exhibitions is the amount of space in library. As the branch library “Strazds” said: “Our library is too small for art exhibitions”. That is why in this library only book exhibitions are organized, where mostly used books from their library or repositorium of Riga Central Library are displayed.

Long term relationships with different partners exist in libraries, but new partners are seeked through personal contacts of librarians. From that, the author concludes that libraries choose to cooperate with well-known partners (for example, kindergartens, schools, youth centers and others) to continue their successful cooperation. But libraries also trust to their librarians in finding and suggesting new partners, and that automatically shortens the time of searching.

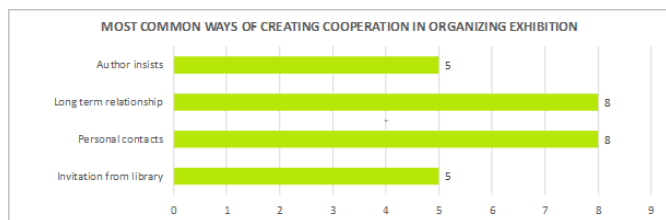


Figure 3. Ways of creating new cooperation in Riga Central Library and its branch libraries (Meldere, 2016)

From 12 libraries, that answered, only three pointed out other branch libraries with whom they would like to cooperate in future. Most common answer to this question was: “with all branch libraries”. The author suggests that those libraries who did not answer to this question are satisfied with existing situation and at the moment there is no need to cooperate with others.

Conclusion

Looking at the network of cooperation of Riga Central Library and its branch libraries in organizing exhibitions in 2015, there is a clear central role of Riga Central Library. However, branch libraries tend not to cooperate often with each other, the cooperation still exists, but the most portion of cooperation is with external partners – schools, kindergartens, artists and others.

Cooperation among libraries can also be explained with geographical criteria – those libraries that are closer to each other tend to cooperate more than with libraries that are far away. A big role is also played by the managers of libraries, because it makes libraries not to get closer geographically, but through people.

This research could be continued in a longer time scale (several years) to see what changes within years – where new cooperation come in and where cooperation disappears, analyze the context of creating cooperation and if the cooperation was planned for long time of period or for one time only.

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CREATING A THIRD SPACE, A MEMORY HOUSE: THE ORANG ASLI ARCHIVE

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Keywords: archives, indigenous peoples, social justice, Orang Asli

Abstract

Archives hold a unique position of privilege. What we as archivists decide to preserve becomes part of our joined collective history. In the face of globalization, many aboriginal peoples struggle to preserve their culture and traditions. Archives can empower aboriginal peoples by offering them the means to safeguard their history and culture in a neutral, secure third place beyond home and country of origin.

Keene State College in 2000 embarked on a project to create an archive for research materials relating to the Orang Asli, the indigenous peoples of Peninsular Malaysia. The project was initiated through a collaboration between the Anthropology department and Mason Library of Keene State College, and funded through the Wenner Gren Foundation.

The project originally focused on archiving the papers of senior scholars in the Orang Asli research community. It became evident however that the peoples of the Orang Asli had no archive of their own and the materials being collected were of substantive legal value. Advocates of the Orang Asli rely on the research materials as evidence to prove the Orang Asli's indigenous ties to their ancestral lands in Malaysia. In Southeast Asia, the need for land is great for cultivating palm trees for palm oil production. Indigenous peoples' land claims, like the Orang Asli, often stand in the way of commercial farming.

The paper focuses on the creation of the Orang Asli Archive as a third space, a memory house functioning as a "safe house" for preserving and protecting the history and culture of these aboriginal peoples. The paper will discuss too the on-going work to create a digital library for research information and the work being purposed to establish a broader, international network for sharing information with the Orang Asli and with members of the Orang Asli research and advocacy community.

Introduction

Archives hold a unique position of privilege. What we as archivists decide to preserve becomes part of our joined collective history. In the face of globalization, many aboriginal peoples struggle to preserve their culture and traditions. Archives can empower aboriginal peoples by offering them the means to safeguard their history and culture by, in the words of Howard Mansfield (1993), creating a “memory house,” a third space where all things within are valued, venerated, and remembered.

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Overview: Orang Asli Archive

The Orang Asli Archive or OAA was established to preserve and disseminate the history and culture of the Orang Asli for the Orang Asli and for the research community and advocates who support them. The archive includes over 30 linear feet of research material, books, unpublished papers, photographic material, audio-visual material, and artifacts, dating from the early 20th century to the present. The collection relates to 19 to 20 indigenous groups that make up the Orang Asli (meaning the “original people”) whose presence in Peninsular Malaysia pre-dates the arrival of the ethnic Malaysians. Among the groups represented are the Batek, Jahai, Ja Hut, Ke-

dah, Semai, Semang, Semelai, Sengoi, and Temuan. The OAA is housed in the special collections of the Wallace E. Mason Library at Keene State College, Keene, New Hampshire, U.S.A.

The OAA includes a number of manuscript collections. Among them are the papers of noted researchers Banseng Hoe (Canadian Centre for Folk Culture Studies), Robert K. Dentan (University at Buffalo), Rosemary Gianni (Keene State College), Adela S. Baer (Oregon State University), Kirk & Karen Endicott (Dartmouth College), Duncan Holaday (University of Malaya), and Shuichi Nagata (University of Toronto). The materials, dating from the 1950s to the present, cover a wide-range of subject matter from the environment, ethno-botany, hunting and gathering practices to linguistics, medicinal practices, and mythology.

The archive also collects material relating to the Gombak Hospital, a hospital established in 1957 by the British Doctor Malcolm Bolton to provide medical care for the Orang Asli. The core of the collection consists of the papers and photographs of three former nurses – Kathryn Henderson, Jennifer Cairn Duguid, and Joan Sweetz. The collection covers the years between 1960 and 1963 and offers rich visual documentation of the doctors and nurses who worked at the hospital and their Orang Asli patients.

The archive has a collection of rare documentary films about the Orang Asli. Included are *Nomads of the Jungle* (produced by Louis de Rochemont, 1948) and *Magic in the Hills* (produced by Ivan Polunin & BBC, 1975). There are numerous rare audio recordings, including those by Duncan Holaday to interview members of Ja Hut. The recordings were used for Holaday’s book *Bès hyang dnèy and Other Jah Hut Stories* (2003). The audio collection includes over 30 recordings of the Kedah by Shuichi Nagata that document the Kedah’s language and customs. Since 2009, the largest expansion in the OAA has been in the digital realm. Keene State College committed to digitizing the photographic holdings of the OAA and making those scanned images accessible online. There are over 3000 digital images available on KSCCommons, the college’s institutional digital repository (<http://commons.keene.edu/oa>). The long-term plans are to extend the digitization to text documents, audiovisual materials, and artifacts. The digital archive could easily expand to encompass more than 10,000 digital documents, images, and objects.

Need for a Third Space, a Safe House

When an indigenous society is under duress and its knowledge is not safe at “home” or in the public sphere of the people’s country of origin, the archive offers a “safe house” away from home or country to safeguard memory and knowledge. The Orang Asli Archive func-

tions as such a “safe house”, a third space outside the realm of home or country.

The creation of the Orang Asli Archive could be interpreted as an anthropological exercise by Western academics to establish an ethnographic collection in traditions of Western colonialism. But for those involved with the OAA project, the act of creating the archive was an act of “social justice.” The notion of the “safe house” is not lost on the scholars and researchers who are well aware of the perils the Orang Asli face.

“[Orang Asli] are currently facing the prospect of losing their histories and identity,” Dartmouth College anthropologist Dr. Kirk Endicott (2016) commented. “Orang Asli societies and cultures are changing rapidly under the impact of economic development and Malaysian government programs intended to assimilate them into the majority Malay ethnic group. Orang Asli memories and oral traditions are quickly fading in the face of these disruptions. The only durable records of their earlier ways of life are the written records, photographs, videos, and sound recordings made by colonial and post-colonial government officials, members of NGOs, historians and other scholars, and particularly Malaysian and foreign anthropologists.”

Dr. Adela Baer (2016), a founder of the OAA, adds: “Because of chronic political problems in Malaysia, the [Orang Asli Archive] is a haven for information on its most downtrodden people, and for future support of OA communities by indigenous and OA scholars . . .”

The Orang Asli do not have the resources or infrastructure to maintain a formal archive and therefore have not the means of protecting their documentary heritage, further emphasizing the importance of the OAA. And beyond historical and cultural value, the information stored in the OAA is of substantial legal value.

Dr. Yogeswaram Subramanian (2014), a prominent legal advocate for the Orang Asli, discussed the importance of the archival information in his presentation “The Legal Recognition of Orang Asli Customs Land Rights and its Challenges” at the 2014 Orang Asli Symposium. He and his colleagues rely on the archival information – particularly the research collected by Western scholars – as evidences to the Malaysian government to prove the Orang Asli’s indigenous ties to their ancestral lands. In Southeast Asia, as Dr. Subramanian (2014) emphasized, the need for land is great for cultivating palm trees for palm oil production. Indigenous peoples’ land claims, like the Orang Asli, often stand in the way of commercial farming. The archival information literally can be what stands between the Orang Asli and the loss of their lands.

In Malaysia, the only organization with a mission of collecting information on the Orang Asli is the Center for Orang Asli Concerns or COAC. The NGO was established in 1989 to advance the cause of the Orang Asli; they aim to provide greater dissemination of Orang Asli news and

views, aid in legal cases involving Orang Asli rights, or in formulating arguments for lobbying and advocacy work. But their position is tenuous because of the political atmosphere in Malaysia and the struggles of funding. “If COAC falters,” cautioned Dr. Baer (2016), “the [Orang Asli Archive] is a vital backup.”

The Third Space, the Memory House

The notion of the archive as a third space is perhaps novel in the context of Ray Oldenburg’s (1989) framework set in *The Great Good Places*. But in the case of the OAA, the archive occupies a “safe” space beyond the perils of home and country. And in the characteristics presented by Oldenburg, the archive offers a “neutral ground” where researchers, activists, and the Orang Asli can engage the materials or engage each other. The archive serves as a “leveler” where the history and culture of a marginalized people can be respected and valued equal to other societies. And lastly, the archive offers a higher degree of “accessibility and accommodation” unavailable or unattainable at home or in country.

Luciana Duranti (2007) writes about archive as place and describes the archive as a “neutral third party” impartial to the content of the records but dedicated to preservation and maintenance of the authenticity and integrity of the information. “For the transparency of its preservation, its security and its stability, it is necessary,” writes Duranti (2007), “that the record pass the archival threshold, the space beyond which no alteration or permutation is possible, and where every written act can be treated as evidence and memory.” The OAA operates as the “neutral third party” -- between the researchers, the Orang Asli, and those concerned with their affairs -- protecting the documents and information from alternation, or worse, destruction.

It is the notion of the archive as “memory house” -- a third space incorporating the concepts of “safe house” and “neutral third party” -- that is the most symbolic. It ties to Oldenburg’s characteristic of the “leveler”. Howard Mansfield (1993) writes in his book *In the Memory House*: “What is saved and what is discarded, who is remembered and why—all that is significant. Who may enter the memory house is determined by decree and chance and the shared illusions of any society...This is what we remember, what we shepherd toward the next generation.”

For Keene State College -- an academic institution outside Malaysia -- to dedicate money and resources to preserving and disseminating the history and culture of the Orang Asli is significant and offers an international recognition these marginalized peoples. The act of creating the archive gives the Orang Asli level of agency. What the OAA can save, can preserve as a memory house offers a mean for the Orang Asli and their culture and memories

to be remembered, valued, and venerated for generations to come.

A Virtual Third Space: Diasporic Archive

The future of the OAA is firmly ensconced in both collecting original material and creating digital content to be made available online. There is however still a steadfast commitment to maintaining a physical location for the Orang Asli Archive, regardless of the growing role of the digital archive. The establishment of the OAA at Keene State College was a political statement that the college is committed to social justice in creating a memory house, for the documentary heritage of Orang Asli whose heritage is under assault by the dominate Malaysian culture.

The areas of future growth will likely be on the de-emphasis of the primacy of collecting original documents and collaborating with repositories to create a diasporic archive of Orang Asli collections. One of the major obstacles of growing the archive is the reluctance of researchers to part with their original records. The researchers insist they need ready-access to their materials and by archiving them in Keene that would create a barrier to their research. Others insist on bequeathing their papers upon their passing. The concern, from an archivist's point-of-view, is that no duplicates exist of the papers in question. Many anthropologists and ethnographers have heard the often-told stories of the fire that destroyed their colleague's storage shed full of a lifetime's worth of field notes.

Offering researchers an option to create surrogates of their papers, photocopying or scanning, would be a productive and prudent approach for safeguarding and archiving their work. Preserving their research by any method or form should be more a priority than an insistence on acquiring original documents. For example, researcher X could agree to have her papers digitized and made available online. Her original documents would come to the OAA when she felt ready to deposit them. Redundancy in documentation will help to ensure that the information will be preserved long-term.

Collaborating on creating a "diasporic" archive for Orang Asli collections is another area of potential growth for the OAA, expanding the third space to a virtual space. There are a number of important repositories for Orang Asli research material worldwide, such as the Center for Orang Asli Concerns (COAC) in Malaysia, the John M. Echols Collection on Southeast Asia at Cornell University, and the Southeast Collection at Yale University. There are numerous "orphan" collections in academic and public repositories, e.g., the papers of Dr. Malcolm Bolton at the Bodleian Library at Oxford University and the papers of H.D. Collins at the Municipal Archive in Suffolk, UK. There are two digital repositories that collect Orang Asli as well as Southeast Asian materials the *Southeast Asian*

Digital Library (Northern Illinois University) and the *Repository and Workplace for Austroasiatic Intangible Heritage* (Lunds Universitet, Sweden). Yet for all the important resources available, there is no centralized location to access and share them.

The concept of a "diasporic archive" is borrowed from the literary archive world. Literary repositories are working together to gather materials of a single author, spread throughout several locations. Examples include holdings related to the authors James Joyce, Rudyard Kipling, and T.S. Eliot. The same diasporic concept can be adopted for the Orang Asli.

KSCCommons could be utilized as a home for the diasporic archive (DA). A "space" could be created on the institutional repository for the different collections, data, and resources to be shared. The DA could reduce competition between repositories for available collections. If an institution acquires a collection, it will be an agreed practice to share that collection via the DA. The emphasis will be on sharing and preserving of Orang Asli material and less on competing for resources.

Conclusion

Building a "memory house" – a third space, a safe space -- for the Orang Asli was the intent in establishing the Orang Asli Archive. The breath and significance of the archive continues to grow since its creation in 2000, and so does its significance as neutral, secure place for Orang Asli documentary heritage beyond the perils of home and country. The addition of the Orang Asli digital archive will further the reach and accessibility of the collection. Pursuing alternative methods and means of collecting research documents – such as the concept of the diasporic archive -- will help to make the Orang Asli's "memory house" larger and more inclusive.

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CROWDSOURCING FOR QUALITY OF LIFE: THE CASE OF COLLABORATIVE CRISIS MAPPING

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Abstract

The 2010 earthquake in Haiti showed how ICT and digital mapping could help provide emergency humanitarian aid to people affected by conflicts or disasters. Crowdsourced maps have been used by NGOs in order to quickly identify humanitarian needs on the field and provide up to date information. These tools are part of a recent trend in the humanitarian field, using big data, volunteer and technical communities (V&TCs) and collective intelligence networks to support crisis response. Collaboration is at the heart of the process to collect information and data on the field. On this topic, a large part of the literature is centred on the role of these maps in supporting the humanitarian response provided by NGOs.

However, less research has been conducted so far on the use of online mapping tools by the people affected by crisis. What use can these tools have for them beyond the immediate crisis response? How does digital collaborative mapping help improve quality of life for people affected by crisis?

This article analyses several collaborative mapping projects on recent or ongoing crisis in Syria, Nepal and France (Calais), focusing on the possibilities for local populations to be both users and contributors. Case studies are conducted on these maps to propose a typology of contributions. With this typology of information, this article then aims to discuss collaborative crisis mapping as a tool for: accessing information in crisis contexts; empowering communities and developing their abilities to be actors in the crisis response; and building community resilience. Perspectives, but also issues are explored in this article.

Introduction

The earthquake that struck Haiti on January 2010 established the major role that information and communication technologies (ICTs) can have in an urgent crisis. ICTs and social media have quickly developed in every area of the world and their use is now globalized. As crisis, such as natural disasters, conflicts and population displacements, becomes more complex ground, sharing information is crucial to assess the situation. Crisis mapping appears at the junction of “*new technological developments, social and civil activism, and the general availability of spatio-geographical data*” (Cavelty and Giroux, 2012).

Nowadays, crisis mapping is used in various situations by a variety of actors: civil society, humanitarian organisations, governments, NGOs... Collaborative mapping allows anyone to share information and contribute to the mapping process. During the Haiti earthquake, groups of volunteers mapped the country on the open-source application OpenStreetMap to give locals and humanitarian organisations up-to-date maps of roads and buildings. Other groups deployed tools to collect information about urgent needs on the ground through social media, text messages and crowdsourcing. Using a platform called Ushaidi, collected information was then located on an online map. Ushaidi was first used during the post-election crisis in Kenya where anyone could send information and evidence related to violence and human rights violations, which was then located and displayed on the collaborative map (Meier, 2012). These new tools and collaborative practices show the emergence of a “*global, participatory culture*” (Liu and Ziemke, 2013) in crisis management and activism, while Web technologies imply “*a more mature type of socialisation based upon open networks, collaborative work, information sharing and global actions*” (Roche and al., 2011). For humanitarian organisations, these collective intelligence networks are valued for supporting logistics, providing up-to-date information and helping assess the needs of the population.

On this subject, a large amount of scientific literature is devoted to the study of volunteers communities, their organisational practices (Palen and al., 2015; Palen and Soden, 2014; Bittner and al., 2016) and the implications for the humanitarian community (Meier, 2012; Ziemke, 2012, Milner and Verity, 2013).

This article addresses the topic from a new point of view, using an information science framework to analyse collaborative mapping tools, their use and usefulness for people affected by crisis. Modern humanitarianism focuses on putting people in need at the heart of the aid process and thinking about long-term rehabilitation beyond immediate crisis. Keeping this goal in mind, how does digital collaborative mapping help improve quality of life for people affected by crisis?

Definitions and plan

To define what quality of life is, this paper refers to the World Health Organisation Quality of Life (WHOQOL) instrument, which “*assesses the individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.*” (The WHOQOL Group, 1995). In order to extend this definition to the humanitarian setting, we will also rely on the standard of respect of individuals’ dignity stated in the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief. The Sphere Project, a practical handbook for humanitarian practitioners developed by international NGOs and the International Red Cross and Red Crescent Movement, reflects the new standards and frameworks for humanitarian response in the 21st century and has been adopted as an essential tool by the humanitarian community. This guide gives practical frameworks to ensure the respect of the human dignity and individuals’ well-being:

- Information: affected populations have the right to accurate information about the actions and projects related to ongoing crisis and its management. Access to information through the media, safe meeting and discussion spaces should be ensured and people should be encouraged to provide feedback. Information should also be adapted to cultural and linguistic context. Good information sharing practices ensure the transparency of NGO actions, help reduce stress and anxiety and strengthen community responsibility.
- Participation: people must be involved in the crisis response and their initiatives and abilities supported. Participation mechanisms help people understand the situation and increase their feeling of ownership.
- Capacity building: the response must be built on community efforts and capacity, as “*self-help and community-led initiatives contribute to psychological and social well-being through restoring dignity and a degree of control to disaster-affected populations.*” (The Sphere Project, 2011).

As a tool used in crisis response, how does collaborative mapping meet these requirements? To answer this question, this paper describes the potential and challenges of collaborative crisis mapping through case studies focusing on the production, collection, verification, diffusion and conservation of data. Three collaborative crisis maps are analysed: Umap Calais (France), QuakeMap (Nepal) and Syria Tracker (Syria).

This leads to consider collaborative crisis mapping as a tool for accessing information, not only for NGOs but also for affected communities. As a tool for action and empowerment, it represents a medium for collaborative participation, strengthening and supporting community initiative and capacity. Finally, the potential of collaborative mapping to build and support community resilience is explored.

Umap Calais

The Calais “jungle” was a semi-permanent place of life for many migrants from the early 2000s until November 2, 2016. The camp had its own organisation and gave the residents of the jungle access to various basic services.

The Calais jungle background map uses OpenStreetMap, which is a platform under open-source license that creates and distributes free geographic data for the world[1] without legal or technical restrictions. Digital mapping of the frame was provided by Mapfugees, a volunteer team assembled in collaboration with refugees from Calais and Grande-Synthe in Dunkirk that creates maps to facilitate humanitarian aid and improve the comfort and safety of residents. The volunteers first made the map base, then traced roads, water points, toilets, showers and kitchens on the map. This project was launched in December 2015. The OpenStreetMap format allows the data to be easily re-used by Geographic Information Systems (GIS) in order to print customized maps. Furthermore, OSM can be used offline through Android and iOS applications.



Figure 2: Map of the Calais Jungle (http://umap.openstreetmap.fr/fr/map/jungle-calais_71247#18/50.97176/1.90622)

Mapfugees focused on providing on-site training to residents so they could actively participate in updating the map and providing up-to-date information. According to Mapfugees website, the training includes: OpenStreetMap training, collecting field data, mapping using mobile devices and an introduction to open source GIS software. A refugee is usually paired with a member of Mapfugees and the inhabitants work on their life area. The map is divided into *field papers* in paper format, which are used to gather information. Each change or addition is then applied in OpenStreetMap via the GPS and smartphones of team members. This operation is done outside the jungle for technical reasons (absence of electricity and Internet connection). The inhabitants do not directly modify the digital map but act through the collaborative activities implemented by Mapfugees. This allows, among other things, the moderation of the collected data. Collaboration with the inhabitants of the jungle helps them better understand their cartographic needs. The members of Mapfugees try to respect the terminology given by the inhabitants as much as possible in order to define their reality accurately.

Through these maps, the jungle can become commons[2] (Olstrom, 2010, and Coriat, 2015), which means that the map allows the inclusion of these areas in the world rather than their usual exclusion. The identification of 3G spots and charging stations also shows how the map can be a door to the outside and a situation after the refugee camp. The map may be seen also as a way out, a means of integration to the outside (Lobbé, 2016).

Now that the jungle is dismantled, it raises the question of the value of the map as it is no longer effective. Are we moving towards a map as an archive? Quentin Lobbé quotes the french philosopher Jacques Derrida to illustrate these words: “to archive is a gesture of power” (Lobbé, 2016). Archiving can be seen as a way to build resilience and put the process back in the hands of those who have been excluded from their own history and memory. Mapfugees is currently working on the Grande-Synthe refugee camp in Dunkirk.

QuakeMap



Figure 3: Internet Archive – QuakeMap.org (<https://web.archive.org/web/20150508192525/http://quakemap.org/main>)

On April 25, 2015, a 7.8 magnitude earthquake struck Nepal’s capital Kathmandu. The area was hit with aftershocks, including a 7.3 magnitude shock on May 12. The earthquakes killed almost 9,000 people, injured at least 22,000 and destroyed or damaged more than 800,000 homes[3]. Within a few hours from the first shock, the Nepalese non-for-profit civic technology company Kathmandu Living Labs (KLL) created QuakeMap, a crowd-sourced crisis map providing information to both the people in need and the relief workers and volunteers on the ground. QuakeMap is built upon the open sourced platform Ushaidi, which allowed the KLL team to quickly adapt it as a framework for the Nepal crisis and easily customize it whenever they obtained new data to be added on the map.

The QuakeMap website (QuakeMap.org) was closed recently since the map was no longer needed by the public, more than a year after the crisis. Thus, we consulted the site “Internet Archive (<https://archive.org>)” where web captures of the platform were archived.

KLL collected the crisis data through multiple means of communication including SMS, e-mail, smartphone application (“Nepal Earthquake Report” from Android App), Twitter with the #QuakeMap hashtag, and most of all, the platform itself. On the QuakeMap website, anyone could submit a new report by filling in forms including a title, a description, a location name which helped designate the exact position on the map, and categories such as “People trapped”, “Help Wanted”, “Food/Water”, “Blocked Roads”, “Medical Team”, “Shelter”. In terms of categories, the reports were targeted not only at relief organisations but also at the civilians in need of aid. People could also upload photos, videos and a news source link while submitting a report, which would increase information reliability. These reports were then checked and verified around the clock by volunteers of KLL, which allowed them to upload all the information immediately. While phone communication was hard to maintain during the days following the earthquake due to the collapse of cell phone towers, many people were able to connect to the internet with their mobile phones. This was a vital method to share and obtain the information[4]. Moreover, KLL provided offline maps on smart phones and printed paper maps of certain areas to those who had no internet access.

QuakeMap presents the significant characteristic of being the first emergency mapping project led by a local group and not by governments or international agencies. Local groups such as KLL benefit from language and the cultural knowledge, thus allowing them to take an active part in disaster relief operation[5]. This also allowed Nepal army to get information about camps housing earthquake victims and to coordinate relief operations. More than 3,300 people participated in the crisis mapping (Gilmour, 2016). Compared to other crisis maps, QuakeMap allowed relief workers to take action in ongoing crisis by means of local and remote mappers who immediately verified the reported needs.

However, the collaborative map could also be an essential source to rebuild the affected local areas after the crisis. It is therefore important to continue working on mapping in the long-term, in preparation for further disasters which might occur.

Syria Tracker

The Syria Tracker project is hosted by Humanitarian Tracker, a US-based non-profit organisation dedicated to supporting information in war and crisis contexts. Syria Tracker is a platform that uses crowdsourcing to document human rights violations in the context of the Syrian civil war. The platform uses Ushaidi’s Crowdm

API, also used by Quakemap. The API is simple to use and anyone can create their own map using this system. Syrian Tracker data is used by several UN agencies, NGO and press outlets across the world.

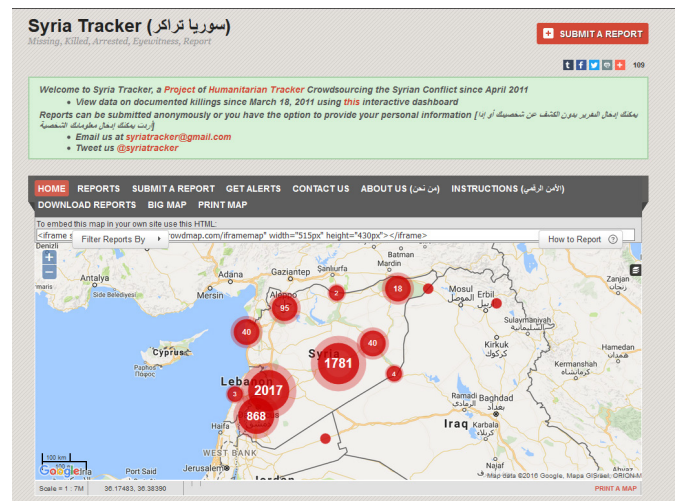


Figure 4: Syria Tracker (<https://syriatracker.crowdmap.com/>) (Dec. 12 2016)

Any person can submit a report containing information related to an event involving human rights violations and its localisation. This information can be: the description of the event, an eye-witness testimony, photos or videos, a tweet. It can be submitted through an online form, by email or by social media using the #syriaspeaks hashtag. However, information cannot be sent by text message as the cellphone network in Syria is not secured. Protecting contributors’ privacy is one of Humanitarian Tracker’s biggest concerns: in a context of war and political repression, they insist on ensuring users’ privacy and offer tools and advices for anonymous submissions. Contributors are advised against sending text messages and encouraged to use TOR, encrypted email services or other anti-surveillance tools. Information related to identity is optional in the online form.

The platform offers several features: advanced search of the reports, data export in CSV and KML, use of categories, web integration, printable maps, reports download, alerts, direct analysis and visualization of the data.

The other main concern of Humanitarian Tracker is to ensure the veracity of information. Submitted eye-witness reports are verified by volunteers who collect and check for news, photo and video evidence of events through automated data-mining. Volunteers can also endorse the veracity of a report through a credibility vote system. Of 6024 published reports (on the date of Dec. 12), 5947 are marked as verified (about 99% of the published reports). However, Angela Oduor Lungati stated that of 70k reports submitted (in April 2014), only 6% are published on the platform due to the moderation and checking process[6], which shows a huge loss in the amount of data initially collected and increases information noise.

One of the goals of Syria Tracker was to collect humanitarian needs from locals in Syria. However, the ground became too dangerous for humanitarian organisations: Médecins Sans Frontières left Syria in 2014 due to grave violations of international humanitarian law and access to the country has been closed to foreign journalists and humanitarian workers. In this context, we can assume that the information cannot lead to action on the ground from NGO or international agencies in most of situations and the role of collecting needs became less important. Ziemke (2014) suggests that warzone maps have a strategic role in the conflict, as they depict the dynamics of power and relationship networks which are at the heart of modern warfare. However, Patrick Meier suggests that this type of map can also be used by international human rights NGO such as Amnesty International and the ICC, as it was the case for Lybia Crisis Map, to help future investigations of human rights violations and crimes[7]. Syria Tracker's function can be seen as testimony and repository, in which personal histories can be identified. This map fills a more long-term objective of bringing evidence of human rights violations to light, helping identify and locate victims of crimes, and keeping both individual and collective memory of the war for the Syrian people and for the world.

Summary and typology

The case studies can be summarized in the following table in order to identify the main functions of each map according to our initial questions.

Table 1: Case studies

| Map | Access to information | Action | Resilience |
|-------------------------------|---|--|--|
| Umap , Calais | Refugees give information about the jungle. Access is supported through mediation by volunteers who also give the tools and skills for participation to refugees. | The map allows people to define and build their own territory. | The jungle become part of the world. Community is no longer confined in an excluded territory and become integrated to the outside, in relationship with the world. |
| QuakeMap | Users (as contributors) can send reports by various means of communication. Reports are targeted not only at relief organisations but also at the civilians in need of aid. | QuakeMap allows humanitarian agencies, locals and mappers to act immediately in an ongoing crisis. Community stays informed on the aid process, who does what and where, as well as their own needs. | Essential source to rebuild the affected local areas even after the crisis. Encourages self-achievement in the local people and can help prevent further risks, thus enhancing risk management and preparedness. |
| Syria Tracker | Anonymous access and multiple ways of submitting information. Use of social media to gather information via data-mining. Information is mostly produced by locals. | Collects and amplifies Syrian voices and testimonies. Less short-term action effect as the country is closed to aid organisations and because of the unstable context. | Place of memory, repository, testimony. Documents facts, keeps traces and evidence of personal histories, relationship networks and conflict dynamics. Can help locate and identify victims of crimes even after the conflict. |

This case study of three different maps shows the diversity of situations in which collaborative crisis mapping can be used and how each context brings up different issues. QuakeMap dealt with an immediate crisis (natural disaster) where humanitarian aid quickly came. Syria Tracker depicts a long-term crisis in a precarious situation (a civil war) involving human rights violations and crimes that need to be reported. The refugee crisis in Europe and the Calais jungle can also be seen as a long-term crisis. This has led to observe several common issues.

Conclusion

Collaborative mapping relies on powerful, adaptable and open-source digital tools that can be used to create digital maps in any given situation, whether to collect urgent needs for water, food and shelter, document violence or support humanitarian logistic. As maps are social representations of space, digital collaborative mapping provides people with the ability to express their own perception of their physical and social space. Moreover, as maps become “a widely available tool for expression and participatio” (Roche and al. 2011), collaborative mapping also represents a way for individuals to express their needs and concerns regarding where they live in relationship with others, echoing the WHOQOL definition.

For humanitarian organisations, sharing information is at the heart of the aid process. For them, collaborative mapping is a powerful needs assessment tool. Data collected by collaborative maps have been largely used at an institutional level by humanitarian organisations, local and international but also by the media, UN agencies and governments, showing the interest for these collaborative maps. This means that collaborative mapping can be a tool to support humanitarian aid or development but also a powerful communication channel about a crisis.

The collaborative aspect of these maps make participation possible for people involved in the crisis, thus enabling autonomy and self-expression. Cavelty and Giroux qualify the use of ICT in crisis as “expression of resilience”, as it lets victims take the initiative of mutual assistance (Cavelty and Giroux, 2012). The case studies have shown several processes that can be seen as resilient building according to the IFRC guidelines on resilience: information sharing and communication, within the community and between the community and external actors; maintaining and visualising relationships networks; self-assessment of needs and problems; enhancing risk management, adaptation and community preparedness in the case of natural disasters (International Federation of Red Cross and Red Crescent Societies, 2014).

On the other hand, several issues can be observed, the first being the accessibility of the technical tools. The text elements of the maps are in English most of the time and language can be an obstacle to accessing information. In the context of urgent crisis, collaborative maps collect huge amounts of data that create a lot of informational

noise. Reports platforms like Ushaidi do not handle well the massive production of data and the information life cycle, thus displaying obsolete information on the map. For example, QuakeMap was still displaying clusters of red dots shortly before it was taken down, giving the impression that there were still needs on the ground.

Another issue is data preservation and archiving. A lot of crisis maps went offline after some time, like QuakeMap. This raises the question of whether the data is kept, where and by whom, as it can still be exploited. To learn from a crisis, there is a need to capitalize on information and data, and collaborative maps can hold an important role even after the crisis to build preparedness, resilience and archiving collective memory. Current technical mapping tools do not tackle the issue of data archiving and how data can be used to learn from crisis.

Collaborative maps can still be used in post-crisis management, therefore technical tools need to be designed to consider the representation and use of datasets after a crisis. If collaborative maps have the potential to build resilience, there is the need of thinking about a long-term use for them. The figure of the “user” or “contributor” needs to be rethought and practices studied as digital tools need to become more inclusive. Access through digital technologies does not necessarily mean equal access and participation. Dynamics of power and barriers exist: language, culture technical and mapping skills, internet access, but also institutional barriers (Bittner and al. 2016). The Mapfugees project in Calais shows the importance of mediation and skills development, either from the community or external actors, in order to ensure participation and help people use and understand the mapping tool.

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DEPERSONALIZATION OF MORAL AGENT IN ONLINE ENVIRONMENT

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Key words: depersonalization, moral agent, information ethics, online environment, anonymity

Abstract

The aim of the paper is to describe depersonalization of a moral agent in online environment in the context of information ethics. Depersonalization can be perceived as a barrier between moral agent and his actions in online environment, when he perceives his actions as not real and dream-like. It is caused by non-material character of online environment. In the first part of the paper is described term moral agent and put into relation with user on the Internet. The main part consists of various approaches to depersonalization of moral agent. For better understanding of the problem is created visualization of depersonalization of moral agent in online environment. In the final part visualization shows also causes of depersonalization that are mentioned by experts in various fields, such as Suler (2004) in psychology when analysing disinhibition or “online disinhibition effect,” Bandura (2002) as moral disengagement in social psychology or finally Floridi (2013) when mentioning depersonalization in information ethics.

Introduction

With the massive expansion of using ICTs it was inevitable to deal with ethical issues in relation to information environment. New fields emerged: computer ethics and information ethics. Capurro (2014) remarks that roots of information ethics can be traced even to ancient Greece, but modern or recent history of information ethics is marked by changes caused by media in the 19th and 20th century. Modern information ethics responds directly to new problems users are facing in online environment. E. A. Buchanan and K. A. Henderson (2009) define information ethics as application of ethical theory to information. Floridi (2013, p. 28) approached information ethics from philosophical macroethical point of view “by modifying our interpretation of information from an exclusively epistemological one to one that is also ontological.” Information ethics can be described as the field of study of ethical aspects of information life-cycle both in online and offline environment. According to Capurro (2014) information ethics is problem-oriented field focused on information behaviour of moral agent in communication influenced by mass media as part of information society.

Moral agent

The term moral agent implies that boundaries between human and non-human, artificial, hybrid or social agent are blurring (Capurro 2015). Moral agent is an agent capable of moral action if it causes moral good or moral evil (Floridi 2013). Moral agency is tightly connected to responsibility and accountability: “...any agent that causes good or evil (i.e. increases or decreases the degree of entropy in the infosphere) is morally accountable for it” (Floridi 2013, p. 154). Moral agent is the source or cause of moral action even when not human; for example animals, guide-dogs may be the source of morally good (or evil) action. The user on the Internet is a human moral agent that causes moral good or moral evil and is therefore responsible for his actions. The relationship between user and moral agent is shown in Figure 1 below. Every user is a moral agent but not all moral agents may be users, for example artificial, social (organisations, firms) or hybrid (consisting of ICTs and humans) agents.

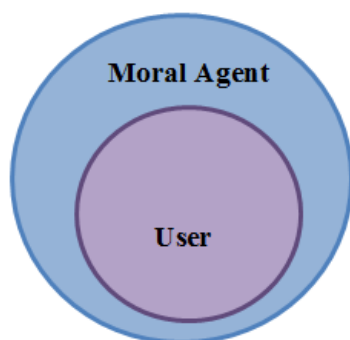


Figure 1. Moral agent and user on the Internet

Moral agent (A) does not know who will be affected by his actions, nor can he predict the direction and receiver of his action (Floridi 2013), as shown in Figure 2. His actions in online environment can influence broader audience than in offline environment, which is again, caused by ICTs.

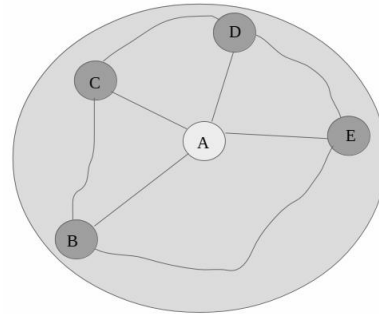


Figure 2. Actions of moral agent in online environment

Responsibility of a moral agent in online environment is tightly connected to main subject of the paper, depersonalization of moral agent. Moral agent in online environment acts differently than in offline environment because he can avert responsibility for his actions more easily because of anonymity. The term depersonalization of moral agent refers to these differences between user's behaviour in online and offline environment. In the next part of the paper the term depersonalization will be analysed and the possible causes will be researched.

Depersonalization of moral agent

People behave differently in online and offline environment: “They might be an outrageous flirt online, while being painfully shy offline” (Joinson 2007). Described behaviour is referred to by different terms: disinhibition or “online disinhibition effect” in psychology (Suler 2004), moral disengagement in social psychology (Bandura 2002) or depersonalization in information ethics (Floridi 2013) or even psychiatry, as depersonalization disorder (Sierra 2009). In this article the term used is depersonalization as it is used by experts in the field of information ethics.

Depersonalization is apparent in online environment which has certain characteristics that are needed to be taken into account. Non-materiality and virtual communication are one of them. Moral agent may feel that his actions are virtual, insignificant and without real impact. Anonymity is another key characteristic that may cause the feeling of depersonalization in online environment when moral agent lacks the feeling of social control and does not feel responsible for his actions online. The reason may be the inability to create lasting social ties online because of constant movement from one communicative relationship to another: “... the Internet might

be thought to undermine self-identity and involvement in community and social interaction” (Wallace 2008, p. 167). The possibility of construction of online identity in online environment can be another factor in favour of depersonalization of moral agent, especially when creating false user accounts e.g. on social network. This is also linked to anonymity which can be viewed as an umbrella covering other problems (creating false user accounts, flaming, trolling, cyberstalking, hacking, cyberbullying, spamming...). All these problems point to responsibility, which is according to Terrel Ward Bynum (1997) the main problem resulting from anonymity on the Internet. He views anonymity as a barrier to responsibility.

Depersonalization is term used by L. Floridi (2013). Floridi (2013, p. 59) describes depersonalization as “increasing sense of the practical anonymity of actions or effects in a context where an individual agent’s behaviour is often rightly perceived as only a marginal and microscopic component of wider and more complex courses of action.” Moral agent in online environment may perceive his actions as games or intellectual challenges, role-playing and not computer crimes. It is caused by faceless communication, virtual environment which seems as “dream-like or fictional,” not real and that also moral agent’s actions are virtual and insignificant. The agent does not feel fully responsible for his actions, when he separates his actions online from his identity: “Whatever they say or do can’t be directly linked to the rest of their lives” (Suler 2004). Also Dreyfus (2009, p. 53-54) agrees that there is a distance between moral agent and his actions in online environment: “... even though interactive control and feedback may give us a sense of being directly in touch with the objects we manipulate, it may still leave us with a vague sense that we are not in touch with reality. Something about the distance still undermines our sense of direct presence.”

Wallace (2008, p. 166) perceives depersonalization as a result of “not knowing individuals as individuals” resulting from anonymous existence of individual as a member of mass, so called deindividuation. Depersonalization in online environment is more apparent than in offline environment because of the new possibilities for anonymous behaviour on the Internet.

Joinson (2007), Kiesler et al. (1985), Postmes et al. (2002) studied depersonalization in electronic, online communication. Joinson (2007) described negative demonstration of depersonalization in online environment by flaming – making impolite statements, swearing or flirting, using exclamations, expressions of personal feelings toward another and using superlatives (Kiesler et al. 1985). Flaming however is connected with negative or antisocial behaviour on the internet (Joinson 2007), but expressing personal feelings, flirting and using superlatives may not be the signs of negative or antisocial behaviour. Depersonalization may have also positive aspects which may enable the user to act freely when trying to help others and be empathetic.

In this paper the term depersonalization is used to describe specific behaviour of moral agent in online environment that includes moral action both in electronic communication and online environment in general, for example hacking, cyber bullying and identity theft.

Because of the complexity of studied problem it is needed to look at the problem from psychological point of view and describe terms such as online disinhibition effect and moral disengagement. Moral disengagement, the concept used in social psychology, refers to moral actions that may imply self-regulatory mechanisms or not, they need to be activated because moral standards are not fixed internal regulators of conduct (Bandura 2002).

Suler (2004) describes online disinhibited behaviour as less restricted, more open. This disinhibition may have positive or negative effects: positive effect is conveyed by benign disinhibition and negative by toxic disinhibition. Benign disinhibition involves behaviour such as sharing online the most personal information, revealing secret emotions and fear or showing unusual signs of generosity and kindness. The negative disinhibition, toxic disinhibition can be experienced when using rude language, harsh criticism, anger and hatred towards other users. Suler (2004) also names factors that are influential: anonymity, invisibility caused by faceless communication that is closely related to anonymity, asynchronicity which means that communication is enacted asynchronously, not in real time, solipsistic introjection, when the user views other through their presentation in online communication. “Cyberspace may become a stage and we are merely players” (Suler 2004). This is again connected to dissociative imagination, another factor that implies creating imaginary characters that exist in different space, in online environment that is separated from real world responsibilities. Another factor is minimization of status and authority, that the user feels free to express himself as he wishes, in peer-like relationships online. Individual predispositions and differences are also a factor that plays important role in disinhibited online behaviour. Causes of disinhibited behaviour on the Internet researched also Joinson (2007).

Visualization of depersonalization in online environment

Depersonalization of moral agent in online environment is illustrated in Figure 3 below. It is perceived as a barrier (6) between moral agent (1) and receiver of moral action (2), which creates distance between them, between moral agent and effects of his actions in online environment. Moral actions are illustrated with an arrow. Moral agent and receiver of action are set in individual and specific contexts (3, 4), which consist of personal values, social context, education, attitudes, preferences... Another context that is important to take into account is the con-

text of specific situation, problem and its characteristics (5). The interaction between moral agent and receiver of moral action is taking place in online environment (7).

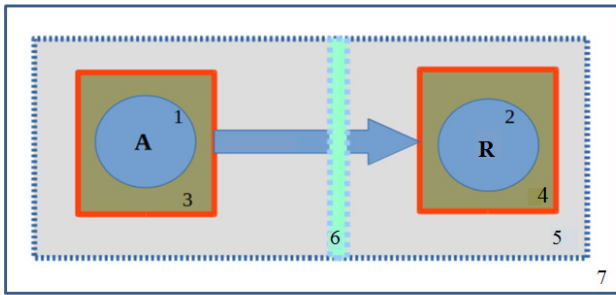


Figure 3. Depersonalization of moral agent in online environment

The barrier between moral agent and the receiver of moral action is caused by ICTs, anonymity and virtual, non-material character of online environment can cause subjective perception of moral agent's actions as not real and not affecting anyone. According to Floridi (2014) real is what is interactive, real action is interactive one. Dreyfus (2009) does not find interaction and feedback the only aspect that can give us the feeling of reality; it still leaves in the user in online environment the feeling of distance. He names another aspect that should be taken into account when discussing a sense of presence in online environment: the ability to "get a grip on things at distance" (Merleau-Ponty 1979), having a sense of context which is not possible to compensate by any technological devices, it "cannot be captured by adding together 3D images, stereo sound, remote robot control" (Dreyfus 2009). The bodily presence is necessary for moral agent to have a sense that he is in touch with reality, ICTs create distance which is not yet possible to overcome.

Another point is that it is quite difficult for average moral agent to understand environmental and personal context in online environment sufficiently. The moral agent is not bodily present in online environment, he or she cannot use non-verbal communication to get plenty of information he is otherwise able to get just from observation in offline communication. All this information create the context of the situation and moral agent has consequently far less information available that could help him better understand the situation and act more appropriately.

Causes of depersonalization

The causes of depersonalization are numerous as described by different experts in various fields. They are arranged in Figure 4 below and divided into two main parts: causes that originate from ICTs and personal causes.

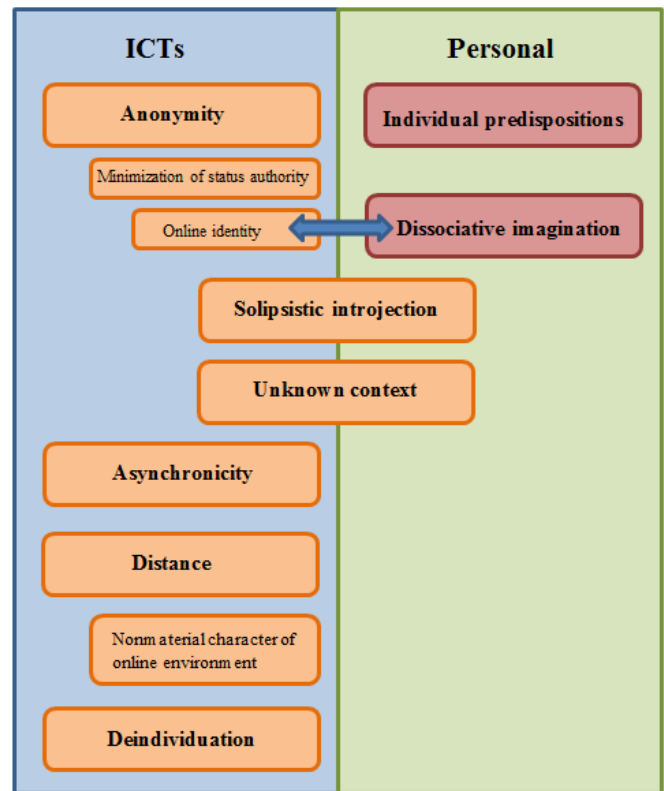


Figure 4. Causes of depersonalization in online environment

The reasons of depersonalization caused by ICTs are: anonymity (creating of online identities and minimization of status authority), asynchronicity in online communication as described by Suler (2004), created distance between moral agent and his actions in online environment (Dreyfus 2009) that is caused by virtual, non-material character of online environment, deindividuation of individual as a member of mass (Wallace 2008). Personal causes are dissociative imagination (which is directly connected to creating online identities) and various personal predispositions. Solipsistic introjection (Suler 2004) describing the fact that perception of moral agent's actions depends on their presentation online, can be viewed both as personal and ICTs cause. The same way also unknown context can be personal or ICTs cause of depersonalization. Not having enough information about situational or personal context can be also viewed as factor that can induce depersonalization of moral agent in online environment.

Conclusion

Depersonalization of moral agent in online environment deserves more attention because it can influence to certain degree every user on the internet (it may however depend on factors such as age, education, socio-cultural context). The problem can be studied in the context of information ethics which is concerned with every aspect related to information and ethics in online and offline environment. Depersonalization can be perceived as a barrier between moral agent and his actions, which creates certain kind of distance between them. The causes of depersonalization are numerous and can be viewed as causes originating from ICTs and personal characteristics. Some causes, such as unknown context or solipsistic introjection can be viewed as both personal and ICTs cause.

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DESIGNING GAMEFUL EXPERIENCES USING ALTERNATE REALITY GAMES

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Keywords: gamification, gameful design, education, alternate reality games

Abstract

Gamification in education has become an effective tool in engaging and motivating students. Developing courses with games in mind results in a game-like experience that effectively addresses the challenges in education, such as collaboration, engagement, and student motivation. Designing a gameful course is a challenge that requires understanding in both the education and game design theory disciplines. What game elements to borrow and how to integrate these elements into the course are questions that need to be answered. The paper proposes using alternate reality games to further enhance student engagement and motivation by integrating the course design into a narrative using game actions to facilitate and inspire collaboration and community formation. The potential for borrowing from ARGs, based on literature and previous work, is discussed and an approach is proposed to highlight this potential.

Introduction

Alternate reality games (ARGs) remain interesting manifestations of games as immersive tools (McGonigal, 2003). An ARG can be defined as a game that uses multiple types of media to create an immersive, narrative-driven experience played by a community of players who collectively solve the puzzles, reconstruct the narrative, and in that way push the game forward. ARGs manifest game characteristics in interesting and creative ways.

Understanding and analysing ARGs to understand what makes them immersive is a valuable exercise, especially when looking at the components of which ARGs comprise. Games are powerful tools for teaching, learning, motivation, skill acquisition, and engagement (Bonsignore, Hansen, Kraus & Ruppel, 2012), and so are ARGs.

Developing complete game experiences can be complex and can require a wide set of skills. In the same way, ARGs can be just as complex. The replicability of the ARG experience is also another challenge facing ARGs in the learning environment (Bonsignore et al., 2012; Jerrett, 2016). Gamification can be a simpler way of using the strengths of games by borrowing the game elements or mechanics and implementing them in a non-game context. Borrowing from games gave rise to the concept of gamification, which can be implemented using gameful design that results in more game-like experiences (Deterding, Dixon, Khaled & Nacke, 2011).

The purpose of this paper is to elaborate on gamification in education, highlighting the challenges gamification attempts to solve and why practitioners choose to borrow from games. A set of game phenomena, which has shown to work in gamification in education, is identified from literature. Providing insight into what research in education considers gameful design to be, the paper will then give background on ARGs, specifically the nature of ARGs. A previous study done as part of a master's dissertation (K. de Beer, 2015) provides the basis for the ARG background as well as the breakdown of the characteristics of an ARG. The paper then provides a parallel between the identified game phenomena in education that has proven effective, and the ARG characteristics that can assist in implementing them in a non-game context through gameful design. This can be achieved by answering the question: *How can the game elements unique to ARGs be used in gameful design?*

Background

A theoretical background is required to provide the framing for the concepts put forth by this paper. Gamification is the concept of using game elements or mechanics in a non-game context (Deterding, Dixon, et al., 2011). Huotari and Hamari state that gamification is the “process of enhancing a service with affordances for gameful experi-

ences in order to support users' overall value creation” (Huotari & Hamari, 2016). Where Deterding, Dixon, et al. focus on gamification alone, Huotari and Hamari expand gamification by stating that it is turning the non-game context into a more gameful experience. The concept of gameful design is designing for gamefulness by making use of game design elements (Deterding, Sicart, Nacke, O'Hara & Dixon, 2011). To make a system or a process gameful is to make it more game-like.

Gamification and education

Gamification has been implemented successfully in various educational contexts and has shown that it effectively engages students (Aguilar, Holman & Fishman, 2015; Barata, Gama, Jorge & Gonçalves, 2013; Boskic & Hu, 2015; De Byl, 2012; Decker & Lawley, 2013; De Santana et al., 2016; Urh, Vukovic & Jereb, 2015; Wood & Reinert, 2012), as well as motivate them (Barata et al., 2013; Bellotti et al., 2013; Caponetto, Earp & Ott, 2014; De Byl, 2012; De Santana et al., 2016; Domínguez et al., 2013; Knutas, Ikonen, Nikula & Porras, 2014; Urh et al., 2015). Gamification is even used to create awareness of specific components within a course (Bellotti et al., 2013) and it has been argued that it increases retention (Decker & Lawley, 2013). Thus, it has been established that gamifying a course will increase motivation for the course, the content, and the usage of systems within the course (such as discussion boards and assessment platforms). Research also shown that a gamified course engages students effectively.

Game elements used in gamification

Literature provides examples of how practitioners gamified their courses. It is important to align the activities and challenges within a course to the game elements (Barata et al., 2013; De Byl, 2012). For example, the usage of game-related terminology from role-playing games for the course content can be a simple way to do this (De Byl, 2012). The game elements should also be integrated into the non-game context (Barata et al., 2013; Wood & Reinert, 2012). There are arguments for making the gamified content non-curricular and voluntary for the students (Decker & Lawley, 2013) so that a student does not feel penalised for not participating within the gamified system. Decker and Lawley also argue that the whole system should be accessible to “casual players” (2013).

Game elements borrowed from games vary to a large extent. Certain elements are easier to implement within a non-game context, such as points (Barata et al., 2013; De Byl, 2012; McDaniel, Lindgren & Friskics, 2012; Moccozet, Tardy, Opprecht & Léonard, 2013), badges (Barata et al., 2013; De Byl, 2012; Decker & Lawley, 2013; McDaniel et al., 2012) and leader boards (Barata et al., 2013; De Byl, 2013; Moccozet et al., 2013; Wood & Reinert, 2012). The manifestation of these elements takes various forms. Points can be awarded to a student for completing tasks, or they can be awarded in the form of player levels (Barata et al., 2013). The use of points, badges, and leader boards

(or PBLs) has been criticised as “lazy gamification”, but effectively integrating these elements into the course will still result in an increase in motivation and engagement. Other elements borrowed from games are the concepts of quests or challenges for students (Barata et al., 2013; De Byl, 2012) presented in the gamified system. These quests and challenges can, in turn, award points or badges. Badges can also be implemented more creatively by awarding them for different types of activities, such as individual challenges, group challenges, or completing a series of challenges (Decker & Lawley, 2013). Wood and Reiners implemented customisation to allow students to express their individuality through earning customisation options from participating in the course (completing activities that earn them points and badges) and also allowing students to explore the content of the course (2012). Such exploration results from students seeking more customisation opportunities within the course by trying to earn more points or unique identifiers such as badges.

Narrative or stories are also used in gamified systems (Boskic & Hu, 2015; Erenli, 2012; McDaniel et al., 2012; Stott & Neustaedter, 2013) and allow for the integration of the course content with the game elements. Game elements that facilitate social engagement from the students with one another and the lecturer constitute another effective way of engaging the learners (Boskic & Hu, 2015; De Byl, 2013; Fishman et al., 2013). Enhancing social engagement can be done by gamifying the discussion system so that it rewards participation within the system. Games contain built-in feedback systems, which allow players to see if they are on the right path immediately, whether they are doing something correct or not and whether they are moving towards the intended goal. Fast or rapid feedback is also implemented in gamified systems (Barata et al., 2013; McDaniel et al., 2012; Stott & Neustaedter, 2013). The ability of a player of a game to explore the space of the game (context) and make mistakes within the context is also an invaluable tool for teaching the player how the game functions. The freedom to fail and learning through failing can also be implemented in a gamified course (Fishman et al., 2013; Stott & Neustaedter, 2013). By allowing students to explore the course content by facilitating the exploration and experimentation with game-like elements and experiences, students can learn the content of the course on their own terms and at their own pace.

The reasoning behind using specific game elements

Game elements can reinforce an “intrinsic sense of satisfaction that engaging in creative and productive work can generate” (Decker & Lawley, 2013) and they can “make learning more attractive, captivating and, ultimately, effective” (Caponetto et al., 2014).

By including challenges or quests within the learning experience, students are allowed “freedom with regards to expression of content” (Barata et al., 2013) as the challenges or quests are mostly optional or voluntary within

the gamified course. Customisation allows students to build a unique profile through their activities to differentiate themselves from their peers (Wood & Reiners, 2012). Another level of customisation in a gamified course allows students to customise their learning experience based on what manner of learning they feel comfortable with (Boskic & Hu, 2015). Leader boards allow students to compare and contrast their performance with one another (Wood & Reiners, 2012) and can even be used as an entry point into the gamified system (Barata et al., 2013). Awarding students with points or badges can also promote specific behaviour, depending on the course content (McDaniel et al., 2012). Fast or rapid feedback provides a student with instant gratification when completing tasks (Barata et al., 2013).

Crafting game-like experiences by borrowing game elements

The discussed game elements can assist in engendering more complex phenomena found within games such as competition, collaboration, community formation, and the concept of agency or control. Voluntarily collaboration with one another and competition (on an individual or collective basis) is key to intrinsic rewards in higher education (Fishman et al., 2013). Collaboration develops certain skills that are important for learning, and if students can be motivated to use collaborative spaces, they will more easily receive feedback from their peers or the lecturer (Moccozet et al., 2013). When students are motivated to collaborate and help each other (Knutas et al., 2014) the result is enhanced engagement with one another (Boskic & Hu, 2015), which, in turn, supports student autonomy (Aguilar et al., 2015). To get students to collaborate, a community of sorts needs to form. Community formation can be motivated by placing students in a game-like environment that rewards, motivates, and cultivates this behaviour (Aguilar et al., 2015). Allowing students a degree of control over their actions and their environment can empower them to explore the course content. This allows students to set their own pace of learning, resulting in mastery of the content in an individualised manner (Aguilar et al., 2015). An example of this control can be found in gamified systems where students could set their own grading structure (Boskic & Hu, 2015).

Gamification to gameful design

In the education discipline, research has developed its own, but equally accurate, interpretation of gameful design. While the term “gamification” still remains in effect, recent research has started to use the term “gameful” (Aguilar et al., 2015; Caponetto et al., 2014; Domínguez et al., 2013; Fishman et al., 2013). There are various reasons for this change, from avoiding the negative connotation of the term “gamification” (Fishman et al., 2013) to arguing that gameful design is a “step further from gamification” (Aguilar et al., 2015).

This research has shown that, rather than borrowing elements from games and using them to engage and motivate students, a wider focus on game design allows for the crafting of game-like experiences (Fishman et al., 2013). There is also an acknowledgement of the large-scale effort required for these types of experiences as the concept of “game-like experiences”. This needs to be kept in mind from the very start of course development (Domínguez et al., 2013). The movement from borrowing game artefacts and applying them to the non-game context (Caponetto et al., 2014) towards developing the course and content from the ground up to be more game-like (Domínguez et al., 2013) results in the structure and the overall learning process to be more able to support intrinsic motivation (Aguilar et al., 2015) and to be more engaging overall.

Making education more game-like

Developing a course from the start with gameful design in mind can allow the lecturer to use the strengths of games. Phenomena found within games, such as collaboration, community formation, and player control, can be implemented within a learning experience by making use of game elements, such as narratives, challenges/quests, and exploration. Understanding ARGs can assist in designing these game-like learning experiences, because ARGs make use of the discussed game elements in unique ways. These implementations result in player behaviour distinctive to ARGs. By understanding how ARGs use these game elements and then implementing them in the game-like learning experience, one can duplicate the success of ARGs in engendering collaboration, motivating community formation, assisting in exploration of information landscapes, and giving the student a sense of control.

Understanding ARGs

Alternate reality games are immersive games (McGonigal, 2003) that make use of multiple types of media (Dena, 2008; Hansen, Bonsignore, Ruppel, Visconti & Kraus, 2013; J. Y. Kim, Allen & Lee, 2008; McGonigal, 2003) to create a complex narrative that is fractured across various platforms (Bonsignore et al., 2012; Dena, 2008; Hansen et al., 2013). Players of an ARG are enticed into the narrative and through collaborative problem solving and community engagement (Gurzick et al., 2011; J. Kim, Lee, Thomas & Dombrowski, 2009; McGonigal, 2003; unfiction inc, 2002) they solve the game puzzles and challenges (Hakulinen, 2013; Hansen et al., 2013) which reward them with further game narrative or more puzzles/challenges. The collaborative process of reconstruction requires players to uncover, collect, interpret, and reassemble the game information, and is required for the game narrative to make sense (Hansen et al., 2013). By solving these game puzzles/challenges, players are rewarded with pieces of narrative, which, when put together, advance the game narrative and the game (Dena, 2008).

Components of an ARG

An in-depth analysis of ARG literature done as part of a master’s dissertation (De Beer, 2015) allowed the identification of the characteristics discussed above. From these characteristics, three components were identified that form an ARG. The three components identified in the dissertation are similar to components of an ARG identified by the ARG white paper (Martin et al., 2006, p. 31).

The components are:

- The narrative (called “exposition” in the white paper) – This component includes the pieces of narrative in the ARG, the overarching narrative, as well as how the ARG uses narrative.
- Game actions (called “challenges” in the white paper) – These are the game activities described in game design theory.
- Community and interaction (the white paper just refers to “interaction”) – This component describes how players interact and participate with one another and the ARG.

Analysing three ARGs based on the above-mentioned identified components allowed for the creation of a conceptual framework. The framework enables the analysis of ARGs on an abstract level, specifically to aid in the design of ARGs. The framework also sheds light on how the components interact with one another within the ARG. The components identified in ARGs are also seen within gamification in education, as discussed in the background of this paper. It is this distinctive interaction between these components in an ARG that needs to be replicated in the gameful design of education.’

A detailed discussion of the framework for designing and analysing ARGs can be found in De Beer (2015) as well as in De Beer and Bothma (2016), which includes discussion on how the framework was developed.

Gameful design using ARGs

The interaction between these components in an ARG can be replicated in a non-game context such as education. The background has shown that game phenomena, such as collaboration, community formation, competition, and control can manifest within a game-like experience. Implementing the borrowed game elements, similarly to how ARGs implement them within the education context, can result in the components of an ARG manifesting in a non-game context. The following sections will discuss how each of the components exists within an ARG and how they can be used in designing game-like experiences for education.

Narrative

The narrative in ARGs can be described as a type of interactive fiction. Players of an ARG are continuously interacting with the game narrative by looking for clues, pieces of story, or content to explain certain events. Players access these narrative chunks (Dena, 2008) by receiving them from the game, solving puzzles in the game, or constructing their own cohesive narrative. In ARGs, the concept of the “player as producer” plays a large role in how the narrative unfolds. As players collect the narrative chunks, they have to reconstruct the narrative to make sense of it (Gurzick et al., 2011). Players can also “fill in the gaps” by making their own narrative leaps. In the case of an ARG, the game can weave these narrative leaps into the game narrative and make it part of the ARG (Dena, 2008; J. Kim et al., 2009). Players are then responsible for creating narrative content for the game.

Creating a game-like experience in education literature has shown that using a narrative or story engages the students. Making use of “chunking” that is done in ARG narratives can motivate the students to investigate further for “gaps in the story”. The process of understanding the narrative also requires of students to evaluate the found information, decide on its relevance, and then integrate it into the already constructed narrative. If the narrative is closely linked to the course content, this exploration can result in the exploration of the course content as well as the narrative. By then searching for the narrative, players will explore the narrative space. If the narrative space is integrated with the course content (thematically, abstractly, or just by providing simple links in the narrative) students will then explore the course content as well.

The narrative in an ARG is also directly linked to the game actions. In the case of ARGs, these are usually puzzles or challenges that are very complex and require players to collaborate and employ a collective detective (unfiction inc, 2002). Game actions in an ARG are similar to the borrowed game elements in gamification. In gamification, the game actions can reward the students with narrative chunks. The awarded points can also be linked to the narrative in the gamified course.

Narrative can lead to more narrative chunks or link to a challenge within the course. Solving the challenge can reward players by providing more narrative content. The reward can also be giving access to more complex challenges, which, in turn, can reward more narrative.

Game actions

Game actions in ARGs are complex puzzles and challenges that players need to solve collectively. These game actions require the community of players to share information with one another to solve the problems. By embedding course content into the puzzles or making the problems they need to solve course-related, students will engage with the course content in order to solve prob-

lems and complete game actions. Students can also be motivated to solve problems due to the narrative the puzzle provides as reward, or the narrative context in which the puzzle is found.

By making the game actions related to the course, the solving of the game actions (puzzles or challenges) can result in learning. Game actions can also be embedded within the course, which can inspire students to explore the content to find the game actions.

Game actions can reward players by means of narrative revelations within the gamified course, which can further expand the complete narrative. The narrative can contain course-related content, which can then lead to another puzzle or a narrative reward. As discussed at the end of the narrative section above, challenges or game actions and the different types of narrative pieces, are linked together. It is this interlinked nature that is manifest within ARGs and can be replicated in a gamified course.

Collaboration

In ARGs, the player community forms around the game. This is due to the complexity of the ARG puzzles and the nature of the game narrative. Players are required to collaborate to solve the complex puzzles, as well as construct the narrative (as discussed above). Certain game actions are also designed in such a way that they require players to collaborate to solve them. By using game elements in a gamified course and designing the game-like activities in such a way that it is related to the course content, the collaborative solving of these puzzles will allow students to learn concepts from the course collectively.

Community formation is a product of these collaborative puzzles and a “chunked narrative”. Students will form groups around certain challenges to attempt to solve them. If the challenges are widespread, various students can choose to focus on certain challenges within the sub group. This is something that manifests extensively in ARGs (Gurzick et al., 2011).

The freedom of students to explore the course content and to form their own groups around certain challenges results in students having a sense of control. How the narrative is constructed by the community or how the game actions are completed is up to the student community.

Conclusion

This paper presents a concept of using ARG components and game elements to allow a gameful course to manifest ARG-like characteristics. By combining how gamification has borrowed game elements from normal games with how ARGs function, the creator of the gameful course can inspire student collaboration, community formation, engender a sense of control, and motivate students to en-

gauge with content integrated into an overall narrative.

The approach proposed in this paper is for use within a gamified course, but has not yet been tested empirically. Narrative integration similar to ARGs has been done in gamified education and was very effective (Boskic & Hu, 2015). Using the conceptual framework for designing and analysing ARGs (K. de Beer, 2015) to design a gameful course will be attempted in future work.

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THE DOUBLE MEANING OF “REPLACEMENT” AND THE MORAL VALUE OF HUMAN AND NONHUMAN INFORGS: CROSSROADS OF PHILOSOPHY OF INFORMATION AND ACTOR-NETWORK THEORY

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Abstract

In this article two concepts are introduced as a reaction to recent empirical recurrent themes of fear and skepticism with regard to machines, and more specifically artificially intelligent machines. I propose, thus, to treat the problem of “mechaphobia,” that is, the fear of ICTs replacing humans and human activities, by the usage of a novel conceptual tool, namely the notion of “re-placement” as opposed to “replacement.” Heideggerian methodology is applied to explore words’ origins as means of refreshing concepts used today in problematic manners. Replacement as substitution is then treated as re-placement as reconstitution. Re-placement between the human and the nonhuman is further supported theoretically by the emphasis on nonhuman agency as proposed by Actor-Network Theory and the Philosophy of Information. In their alignment as to the value of nonhuman agents, actors or inforgs, the common direction of the two fields is highlighted, allowing the further rejection of replacement dichotomies such as online/offline, or analogue/digital. Re-placement is ultimately suggested as a central component of an emerging Virtue Information Ethics, an Information Ethics which focuses on the construction of a moral character appropriate to the contemporary needs against the speciesist discrimination against the nonhuman ICTs (conscious, semiconscious, unconscious, or otherwise) for the flourishing of an all-embracing informational environment. Quality of life becomes synonymous to equality of informational existence, posing several challenges to our taken-for-granted conceptions about the primacy of human over the nonhuman. Our “training” in understanding re-placement is treated as a vaccination, simultaneously poisonous yet therapeutic, dangerous but liberating, for our inseparable Being-with-ICTs.

Introduction: The Fear of Replacement as an Expression of Mechaphobia

Human agency often tends to criticise its possible conceptual equation, interchangeability, or even direct relationship with nonhuman agency. Consider the reactions to evolutionary theory which holds that nonhuman animals are in fact our kin. Even today, conspiracy theories (and not only) claim in the sake of a counter-argument that it is impossible for a more “complex” structure to be the outcome of a “simpler” one. Or, when one spends too much time in endeavours with non-living things – books, make-up, art, games, whatever does not involve another human – one is frequently labelled as a materialist or an anti-social human, accused for committing the deadly sins of reification, objectification, even hylomorphism. In a nutshell, one’s quality of life is considered to be degraded and devalued, if it is replaced by nonhuman, especially non-living, entities – however informational. An indicative recent too-exaggerating example is the fear of superintelligent robots replacing or even eliminating humanity (Bostrom, 2014). The present paper explores this psychological pattern as expressed in various cases of information and communication technologies (ICTs) replacing operational elements that are by definition considered to be human. By this I wish to contribute simultaneously both to the fields of Information Ethics as a subdivision of Information Science, as well as to contemporary Actor-Network Theory (ANT) as an approach to Science and Technology Studies (STS). My central hypothesis is that a fundamental reevaluation of the meaning of the word “replacement” may be of significant benefit for the improvement of our everyday conception of our being-with-ICTs. It is quite often that lexicological phenomena have a dramatic impact upon our understanding of scientific and non-scientific terminology, to the extent that sometimes semantic controversies tend to appear in our discourses, with further implications in the ways we structure our technosocial lives.

Think of the following phrases: “she lost her arm in an accident and had to replace it by a bionic implant,” “gradually, humans will be replaced by machines and many jobs will be lost,” “youth today replaces human communication with electronic gadgets.” Several variations of these random examples can be thought in the social reaction to machinic/inorganic/digital ICTs taking over aspects of our human/organic/analogue lives. The possibility of something human being replaced by something electronic or mechanic tends to be associated with negativity and scepticism. In her book *How We Will Learn in the 21st Century*, Judy Breck describes this critical behaviour against the digital in the context of information literacy as mechaphobia, inspired by the human fear for the mecha humanoids in Steven Spielberg/Stanley Kubrick’s film *AI Artificial Intelligence*:

“Spielberg’s movie mechas give us the basis for a fine name for the fear associated with machines: *mechaphobia*. Mechaphobia that can be insidious is not just fictional. Among its potent effects, mechaphobia is a very real factor in the progress, or lack thereof, toward education on planet Earth” (Breck, 2002, p. 34, original emphasis)

The term has been further employed recently in popular culture throughout the pages of the comicbook *Deadpool*. A gothic-styled gynoid reacts when being called a “lacebot” by the protagonist, saying that “Some of us even consider the ‘bot word mechaphobic” (Warren et al., 2016, p. 32). This brings us to think of mechaphobia as a novel expression of social stigma (Goffman, 1963), previously encountered in the cases of sexism, racism, homophobia, ageism, and so on; this time discriminating entities on the basis of being inorganic and/or mechanic or being related to such entities. The more ambiguous the distinction between human and machine is for an entity, especially if this is deliberately caused, the more deviant the entity is considered. And the more likely humans or human actions are to be replaced by machines or digital activities, the more hazardous the situation *appears* to be.

Meanwhile, maximisation of efforts is placed to make ICTs more and more sophisticated, for the benefits of medicine, communication, entertainment, transport, and so forth. Therefore, humanity is caught in a paradox: on the one hand humans are called to be adjusted in an increasingly digitised and mechanised environment; on the other they are forced to think constantly critically about it. This paper aims to discard the second option, not by means of a total elimination of techno-criticism, but by means of “making kin” (to borrow a phrase by Haraway, 2015) with our artificial companions and/or body parts. “Being-with-ICTs” is a compound expression I am coining to denote that our connection with technology is a unitary phenomenon. We cannot think any more of humans apart from ICTs; therefore, “replacement” taking place between either part of the expression, our being or the ICTs, should be rethought.

To support my argument, I build on an array of sources. I first apply Heideggerian methodology in understanding the term “replacement” as it was initially/primordially conceived in order to teach us about contemporary misconceptions, introducing the differentiation between “replacement” and “re-placement.” I then add to the thesis by employing current theoretical trends of engaging with the nonhuman as described in the interdisciplinary fields of the Philosophy of Information (PI) and Actor-Network Theory (ANT). Having the proposal theoretically grounded, I propose the usage of re-placement as a form of informational ontology stemming from our epistemology of replacement. This will ultimately be understood as an intermixing of Virtue Ethics with Information Ethics and Roboethics. Some final remarks summarise the findings and provide with possible applications/examples of the concept.

Heidegger and the Re-placement of Replacement

One of Martin Heidegger's methods in reaching rich conclusions about the nature of our existence in the world and in proposing solutions to our conceptual misunderstandings was the return to the original meanings of words. The habitual usage of a secondary meaning as the primary one results, in Heideggerian terms, in a covering or veiling of the existential truth; to unveil our customary applications of linguistic elements, is simply to get closer to our relation with the world in a rather primordial and instinctive manner. As his translators mention in their preface to his seminal *Being and Time*, "[h]e occasionally coins new expressions from older roots [...] words which have undergone a long history of semantical change are used afresh in their older senses" (Macquarrie & Robinson in Heidegger, 1962, p. 13-14). I hereby follow this strategy for the deeper understanding of "replacement." In most of the cases, we are accustomed to the usage of verb "to replace" as when an element B functions as an equally valued substitute to an element A. For instance, a broken vending machine is replaced by a new one, a damaged book in the library is replaced by a novel copy, a new worker replaces the previous in the vacancy, and a new fiancé replaces the ex-partner. So far so good, as long as A is of equal value taxonomically-wise with B, there is no "problem." The challenge occurs in the human mind when a book replaces a partner (boring relationship), a partner a book (passion above academic career), a vending machine replacing a worker (loss of jobs due to automation), or a worker replacing a vending machine (complaints in doing something that should be done by a machine). Combinations are infinite. But is substitution the only way we can think about replacement?

The initial meaning of the verb "to replace" from 1590 is to return something into its initial position; in contrast to its 1753 definition which is the one primarily used today (Replace [Def. 2], n.d. a, Replace, n.d. b). We can understand this usage of the term in phrases such as "please do not replace the books in the shelves" or "always replace the cap in the bottle after use." Whereas the rather popular meaning of replacement means substitution, the originary one means reconstitution. This type of language-game brings us to confront an entirely new horizon of our world conception. If we substitute the novel meaning of the verb "to replace" and the noun "replacement" with the older one, a radical reconstitution of our relation to our surroundings appears to take place. If, when I say "I replace my older fridge with a new model" I actually mean "I reconstitute my fridge," a much more versatile and flexible relation is founded between me and my surroundings. To the extent that an entity's function and – preferably – form renders it operatively indistinguishable when replacing another, then replacement means substitution. When the function and the form slightly or greatly differ to different degrees

of intensity, we may speak of reconstitution. The various replacements we encounter in our technologically interfaced lives are opportunities to think of revalued standards and norms, novel establishments of thinking and understanding of our environments. To comprehend this proposal more clearly, we may think of the opposite meaning of replacement; the possibility of something being *irreplaceable*. What is irreplaceable, and why it is so? I hesitate to replace my notebook because my writings and drawings cannot be either reconstituted or substituted. But what if I have them scanned and then regulate the pain of losing it after an unexpected fire? What about the benefits of replacing my old habit of keeping handwritten notes with using digital ones and all the technical benefits of this? And what about my heart being replaced by an implantable cardiac defibrillator? Is there a borderline separating substitution from reconstitution there? I wish to defend that every sort of replacement is in fact a reconstituting one. The novel forms, functions, and values undertaken by entities replacing older ones return well known activities to their initial position, *but* according to the standards and demands of the spatiotemporal context they occur.

For the sake of a meta-theoretical pun, we may speak of a replacement of the term replacement. To avoid confusion, I hereby propose a conceptual distinction between the vulgarised version of *replacement* as substitution and *re-placement* (hyphenated) as return to an initial position, to be used as such at least for remainder of this paper. Let us now proceed in contextualising re-placement within contemporary technologies and societies in the light of current social needs as described by relevant theory. Phenomenology, the philosophical discourse followed by Heidegger, is thought as a return "To the things themselves!" (as expressed by Husserl in Heidegger, 1962, p. 50). Hence, current trends in social and philosophical theory with their focal centre on things may elucidate better the context of re-placement.

Inforgs and the Generalised Symmetry: The Crossroads of PI and ANT

In our preparatory discussion some indications were given as of humans associating their various replacements by the nonhumans with a feeling of discomfort. This provides us with some steady light to further investigate and theoretically support allowance for our Being-with-ICTs to have done with the human-nonhuman dichotomy and the acceptance of re-placement. Two recent theoretical fields, very rarely used jointly, the PI and ANT have in their agendas a very similar appreciation for the nonhuman and the process of humbling human centrality. Their main positioning as to the rethinking of the nonhuman role in our interactions is presented and further applied

to the previously described notion of re-placement. After presenting the nonhuman appreciation of ANT and PI, I aim to add re-placement in their conceptual tools of analysis. By no means the presentation of the approaches should be taken as exhaustive; the space needed to cover the topic would exceed the limitations of this essay, and furthermore such a presentation would go far beyond the present scope.

ANT, stemming from the field of STS, approaches sociology with an emphasis on joint construction of phenomena through the interaction of semiotic concepts and material objects as well as any nonhuman factor. Instead of using the traditional categories of active subjects and passive objects, ANT describes the impact of actors (or actants) in the social process.

“ANT states that if we wish to be a bit more realistic about social ties than ‘reasonable’ sociologists, then we have to accept that the continuity of any course of action will rarely consist of human-to-human connections (for which the basic social skills would be enough anyway) or of object-object connections, but will probably zigzag from one to the other” (Latour, 2005, p. 75)

This emphasis on the nonhuman object has led the ANT scholars to speak of a generalised symmetry – the rejection of any type of moral prioritisation among humans and nonhumans (Murdoch, 1997). However, this symmetry has nothing to do with any metaphysically absurd sense. ANT has spoken of the impact of scallops, doors, ships and ship routes, writing material, and many more to show precisely that humans are not sole masters of their progress. “To be symmetric, for us, simply means not to impose a priori some spurious asymmetry among human intentional action and a material world of causal relations” (ibid. p. 76). To symmetrise in such a manner allows for originary re-placement to reveal itself when something is replaced. To replace the subject of action and recognise that the existence or non-existence of rain is more responsible for the dietary customs of a tribe, or that a rapid, efficient, automated librarian can act as an initiator for users reading more often, is to re-place the initial values of diet, reading, and Being-in-the-World or Being-with-ICTs. ANT has challenged the social discrimination against machines invoking the theme of speciesism; as co-founder of ANT, John Law asks: “Sociology may know about class, or about gender. But how much does it know about speciesism – the systematic practice of discrimination against other species? And how much does it know or care about machines?” (Law, 1991, p. 6-7). This opens the field for deep discussion – by no means resolved since 1991 – and brings us to think of the more recent contributions of PI.

PI is a recent field, stemming from Information Science, drawing attention to and inspiration by our relation with ICTs. The generalised symmetry proposed by ANT for all nonhumans is also found in PI, but according to the latter’s narrative, we come to realise our humbled nature

only after the advent of an ICT-mediated world: “ICTs are not merely re-engineering but actually reontologizing our world. [...] Human-Computer interaction is a symmetric relation” (Floridi, 2010, p. 11). Like ANT, PI introduces an entire vocabulary for explaining the world. Its contribution to Information Ethics is the proposal of the infosphere, an interpretation of our environments not based on the primary value of life, but of information. The PI approximate equivalent to ANT’s actors/actants is the informational organism, or shortly inforg. No matter if an entity is animate or inanimate, its existence and informational capacities and outcomes constitute its right to exist and flourish. Infosphere “denotes the whole informational environment constituted by all informational entities (thus including informational agents as well), their properties, interactions, processes, and mutual relations” (Floridi, 2007, p. 59). Two degrees of replacement and re-placement can be traced here, a micro and a macro re-placement. Firstly, to the extent that an entity’s informational nature is understood, equal degrees of information may lead to replacement as long as the replacement is also re-placement, that is, if the informational value and benefit is not harmful to the infosphere. Personhood is still personhood no matter if the person does not consist of organic components. Secondly, the macro re-placement takes place as the replacement of bio-centrism by info-centrism, thus re-replacing the ideal of viewing the “big picture” anew:

“Substitute now ‘life’ with ‘existence’ and it should become clear what information ethics amounts to. It is an ecological ethics that [...] replaces biocentrism with ontocentrism. It suggests that there is something even more elemental than life, namely being – that is, the existence and flourishing of all entities and their global environment” (Floridi, 2010, p. 112)

This brings us again to Heidegger’s fundamental question of Being as an overlooked area of investigation: “over and above the attempt to determine the essence of ‘man’ [sic] as an entity, the question of his [sic] Being is rather conceived as something obvious or ‘self-evident’” (Heidegger, 1962, p. 75). All in all, when we confront the challenges of replacing or being replaced, questioning our morals whether inforg/actor A should be replaced by inforg/actor B, our criteria should reject the preoccupations of the humanness or the liveness between the two, and decide by the informativeness and the impact of existence – as largely as the scale of reference can be conceived to maximise long-term quality of existence. In the present section the alignment of re-placement with the scopes of both ANT and PI has been defended. Moreover, common aspects of the two fields have been highlighted, bringing forth the opportunity for further future dialogue between them, adding the conceptual tool of replacement as an instrument of task solving in sociotechnical and information-driven challenges. We may now proceed to some final remarks.

Conclusions and Further Implications: An Ontology of Re-placement as Virtue Information Ethics

The meaning of this paper in a sentence is: we need to look at the uses of the word “replacement” in our everyday interactions, especially with nonhumans, to understand our needs and perform with respect towards our companions. Throughout the essay I have argued that in cases where the existential welfare of humans is appearing as “threatened” through replacement-as-substitution, we should “train” ourselves to perceive a re-placement, firstly as cross-species communication, secondly as mutual verification of the species, thirdly as reconstitution, and certainly *not* as a relation of “survival of the fittest.” This “training,” the “construction of moral character” brings us to a very old and quite forgotten approach to Ethics, namely Virtue Ethics. To my knowledge, the only existent reference of Virtue Ethics applied to ICTs is Wallach, Allen, & Smit’s (2008) proposal of applying Virtue Ethics in artificial intelligence in our gradual migration to a world inhabited both by humans and robots. As they state, the issues arising from AI-related disputes are “not just about rights (deontology) and welfare (utility); they are often also about issues of character” (n.p.). Their innovative thinking does not only suggest the building-up of human moral character, but the programming of “good morals” to computers and robots as well, thus taking good account of the nonhuman.

A foreseeable future or already present state of blurred lines between “human” and “robot” (the cyborg, Clynes & Kline, 1960, Gough, 2004), online and offline (the on-life condition, Ubiquitous Computing, Ambient Intelligence, Internet of Things, Floridi, 2011), digital and analogue (digits are analogue!) testifies for a non-combatant conception of re-placement as a positive synonym to renewal, righteous positioning, or reevaluation. Oversimplifying, neither humans nor robots or other ICTs will be conventionally replaced by each other; they will rather both acquire novel ontological and moral statuses, which will generate a milieu for new discussions and understandings. To begin and learn to act under these settings is to establish a transitory stage of Virtue Information Ethics (VIE), which focuses on the moral character we are invited to develop after the contemporary evolutionary trajectories of ICTs.

Technologies can be viewed as medicine to previous pathologies. *Pathos* (passion/passivity) is turned into *Techné* (art/craft). Mechaphobia and the fear of replacement deceitfully treats technology as a pathology. The condition bears similarities to a child being afraid to get vaccinated. Jacques Derrida, in his work on Plato’s pharmacy, explains the double nature of the *pharmakon*, i.e. the drug/medicine. The drug is at the same time poison and remedy (1981). Contemporary ICTs inject us with their

poisonous replacing dispositions, only to re-place us in our initial “healthy” position. Dangerous and painful poisoning may be perceived as the antidote to previous malfunctions. A final Heideggerian remark: in another text, *The Question Concerning Technology*, the philosopher concludes that after all “[t]he essence of technology, as a destining of revealing, is the danger” (Heidegger, 1977, p. 27). New technologies always take us away from our comfort zones, introducing new habits that humans are forced to incorporate. In my interpretation, the more dangerous a technological condition appears to be, the more innovative and positive its effects are to be expected. If deep techno-criticism and instances of mechaphobia are apparent in these (still) early stages of replacement, this implies that we are following the right path to our ontological re-placement.

Heideggerian lexicological methodology has been applied in this paper with the theoretical support of ANT and PI to allow for an unconstrained conception of *re-placement* as *re-placement* in our Being-with-ICTs. The construction of moral character based on a symmetrical approach to humans and nonhumans has been suggested as a conceptual medicine for mechaphobia, which led to VIE, a virtue-driven approach to Information Ethics which embraces both human and nonhuman actors/in-forgs. More work is to be carried out in incorporating the concept of re-placement and the VIE approach within Information Literacy and general Ethics curricula, as well as in the everyday life (and mostly Being) of the human and the machine. An ontology of re-placement, escaping its ICT-centered context may have further mirroring effects in our everyday understanding of replacing things, concepts, and agents of any kind. Any “replacement” example from the everydayness of our lives can be reconsidered under the “re-placement” value.

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THE E-LEARNING OF GENERATION Z: GENERATION NEEDS AND FUTURE PERSPECTIVE

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Abstract

In this research paper there will be talking about Generation Z kids and their needs at school. It is obvious that they have different needs than 20th century pupils did, which is when the basic public school curriculum was compiled. Unfortunately, many schools are working on the same standards and are not so flexible as the changes in market or society. In order to that, a new methodology and teaching strategies will be revealed. Especially those, which are related to e-learning. In the paper there will be both: practical examples, theories and critical opinion about the products. Finally, some future predictions will be shared.

Introduction

Nowadays schools are being attended by the so called Generation Z kids. They have different needs than 20th century pupils did, which is when the basic public school curriculum was compiled. However, some school principles have remained largely the same because *modern theories like the unique education of the child are combined with a standard measurement and strict grade system*[1] in Lithuania. From that point of view, **the problem arises** that young teenagers are not satisfied with the content they learn at schools and the forms in which way the learning material is presented to them. According to the needs of Generation Z, we should notice a **critical point** that the modern learning system in Lithuania is not perfect and needs to be more precise, which can be done with further research and fundamental changes to achieve educational purposes. The most important thing among those changes would be identifying the correlation with the needs of Generation Z and creating an innovative structure for education. It is important to create a place where children could ardently get basic knowledge of various subjects and, more importantly, where the kids' natural talents could flourish.

The aim of this paper is to analyze three different examples of e-learning and recognize its advantages in order to achieve a better quality of education for Generation Z. The result of this theoretical research is a presentation of opportunities of e-learning as well as identifying good case practices, which could be realized in schools' learning system and could shape the learning habits of Generation Z.

Body

Generation Z: characteristic and needs

Each human has a different personality, therefore a very clear and specific description about Generation Z cannot be formulated. On the other hand, this generation has a few specific attributes and shows a tendency to behave differently in comparison to Generation Y or the Baby Boomers. In fact, Generation Z kids are closely related to technology, which affects the human brain functions (Targamadzė, 2014). That's why this generation is absolutely different. They are young people born after 1992 and it is the first generation to have truly been brought up digital (they are sometimes referred to as Digital Natives) and they don't see the Internet or social media as anything special, they just expect it to be there (eLearning Industry, 2013). When it comes to Lithuania, to Generation Z belong kids born after 2000, when they had a possibility to use IT from early childhood. (Landsbergiene, 2016) *These kids are multi-taskers, and they are evolving to cope with the ever-increasing volume of media byproducts by becoming astutely skeptical and relentlessly discriminating* (Cross-Bystrom, 2010). Despite all digital advantages, they also show a liking towards inspiring leaders and motivators while searching for leadership

in teacher's behavior or in the surrounding world. Also, they are concerned with global problems and look at the world holistically. (Landsbergiene, 2016) So, this generation is one of the most interesting and mostly analyzed by scientists at this time, because it demonstrates strong opinions and criticisms, as well as strong critical thinking. In our particular work, we will state that all school children are Generation Z because there will be some examples describing different ages: from younger primary school kids to teenagers.

Most important curriculum changes by Mark Prensky

In this paragraph there will be shared one activist's words about a new school curriculum and some logical ideas for how we it could potentially be changed to make it more modern and more suitable for a 21st century child. Mark Prensky is an American writer and a speaker in the field of education. He actively presents his idea on a new curriculum, which could become one of the fundamental materials for the learning of kids in the future. He mentions that *the strangest thing about the world's current curriculum is that it is not based on people's real underlying educational needs at all. It is based, rather, on a set of "proxies."* (Prensky, 2014) Proxy is a so-called set of knowledge, like a vehicle where the practical knowledge a young person needs to know hides under the subjects like math, science, history, languages. For example, geometry teaches logic, algebra - abstract and symbolic thinking, history teaches about underlying problems of human history and conflicts (Prensky, 2014), where all those core subjects have so called *underlying skills* hide in the program of the subject based on boring tasks. Almost no student needs all the things they are taught nowadays. What they need are those *underlying skills* that the subjects are *proxies* for: **the ability to think, act, relate to others and accomplish useful things effectively.** (Prensky, 2014) The critical point is that today, all those skills are taught extremely indirectly and without an explanation what one or another subject really covers or means. I was working in a team on a DEMOLA project called *Creating the concept of the lesson for generation Z children*. About sixty students from various Lithuanian cities were interviewed in small focus groups using a deep questionnaire. The majority of students responded that the main goal of education is to finish school successfully with good grades, to pass exams as well as possible, because it is a ticket to a *good life* or university later. (Individual survey, 2016) Coming back to the author, nowadays, there are some slight changes being done, some additional *21st century skills* are added, but the curriculum is not starting to change from the core. (Prensky, 2014) The base of a new curriculum by Prensky is based on top four core elements: effective thinking, action, relationship and accomplishment. All those elements contain more precise subjects like: Critical, Mathematical, Scientific, Creative, Design, Systems Thinking; Problem-Solving; Inquiry, Argument Skills; Judgment; Aesthetics; Habits of mind; Self-knowledge of one's; Passions; Strengths; Weaknesses. (Prensky, 2014)

Also, there are many other ideas of a possible curriculum. One of them is the ability to choose a school subject on one's own (Prensky, 2014), what issue one wants to solve. For example, a child wants to calculate how popular he is. Effective relations, project management are also very important *accomplishment in the real world skills* for students to learn at school. This is an interest-based curriculum with a new approach to school pupils. The main idea of the article is a very urgent message to our schools that it should be not about learning, but about the process of growth as a capable, flexible, challenge-accepting personality.

E-learning: advantages and critical attitude

E-learning can be defined as using a computer and the Internet for teaching and learning. (Zou, 2007) Main goals of e-learning are to increase the quality of learning, improve productivity, effectiveness and attract the attention of students. The implementations of e-learning can vary greatly, for example, high quality graphical materials (including video, sound, HD pictures, 3D pictures), interactive links to other sources, text documents and supporting visuals to it and many others.

The advantages of e-learning are diverse, including: efficient, quick and centralized maintenance of up-to-date course materials; flexible class and learning time and speed; local or remote classroom access; online assessment; paperless delivery; capability of presenting learning materials in different forms (text, photo, video, animation; part-time students enrollment; cross-disciplinary collaboration; ability to extend the course to students with disabilities. (Zou, 2007)

However, despite the fact that e-learning offers many advantages, a critical point arises: a big amount of educators still are not using e-learning methods as an infeasible concept due to the prolonged recognition of a lecturer-student learning environment. (Zou, 2007) A problem of self-organizing and time-managing is important also because students should be aware of the fact they are responsible for the materials they supposed to learn.

E-learning examples: online learning platform "E-learning for kids"

We managed to find one widely used and known international example of e-learning for Generation Z kids. The foundation *E-learning for kids*. Founding dreams executed the idea of a learning environment in late 2004, in the United States of America. The main idea of this e-learning system is to suggest high quality digital lessons for primary education (Barten, 2011). The created courses are guided by learning topics which are part of the International curriculum, which is used in 138 countries. This educational platform is the source for learning on the Internet all over the world. For Generation Z kids, it is the perfect opportunity to hone the skills in math, science, reading and keyboarding.

This learning system contains more than 700 courses for children aged 5 – 12. The most important thing is that this foundation provides an attractive education form for its target audience. The learning method is based on games, where the player gradually reaches the highest level at selected topics. Generation Z children have been found to learn more effectively if they are left to solve problems rather than being taught the answers, and their gaming experience means that they are happy to 'work on a level' as they know that even if they fail, they will learn something that they can use to progress further next time (Greener, 2013). Trying to reach a better result is the best motivator for learners to play again and to achieve a better result in Math, Language Arts, Computers, English as a Second Language, Environmental, Health and Life Skills.

To sum up, the foundation *E-learning for kids*. *Founding dreams* is trying to change the learning system not only in the USA. They suggest the e-learning model for Generation Z kids, which is based on International curriculum. This model can be used almost all over the world. It is based on games that lead this generation's interest and motivation to achieve a better result. The gaming process is becoming one of the most powerful and effective learning systems for Generation Z kids.

E-learning examples: online learning platform Matematika.lt

The second example for online learning is the learning platform *Matematika.lt*, created as a webpage for Lithuanian students to learn mathematics and get ready for the final examination (for both the 10th grade and 12th grade finals). This project can be called an innovation in Lithuanian learning society. It is based on self-learning and self-motivation. It is not affiliated with any school or university. The main purpose is to help those students who do not understand something at school and want to work towards a better understanding or for those who simply want to practice more.

Matematika.lt offers a functionality which suits the wants and needs of Generation Z: video lessons, in which every task is explained by a professional school teacher or university professor; exercises for practice with the correct answers and video explanations of the solving process; reliable people with which a student can communicate through emails or organize a video chat; finally, a solid product quality including nice looking graphics. (Matematika.lt, 2016) The website has *YouTube* and *Facebook* accounts, as well. The content of these accounts is related to the website's content, for example, on Facebook "easier" content like animated GIFs or jokes about math are being published, in order to attract the attention of the audience. The possibility to choose one of three teachers (Matematika.lt, 2016) is also a good idea because every person likes a different way to explain things. As it was mentioned before, this project is quite new and absolutely free, which is one of its greatest ad-

vantages. On the other hand, the attention of this website is concentrated virtually only on exercises which are typically found on final exams. Also, some information can be too hard to understand because some steps are skipped. Also, there is a lack of proper communication of the product and some schools are looking at this project skeptically or even with a fear.

To sum up this subtopic about the *Matematika.lt* project, it is a step towards talking about e-learning at home and it is a great alternative to individual paid lessons with teachers. This project was created for goal-oriented students which are looking to get ready for exams by themselves. Moreover, the nice-looking page attracts young audience, and reliable professional teachers explain the material very clearly. The ability to stop and rewind the video lessons really helps to understand the subject deeply. Unfortunately, bigger research and a proper marketing campaign should be done to make the website more popular among teenagers. Hopefully, a big community will be created, connecting the big and small Lithuanian cities, and this product will be well known and useful for students.

E-learning examples: blended learning and “Everyday Mathematics” project

In order to present the third e-learning example, we should first explain the concept of blended learning. Blended learning is a formal education program in which a student learns at least in part through delivery of content and instruction via digital and online media with some element of student control over time, place, path, or pace (Nuruzzaman, 2016). This learning program allows the communication between lecturers and part-time students, is also found to have improved. Students were able to evaluate their understanding of course material using the *computer-based qualitative and quantitative assessment modules* in a better way (Shirley, 1998). In other words, blending learning is a combination of e-learning and face-to-face learning using different proportions of time related with offline and online studying. One of the examples for blending learning examples is the flexible teaching material *Everyday Mathematics*, which was developed by education researchers at the University of Chicago School. *Everyday Mathematics* is the only research-based program that can be implemented in a fully digital format, fully in print, or in a print-digital hybrid format—whichever fits your classroom (Everyday Mathematics 4, 2016). This program uses a teacher planner in order to open the necessary lesson every day. Nevertheless, it is possible to select any lesson one wants to, this program shows the list of necessarily materials for today’s lesson, its vocabulary, which is required to explain the lesson, and allows the note-writing function. This system is connected with kids in the classroom and that is the reason why it shows how students are performing in the lesson. It informs about kids’ potential, knowledge and skill level, and seeks out areas for improvement. Gifted or curious students can use the educational technology to advance their skills or exceed grade

restrictions. Some online institutions connect students with instructors via web conference technology to form a digital classroom involving latest technology (Nuruzzaman, 2016). Moreover, use of new communication technologies improves not only access to learning, but it also energizes student’s attitude towards the learning (Shirley, 2010). This learning tool is attractive not only to the student. It is a comfortable teaching material for the school teacher and parents because it shows how content develops across lessons and allows to easily pinpoint each student’s mastery level for every standard at any point in the year (Everyday Mathematics 4, 2016).

All in all, the blended learning is one of the most powerful learning methods for Generation Z kids and their teachers. *Everyday Mathematics* makes sure that the students are focusing on what they need at every grade level, so that as they move through the grades the curriculum is coherent (Everyday Mathematics, 2016). The main point of this learning is that it enables teachers to adjust his own instructions to meet the need of every student in the class.

Future perspective of education and learning

The future is unpredictable when technologies and ways of using them change so incredibly fast. Although, there are some scientists who are analyzing the tendencies of changes of e-learning and education in general. One of the predictions is that *it will be focused heavily on the individual learner*: it highlights the change of perception from the group (class) goals to individual goals because we all have different connections and receive different content; one of the dangers is though, that algorithms will show the content we want to see and not the content which would be challenging. (Anderson & Dron, 2016) The second prediction is that *it will be distributed, technically, socially and organizationally*: while centralized institutions and learning tools will play the main role in education, both the process of learning and its accreditation will be more distributed; the teacher will become like a service provider rather than a controller of the process. (Anderson & Dron, 2016) Third, *it will be crowd-driven and emergent*: the popularity of crowd support will increase in a more sophisticated way; pedagogies will not be theory-driven but data-driven, emergent rather than designed. (Anderson & Dron, 2016) Some more predictions for the education of the future are that *it will be integrated, just-in-time and authentic, courses will play a less significant role, and learning will be divorced from accreditation*. (Anderson & Dron, 2016) In conclusion, it could be said the scenarios about the future of education can be more or less predicted now. Old learning patterns will probably be integrated with a new technology-oriented approach to make the learning process more fluent. On the other hand, we do not know how technologies will be developed: it may be, that there will be courses offered which will be able to be learned overnight. The most

likely scenario is that learning facts and basic skills will be marginalized, while creativity, networking and international approach will be on the top level. (Anderson & Dron, 2016)

Conclusion

It is well known that one cannot speak of Generation Z kids without mentioning the modern-day technology and their wise, holistic and often cynical perception of life. That means that Generation Z people could fulfill themselves in a different way, such as e-learning the material needed for their educational development. We showed some examples related to the possible changes in education, which would not only add some *21st century skills*, but change the system from the core. We mentioned the advantages and disadvantages to e-learning in order to show that it is not the only and best possible way to teach Generation Z. Moreover, we described three very different approaches to learning online: ones had to do with finding all the relevant material on the webpage, others mixing it up using *blended learning*. Combining old and new is the easiest way to make some slight changes in education. Our small research has shown that some analyzed examples and other research could be the reason for educators and government organizations like the Ministry of Education to change some teaching methods using more attractive educational materials in their classrooms. Because these small first steps are the beginning of the future learning system not only for Generation Z, but also for those after them.

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THE EUI LIBRARY AND THE DELIVERY OF NON-ELECTRONIC RESOURCES: PUTTING THE PHYSICAL COLLECTION ON THE MOVE

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Abstract:

The Library of the European University Institute supports the highlevel research, teaching and training programmes of the EUI scholarly community, and provides the best possible collections, services and information tools in the social science and humanities, with particular emphasis on Europe and related issues.

Since the summer of 2016, however, the EUI campus poses new challenges to our Library services. The relocation of several departments and services spread the community across four different villas on the eastern hills of Florence. In order to meet the new needs of the users, the Unit of Front Office Services of the Library offers the possibility to request items and received them, in less than 24 hours in the chosen location chosen. This new service is mainly managed by trainees, making the figure of the trainee become the face of the library for hundreds of researchers and professors that seldom visit the Library physical spaces. The role of the trainee is key to assure the share of information that the Library is called to accomplish also with print collections, and that so easily does with the electronic ones. So the task of the trainee, a part of that of acting as a courier, is to manage the collection, interact with logistic services, represent the Library where its physical presence doesn't exist, think of advertising campaigns to increase the interest in the new service, report the eventual incidents of the current activity and propose improvements according to his/her own experience as practical authority in charge of the workflow.

European University Institute

- International postgraduate teaching and research institute located in San Domenico di Fiesole (Florence, Italy)
- PhD programme economics, history, law, and political and social sciences. More than 100 theses defended yearly
- Master programme in law (LLM)
- Post-doctoral fellowship programmes: Robert Schuman Centre for Advanced Studies (RSCAS) and Max Weber Programme (MWP).
- Teaching staff, fellows and researchers recruited from across the European Union and beyond
- 63 professors
- 897 PhD students and fellows from more than 60 countries
- Historical archives of European Union
- The European University Institute is seated on the Tuscan hillside overlooking Florence and close to Fiesole
- Many of the villas date from the Renaissance period and have been restored along with their landscaped gardens

European University Institute Library

Nearly forty years of investment in collections, services and infrastructure, have resulted in an internationally recognised social science research library, valued for its multi-national character and the high quality of its collections with a special emphasis on Europe. Most of the Library's print holdings are on open shelving. In addition, the Library provides its users access to an extensive collection of databases, full text e-journals, ebooks and e-working papers. The Library has the status of European Documentation Centre (EDC), an official depository of EU publications and documents. The EUI subscribes to the principle of Open Access. Library staff strives to work with the academic community to increase the content, coverage and visibility of the EUI research repository, Cadmus.

2015 data

Collections

- 58,600 e-journals
- 483,000 e-books
- 1,577 current print journals and serials
- 557,000 print books
- 351 databases
- 17,688 items listed in Cadmus, EUI Research

Repository Services provided

- 8,100 purchased books per year
- 16.23% of purchased books are based on user requests
- 55 computers available for EUI members
- 3,774 interlibrary loans provided to EUI members
- 75 training session hours for 682 participants

Usage of resources

- 153 users entering the Library per day
- 97,655 volumes loaned or consulted
- 4,184 volumes delivered from storage
- 275,825 full-text documents downloaded
- 160,429 visits on the Library website
- 293,871 visits on Cadmus, EUI Research Repository

What do users think and say?*

- 92% of the Library users express that "the Library collection fits my research needs"
- 98% of the Library users express that "the Library provides a good service to me"
- 87% of the researchers access the library every day or every week
- "By far the best book collection I have seen in a university library"
- "A brilliant library with highly qualified and responsive staff"
- "The best-organized E-resource pages I've come across in my university studies!"

EUI Villas where Book Delivery Service goes

Badia Fiesolana

The Badia Fiesolana is the EUI's hub. Opened in 1976, it houses the office of the President, the office of the Secretary General, the Institute's library, the Department of Political and Social Sciences, the Academic Service, the Real Estate and Facilities Service, part of the Budget and Financial Affairs Service and the Communications Service. During the following centuries the Badia was at different times a summer residence for bishops, a printing and engraving shop and civilian housing. The Italian government offered the building as the home of the EUI and after extensive work the Badia was transformed into the space we see today.

Villa Salviati

From October 2012 Villa Salviati is home to the Historical Archives of the European Union, a unique resource for researchers at the EUI and far beyond and from August 2016 houses the Department of Law, the Department of History and the Academy of European Law.

Villa Schifanoia and the Cappella

From August 2016 Villa Schifanoia is home to the Robert Schuman Center for Advanced Studies.

Villa La Fonte

From August 2016 Villa La Fonte hosts the Department of Economics.

Delivery of non electronical resources

During the summer of 2016, many of the EUI departments and services faced relocations which are necessary for the future development of the Institute. The Library is staying in its current location at the Badia Fiesolana and keeps being an essential the landmark for the EUI community, with the possibility, nevertheless, to deliver its collection and part of the services where the academic community works. Time has come to feature new library services that go beyond traditional spaces. Library resources will have a presence in the different premises of the EUI campus and services will be offered through the web or inside virtual spaces of EUI departments, centres and programmes, when needed and requested.

Bringing library to the Campus it's the title of this new project that EUI started just last October. The new book delivery service covers four locations across the EUI campus: Badia (Library), Villa La Fonte, Villa Salviati, Villa Schifanoia.

Why book delivery?

- Many institute members offices are located in other parts in EUI Campus than Badia Fiesolana, where library is
- In front of a stressed deadline, many people need immediately items about their research but they don't have enough time to reach the library
- When the weather conditions are not good, many people are reluctant to leave their personal offices/working spaces and to go to Badia Fiesolana just for one item loan

The users just need to

- Find the book: search the Library catalogue
- Select the location where would like to pick up the book by clicking on "Place hold" and by logging into their Library account
- Pick up the book at at the porter's lodge in Villa La Fonte, Villa Salviati, Villa Schifanoia and at the Library loan desk at the Badia after an email notification is received

Books may be returned in the book-drop boxes at the above villas or at the Library loan desk as usual. Users who are physically in the Library will be given priority. Whoever requested the book remotely will receive it next. It is possible also to change the pickup location if the library has not processed the request yet. To do so, users have to log into their Library accounts, click on the tab "Holds" and modify the requests according to their needs. Once they are notified that the book is ready to be picked up, it will be reserved for them for five working days. After this time the library staff will move the item back on the shelf. If a book cannot be found on the shelf users notified by email that there will be a delay in the delivery and when the book can be expected. Also, there is an option of making an InterLibraryLoan request. EUI Library deliver books twice a day with the EUI shuttle service. Books requested between 8:00 and 13:00 will be delivered in the afternoon. Books requested between 13:00 and 8:00 (following day) will be delivered in the morning.

At a glance

What is book delivery and how it's working?

An EUI shuttle bus (service provided by Institute's Real Estate Service) transfer books each day from Badia Fiesolana (Institute's main building and Library's location) to the EUI campus.

When

Twice a day (09:15 & 15:00), from Monday to Friday

Who is involved

Library's staff along with the Real Estate & Facilities Service staff which are mainly the shuttle bus drivers and the porters at Villa Salviati, La Fonte and Schifanoia

Who does what

Staff

- Twice a day (at 08:00 and at 13:30) an email containing the list by items on hold is being sent automatically by the system. The collection process starts. Priority is always given at requests by Villas outside Badia Fiesolana, especially in the morning, due to lack of time. The items situation becomes from <<on hold>> to <<in transit>>, the books are being placed in boxes and are ready to be delivered.

EUI shuttle bus service

- Twice a day there is a route for book delivery (Badia Fiesolana- Salviati- La Fonte- Schifanoia)

Porters

- Receive from the library staff the books requested
- Give the returned ones along with the items which their hold has been expired

- For checking out books, they use the SirsiDynix's MobileCirc platform
- 'Uphill research?'
- Let the library come to you!

Stats

- Book delivery stats October-November (till 21/11) 2016:
- Villa Salviati: 587 requests (almost the 1/3 of the total amount)
- Villa La Fonte: 95 requests
- Villa Schifanoia: 79 requests
- Badia: 817 requests
- In total: 1578 holds

Important clues

- Monday is almost always the day with the most requests
- A high increase of hold requests is appeared, when the weather conditions are not good
- Users affiliated with the Department of Economics order less "tradional" types of resources in contrast with the members associated with the Law, History and Social Political Sciences Departments
- Book Delivery Project future targets
- Project to be even more effective
- Establishment of this Service at the EUI society would be a great success for the Library
- Minimize of the one and only big problem that the project faces: books that the staff can't find

Necessity of Book Delivery Project

So why is this service useful? As it's written at the title of the project, library now it's more "visible" inside the European University Institute Campus. Every professor, researcher, student, alumni, employer knows that going to the library is not the only option for having access to a non electronic document. The Library along with the Real Estate and Facilities Service and their brand new Shuttle Buses, guarantee that the requested item will go to the user easily.

Promoting Book Delivery Service

- EUI Library uses quite Institute's social media accounts at Facebook and Twitter to promote this project inside EUI community
- Video posted on youtube
- Colored posters at all the Campus areas with smart and funny quotes such as:
- 'Stuck in Salviati/Schifanoia/La Fonte?'
- 'Need books?'

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EXPLORING STAFF-LESS LIBRARIES AS SOCIAL SPACE; A METHODOLOGICAL REFLECTION

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Abstract

Today, public libraries in several countries have introduced staff-less opening hours. The term “staff-less library” refers to a public library that during some of the opening hours are without library staff available to the users, but the library is open for users to enter and use its services. In staff-less libraries, users need to manage the library on their own. In this paper the following question is explored; how is increased self-management related to users self-governing and to users being governed in the library. In addition, methodological issues and the utilization of interviews and observations in relation to the library as place are investigated. The governing of users, or governmentality, is situated at the physical library and the library as place is vital to the research. One early finding discussed in this paper is the notion of the library as meeting place and how users actually are making use of staff-less libraries. Libraries are administered in order to facilitate certain meetings and aggravate others, although users also conduct themselves in alternative ways in relation to the existing order. This two-sided process is analyzed. At this early stage in research, the combination of methods used seems to be fruitful to explore users’ self-managing of staff-less libraries.

Introduction

It is becoming increasingly difficult to disregard the prevalence of public libraries that during some of their opening hours are unstaffed, but open for users to enter and use their services. Today, these libraries exist in many countries in northern Europe and in Asia. For example, there are staff-less libraries in Sweden, Norway, Finland, Denmark, Germany, England, Ireland, China, Singapore and Taiwan, but also in the United States and Australia (Johannsen, 2017 Forthcoming).

Thus far, however, scholars have paid relatively little attention to the phenomenon. In addition, the research until now has either tended to focus on the technological aspects, or to map the prevalence of staff-less libraries and their features (see e.g. Johannsen, 2012; Tseng & Kuo, 2009). Although, some reports also focuses on librarians professional role in staff-less libraries (see e.g. Johansson, Lindberg, & Rivano Eckerdal, 2015). In contrast, I am interested in the users' perceptions of and practices in staff-less libraries. My fieldwork situates at public libraries with staff-less opening hours in Sweden and Denmark. I utilize interviews and observations to analyze how users conduct themselves in the library and how they make use of the library when staff is not available to them.

The term "staff-less libraries" is ambiguous, since there are several English terms used to describe these libraries, such as "self-service libraries", "open libraries" and "intelligent libraries" (see e.g. Johannsen, 2012b; Tseng & Kuo, 2009).[1] The concept the terms refers to may vary as well. Throughout this paper, the term "staff-less library" refers to a public library that during some of the opening hours are without library staff available to the users, but the library is open for users to enter and use its services. However, the library is not open to all. For example, there is a required minimum age, in Sweden you need to be a registered user of the staff-less library, and in Denmark a medical card (called "Sundhetskort", which all residents in Denmark is entitled to) is required to enter (Johansson et al., 2015; Københavns Biblioteker, n.d.).

A library without librarians physically available to the users can be considered an aberration, since librarians often are regarded as vital to assist users' conduct of the library. In staff-less libraries, users need to manage the library on their own. The imperative to self-manage is widespread throughout society; nowadays there are shops where self-service systems replaces cashiers, airports are equipped with self-service check-in machines, most people uses ATM's to access cash, and purchases of for example tickets are often handled online. Staff-less libraries situates in this context of self-management and I interpret the staff-less library as a manifestation of a *dispositive of self-management*. The question how increased self-management relates to users self-governing

and to users being governed in the library intrigues me. In addition, the self-management and the physical absence of staff during staff-less opening hours contributes to inform users' practices, perceptions, and expectations. My aim is to explore those aspects and thereby investigate users' conduct in staff-less libraries.

In this paper, I explore some methodological issues relating to the overall research aim. To investigate the outlined area of interest, I utilize research methods that allow users to express their perceptions and experiences and methods that visualizes users' actual practices in the library during staff-less and regular opening hours. Particularly, I discuss non-participatory observations and *seating sweeps*, a method of structured observations of users' practices in the library space (Given & Leckie, 2003). Staff-less libraries obviously are places, stretched in space and in the social world. Thus, users' perceptions and practices situates in this place, and methods that embrace spatial aspects and opens up to an exploration of the relationship between place and power enrich the analysis.

Outline

Above, I introduce the territory and aim of the paper. Below, I firstly outline the notion of library as place and relate it to the concept of governmentality. Secondly, I discuss the methodology. Finally, I discuss and analyze one early finding before concluding this paper.

The library as place and governmentality

The library as a physical place distinguish staff-less libraries from for example digital libraries, which equally are without available staff. The concept of library as place is therefore useful when analyzing staff-less libraries as the concept contribute to understand physical as well as social aspects of libraries (Fisher, Saxton, Edwards, & Mai, 2007, pp. 135–136). When utilizing the concept of library as place I relate to a rich field of research within library and information studies (see e.g. Aabø & Audunson, 2012; Buschman, 2003; Fisher et al., 2007; Given & Leckie, 2003; Mandel, 2016; Vårheim, 2007). This research often relates to the notion of *public sphere* (see e.g. Buschman & Leckie, 2007, pp. 3, 13), a notion developed by the German sociologist Jürgen Habermas. According to Buschman (2003, pp. 178–179), libraries contains the potential of functioning as public spheres, that is places where multiple publics with diverse perspectives and discourses can meet and communicate as an essential part of a democratic culture. Even if the analysis of the library as a public sphere postulates the library as a physical place, Buschman does not empirically investigate the actual library space.

When analyzing the library as place and the library as public sphere several scholars implicate a presumed relationship between libraries and empowerment (see e.g. Aabø & Audunson, 2012; Buschman, 2003; Vårheim, 2007). Nevertheless, the function of public libraries as empowering spheres is not an axiomatic issue. Scholars such as Hansson (1999) and Skouvig (2004) illuminate a historic tension within public libraries, including for example a struggle between those who emphasized the public library's role to suppress conflicts and to discipline the users in order to uphold status quo and those who strived for a library that strengthens the working class or other marginalized or oppressed groups. This tension relates to the question how libraries constitutes public spheres and if so, how these spheres can be interpreted in a context of power relations. The tension also highlights the changing and dynamic character of public libraries and the historicity of libraries democratic role.

I utilize Foucauldian concepts and theories when analyzing staff-less libraries and the library as place within society today – a society where power often takes the form of governmentality rather than discipline (cf. Foucault, 2008). Thus, I re-investigate the concept of library as place in the context of governmentality. Foucault (2008, p. 186) conceptualize government as the conduct of conduct, or how to exercise power upon the actions of others. In this context we need to acknowledge that to Foucault (1980, p. 119) power not only permits or prevents, power also produces and regulates knowledge, discourses and practices. Thus, users in the staff-less library are simultaneously autonomous and governed, their "...freedom of behavior is entailed, called for, needed, and serves as a regulator, but it also has to be produced and organized" (Foucault, 2008, p. 65).

The entanglement of governmentality and self-management in staff-less libraries is twofold. On one hand, users of the library during staff-less opening hours are expected to manage the library by themselves. Users also express this expectation in the interviews I conducted. For example, if users cannot find what they are looking for during staff-less opening hours they do not express frustration, but simply state that they need to return during staffed opening hours, as they only are able to conduct practices they can manage on their own during staff-less opening hours. Users are also expected to use their freedom in the staff-less library in a proper way. Technologies such as camera surveillance and/or registration of users who enter the staff-less library monitors the self-formation of the users and makes it possible to discipline those who misconduct. In addition, the library is used as a mean to accomplish a higher degree of self-management in society in general, for example by facilitating activities to increase digital competences and making information accessible to self-educating. These manifestations of the dispositive of self-management illustrates the library's role in making the governed "conduct themselves in a certain rational way" in society (Burchell cited in Huxley, 2007, p. 189).

Methodology

There are no clear-cut boundaries separating theory and method; theoretical choices influence the selection of methods and methodological considerations affect the implementation and use of theory (Holstein & Gubrium, 1995, p. 73). Thus, the theoretical significance I assign the library as place calls for methods that allows exploration of the physical place and of the users' practices in this place. I therefore conduct observations in addition to interviews and text analysis. While interviews enable me to approach the users' perceptions and experiences and text analysis contribute to contextualizing the research, observations provide material that opens up for analysis of the library space and of what users are doing in the library.

I conduct two different sorts of observations, non-participatory observations and seating sweeps. During the non-participatory observations, I spend time in the library observing and taking notes of for example where users are (in what section, sitting/standing, etc.) and what they are doing there (reading, talking, using a computer, eating, etc.). These field notes informs my analysis of what happens in the library at a daily basis. Since the seating sweeps only take place during specific points in time and therefore only capture what is going on at that particular moment in the library, the non-participatory observations contribute to a richer understanding.

Seating sweeps is a method of structured observation developed in order to analyze social space (Given & Leckie, 2003, p. 366). Leckie and Hopkins (2003) introduced the method into library and information studies with their research on the public's use of two central public libraries in Canada. Later on, Given and Leckie (2003) elaborated the methodological aspects of the study in a paper. At that time, the method of seating sweeps had been used for several years in research on for example shopping malls and other public spaces (see e.g. Brown, Sijpkens, & Maclean, 1986; Hopkins, 1992). When Leckie and Hopkins (2003) and Given and Leckie (2003) introduced the method in LIS, the purpose was to explore how users actually make use of the public space in libraries at a daily basis. This purpose relates to my aim to explore how users perceive, make use of, and conduct themselves in staff-less libraries in their everyday life.

The seating sweeps method consists of several walks, "sweeps", through the library. I conduct three sweeps a day, both during regular opening hours and during staff-less opening hours, for about one week in each library. During the walks, I observe all public spaces and take notes on where users are upholding themselves and what they are doing. The purpose is to capture data such as:

“who was using the library (i.e., gender and approximate age), the activities in which those individuals were engaged (e.g., reading, writing, talking, eating, sleeping, and using library computers), the library location in which those activities occurred (e.g., book stacks, computer terminal, printer, and public telephones), and the personal belongings that those individuals had with them (e.g., briefcases, cell phones, laptop computers, food and drink, and baby carriages).” (Given & Leckie, 2003, p. 375)

When constructing my list of aspects to note I used a checklist referred to by Given and Leckie (2003, p. 374) as inspiration, but adjusted it to the purpose of my study; I massively decreased the number of aspects taken into consideration. During each sweep, I use a map of the library with stacks, tables, chairs, and other furniture outlined. I mark the position of the users with a red cross on their location on the map, together with abbreviations for their approximated gender, age and ongoing activity. When conducting this sort of observations, in contrast to for example participant observations, I as researcher takes on an observing role (Baker, 2006, pp. 174–175). However, to observe should not be confused with passivity or objectivity, since I constantly select, compare and interpret (Ranci re, 2009, p. 13), and thereby analyze and construct knowledge.

Findings and discussion

As already stated, I have not yet completed my fieldwork and I have only started analyzing my material. Accordingly, the following paragraphs are a tentative tryout. I utilize material generated from my analysis of interviews and observations and discuss the library as a meeting place. However, I have not started to analyze the data from the seating sweeps in a more structured manner. [2] The analysis below therefore draws on an overview of the sweeps.

The library as meeting place or place?

When analyzing users spending time in the library, in contrast to users going to the library to access information and leave thereafter, the library as meeting place or social place is often highlighted (see e.g. Aab  & Audunson, 2012; Buschman & Leckie, 2007; Lj dal, 2005; Skot-Hansen, 2001). Based on my observations and interviews many users visit the library to spend time there, for example to study, work or read, but also to sleep or to load their mobile phones. However, these users rarely talk to each other and some prefer to visit the library during staff-less opening hours, since it is less people and therefore quieter during these hours. This give rise to questions such as; what constitutes a meeting – is it enough to be in the same room? Hvenegaard Rasmussen, Jochumsen and Skot-Hansen (2013, p. 57) discuss this and emphasize the quality of just spending time in the same place, regardless of oral or written communication.

They picture the library as a stage where strangers communicate with each other simply by being present together, as actors mediates feelings by other means than words (Hvenegaard Rasmussen et al., 2013, p. 57).

Nevertheless, if there should be any communication – even non-verbal, the users at least need to have visual contact with each other at some point. This addresses the design of the library space. I observed how the ordering and furnishing of the library facilitates certain meetings, at the same time as other meetings are aggravated. One example of this is the separation of children’s books from books for adults and from books for youngsters, and the separation of books in foreign languages from books in the majority language. These separations and distinctions of the material correspond to an ordering of bodies in the library space, informing users where they are expected to uphold themselves. In addition, different areas of the library withhold different expectations and regulations, though seldom explicitly. For example, in the children’s section, a higher noise level is accepted and playing is an encouraged activity, signaled with the supply of toys and costumes. During my observations, the crossing of (invisible) borders, for example children moving to other parts of the library, revealed these expectations; an act that seemed uncontroversial in the children’s section provoked reactions in other sections (cf. Mckechnie, Dixon, Fear, & Pollak, 2005).

Staff-less opening hours increases the importance of administrating the library since the users’ conduct is to be conducted, without present staff. Accordingly, at one library I was told that the section devoted to quiet activities had been moved after implementing staff-less opening hours, since the section needed to be separated more clearly when staff is not available to tell users to be quieter if necessary. In other words, the architecture of libraries is one element of support to “...ensure a certain allocation of people in space, a canalization of their circulation, as well as the coding of their reciprocal relations” (Foucault, 1986, p. 253), and during staff-less opening hours such architectural measures enhance in significance. This administration of the library affects the library as meeting place, since it aggravates reciprocation between users with different domains of lifestyle (Hvenegaard Rasmussen et al., 2013, p. 57). That is, to function as “stage” the library ought to place functions or sections used by different groups of users close. In this regard, staff-less opening hours may contradict ambitions to create meetings.

My observations also reveals how the functionality of specific areas often change during the day. At one library, children and youngsters are rarely present during early staff-less opening hours and adults using computers (probably to study or work) then sits down in the children’s or the youngster’s section. However, after a certain time of the day the same area is the most noisy one, and not suitable at all to activities like studying. Accordingly, I do not notice any adults with computers at this section when sweeping the library during these later hours. At

another library, a specific section devoted to youngsters furnished with tables, chairs and a sofa, is appropriate to activities like studying. However, due to schooling and the age limit during staff-less opening hours, youngsters rarely visits the library before lunchtime and occasionally adults uses the place during these hours. Thus, users are conducting and thereby re-organizing the library by utilizing it in ways not anticipated. By governing themselves, they are also governing the library, as they re-interpret and re-construct the functionalities of sections and places in the library.

To sum up; utilizing observations enables me to explore the library as meeting place and discuss aspects such as those mentioned above. For example, the seating sweeps neatly visualize how different groups of users uphold themselves at different sections in the library during the day. The structured character of the seating sweeps also helps to visualize practices that otherwise could have been neglected. For example, at first I tended to disregard users sleeping in chairs or users loading their mobile phones, as they did not correspond to my stereotype of library users. However, when sweeping the library, I need to take note of these users in the same manner as the other users and to reflect on their library use. Nevertheless, the non-participatory observations are vital to understand and interpret the data from the seating sweeps. Above all, there are two reasons for this; the non-participatory observations proceeds between the sweeps and the non-participatory observations allow me to utilize other senses and for example note what I hear in addition to what I see.

Conclusion

Public libraries are physical places and when investigating users' practices in libraries it enriches the research to utilize methods that allows explorations of the place. When researching libraries with staff-less opening hours this may be even truer, since staff-less opening hours situates in the physical library. Observations enables such explorations. By utilizing both non-participatory observations and seating sweeps I get a broad picture of users' activities in the library. The seating sweeps enables me to see what practices users are undertaking at which places in the library during staff-less opening hours compared to regular opening hours. Observations in-between the sweeps constructs a richer material and contributes to the interpretation of the practices noticed during the sweeps. At this point, the combination of methods, including interviews, text analysis and observations, seems fruitful. However, the forthcoming process of continued fieldwork and analysis will most certainly reveal both strengths and weaknesses of respective method to address later on.

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- [2] I plan to import data from the seating sweeps into relevant computer software in order to analyze and later on display it.

FROM EGO-CENTERED TO USER-CENTERED DESIGN OF GAMIFICATION

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Keywords: gamification, application, user-centered design, gamification experience

Abstract

Our first prototype of the gamification application for libraries integrated the knowledge about gamers that are represented in the basic gamification frameworks. By designing a gamification application for libraries and reading (Booga), it was necessary to include also motivations, emotions and needs of readers and nonreaders, otherwise a generic gamification experience would be created. The knowledge gained by the empathy mapping research method was transformed into personas, wireframes and paper prototypes and tested with users. This paper describes the paradigm shift from ego-centered to user-centered design, but also the shift from extrinsic to intrinsic motivations of users and their transcription to the application.

Background and purpose of the study

Gamification, or “the application of game elements and game thinking in a non-game environment” (Werbach, Hunter, 2012) is not just about having fun or attracting new customers in a playful way in for-profit organizations. The objective of gamification can be higher and much more meaningful for society. A successful gamification has been a crucial component in the projects, striving to create a change in the way of thinking in the society. Examples include traffic gamification, where people gained motivation to obey the rules in a jocose way (traffic lottery for good drivers; or traffic lights with dancing figure, entertaining the waiting pedestrians). The other examples include education or even throwing out garbage in an effortless and joyful way. If applied correctly, gamification can be a supporting element in any field of human activity because of its ability to create shortcuts in giving rewards for human achievements and also because of the possibility to create a feeling of self-actualization and growth in safe environment (Simko, 2016).

The aim of our gamification application called Booga (BOOKs and GAMification) is to motivate users to read and visit the library and thus to address the reported preference of social networks and gaming before books and library visits of today’s teenagers. The study (Kids & Family Reading Report, 2016) also shows that one of the most common problems for teenagers, preventing them from reading is that they can’t find a book, they like. Booga is designed to suggest books and provide additional interactivity and gaming experience to reading experience that could appeal to the preference of young people.

Methods and procedures

Ideation of gamification application

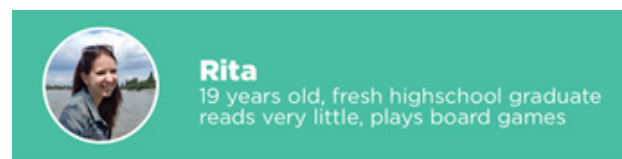
In our first Bobcatsss article about gamification (Hr̄ková, Garaj, 2015) it was asserted: “For the right application of gamification, it is necessary to identify its objectives and these objectives adequately integrate with gamification elements such as badges, points, tasks or progress bar.” It is true that the gamification elements as badges demonstrably increase the user activity (Hamari, 2015). Nevertheless, if we start to prototype a gamification application by designing its components, mechanics and dynamics, we create a very generic gamification experience that will not be successful as was the case of a library application SCVNGR and many others. The cornerstone of a unique gamification experience (as in every user experience) is building the application on user problems and points of pleasure, or in other words their emotions and intrinsic needs. This design-thinking approach is supported by Robson and col. (2015), who mention emotions as one of the principles of gamification besides mechanics and dynamics. Creating a unique gamification experience there-

fore means integrating the application with its unique users, not just gamers that are represented in gamification frameworks as MDA (Werbach, Hunter, 2012) or in four types of players (Zichermann, Cunningham, 2011).

The first prototype of gamification application, based on the theory and our rich but self-centered creativity didn’t work well. After a lot of feedback from our newly established team from Faculty of Informatics and Information Technologies in Bratislava and the volunteers also participating on the project (designers, copywriters), we found out that the application is rather cumbersome with its three parts and it would take years to accomplish this project in our financial situation. The three parts of the first prototype were narrowed to one main part, where the quiz was chosen as the most appropriate and easiest manner to reach the audience.

Personas

The problem with the first prototype was also the target group - the application was designed for four types fun (Lazzaro, 2004) and four types of players: socializers, achievers, killers and explorers (Zichermann a Cunningham, 2011), but still just for one type of readers. Also, it relied more to the extrinsic motivations (as badges and points) than on the intrinsic motivations that make people read and play naturally. Therefore, the persona for gamification application Booga had to be revised according to the needs, intrinsic motivations and emotions of both readers and players. Based on this goal, four personas were created. The 1st persona are non-readers (people that haven’t read any book in a year). 2nd persona are people who don’t know, what to read and are looking for some kind of help or suggestion. 3rd persona are people who love to read and last persona are people who don’t have much time or motivation to read, but would like to do it.



Story

Books: Rita reads very little, mostly the Facebook news feed. Sometimes she read the articles in women’s magazines.

Games: Occasionally, mainly board games or SIMS (because she can create ideal family)

Like

- Playing board games with friends with easy and straightforward rules
- Short novels, true stories from life
- Fashion, happiness, love and happy ending

Pain

- Boring, childishness, meaninglessness
- Complicated and unfamiliar words
- A book in a foreign language

Touchpoints

- Friends
- Facebook
- Web sites and magazines for young adults

Fig. 1 Example of persona (non-reader, socializer)

Empathy map

To provide deep understanding of intrinsic motivations, feelings, thoughts, attitudes and needs (not claims of needs) of readers and players, an empathy mapping research method was chosen. This uncommon method is helpful in synthesizing the observations about potential users without the existence of prototype. Empathy maps vary in shapes and sizes, but there are basic elements common to each one [1]:

- Four quadrants broken into “Thinking,” “Seeing,” “Doing,” and “Feeling.”
- Sticky notes covering the quadrants (different color for different user)
- Additional boxes at the bottom of the quadrants: “Pains” and “Gains” (in some versions)

Our procedure included a direct brainstorming with users of our target group about their “Thinking,” “Seeing,” “Doing,” “Feeling” and “Pains” both in the fields of reading and playing games. Eight users that are playing and reading on a regular basis were selected for this qualitative user research. They were asked to do the exercise alone during the session by thinking about their favorite games and books, write it down on the sticky notes and put them to the appropriate quadrants on the empathy map. The most important part of the statement was the “because” part, where they were asked to explain their thoughts by a moderator.

According to the empathy mapping research results, the most important for both gamers and readers was the feeling of identification with the character and the immersion to the story. Young readers are used to connect and compare the information they read with their reality and the text make them think about values. In games, some more active motivations were additionally mentioned as the possibility to evolve, discover or cooperate. Some players preferred to build or see something new, some preferred to kill enemies. These facts correspond to four types of players. Additionally, our results show that both in reading and playing the feeling of thrill and conflict has to be present. The senselessness (missing objective), bad graphics or difficult text and cliché should be avoided according to our research. On the contrary, gamers need to know the final objective so that they can strive to reach it and feel the adrenaline throughout the whole way.

The immersion to the story causes the feeling of being part of the game or book, of losing track of time, and the alternative state of mind that helps to escape from reality. Lazzaro also supports these conclusions: “players report that how a game makes them feel inside is one of the major reasons why they play” (Lazzaro, 2004). In another words, people are playing, because they are looking for some kind of different life experience and they are using “games as therapy” (Lazzaro, 2004).

Creating a new gamification experience

The research results based on synergy of empathy maps of both readers and gamers opened a new perspective for gamification design. The first feature that was addressed, was the immersion to the story. In games, there are lots of types of stories creating these basic emotions of entertainment: suspense, romance, comedy, horror, adventure, drama or tragedy (Ventrice, 2011).

The concept of tragedy and following adventure was chosen. Tragedy is an emotion rarely covered by games or gamification and the feeling of thrill (adventure) was mentioned often by the respondents of our research. The concept of flooded city and library, where users behave as “brave librarians” that have to find and clean all lost books was invented. Users will be able to explore the fictional map, discover books and the quiz will serve as a tool to clean them. Throughout the journey, users are going to meet “daemons of stupidity” that could be killed just by the acquired knowledge (books). The objective is to clean as many books as possible and to develop a balanced soul that is visualized in the application according to the achievements. The concept of progress bar as a soul and daemons as the enemies to kill are new and invented after lots of brainstorming. The concept of soul was inspired by this citation from by Carlos Ruiz Zafón: “Every book, every volume you see here, has a soul. The soul of the person who wrote it and of those who read it and lived and dreamed with it. Every time a book changes hands, every time someone runs his eyes down its pages, its spirit grows and strengthens.”

Users will be able to navigate themselves in the application through various “streets” of the city designed according to basic genres of fiction: Romance, Fantasy, Horror, Crime, Adventure and travelogues, Fairytales, Drama, Classics and Sci-fi. This will ensure navigation to the parts of application according to the preferences of readers.

Research respondents also described that they usually “empathize themselves with the story or character” while reading. Booga got a new story with a storyteller, young librarian Ann (figure 2), who helps players with tasks, onboarding process and explains the important information. Through this feature, users have a sense of real interaction in the application. Ann is distinguished by the power to help users explore their abilities and another game actions, which could seem difficult. This need for help within the system is also based on the results of our research, as respondents pointed out that they “don’t like hard games, where they don’t know what to do”.



Fig. 2 Storyteller in the application called Ann holding wet, almost destroyed book

Other features of the application include badges, leaderboard and (de-)motivational citations from popular literature that appear after success or failure of the user. These features are designed to create a bond not just with the application, but also with literature. The badges occur randomly (as players reportedly prefer serendipity) and are based on user activity. The examples of badges include: poet, traveler, lover, magician, scientist, night-reader badge etc.

As part of this new experience, system will be lighter, easy to use and editable. In 2014, for the first time, more people utilized mobile devices (smartphones, tablets) than desktop computers (Chaffey, 2016). This is one of the reasons, why Booga web application is built on mobile first approach.

DMC framework revised

DMC game framework is an abbreviation, meaning Dynamics, Mechanics and Components that every gamification should contain. Components are more-specific part of system and they contain one or more mechanics. Mechanics are less-specific and more-abstract and contain one or more dynamics, which are most abstract part of system (Werbach, Hunter, 2012).

Dynamics described by Werbach and Hunter are “the abstract aspects of the gamified system that you have to consider and manage, but which you can never directly enter into the game” (Werbach and Hunter, 2012). They are cornerstones of Booga gamified system that contains constraints, emotions, narrative, progression and relationships as described above. As our empathy map research indicates, emotions and narrative can be considered as the most important dynamics. Based on this founding, emotions and narrative were and should be prioritized in designing gamification application.

As Werbach and Hunter (2012) indicate, “mechanics are the basic processes that drive the action forward and generate player’s engagement.” They are half abstract and

half recognizable. After the reconsideration of gamification dynamics, mechanics of Booga were also reviewed and reselected. At the moment system contain:

- Challenges – tasks in the quiz that are within every book that user find
- Chance – the hindrances, when users meet daemons of stupidity
- Feedback – leaderboards, (de) motivational citations
- Rewards – points and spiritual energy, badges for special occasion
- Resource Acquisition – after the completion of quiz tasks
- Turns – the limitations for activity (e.g. killing daemons) defined by the amount of user energy
- Win state – the best librarian in the world with the most balanced soul

Gamified system usually has a lot of recognizable components, which are more-specific parts of the system designed for user interaction (Werbach and Hunter, 2012). Avatars, points, achievements, badges, combat, leaderboards, levels, points, quest and social graphs weren’t forgotten, when designing Booga experience. All components were carefully implemented to game story (main game quest) to create the unique atmosphere that should be stimulating to read.

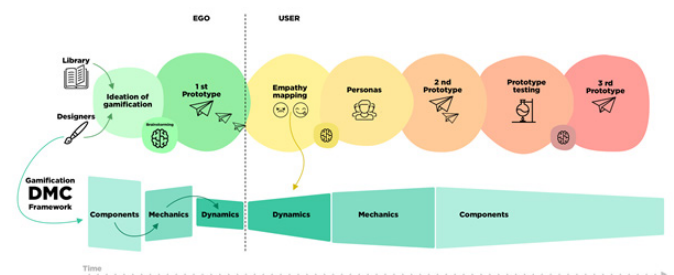


Fig. 3 DMC framework in the workflow of ego- and user-based gamification design

Third iteration (paper prototyping)

After designing the second prototype, the engagement in content (quiz tasks) needed to be tested. Low fidelity prototypes, containing the testing quiz tasks were created. User testing scenario had two rounds with two books, each containing four tasks to resolve. Five users corresponding with our personas were identifying the mistakes in the text of books and guessing the characters in books based on some insights. Users appraised this approach with the notion that the text cannot be too long to catch their attention.

Summary of the findings and conclusions

The process of designing gamification application, including the results of user research was presented in this paper. Designing gamification is not an easy task (despite its simple looking outcomes) and should be based just on the results of user research and never on the experience of the designer or solely on theoretical frameworks. Common user experience methods as eyetracking or mouse tracking, card sorting or web analysis were not sufficient to accomplish our research goals. Our user-centered approach was inspired by design-thinking methods, where design is based on user problems and motivations. For this purpose, empathetic maps were proven as the most appropriate research method. The main intrinsic motivations of both readers and players as the feeling of identification with the character and the immersion to the story, the possibility to evolve, discover, build and see something new and also to kill enemies were addressed by dynamics, mechanics and components of Booga application. The user is able to evolve and build his soul according to books that he read and resolved. He gains the energy in order to kill the daemons of stupidity. On his way (based on the tragic story), the user is able to discover new books that could motivate him to read more. The other components, based on the reading culture (as badges, streets and citations) are designed to involve and surprise young users. Bad graphics or difficult text and cliché that were the biggest pain points of readers and players were tackled by involving professional graphic designers and copywriters. Ann, the virtual librarian will also serve as the prevention of user failures. The quiz was also tested with paper prototypes and the results have shown high level of user's satisfaction. A serious user testing of the existing application will be necessary in the future to validate the flow and user satisfaction of all the components, dynamics and mechanics of the application. This paper can serve for everyone starting with the ambition to design gamification to prevent some failures, coming out of ego-centered design.

Discussion

This gamification application was designed in Slovak research circumstances that always fight with a limited budget. Nevertheless, the application will not stay in the phase of wireframes as the authors believe that people like to learn in a playful way and therefore a gamification application for libraries will find its users. With this aim, students and consultants that are currently programming the application as part of their thesis and many volunteers were invited to take part on this project.

During the process, it was also necessary to exclude some features of the application because of the above mentioned reasons, not because they weren't useful. The possibility to cooperate in groups, the changing roles of users according to their activity, building a library etc.

are the examples of these features. The next opportunities outside the library environment for this kind of application present themselves as the alternative e-learning platform based on the Comenius concept "learning by playing".

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FROM PEER ECONOMY TO PEER LIBRARY, INNOVATIVE FRENCH PROJECTS IMPROVING QUALITY OF LIFE: COMMON GOODS, CREATION, VALUE

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Keywords: peer economy, peer library, Commons, P2P, collaborative projects, sharing

Abstract

The peer economy is based on sharing or exchanging goods, services, or knowledge between individuals, with or without money exchange, often via a digital matchmaking platform. This system aims at offering alternative models to attempt to answer to today's needs in a challenging economic environment. Current research on peer economy is mainly focused on its political and economic revolution induced in capitalist societies.

As a part of the non-market sector, it appears that libraries have not been studied yet through the prism of peer economy. Still, recent studies and advocacy work tend to show that libraries do have an economic impact on our societies. We make the hypothesis that libraries can be part of the peer economy and therefore want to demonstrate how they support P2P exchanges among patrons and librarians, improving quality of life on a daily basis. The emergence of the peer economy as a new business model has also raised the awareness of libraries interested in developing new services and uses. This tendency is currently resulting in the development of collaborative projects in different fields meeting three criteria: common goods, innovation and value.

We based our research on a literature review of French LIS and general articles presenting projects to question the emergence of peer libraries in France. This paper discusses the notions of common goods, innovation and value and how libraries can be studied through this economic prism.

Introduction

In 2011, *Time Magazine* enlightened the peer economy among ten ideas that could actually change our world: “Don’t own. Share” is now a motto for today’s quality of life. The peer economy is based on sharing or exchanging goods, services, or knowledge between individuals, with or without money exchange, often via a digital match-making platform. This system aims at offering alternative models to attempt to answer to today’s needs in a challenging economic environment. For Michel Bauwens, theorist and researcher on the field of P2P theory: “Peer production is highly dependent on the market for peer production produces use-value through mostly immaterial production, without directly providing an income for its producers.”

Current research on peer economy is mainly focused on its political and economic revolution induced in capitalist societies. More than one in two French thus declared taking part of peer economy transactions in everyday life in 2015: car sharing, objects lending, crowdfunding, etc. But we noticed that this figure did not include the participation in library activities, whereas patrons are having more and more P2P interactions, sometimes without even being aware of it (for instance in participating in a MOOC, exchanging books via a book box, etc.).

As a part of the non-market sector, it appears that libraries have not been studied yet through the prism of peer economy. Still, recent studies and advocacy work tend to show that libraries do have an economic impact on our societies. We make the hypothesis that libraries can be part of the peer economy and therefore want to demonstrate how they support P2P exchanges among patrons and librarians, improving the quality of life on a daily basis. The emergence of the peer economy as a new business model has also raised the awareness of libraries interested in developing new services and uses. This tendency is currently resulting in the development of collaborative projects in different fields meeting three criteria: common goods, innovation and value.

We based our research on a literature review of French LIS and general articles presenting projects to question the emergence of peer libraries in France meeting the criteria of the peer economy. In this perspective, we put forward an investigation of the way librarians and journalists are presenting the added value of these projects set in collaborative economy. This research is based on French examples and could be further extended by a broader picture of innovative European projects.

This paper discusses the notions of common goods, innovation and value and how libraries can be studied through this economic prism, in the following three sections. First, we approach the topic of information sharing, with the concept of the library as a common good. Then, we question the involvement of libraries in innovative projects, especially new ways of learning through workshops or MOOCs, as “human libraries”. Finally, we

present the idea of the library being a place of collaborative added value through the creation of information and data, for instance with 3D printing, seed libraries or the development of open software.

The idea of value is related to the notion of impact: “[...] to evaluate how the library changes its patrons’ life, neighbourhoods or society by providing an access to knowledge and culture, digital training etc.: the impact gathers all these direct or indirect, immediate or longer-term efforts of the library on its environment.[1]” (Touitou, 2016).

In the 21st century, library may be understood as a hub, connecting people and ideas.

The collaborative library: a common good and a place of sharing

We need to refer to the notion of “Commons” to define the collaborative library. During the 13th century, agrarian private property knew a massive change due to the “enclosures” shift (some fences surrounding the fields appeared, leading the community-based management to private property). The common goods are collectively managed following definite rules regarding access and use. Commons can be natural, cultural or information assets[2] (Rothé, 2015).

The collaborative library meets the criteria of this definition[3] (Pagnet, 2015) : it collectively manages natural and cultural goods, and information assets to give access and use of them to a wide audience, while conserving and valuating them for future generations.

It pursues a general interest transforming the library into a common good useful to everyone, at the heart of the social and economic concerns of the 21st century. This characterization can be included in a wider movement driven by the development of “third places” as defined by the sociologist Ray Oldenburg in 1980. These third places are different from the first place (home) and the second place (the workplace) as neutral spaces, open to everyone, offering numerous services meeting the needs of a population[4] (Rue89Lyon, 2014).

The collaborative library needs to be integrated in wider social movements, in order to advocate its missions and have the support of civil society. This implies a change in positioning as libraries fighting for cultural rights and knowledge Commons. Changing the discourse is also essential to position the libraries not only in cultural and heritage fields but also in education and social fields. Libraries host many conferences on the topic of Commons to raise public awareness, such as in the Bibliothèque publique d’information (Bpi)[5] (Bpi, 2014) or during the latest Association des Bibliothécaires de France (ABF) congress[6] (ActuaLitté, 2016).

A primary role of the libraries in collaborative economy is to fight against appropriation of the Commons by companies or private organizations. The installation of seed libraries[7] (uMap, 2017), via the association “Graines de troc[8]” (Graines de troc, 2017) or “Partageons les jardins[9]” (Partageons les jardins, 2017) for instance, illustrates the struggle libraries are involved in. These associations are aiming for the exchange of free seeds in order to fight against living organisms’ patenting by companies such as Monsanto. They can also aim at promoting social cohesion in an urban environment, for example by creating shared gardens in an indoor courtyard or outside the library, as the one Louise-Michel Library installed in Paris[10] (Rivaz & Melot, 2015). More and more libraries are also accommodating cafés[11] (Lire au Havre, 2017) in their lobby as places of social interactions and meeting grounds.

A further example is the temporary library created by the Bpi on the topic of social revolt from the 22nd April to the 8th May 2016. Called “Occupy Beaubourg”[12] (Livres Hebdo, 2016), this library was collaboratively supplied. Its leitmotiv stated that “this constantly metamorphosing library will become a lively place for sharing and exchanging views, set in an organic and artistic process, following the model of collective and spontaneous libraries appearing within social protest movements *Occupy* all over the world in New York City, Hong Kong, Taiwan. [13]” (Bpi, 2016). This initiative enabled the gathering of a few thousand documents; it also gave pause for reflection to the citizens about the need for a resistance or struggle library to accompany social movements. These “resistance libraries” furthermore have several lives, setting them in the circular economy. For instance, when the French social movement “NuitDebout” stopped, the books gathered by the Parisian “BiblioDebout” have been shared between BiblioDebout Lyon and the Le Taslu Library[14] (Zone A Défendre, 2016). This library, located at the heart of a “ZAD”[15], is managed by a group of collective struggle against a future airport in Notre-Dames-Landes.

Libraries also promote the access to an open Internet: some of them even sign the Bib’lib’ charter[16] (ABF, 2015) initiated by the ABF, an Internet access being needed to undertake administrative formalities, guaranty access to knowledge and communicate all over the world. Libraries can also provide a “Bibliobox”: derived from the “PirateBox”, it allows users to download P2P-shared files for free without authenticating. To ensure the right to private copying, some libraries also organise “Copy Parties”[17] (Libération, 2012), where participants can download library contents for personal use. The Library of the Institut National des Sciences Appliquées (INSA) in Rennes even organised a “Crypto Party” to teach participants how to protect their personal data and their e-reputation[18] (Let it bib, 2016).

Naturally, books are also exchanged, thanks to “bookcrossing”, book boxes and “Troc de presse”[19] (Pratiques collaboratives, 2015). Those display stands

installed in libraries’ lobbies enable visitors to exchange magazines and newspapers for free. Many book boxes are installed in the French streets as in many other countries all over the world. This initiative is supported by the association Les Livres des rues[20] (Les Livres des rues, 2017), defining its goal as promoting street libraries and raise the awareness of citizens and institutions. Philippe Guichoux, President of the association, describes the organisation in Rennes: “Open access books 24/7: this is what street libraries installed across France achieve, on shelves or wooden boxes.[21]” (Le Parisien, 2014). The company RecycLivres[22] (Recyclivres, 2017) launched a collaborative directory to map all the book boxes[23] (Boîte à lire, 2017) in France. There are currently 600 identified boxes with their location and a picture if possible. They are installed by neighbourhood committees, associative libraries or cities thanks to their public libraries’ network. Available for all, these book boxes can especially benefit the homeless who through no fault of their own are the public space’s inhabitants, thus playing a key role in social and solidary inclusion.

The collaborative library: a place to learn all life long

For thirty years, libraries have been diversifying their offer, by lending other media along books. They expanded lending to tapes, games and vinyl records, then CDs, DVDs and video games. Today, many of them also lend readers, digital tablets, laptops and other electronic devices to patrons. Download of Open access music and text contents[24] (ACIM, 2015), individual and collective listening[25] (BM Lyon, 2015) and viewing rooms are also available. Some libraries even lend toolboxes[26] (Bricolib, 2013), music instruments, games consoles or sewing machines.

Mediation workshops are proposed along the availability of these spaces and collaborative tools. Collaborative libraries do not, indeed, consider that this is enough to lend those tools or cultural and everyday objects: they promote the development of training workshops, not necessarily conducted by the library staff. Libraries also develop partnerships, especially when they create “Fab-Labs”[27] (Labenbib, 2017) or “MakerSpaces”: in the global Do It Yourself (DIY) trend, those collaborative creation spaces with 3D printers require special competences.

There is also a distance education offer thanks to Massive Open Online Courses (MOOCs) and Small Private Online Courses (SPOCs). Libraries can contribute to the conception, realisation and promotion of these media in their Training Catalogues. Collaborative economy tends to encourage the autodidacts movement; the collaborative library can play a role to foster self-directed language learning sessions, computer coding[28] (Voyageurs du code, 2017), video games creation[29] (Bpi, 2015) etc. One must pay attention not only to these projects but

also to the commitment of the staff, which can be disoriented because of the change of view on the library; they must be reassured that these changes do not imply a loss of “core competences” or expertise but rather the opportunity of developing new competences.

The library in Languidic also offers a sharing skills service through the digital matchmaking platform Steeple[30] (Let it bib, 2015), built on the model of the “human library”: librarians as well as users propose to share their skills in exchange for new ones. Library is thus positioning itself as a learning place to develop further information, communication and social competences.

In Valence, the public library organises cooking workshops for participants in French learning workshops. One Saturday a month, these sessions serve as a basis to French learning, creating bonds between participants and introducing the library[31] (Médiathèque de Valence, 2014). It also offers the services of a public letter-writer to help patrons answer letters, write a request or a résumé and a cover letter.

The collaborative library is committed to being a fully-fledged resource for citizens. Co-working spaces are now being created in other places than libraries, providing tables, chairs, phone and any useful tool to conduct meetings. New needs quickly emerged among co-workers, especially regarding documentation. Developers and Web Designers created a “Webibli”[32] (ActuaLitté, 2015), thus uniting a community of so-called “weblinautes” who lend their own books and borrow their neighbours’ ones. The users’ accounts are positive: Timothée explains that this library is “the best way to stay up-to-date without breaking the bank while meeting nice people sharing interests!”. To Celia, “thanks to Webibli, I stopped spending too much at the bookshop and met new people!”

The NGO Bibliothèques sans frontières[33] also offers learning tools to improve citizens’ the quality of life: the “Khan Academy”, available to francophone learners, is governed by the rule of “providing a high-quality teaching to everyone, everywhere” with more than 2 200 mini-lessons on maths, computer science, history, finance, physics, chemistry, biology, astronomy, music, pictorial art or economics. Those video tutorials are available on YouTube.

The collaborative library: a place of creativity and innovation

This transition towards collaborative libraries requires a local rooting in the scientific, cultural, educational and social project of a town just as in Grenay, where policy for library services is at the heart of the action[34] (Médiathèque Estaminet, 2017). In small cities where up to 50% of the inhabitants are registered library users, such

as in Saint-Aubin-du-Pavail[35] (Médiathèque Philéas Fogg, 2017), the library also serves as “single desk” for filling in any administrative formalities as well as getting a basket of vegetables purchased from a local farm or picking up a parcel. It also plays an important facilitative role by imagining new services, such as cultural car-sharing launched by the library in Vergongheon in 2015[36] (Auzon Communauté, 2015). A start-up called Covoiturage-Art[37] (Covoiture-Art, 2017) then disseminated this practice by suggesting 1 500 cultural sites to users.

The Toulouse Public Library unveiled a “Music Box”[38] (Bibliothèque de Toulouse, 2016): this innovative service is dedicated to amateur musicians who can borrow music instruments, learn to play and record their creations in the recording studio. “A public library has never offered such a service to amateur musicians”, declared Nicole Miguel-Belaud, city councillor in charge of public reading and libraries. These elements contribute to bringing collaborative libraries closer to citizens’ concerns since one in four of them claimed playing a music instrument in 2010[39] (IRMA, 2010).

The collaborative services developed by the libraries generally serve well-defined communities. For instance, enhancing a video games-space is not necessarily aiming at all audiences but rather to gamers. It strongly supports the hypothesis that the collaborative library’s actions are more effective if services are developed to answer expressed needs. Paradoxically, deviating from the core missions of the library – to promote books and reading – may be the best opportunity to supporting it with reading, writing and languages learning workshops.

In this perspective, some libraries are organising “Biblioremix” sessions, based on “Muséomix”: these one or several-days workshops aim at co-constructing the ideal library. As in Versailles[40] (Biblio Remix, 2016), half of the participants are patrons and the other half are librarians. “Hackatons”[41] (BnF, 2016) and “hackerspaces” can also contribute to redesigning the library and its model by joining the free license and open software movement from the IT field. This approach consists in fostering the use of open source software[42] (BibLibre, 2017), producing and distributing contents under Creative Commons licenses or actively contributing to the collaborative encyclopaedia Wikipédia[43] (Livres Hebdo, 2016).

The library as an editor and producer of contents can also back researchers in their studies, by supporting the Open data movement[44] (BnF, 2017), reusing public data or providing help to data and text mining. Liberating public services and library data is a transparency action that contributes to restoring citizens’ confidence. Communicating on and via this data is an interesting track, improving the way patrons – whether they are users or not of the library – perceive its activities and potential. Furthermore, this data can be freely reused and adopted to build new services. This is how the app Affluences[45]

(Affluences, 2017) has been developed by the eponymous start-up before being deployed in 67 libraries in France[46].

Libraries are also committed to Open access[47] (Université d'Angers, 2013): they support the research results produced thanks to public funding, to oppose the "author pays" model promoted by scientific and scholarly publishers such as Elsevier[48] (Sciences et avenir, 2016). Collaborative economy relies on principles of solidarity and mutual aid. For libraries, it implies to be able to develop new funding methods to back projects, for instance via crowdfunding[49] (Les Échos, 2015). This method is also an opportunity to involve the library users' community in projects and to contribute to their achievement. Conclusion: the peer library, an innovative model to create and improve together

Through these different projects, peer libraries develop ability to act on their users' everyday life issues by going beyond their traditional scope. By doing so, they affect positively the quality of life, thus making library services indispensable. These evolutions fit in the post-capitalist revolution, placing the collaborative libraries in line with their era and their patrons' expectations. An advocacy action towards the citizens and authorities is necessary to help generalize this model by informing and highlighting its assets. This is the purpose of the Numok digital festival organised by Paris public libraries[50] (Paris Bibliothèques, 2016). For two weeks, forty libraries from the capital city of France proposed more than 200 free cultural events related to digital technology and knowledge Commons.

Notwithstanding this trend, the development of collaborative libraries in France is relatively late in comparison with Anglo-Saxon or Northern Europe countries, lacking a guide to developing this model and evaluation tools. To that end, the International Federation of Library Associations and Institutions (IFLA)[51] (IFLA, 2016) and other professional associations[52] (ABF, 2016) are developing impact assessment methods. These evaluation tools measuring the social impact of libraries also integrate "outcomes": employment, property prices, education, social inequality reduction.

Therefore, the French Standardization Association (AFNOR) published the ISO 16439 standard entitled "Methods and procedures to evaluate the impact of libraries". Lately, the Val d'Oise department lead the study[53] (Val d'Oise, 2016) "La bibliothèque vaut-elle le coût?[54]. The results show the positive effects of the libraries within the communities to convince decision-makers and funders to invest in public reading policy and libraries building. Professional literature is also versed in these issues as reflected in the manual *Évaluer la bibliothèque par les mesures d'impacts* (Evaluating the library through impact measurement), coordinated by Cécile Touitou, and published in 2016 by the Presses de l'Enssib[55] (Touitou, 2015).

These tools will help collaborative libraries to assess their contribution to the improvement of citizens' quality of life, maybe leading a path to reinvent the overall French library model.

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GAME-BASED STUDENT RESPONSE SYSTEMS IN INFORMATION LITERACY TEACHING

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Keywords: information literacy teaching, higher education, learning games, game-based learning, student response systems (SRS), game-based student response systems (GSRS)

Abstract

In this paper, I examine the possibilities of using learning games in higher education information literacy teaching as a means to increase student engagement. I will focus on the use of student response systems, more specifically quiz tools such as Kahoot! and Socrative, that offer a relatively simple way to bring elements of game into teaching even large groups of students.

I will review earlier literature about learning games as an engagement strategy and the effects of the student response systems on student performance. I will also present practical case examples about how different quiz tools can be used in library orientation and information literacy teaching. I investigate some pedagogical possibilities offered by these tools: on one hand the possibilities of making different types of questions, and on the other the different roles that are available for the instructor and the students. The aim of this investigation is to offer suggestions for good professional practices in using these tools in various higher education information literacy teaching contexts.

The background and purpose of the study

In this paper, I will examine the possibilities of using learning games in higher education information literacy teaching as a means to increase student engagement. I will focus on the use of (game-based) student response systems, more specifically class quiz games offered by software such as Kahoot! and Socrative. Kahoot! and Socrative offer a relatively simple way to bring elements of game into teaching even large groups of students. I will present practical case examples about how these tools can be used in library orientation and information literacy teaching. My aim is to offer suggestions for good professional practices in using these tools in different higher education information literacy teaching contexts. My theoretical interests are linked to learning games as a strategy to enhance student engagement and motivation and I will review earlier literature and case studies about the topic.

Gamification is a strong trend both in education and in the library world. At the same time, it is demanding to create and find games that are both engaging and educational (Felker, 2014, p. 19-20). For an individual instructor aiming to gamify his or her own teaching it is equally challenging to find suitable games and to find the right balance in using games as a teaching method. Gamification can be defined as the process of applying game mechanics and thinking to the real world to solve problems or engage users, and it can be applied either by bringing game-like structures and systems onto existing systems or by reworking a system from the ground up as games. An example of a game-like structure that can be brought to education is introducing leaderboards, badges or a points system to supplement the final grade whereas reworking the system from the ground up would mean redesigning the entire course to be an extended game (ibid.: 20). In this presentation, I will focus on the first and limit my consideration to class quiz games as a method of gamifying information literacy teaching.

My interest for the topic stems from my own experiences in teaching information literacy in my work as an information specialist in Humak University of Applied Sciences in Finland. All the 1st year students of Humak attend an information literacy course that focuses on information sources, basic search strategies, evaluation of information and the information resources offered by the library. As the course is mostly an online course, there is a limited amount, about 90 minutes, of contact teaching for each group and the group size in face-to-face instruction is about 30-35 students. These practical arrangements naturally affect what can be done for example with gamification. As time is limited, the learning tools (such as games) used need to be simple and fast to explain in a context of only a couple of hours of teaching. To my knowledge, the practical arrangements are similar much

of the information literacy teaching in higher education at least in Finland, which makes this paper relevant even in a wider professional context.

My professional experiences thus have guided my approach, first of all by offering me the framework of information literacy teaching and secondly by focusing my interest to game-based learning in a relatively simple format of quiz tools. My aim has been to bring game-like elements into traditional teaching, not to realize all teaching in a game format.

Kahoot! and Socrative as a method of gamifying information literacy teachings

Different terms are used to refer to tools like Kahoot! and Socrative. Socrative website defines the tool as an *instant response system* whereas in Kahoot! website their tool is referred as a *game-based learning platform* (Socrative, 2016, Kahoot! A). In academic discussion this kind of tools are referred as *student response systems* (SRS). Student response systems were introduced already in the 1960s using computers and in later stages devices called "clickers". In 2000s the SRSs were brought online, first via browser-based interfaces and later on also through mobile applications (Ben-Av & Ben-Av, 2016, p. 94). To account for these technological developments, Socrative is sometimes mentioned to be an *online student response system* and Kahoot! a *game-based student response system* (GSRS) (see for example Awedh et al., 2014; Wang, 2014). Wang (ibid., p. 218-219) defines Kahoot! as a game-based student response system and Socrative and other similar software as student response systems on the grounds that Kahoot! was designed as a game, whereas for example Socrative is a student response system with games as an add-on feature. For my purposes this distinction is not significant as both software offer similar kinds of possibilities for quiz games. Next, I will present the two software in more detail.

Kahoot! is a free platform that instructors can use to create quizzes, surveys and individual discussion questions that are launched and projected onto the classroom screen. The student can join in through their personal device and then answer the questions in real time playing against other students. Students answer via their own devices, but all the questions, answers and the leaderboard are on the screen and everyone hears the same music when playing. The instructor can facilitate and discuss the content or the responses of the students. The discussion and survey modes of Kahoot! do not have a points system or scoreboards, so it is also possible to use Kahoot! in non-competitive settings.

Socrative can be used to create quizzes, quick questions,

space races and exit tickets. Socrative has a free version but with a pro version one gets more functions and for example the possibility to run quizzes for larger groups. Quizzes are answered with the students' own devices and also the questions are shown on the student devices so it is not always necessary to have a screen. It is also possible to have quizzes that are completely student-paced. The most game-like function of Socrative is space race, where students answer questions individually or in teams and watch the progress of the race from the screen where each team is presented as a rocket travelling from one end of the screen to another.

When we think about Kahoot! and Socrative as games we must first of all state that the feeling of game is created with fairly simple elements: the use of leaderboards and points. The competitive atmosphere is reinforced with the use of graphics. These software, especially Socrative can also be used without game-like elements.

Previous studies about using student response systems as an engagement strategy

Next, I will review literature about learning games as an engagement strategy. On one hand, games are often perceived as a method of providing a deeper learning experience that is at the same time enjoyable. On the other hand, people seem to learn better when they are active participants in the learning process (Felker, 2014, p. 20). Games are also considered environments where people solve complex problems without feeling the same fatigue or frustration than with a comparable learning task (Fotaris et al., 2016, p. 94). The motivation and engagement connected with learning games seem to be perceived to stem from enjoyment of the game and the more active role of the student than in more traditional teaching methods.

Several studies have been published about using Kahoot!, Socrative or similar software in higher education and both quantitative and qualitative experiments or quasi-experiments have been made about the effects of using this kind of software both in terms of student motivation and learning results (see for example Awedh et al., 2014; Ben-Av & Ben-Av, 2016; Dakka, 2015; Fotaris et al., 2016, Méndez-Coca & Slisko, 2013 and Wang, A.I., 2014). All in all, the studies show that students' perception of both Kahoot! and Socrative has generally been positive. Students have felt quizzes to be helpful and motivating for their learning (Ben-Av & Ben-Av, 2016, p. 99; Awedh et al., 2014, p. 22). Wang (2014, p. 217 & 227) investigated the student experiences and the possible wear out effect of using Kahoot! in every lecture of a course for five months and concluded that even after five months, Kahoot! quizzes boosted student engagement, motivation

and learning even if there was a minimal wear out effect for motivation and engagement.

There are fewer studies about the actual effects of using quiz tools for learning results. Dakka (2015, p. 16) compared the student performance in two semesters of an engineering course and the overall performance of the students was better in the semester when Socrative quizzes were used. Fotaris et al. (2016, p. 106) noticed that the experimental student group that was using Kahoot! had a better academic performance than the control group. The groups studied have been relatively small so the results cannot be generalized. The lack of larger-scale empirical evidence on the impact of game design on learning outcomes is also a wider issue. Another challenge in analyzing the effects of game-based learning is the tendency of the studies to focus only on one or two platforms. (Jabbar & Felicia, 2015, p. 752) All in all, it seems that (game-based) student response systems have positive effects both on student engagement and performance, but more research is still needed on the matter.

Case examples about using Kahoot! and Socrative in information literacy teaching

Next, I will present practical case examples about how Kahoot! and Socrative can be used in library orientation and information literacy teaching. I investigate some pedagogical possibilities offered by these tools: on one hand, the possibilities of making different types of questions, and on the other, the different roles that are available for the instructor and the students.

Student response systems such as Kahoot! and Socrative work best with simple questions that can be asked in multiple choice format. The wording of the questions and different choices often requires quite a lot of thinking if you want to keep the quiz relevant. The quiz format is not the only option, one can also pose individual questions – why not even several during one class. With Socrative it is also possible to have short written answers to questions.

When it comes to the contents of the questions, there are three basic choices: introducing new topics, checking what the students know or activating old information and revising and summarizing the important concepts presented in class. New topics can be introduced by asking questions that make the students think of their stance on a topic or make them curious about the topic of the class. I have used Kahoot! and Socrative both to check that the students already know about Google beforehand, and for example a quiz about the use Boolean operators could make a suitable topic for making students curious about the topic before explaining Boolean logic in detail.

A key element affecting to the overall experience of the quizzes is whether they are student-paced or teacher-based. In teacher-paced quizzes everyone answers the questions at the same time possibly competing with each other about who answers the quickest, and ultimately the instructor decides how long the students or teams can take to answer one question. Kahoots are always teacher-paced as Kahoot! always requires a shared screen where students can see the questions. This is a pedagogical choice from the creators of Kahoot! as they consider that best engagement and learning is achieved when there is a shared screen and the students are not too fixated on their own devices (Kahoot B). With Socrative, it is possible to make student-paced quizzes and the quizzes can even be started at different times by the students.

When determining the rhythm for a quiz, the instructor needs to decide whether to pursue a shared competitive experience or an environment where each student or team can consider and discuss the questions in detail. For example for library orientation, a completely student-paced quiz where the student can look for the answers in the physical library would work well. But if the instructor wants to include a competitive element, a Kahoot! quiz or Socrative space race works better.

This kind of software can of course also be used so that the students divided in teams make quizzes about the topics they are learning about. But ultimately even in this case the makers of the quiz either determine the pace or let the ones answering the questions at the rhythm they want. A method where students learn about a topic and then teach it to others via quizzes would apply well even to information literacy teaching, but often this approach is more time-consuming than a method where the instructor prepares the quizzes.

Discussion

One aim of this investigation was to offer suggestions for good professional practices in using tools like Kahoot! and Socrative in different higher education information literacy teaching contexts. I have presented different examples on how to use these tools and we can conclude that they can be used for different purposes and that the instructor should put some thought into what he or she wants to accomplish. Different functions of these tools can, on one hand, be used to create competitive quizzes that engage students in a shared experience, and on the other, to enable working in a student-paced rhythm so that everyone can take their time to answer the questions.

Earlier studies have shown that students generally have a positive attitude towards using quizzes as part of lectures. Some studies suggest that using student response systems like Kahoot! and Socrative also enhance student performance but there is no wide-scale research about it. All in all, earlier studies about the topic imply that with the help of these tools, instructors can engage and motivate students and possibly even enhance learning results.

The contents of the quizzes are naturally also important. Many topics in information literacy teaching are suitable for quizzes and the format can for example be used to introduce new topics, to review what the students know beforehand or what they have learnt in class. The instructors should think about what they are aiming at by using Kahoot! or Socrative, and determine the format and the contents of the quiz based on that.

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HOW CAN LIBRARY ANXIETY PLAY A POSITIVE ROLE ON STUDENTS' IDENTITY? A PHILOSOPHICAL APPROACH TO ANXIETY AND ACADEMIC LIBRARIES

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Keywords: library anxiety, university library, academic libraries, identity, positive anxiety

Abstract

This paper aims at looking at the phenomenon library anxiety within academic libraries and discuss whether it can have a positive effect on students as students seem to be one of the main groups experiencing library anxiety. Based on a discussion with the German philosopher Martin Heidegger's concept of anxiety and with the Norwegian professor of psychology Paul Moxnes' positive anxiety, I suggest that anxiety can be seen as something positive, as it is necessary for the construction of the self.

My research question is: Can library anxiety play a positive role on students' identity? The paper aims to answer to the research question on a philosophical level. This perspective presents library anxiety as an identity-builder through a discussion on Heidegger and Moxnes. In this paper I will argue that anxiety is a necessary tool for the construction of the self (Heidegger 1962) and a positive force (Moxnes 2012), and discuss that anxiety is something different from fear, as the subject can overcome anxiety, while fear may be paralyzing.

The paper concludes that through anxiety, the self is able to detach itself from the world it is a part of, can be free and exist. Library anxiety can play a positive role on students' identity, if it is recognized and mastered. Mastering anxiety and a library's services can thus strengthen students' identity and improve their quality of life.

Introduction

This paper is not based on a previous research or a survey, but it aims at examining the phenomenon “library anxiety”. By library anxiety, I mean the feeling of being afraid of using the library for different reasons, but mainly because people feel they lack knowledge about how things work in a library and they feel uncomfortable asking a librarian for help. It seems like most of research articles I have read so far treat the phenomenon library anxiety in negative terms.

I want to find out if library anxiety can be seen as something rather positive. The reason why I want to discuss the concept “anxiety” in positive terms is because I have read the German philosopher Martin Heidegger’s theory about anxiety in his famous *Being and time* first published in German in 1926. In the way I understand Heidegger, anxiety is actually positive as he describes anxiety as something constructive for the self. I have also came across the Norwegian psychology professor Paul Moxnes’ new thinking about anxiety, which leads to positive anxiety. Moxnes refers to Heidegger amongst others philosophers and this makes me think that Heidegger’s theory on anxiety is quite central for the understanding of the concept of anxiety today. I was then curious to find out if it was applicable, in theory, to the library as an institution.

With this paper, I hope to contribute to more knowledge about library anxiety within academic libraries. I chose to focus on academic libraries as I am a student and work in an academic library myself. The topic for this year’s BOBCATSSS conference is “Quality of life through information” and since students seem to be one of the largest groups suffering from library anxiety, I find this topic to be interesting.

As I have mentioned earlier, the question I raise is: Can library anxiety be positive for students? This paper stresses why it is important that students overcome library anxiety. It is essential to overcome library anxiety in order to be able to find, get and use information properly, which will strengthen the students’ identity.

In order to answer my research question, I aim to give a better understanding of the concept of anxiety with the German philosopher Martin Heidegger and with the Norwegian professor of psychology Paul Moxnes, before I move on to the phenomenon library anxiety with the professor of library sciences Constance Mellon, who was the first to put a name on it. And at last, I want to see if we can talk about library anxiety in positive terms.

What is anxiety?

In the online *Oxford dictionaries*, anxiety is defined as “a feeling of worry, nervousness, or unease about something with an uncertain outcome” (n.d.). In the field of

psychiatry, anxiety is “a nervous disorder marked by excessive uneasiness and apprehension, typically with compulsive behavior or panic attacks” (n.d.).

As I have read and interpreted anxiety as something positive, I will give an overview of the concept of anxiety in philosophy and modern psychology with Martin Heidegger and Paul Moxnes.

Anxiety in philosophy with Heidegger

In his masterpiece *Being and time*, published in English for the first time in 1962, Martin Heidegger writes that moods (which have often been translated as “states-of-mind”) are essential to reveal the human existence and that anxiety is one of these moods. The way I understand Heidegger, anxiety is distinctive from other moods as it makes me experience my own existence by making the world unfamiliar (Heidegger 1962 pp. 228-229). In their research paper “Affectivity in Heidegger I: Moods and Emotions in Being and Time”, Elpidorou and Freeman writes:

For Heidegger, anxiety is a deeply disconcerting, rare, and potentially profound experience that may arise even in the midst of our most common and familiar practices. That in the face of which we are anxious is not a particular entity. What elicits anxiety, in other words, is not something that we encounter in our worldly existence, but rather our very own existence, our being-in-the-world (Elpidorou & Freeman 2015 p. 666).

One should not, however, understand anxiety and fear as being equal moods. Anxiety is not worrying constantly about everything and is to separate from fear. I fear an object, something in particular, but I am anxious about nothing concrete. I experience anxiety when I realize that I am not one unity with the world around me which I am a part of, but by doing so, I can detach myself from this world and my “self” can exist when I become self-aware (Heidegger pp. 230-234).

The Norwegian philosophy professor Guttorm Fløistad (1993 p. 253) writes that the experience of anxiety is essential to the analyze of the existence. For Heidegger, all the things in the world become meaningless when one’s experience of anxiety tears away the way in which one has experienced the world so far (Fløistad 1993 p. 254). To the question: what is one anxious about? Heidegger answers that it is “to be in the world”, that the object of anxiety is one’s own existence in the world. Fløistad adds that for Heidegger, the experience of anxiety is based on the principle that someone’s attention is intrigued by the moment they realize the possibility to lose it (one’s own existence) (p. 255).

Anxiety in modern psychology with Moxnes

The fact that a specialist in modern psychology, Moxnes, refers to Heidegger, accentuates the fact that Heidegger

is quite essential for the understanding of anxiety. Let's see how Moxnes develops his theory on anxiety.

Moxnes, writes in his book *What is anxiety?* (2009) (*Hva er angst* in Norwegian) that what is paradoxical with anxiety is that the fear of tomorrow and the day after tomorrow can be reduced through anxiety. Anxiety's task is actually to create security (Moxnes 2009 p. 10). He makes a difference between two main types of anxiety: anxiety that makes someone sick and the healthy anxiety that people actually need to build their lives (Moxnes 2009 p. 14). With "healthy anxiety", Moxnes means the anxiety that protects us from the deadly dangers we can encounter every day and he underlines that this anxiety is necessary for us to be skilled, create good products and forms of work, good societies and a safe future. From this perspective, anxiety is a form of intelligence (2009 p. 18).

The "sick anxiety" represents anxiety disorders as psychiatric diagnoses that prevent human beings from functioning properly in society (Moxnes 2009 p. 72). Moxnes points out, however, that anxiety has always been difficult to define accurately and it has always been a problem for research in this field. Moxnes affirms that the anxiety has three components: the subjective experience of being afraid, the bodily changes associated to this experience and the behaviour that aims to prevent or cope with the threatening situation. These three components are not always interrelated and that makes research on anxiety quite difficult (p. 16). The way I understand Moxnes, anxiety and fear are dissociated and related at the same time.

To summarize this first part on anxiety, for Heidegger anxiety and fear are different from one another, and anxiety is necessary for the construction of the self. Moxnes separates anxiety in two main categories: the healthy and the sick anxiety. So if anxiety can be healthy, does it mean that library anxiety could be something positive as well? In order to be able to discuss the question further I will now move on to the phenomenon library anxiety.

What is library anxiety?

According to Joan M. Reitz's definition in the *Online dictionary for library and information science*, "library anxiety" is: "Confusion, fear, and frustration felt by a library user, especially someone lacking experience, when faced with the need to find information in a library. Among college and university students, library anxiety may be one cause of academic procrastination" (n.d.). Understanding library anxiety as a cause of academic procrastination inspires me to look especially at library anxiety within academic libraries.

Mellon's theory

The phenomenon "library anxiety" was first introduced by Constance A. Mellon in 1986 in her research article "Library anxiety: a grounded theory and its devel-

opment". This paper was based on a qualitative study, which explored the feeling of students about to use the library for research. 75 to 85% of the students described their response to library research in terms of fear. Three concepts emerged from that: "(1) students generally feel that their own library-use skills are inadequate while the skills of other students are adequate, (2) the inadequacy is shameful and should be hidden, and (3) the inadequacy would be revealed by asking questions" (Mellon 1986).

In her recent article "The strange affliction of "library anxiety" and what librarians do to help", the American writer Ella Morton writes about Mellon's theory and underlines that library anxiety "involves feeling intimidated, embarrassed, and overwhelmed by libraries and librarians" (Morton 2016). Mellon's paper from 1986 "reported that college students in particular are prone to library anxiety because they believe their research skills are inadequate, which makes them feel ashamed and unwilling to talk to the very librarians who might be able to ease their worries" (Morton 2016). Morton goes on arguing that "A major contributor to students' anxiety is in the design and architecture of the buildings" (2016) which is found true in Mellon's study (1986) where some students expressed a feeling of being lost (physically) in the library. She found out that that this feeling of being lost was due to: (1) the size of the library; (2) a lack of knowledge about where things were located; (3) how to begin, and (4) what to do.

Sharon Bostick's Library Anxiety Scale

Along with Constance Mellon, Sharon Bostick is a reference in the field of library anxiety, as she made the phenomenon popular as a research topic after she developed the Library Anxiety Scale (LAS) in 1992, "to quantitatively measure: (1) barriers with library staff, (2) affective barriers, (3) comfort with the library, (4) knowledge of the library, and (5) mechanical barriers" (Reitz n.d.). The academic library is a place that no students can avoid: they will have to use its services, eventually, either from campus or from home. Academic libraries are however rather big institutions, and finding the right information can become a complex task. Academic libraries must follow the development of technology to remain up to date and to remain used by patrons, which implies that patrons also have to remain up to date on the library's services in return.

It seems like the phenomenon library anxiety is mostly defined in negative terms. I will however suggest another way to understand the phenomenon based on Moxnes' "positive anxiety".

Can library anxiety be positive?

The Norwegian psychology professor Paul Moxnes has written a second book, *Positive anxiety* (2012) (*Positiv*

angst i individ, gruppe og organisasjon – Et organisasjonspsykologisk perspektiv), where he draws further on the positive effect of anxiety on individuals and groups. In this book, Moxnes talks about “positive anxiety” because anxiety can be used as a constructive force if it is set with the right conditions. Moxnes writes about the everyday anxiety, not anxiety as a sickness. According to Moxnes, the everyday anxiety is necessary for us to take good decisions and accomplishments. As I have already written, anxiety is a form of intelligence.

Moxnes refers to Heidegger (2012 p. 145) in this book on positive anxiety. He points out that Heidegger’s anxiety is bounded to freedom as it is through the experience of anxiety that I separate myself from the world I am a part of and that I become myself. As such, anxiety becomes an important tool for the construction of the self. Library anxiety could be then seen as having a positive effect on students, if recognized and mastered, and thus having a positive effect on their life quality. On a philosophical level, this perspective presents library anxiety as an identity-builder, as it pushes students out of their comfort zone. This perspective can enable us to look at anxiety as having a positive function on the being and library anxiety as a way to improve quality of life among students.

Conclusion

Human beings, pushed outside the known and the familiar world will experience anxiety. Anxiety is however a necessary tool for the construction of the self, according to Heidegger. Through anxiety, the self is able to detach itself from the world, can be free and exist. For Moxnes, the healthy anxiety is a positive force that allows to function well in society.

In the library context, it is when confronted to a new situation, a new world with different codes that the library embodies, that students experience anxiety. If mastered, however, this anxiety can enable students to ask for help, to adapt and gain autonomy towards librarians, as well as they can get proper knowledge on how to find and use the information they look for. The library thus becomes a more homely place and when new changes do appear, as libraries must follow the new technologies, the student’s self will have gained the necessary tools to adapt itself and manage new information. Mastering anxiety and a library’s services can strengthen students’ identity and thus improve their quality of life. Anxiety does not have to be negative but one has to find a way to make something positive out of it, before it turns to fear. Students can overcome library anxiety if it is a healthy anxiety but this can be difficult to do if we talk about a library fear. On the one side, as Moxnes writes, it is difficult to talk about anxiety as it does not have a clear and fixed definition and as there are several kinds of anxiety. On the other side, I wanted to stress that anxiety is not as negative as it seems and that there might be something positive to get out of library anxiety.

My aim with this paper was mainly to discuss whether it was possible to understand library anxiety in a different way, and suggest that it can play a positive role on students’ identity. It would be interesting, for further research, to look at librarians’ awareness about “library anxiety” and the role they can play to help students mastering library anxiety.

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THE ILLICIT INFORMATION COMMUNITY: INFORMATION – PRACTICAL REFLECTIONS ON THE SHADOW LIBRARY AAARG

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Keywords: shadow libraries, cultural fields, information practices, information needs, open access

Abstract

This paper presents a netnographic analysis of information needs and practices related to the shadow library AAARG. AAARG is regarded as a portal and community for the sharing and distribution of academic and artistic texts, books and articles. The portal in question is defined as an actor within the guerrilla open access movement, a radical node within the larger open access movement, which is analysed as a cultural field using the theoretical framework of Sociologist Pierre Bourdieu. AAARG is thereafter discussed in an information-practical sense with regards to social interaction between individual users' needs as well as discursive and constructional origins of such needs. These needs and the practices they create are then examined with regards to the order that the platform itself creates, tied to the cultural field which it is a part of. The conclusion is that alternative knowledge organizational platforms such as AAARG have had and will continue to have a big influence on the discussion of today's open access models, since they clearly fill a certain demand. The discrepancy between such initiatives and institutional open access activities will therefore need further analysis in a library and information scientific context.

Background and purpose

The clash between free access to electronic information and current copyright laws is hardly a new one. Despite the fact that we through the decades, especially in a Swedish context, have seen the file sharing question debated in absurdum, the issue still causes dichotomist standpoints. Free, or open access, is a twofold notion even in academic milieus. Peter Suber (2012, p. 4) describes open access literature as "digital, free of charge, and free of most copyright and licensing restrictions". The interpretation of this definition varies however between different actors. On the one hand, an institution such as the National Library of Sweden (2015) uses the term in their work to encourage open access to scientific results published by researchers. The late internet activist Aaron Swartz (2008), on the other hand, used the term in his *Guerilla Open Access Manifesto* as a call to students, researchers and librarians to leak the material which they had been provided through pay-walled scientific databases and repositories.

In this paper, it is the latter contemplation of the open access notion and movement which I aim to address and problematize with a number of information-need and -practice theories from a library- and information scientific viewpoint. My study object is the information-practical community which is the website AAARG (acronym for Artists, Architects and Activists Reading Group). AAARG can be defined as a shadow library: a digital text repository and community where users with a social and political agenda can up- and download copyrighted (often academic) material. The study is done through a theoretical reflection on user community and information-practices which has then been empirically tied to AAARG. During 2016, Alexandra Elbakyan's shadow library Sci-Hub attracted great attention in Swedish as well as international open access discussions, although the portal has more often been described than properly analysed. Shadow libraries as a phenomenon are however a lively such and it is my aim that I with this paper conceptually delve into another part of the shadow library movement, embracing numerous theoretical angles. Although studies of shadow libraries are currently ongoing by several researchers internationally, there is however not much research published on the subject. Hence, it is relevant to apply an overall conceptual theoretical analysis of a specific node within the field in a library and information scientific context.

Theoretical and methodological standpoints

The study has been done through a theoretical reflection on a AAARG's users community's needs. In Bourdieu's

sense, I define AAARG as an actor within the cultural field which I describe as guerrilla open access in order to discuss its users' information needs. This is done to understand this very need in a social context by applying theoretical frameworks by Anna Lund (2010), discuss discursive information needs via Kimmo Tuominen (2010), through Case (2007) illuminate how these needs creates information practices and thereafter contrast these needs to Weinberger's (2007) three orders of order. The examination of the empirical material has been done through a netnographic study of AAARG's website. These examinations have thereafter been connected to the above-mentioned theories and relevant secondary literature regarding AAARG, producing the analysis. The paper should therefore be seen as a reflection on an information accumulating phenomenon with several theoretical viewpoints, in order to initiate an information-practical discussion of AAARG and shadow libraries which can be furtherly built upon.

AAARG as an actor in a cultural field

We need to take information, wherever it is stored, make our copies and share them with the world. We need to take stuff that's out of copyright and add it to the archive. We need to buy secret databases and put them on the Web. We need to download scientific journals and upload them to file sharing networks. We need to fight for Guerilla Open Access. (Swartz, 2008)

Let us assume that file sharing of copyrighted information, in any form, has the purpose of filling an information need. The distribution of copyrighted material occurs – at best – in a juridical grey area. But it should still be regarded as a kind of distribution of information and ought therefore to be analysed as such. According to Pelle Snickars (2015, p. 32), Professor of media and communication studies at the University of Umeå, net-based communities where books are freely shared have existed for more than a decade, especially in an academic context. Seen as a web community, AAARG is therefore not a ground-breaking such, although it is moderately centralized form and function-wise. Matthew Fuller (2011) defines AAARG as "a crucial site for the sharing and discussion of texts drawn from cultural theory, politics, philosophy, art and related areas". The shared content of the website can thus be related to classical fields within humanities disciplines. But it also includes other types of research areas and art genres such as digital humanities, afrofuturism, anti-racist theory, dadaism and library and information science.

How then does one examine the community and the information needs and practices created therein? One method is to regard this of the open access movement as a cultural field. According to the theories of Sociologist Pierre Bourdieu (1997, p. 129), the individuals engaged

in a field have certain fundamental interests, namely those that are linked to the actual existence of the field. Such a field creates an objective community which ties the field's actors. The basic physical and emotional states of the actors within these communities are deemed habitus: "the precondition not only for the co-ordination of practices but also for the practices of co-ordination" (Bourdieu, 2013, p. 81)

As per the definition above, AAARG can be traced as a web-based file and information sharing community, especially as the site connects academic actors with a common view of open access and therefore creates a principal common habitus. The quality of the AAARG's archival materials itself varies. Metadata are sparse and the website itself is difficult to overview. At the same time, this isn't anything which interferes with the website's actual operative mission. Sean Dockray, artist and initiator of AAARG, have himself emphasised that the website's mission has always been to spread knowledge and act as a resource for file sharers since the sharing itself creates a community (Julian Myers, 2009). This creation of a community has been bridged also to an academic milieu. Snickers (2015, p. 30) have described how he has organized a PhD class in Media Theory exclusively using material uploaded to and downloaded from AAARG. Hence, AAARG can be regarded as an actor in the objective community that is guerrilla open access. But AAARG's users should also be regarded as such actors in the cultural field that AAARG is a part of. These users and their needs and activities will now be furtherly discussed.

Information needs, practices and socio-cultural aspects

How then, are we able to study perspectives connected to AAARG's users' needs? Why isn't this need filled within the frameworks of traditional library institutions? In order to reach such insights, an analysis of information needs in a social context is needed. Anna Lundh (2010) assumes Robert Taylor's model of question-negotiation when stressing the importance of an analysis of information needs grounded in the interaction of individuals, rather than originating autonomously from an isolated individual. The needs, or the questions, arises as a social process. Hence, it is vital to analyse how these needs are created within this very interplay. With regards to AAARG, Taylor's (1968, p. 9) visceral needs could be seen as an abstract need of knowing or understanding a specific subject or area. The conscious need could in turn be seen as accessing a certain type of, say, academic material. The formalised need can be expressed as how the user herself defines the need in an expressive way and decides that a shadow library such as AAARG ought to act as the information source of the material needed. Finally, the compromised need is fulfilled through browsing and searching through AAARG's database after the material

in question. However, this theoretical model does not answer why the users chooses AAARG as its primary source for information. Cultural and social aspects are therefore needed to be taken into account. Taylor's theoretical framework does indeed tell the analyser how the need is established in an abstract-practical perspective but does not take into account the culture which AAARG creates, why the user simply doesn't access a library or in another sense obtains the information sought.

According to Lundh (2010), there are several variables of activity to be taken into account regarding why the user turns to AAARG's database specifically. It is therefore significant to regard AAARG as part of a discourse. Kimmo Tuominen (1997) stresses the discourse-analytical scientific viewpoint as of great importance for studies in information search and needs. Unlike research assuming a binary interplay between subject and object, Tuominen (1997, p. 352) finds that the discourse-analytical viewpoint enables a contemplation of how meaning and structure is created within the discourse itself. As previously mentioned, I want to stress that the endeavour towards free access to information material is one of the main political key factors to AAARG's existence and use. Therefore, a discursive consideration of Dockray's view of the shadow library as a platform for information distribution is in this case suitable. Likewise, AAARG can be seen as a part of the open access movement that Swartz (2008), among others, have spoken for. Thus, one may delve into the cultural rules created within the discourse/field and distinguish information needs in a social community.

In an information-practical perspective, Donald O. Case (2007, p. 160) addresses Tuominen, Talja & Savolainen when using the term constructionism to describe how individuals create understandings, meanings and identities via dialogue and discourse. Case (2007) stresses that the constructionist tradition is built upon the theoretical foundations of Mikhail Bakhtin and Michel Foucault concerning semiotic and discursive elements. By connecting these constructionist paths of thought to Bourdieu's field theories, one may view AAARG's users' information seeking processes in a practical sense. Hence, one may produce a broader and more culturally conditioned viewpoint which isn't halted by a specific need but instead examines practical paths towards information and how these paths are discursively maintained and developed. These theories are in this sense connectable to bourdiean and foucaultian traditions of ideas as well as how Dockray envisages AAARG and how Swartz (2008) entitles the guerrilla view of the open access movement.

As such, AAARG itself causes this practice, which can be theoretically substantiated through Weinberger's (2007) explanation of the three order of orders. According to Weinberger (2007), the first order of orders constitutes the physical order of things while the second order of orders comprises the classification system itself – the metadata – of these things. The third order of orders, however, includes the digital order which emerges in a system of networks and protocols wherein things as well

as metadata are included in a digitized platform with precise search tools and generative schedules of classifications. As well as putting the things in context inside a specific field, this third order of orders can also function as a defining actor of the field. It is in this collective third level of orders that AAARG, its material, approaches and social community is developed and maintained. Hence, AAARG can be regarded as a uniting social order of classification which, through its dislocation of power, seeks to create and re-create itself via decentralized user activities. This is done through a collective aim towards reproducing itself as a digital node which develops and distributes otherwise inaccessible academic and artistic texts in a social platform. By examining this procedure, one paves the way towards understanding the material published on AAARG, with which agendas the material is published, how it relates to the other material and why certain disciplines are missing or prioritized. The movement, as Swartz (2008) proclaims it, wishes to redeem itself from a power structure where single actors possess knowledge and the information. Instead, this same information ought to be free and accessible for public.

Concluding remarks

As per the analysis above, one may stress that AAARG itself has become a social phenomenon with a somewhat collective agenda. The purpose of the website has developed towards contributing knowledge distribution through free access to electronic versions of books and articles of a certain academic and artistic nature. The website has grown through a social-constructive political tendency towards such free access. By regarding guerrilla open access as a cultural field, one may consider AAARG as an actor within this field, playing by the rules of the movement. At the same time, AAARG has developed into taking an increasingly more radical view of free access to copyrighted information as per the community caused by its users.

In an interview with Jonathan Basile (2016), Dockray claims that AAARG has grown out of its proportions and that the website originally wasn't created to function as a node for piracy. However, current rights-issues regarding open access to scientific results from an institutional direction have drawn the website towards such a development. In this sense, AAARG can be seen as an actor in a certain cultural field, which has been annexed by its users and therefore become a political-technological tool for the distribution of art and artefacts in a digital repository. This can be viewed through how Lundh (2010) highlights information needs as a social interaction between individuals. But also through how Tuominen (1997) deems that this need and meaning is created discursively and according to Case (2007) constructional within the field. In alignment with Weinberger's (2007) third order of orders, AAARG has overshadowed the two other orders as well as the material itself by existing as a community. Regarding the users, one finds a habitus which corresponds with Swartz's (2008) manifesto. This

in turn means that AAARG and its material becomes a potent innovative actor which composes a clear activist view within the open access movement. The users' common fundamental interests, as Bourdieu (1997) expresses it, have therefore had an overall impact of the knowledge organization which AAARG creates. These information practices have therefore re-profiled AAARG within the cultural field that is guerrilla open access.

In this paper, I have proposed an analysis of the cultural field which AAARG is a part of and represents. I have assumed the definition of AAARG as an actor within the guerrilla open access movement seen as a cultural field. By doing this, I have stressed the field's functioning as a complex cultural unit. Thus, I have sought to problematize AAARG's origin and existence with library and information-scientific theories and methodologies in order to examine how and why AAARG is an independent unit resting on internet activist views in a legal grey area. AAARG and its' users are striving towards becoming a digital community challenging norms and power structures regarding current modes of information distribution. The actors devote themselves to a more guerrillaish viewpoint of free and open access to information.

In this remark, AAARG and its innovative born-digital activism has similarities with traditional library activity in its vision of free access to knowledge. It is my belief that these alternative knowledge organizational platforms have had and will continue to have a big influence on the discussion of today's open access models, since they clearly fill a certain demand. Hence, this phenomenon will need further examination in comparison with the prevailing models of open access to scientific results.

A question arising in the light of this discussion is how this grey area is going to be bridged to the open access activities performed by institutionalised library actors and if this is at all possible. Should perhaps the internet activist information-practice continue to act beside information practices in a more traditional library context? This is a remark which should be furtherly studied in a culturally conditioned information-practical view.

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THE IMPACT OF CREATIVITY ON INFORMATION LITERACY INSTRUCTION

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Abstract

Creativity and creative topics hold exciting potential for enhancing students' engagement with information literacy. Even though professional organizations for librarians advocate creative and critical approaches to teaching, many instructors have not yet adopted these. Viewing students as creative intellectuals (rather than as consumers of information) supports their growth in information literacy. The library environment must focus on inquiry rather than process. The authors have engaged in research and reflection on the role of creativity in information literacy. Their work is rooted in larger theories on pedagogy—critical and reflective pedagogy, but also the intersection of liminality and third space theory.

Introduction

Creativity provides a portal from which to transcend the predictability of library instruction sessions. It also invites librarians to respond to students' individual learning styles. The authors are interested in creativity as a means of making library instruction a more interesting and engaging access point to the information world, as a way to take chances in being more creative in the classroom, and to facilitate the library as a place for creation (knowledge and otherwise). The authors are interested in providing an overview of the conceptual framework that informs their thinking about how creative pedagogy fits into the classroom, and why it is so important to the future of information literacy.

Creativity in the Literature

In a special issue of *Development and Learning in Organizations: An International Journal on "Nurturing Creativity and Innovation,"* authors of the article "Fostering Creativity—A Holistic Framework for Teaching Creativity" present a framework for creativity that calls for cultivating a mindset that frees students from "self-constructed obstacles" (Berg, Taatila, & Volkmann, 2012, p. 7). Students must learn about the motivations for learning and applying creative thinking. Students are endowed with the creative problem solving strategies and the capacity to apply creative techniques (Berg et al., 2012). This involves readjusting thinking in order to reframe a problem, to search efficiently, and to plan time for repetition and reflection.

There are opportunities for librarians to help students develop divergent thinking—generating many ideas to explore multiple solutions. While divergent thinking is not necessarily synonymous with creativity, it is a stepping-stone for transformative thought. The groundwork for divergent thinking can be seen in the scholarship on critical and reflective literacy.

The nature of library service has been predicated on the research it offers which often focuses on citation, plagiarism, and searching databases. Some library instruction is so prescriptive that it intimidates students. Even with so much literature on the adoption of a critical approach to information literacy, many library instruction sessions take a more traditional approach. Librarians should not focus on the student as a consumer of a service, but instead on the student as a growing organism and a reflective learner. The goal of academia, according to Alison James and Stephen Brookfield in their recent book, *Engaging Imagination*, is to help students to become critically reflective and in creating lively classrooms (James & Brookfield, 2013). The model of the lively classroom should be extended to the academic library.

Penetrating the culture of convergent thinking requires unconventional solutions. As the library pioneers a strong relationship with technology and a culture of creation, evident through makerspaces and Digital Humanities programs, there is a need for classroom instruction to mirror the changes in engaging users with scholarship and tools that enhance their relationship to information. Boldness and experimentation can be captured by creating a space that makes such innovation possible. James Elmborg, Professor at the University of Iowa, proposes in "Libraries as the Spaces Between Us: Recognizing and Valuing the Third Space" the idea of Third Space as a counter to recent discussions in the library field on the library as place (Elmborg, 2011). Third Space reinvents the library from the premise that libraries and librarians can develop ways of working with increasingly diverse populations in increasingly dynamic contexts. Third Space can be viewed as a space of cultural, social, and epistemological change in which the competing knowledges and discourse of different spaces is brought into conversation to challenge and reshape identities (Elmborg, 2011). The environment must be rich in inquiry rather than one dominated by process.

In a talk titled "The Liminal Library," Barbara Fister cites the ACRL *Framework* as moving away from competencies that placed too much emphasis on observing the rules of finding and evaluating information (Fister, 2015, p. 6). The frames are more complex in their integration but also more abstract. The shift from linear competencies to threshold concepts represents a place in an intellectual journey that is between understanding—what Fister refers to as *liminality*. Similar to Elmborg's Third Space, liminality represents a journey in navigating uncertainty through a "transferrable learning experience... by increasing self-knowledge and confidence" by participating in the making of meaning (Fister, 2015, p.7). This making of meaning comes through a state of questioning where students can rethink assumptions and participate in the making of knowledge as a dialog. Students are no longer receivers of standardized information but participators in a new reality of exploration and discovery, resulting in self-created authority. Similar to Elmborg, the environment is no longer dominated by process (standards) but integrated into a conversation about the place of information in one's own life.

Troy Swanson presents an outline of information literacy that must transcend the basic library instruction that has been prevalent for years. He states that before we send students to books, periodicals, and websites, we need to teach them about information. Swanson outlines an opportunity for both instructors and librarians working together to draw on critical literacy theory, or critical pedagogy. Swanson outlines critical literacy through three points:

1. Critical literacy assumes that teaching of literacy is never neutral but always embraces a particular ideology or perspective.
2. Critical literacy supports a strong democratic system grounded in equity and shared decision-making.

3. Critical literacy assumes that the literacy instruction can empower and lead transformative action (Swanson, 2004, p. 264).

He applies Paulo Freire and Ira Shor's problem-posing approach to instruction. In this approach, librarian and instructor act as guides, asking students questions and challenging them to produce their own theories on the information sources presented. While this might appear to oppose creativity, it supports the notion of being more reflective and looking at information from different perspectives.

In her work, "Information Literacy and Reflective Pedagogical Praxis," Heidi Jacobs explains that critical pedagogy invites creative, reflective dialog. Jacobs explains that "To teach students about personally meaningful information and non-analytic information processes means first and foremost to create a space where inner life can be nurtured, where creativity can emerge, where students can love the questions" (Jacobs, 2008, p. 260). The basis of questioning is a healthy skepticism; it offers opportunities to foster divergent thinking. Divergent thinking is discouraged when students are scared to do the "wrong thing" in class (Goodman, 2014, p. 2). The library classroom should be seen as the fulcrum for transforming the library as a creative, playful space. Play facilitates five cognitive processes involved with creativity: problem framing, divergent thinking, mental transformations, practice with alternative solutions, and evaluative ability (Kurt, Kurt, & Medaille, 2010, p. 15). Mainemelis and Ronson explain that play allows for "exploring different perspectives, creating alternative worlds, assuming different roles, enacting different identities, and also taking all these, and the players themselves, out of the cognitive contexts in which they normally operate (Kurt et al., 2010, p. 15).

Most of us in our childhood have a great capacity for divergent thinking. As we become "educated" that capacity diminishes. There is a natural opportunity to develop the creative capacity of students through the employment of technology. New creative work lends itself to exploring a whole range of digital literacies that are required in our culture (Mackey & Jacobson, 2014). While technologies might not in themselves be the answer, they might provide the impetus for refiguring old patterns and search for new ones.

There is also much we can learn from the arts. We can employ art strategies, such as bringing disparate images together or finding relationships based on aspects other than literal meaning. The idea is to introduce the creative side of the library according to the ways many of us conduct research—through a method of "scratching." Instead of enforcing the rules of research, the goal is to inspire students through creative exercises—digging backwards, or as Twyla Tharp says, "transactionally"—asking questions and "owning" what is found through discovery (Tharp, 2003). Tharp encourages accidental discovery. She encourages educators to guide students toward recalibrating thinking, identifying hurdles, and

finding divergent solutions. Risk taking, inherent in the kind of questioning and thinking promoted in creativity, is important in driving innovation (Tharp, 2003).

As we seek creative solutions in the classroom to stimulate thinking and fuel a renaissance in education, the library can lead the way in cross-disciplinary germination. Inquiry-based feedback coupled with deep observation encourages a more open-ended and in-depth approach to questioning traditions. Librarians can facilitate students' capacity for observation, getting students, for example, to spend two minutes silently observing and then asking questions prefaced by phrases such as "I noticed that ..." "why," and "how" (Goodman, 2014). Most importantly, librarians can encourage play and help students reflect on failure without fear. Librarians can change the culture of the classroom into a place for mistakes and child-like inquiry. Once students are less afraid to make mistakes, we open up the environment for experimentation.

Librarians can lead the way in encouraging creativity and personalization during learning and research. The goal is to implement a method of instruction that capitalizes on the playful side of searching, understanding and using information. The basic idea is to get students to think transformationally and multi-dimensionally, rather than literally. In practice, this often involves getting students to think about topics and categories of information that already interest them, tempting them to delve into research, and then analyzing and building upon strategies. The following three sections discuss creativity as it manifests in the classroom and shapes students' growth in terms of information literacy and practice.

Creativity in the Library Instruction Classroom

What does creativity look like in the library instruction classroom? Library instructors who begin encouraging creativity during their instruction sessions often note several things. First, students can appear frightened or hesitant to introduce creativity into their work. Creative approaches to assignments are generally more challenging than simply finding a few articles and writing a cohesive argument. Introducing creativity can also bring forth deeply personal elements which may feel good, but which may make students feel vulnerable. Second, students who move past their fears of creativity often produce highly enthusiastic work that meets all of the course requirements and goes much further. Mark C. Carnes has written about how role-playing games in university history classes can encourage remarkable levels of enthusiasm and dedication among students (Carnes, 2015). Third, preparing students to be both creative in their research and successful with their assignments requires skillfully preparing the students to perform this work, which empowers them in multiple ways.

How Creativity Manifests

Creativity manifests in many ways, depending on the subject matter and format of the assignment, and on the individual student. This section discusses four common ways that creativity appears in the library instruction classroom.

1. **Productive fun:** Library instructors are often fortunate enough to witness productive fun in the classroom. Students spontaneously bring up favorite topics (celebrities, musicians, current events, etc.) while the library instructor teaches a range of information literacy skills. Slowly, students begin to smile. They are generally willing to share the techniques they used for the search. Suddenly everyone wants to search for a favorite topic.
2. **Pursuing personal interests and concerns:** Students can pursue topics of personal interest in any subject area, when faculty offer this freedom. Swanson places this connection of information with the self as the first step in students' journey toward action. He interprets Benjamin Endres' work and describes a progression of "self-reflection, interpretation, understanding, and ultimately action" (Swanson, 2004, p. 264). Librarians and classroom faculty often see the introduction of personal interests to extended research (compared with brief appearances in the "productive fun" category) as the moment when deeply engaged learning begins, and when students first connect their interests with academia. For example, an economics student realizes that she can research the practice of microlending to women entrepreneurs in Bangladesh. For the first time, her desire to make the world a better place connects with the economic theories that she has been studying; she begins to learn with passion. The self can connect with research in other powerful ways as well. An example of this sort of interaction touched one of the authors several years ago. An art student shared the fact that she had experienced domestic violence in the past. She now wanted to research themes in the art of other survivors. The author gently acknowledged the student's experiences and was able to teach the student research skills that she could use to create a highly interdisciplinary project. The student excelled, and built up her own research skills through passionate work.
3. **Moving past the confines of an assignment:** This phenomenon happens when students stop focusing on their concerns about grades and become deeply engaged with the research. The librarian plays two important parts here: (a) helping students build the practical research skills that they will use and (b) reassuring students that they will indeed succeed despite loosening their grip on the requirements. Librarians and classroom faculty both often notice that a motivated student will mention specific requirements of an assignment, often with great concern,

early in the research process. Once they develop comfort with the required set of skills and interest in the topic at hand, references to the requirements disappear. The student feels so confident about succeeding that they can focus on what excites them.

4. **Seeking information both inside and outside the library:** Students who develop great confidence with information literacy often have a sudden realization that (a) there really is quality information that resides outside the library, and (b) they have the skills to identify this information. These students have learned to identify the information they truly need, and have developed the confidence to assess sources. This is a mature manifestation of information literacy! For example, an art student may realize that scholarly critique of a contemporary artist has great value -- but so do the gut reactions that a favorite art critic expresses on her blog immediately after visiting a gallery show.

Readers may have inferred several things during this section. First, in moving toward these levels of creativity, students develop comfort with the basic skills of information literacy. Librarians play an important role in teaching and bolstering these skills, as well as in encouraging the students to use these skills to explore. Second, encouraging students to enjoy using their information literacy skills throughout their assignments empowers them to perform high-quality, deeply meaningful research that may change lives.

How Creativity Empowers

The best creativity-focused teaching encourages students to explore and pursue their passions while subtly teaching and reinforcing information literacy skills. By simultaneously supporting interests and building competencies, it empowers students to succeed in the many places where information literacy and research touch their lives, both inside and outside the classroom. Below are four types of relevant empowerment, with brief examples:

1. **Traditional information literacy skills -- and connections with experts:** Students who have positive experiences with creative information literacy instruction learn skills for seeking and evaluating information, even if they don't recognize these skills at the time. They also tend to naturally form bonds with and trust in librarians, and turn to them.
2. **Identifying the information, rather than the sources, they need:** Students who have built confidence in researching topics that interest them learn to consider the list of requirements for an assignment ("three peer-reviewed articles...") and think about the information that will support their viewpoints ("I'd like to find data that supports my argument that music lessons increase elementary-aged students' ability to learn social skills.") Both librar-

ians and classroom faculty members will realize that this change in a student's thinking indicates tremendous growth and empowerment in terms of abilities.

3. **Building research skills that apply and evolve over a lifetime:** Students who truly understand principles of information literacy will be able to adapt them over a lifetime, even as technologies and preferred sources change. Skills such as evaluating sources, identifying specific research questions, and seeking assistance with research needs will continue to support students' needs, whatever the context. One of the authors uses an interesting in-class activity to investigate the information-related life skills that students have already built through experience. Students must describe the information-gathering processes they would use to plan the purchase of items such as movie tickets, running shoes, the car that they will drive to their first professional job, and the car that they will drive ten years later. Common trends evolve: Choosing a movie may involve texting a friend or quickly browsing online; it isn't much of a risk, financial or otherwise. A pair of running shoes might merit research online, browsing a running magazine, or asking an expert at a sports store. The cost is higher, and shoes will affect athletic performance, but one pair of shoes isn't forever. Students get serious when they discuss the car they will drive to their first professional job: reliability, safety, cost, and the impression the car makes will affect their lives in many ways. They debate the various ways to find this information; students see that the stakes are higher, and begin to critique their information-gathering processes. The idea of buying a car ten years later brings up complications and concepts that may be completely unfamiliar to students: their incomes may be higher, but what if they have children by that point? How does one even decide what factors to consider as a parent? Through this activity, students recognize the growth of their own information-gathering processes and skills.
4. **Defining a question and allowing it to evolve:** Students who understand how to work with an evolving research question exhibit true intellectual maturity. When instruction librarians teach students how to work with a question that evolves as their research moves along, they give students one of the richest gifts available in the world of research. Situations like this happen: after reading through a few (or many) articles, the student no longer believes their original thesis. They want to know how to handle this without entirely discarding the original topic and starting on something completely new. The librarian who successfully teaches them how to handle this teaches a future researcher how to handle complex research questions that evolve as results flow in.

Conclusions

The idea of creativity in the library is not new. It has its foundations in library and information science. The library has been a place that historically, like education in general, has promoted convergent thinking. Even with changes in the way higher education views information literacy, there are opportunities for librarians to develop students' capacities for divergent thinking. Creativity and what this means for librarians as educators creates opportunities for re-thinking the library as a catalyst for transformation across higher education.

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THE IMPORTANCE OF QUALITY CLASSIFICATION AND SUBJECT INDEXING OF HEALTH INFORMATION IN PUBLIC LIBRARIES: A COMPARATIVE ANALYSIS

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Abstract

The general aim of this paper is to explore the practice of subject indexing and classification of health information in public libraries. The pilot study encompasses two public libraries, each from a different European country, Croatia and Sweden: Zadar Public Library, and Växjö Public Library. The research questions are: 1) how important is the terminology for subject headings; and, 2) how many subject terms are enough to describe an information resource in a catalog record? The research was done in two phases. First, an exploratory evaluation of subject searching in the catalogs was conducted. Second, after the analysis of the catalogs, questions for interviews were formed. Four semi-structured interviews were conducted, two per library, of which one interview with a subject librarian and one with a reference librarian. Finally, a comparative analysis between the two libraries from the two countries was conducted. Results imply that the subject headings and classification used were very generic and did not cater for specific, topically narrower queries. Also, subject indexing was considered important, especially to the librarians for searching purposes through ensuring consistency in the catalog, thereby making it easier to find resources on the same topics.

Introduction

We, librarians, and information scientists, like to live in a belief that library catalogs are more useful than Google search. In reality, a library catalog represents a selection of information resources but the access to them by end users seems to be difficult. Library catalogs still struggle with simple keyword search which users expect to implement with ease as they do in web search engines. This paper attempts to enlighten the need for better subject access and classification with the focus on health information.

Literature review

Health information

Health information includes different categories, for example, medical information, dietary information, pharmaceutical information, fitness information, information on how to fill out medical forms etc. It is important for the public to be aware that their library provides access to health information (Rubenstein, 2015). But to understand what is needed to fully comprehend it librarians and users must have sufficient health information literacy. "Health literacy is a foundational and essential notion that connects a variety of key issues in health policy, health services research, health communication, and health care delivery (Luo & Park, 2013)." It has been reported that public libraries are often the first access point to extend, confirm, or refute the information learned from the health professionals. The user may approach the reference desk with health-related question, for themselves, a family member, or a close friend. Some come to the library prior to their doctor's visit to research their symptoms, or after the visit to the doctor to gain further information (Allcock, 2000).

According to Luo & Park (2013), public libraries play an important role in patrons' quest for health information by providing relevant print and electronic resources, free computer and internet services which allow patrons easy access to the online health information, and reference services which help patrons address their health information seeking needs. What is most important for libraries is to keep up with current health information in their physical and online collections. Also, when presenting the information to the users, librarians should keep in mind the delicate nature of that kind of information and should approach the user without any judgement or personal views. Study conducted by Ingham (2014) concluded that most users visited the library for health information because they were already aware that the library has that information.

While reviewing related literature, some issues arose. Could it be that the library catalog is inefficient in helping the librarians find health information they already have in library collections? This is the question which we tried to answer in this pilot study.

Subject indexing and classification of health information

One important part of access to health information is health literacy; in the words of Flaherty and Kaplan (2016): "A primary component of health literacy is the ability of an individual to obtain basic health information." Libraries have been identified by users as a place for trustworthy health information resource (*ibid.*). Users have high expectations of libraries, especially public libraries where we can encounter all sorts of different user questions.

In this exploratory research, we wanted to examine what kind of subject access to health information is offered to the users, and whether the information available in the catalog is sufficient to assure that users are finding the answer they are seeking. According to Golub (2016) subject searching is one of the most common and yet the most challenging type of searching a library catalog. Kumar (2012) says that today's searching strategies are those supported by Google; research has shown that users execute the same search strategies for finding information in OPACs as they do in search engines. Further, we see a rising trend that only search results retrieved on the first page are viewed (*ibid.*).

We would like to emphasize the importance of quality subject indexing and classification. "Good' indexing can be defined in a very pragmatic way as indexing that allows items to be retrieved from a database in searches in which they are useful response and prevents them from being retrieved when they are not (Lancaster, 1998)." When users encounter a failed search in OPAC the usual response is to leave the search because they presume that the information does not exist in the library collections (Kumar, 2012). Expected challenges with subject searching are: concepts take various names (synonyms) and a same name can refer to different concepts (homonyms); a name could take various forms; most users have difficulty with conceptualizing information need and transforming it into search query (Golub, 2016). One way in which libraries could approach this problem is by improving the subject access because users use broad keywords for which search engines always retrieve answers regardless of the quality. Yu and Young (2004) studied the impact of web searches on subject searching in OPACs and reported that users value quality of the results more than the process but they expect the search to be quick and easy. Good subject indexing and classification must be achieved so that users can retrieve the right answer with minimal effort.

Research

The general aim of this pilot study is to explore the practice of subject indexing and classification of health information in public libraries. Specifically, we want to determine to what degree librarians value good subject indexing and classification in their catalogs as an every-

day tool for answering user questions about health information. The research questions are: 1) how important is the terminology for subject headings; and, 2) how many subject terms are enough to describe an information resource in a catalog record? The research encompasses two public libraries, each from a different European country, Croatia and Sweden, Zadar Public Library (further in text: Zadar) and Växjö Public Library (further in text: Växjö).

The research was conducted in two phases. Firstly, each of the public libraries' catalogs was searched for the same ten health information topics randomly selected by the authors. Secondly, after the analysis of the search results and observed issues in catalogs, questions for the interview were formed. Four semi-structured interviews were conducted, two per library, one interview with a subject librarian and one with a reference librarian. We wanted to see different points of view on the same subject and problems. Finally, a comparative analysis between the two libraries from the two countries was conducted.

Methodology

The empirical data for the study were collected in two phases, from December 5 to December 8, 2016. The first phase was the search of the two library catalogs using ten selected health information topics, which were represented by one major term and one closely related term, the latter where it was estimated that users would use a different form of the concept. The selected terms were as follows: diabetes/sugar disease, cancer/oncology, depression/angst, mammography/breast cancer, gluten intolerance/celiac, stroke, stress, high blood pressure, pregnancy, exercise/yoga. The terms were typed in library catalogs search box and the number of the retrieved results was recorded. Also, additional topics automatically suggested by the catalog for search modification were observed.

The second phase of the study comprised the interviews of four librarians, two in each library. The interview questions were formed after the initial search of the catalog and observing initial problems. The subject librarian was interviewed to further explore the observations resulting from the first phase, and to learn about the subject indexing and related library policies. The reference librarian was selected because the authors wanted to find out how every day interaction with users and their questions on health information were influenced by the subject indexing.

Library catalogs

Zadar Public Library

Vero, the library catalog (<http://161.53.142.3/cgi-bin/wero.cgi?q=&x=44&y=21>) is a third generation FRBRed catalog. The records are created by the library and some

are downloaded from the union catalog. This seems to be a problem for the catalog because the union records are not thoroughly examined for inconsistencies among the records. The Vero catalog offers its users a one-box search interface; there is not any help offered to the user or explanation how to do a proper search. The only instruction for the user on how to use the catalog is to type in author, title, subject, words, ISBN, ISSN, or publisher under the search box. There is no option for advanced search immediately available; only after making the first search, one of the options that appear in the results interface is an advanced search.

The results interface offers many possibilities of a faceted catalog. Search results are first ranked by relevance, which is not clear how is it measured; an option to rank by title and date is also available. Users have the possibility to limit the search by subject (it is unclear what is meant by this), title or format, and the branch location of the title. The catalog offers users to refine their search by author/contributor, topic (it is unclear what is meant by this), language and year. We can only assume that the topics are derived from the subject fields of the records, no explanation is given. The catalog also offers users an option to "try a new search", by clicking on automatically suggested authors/contributors and terms (also unclear what this refers to). Again, it is not clear how the catalog connects the searched query with the given suggestions.

Växjö Public Library

Växjö has the catalog integrated on the library website (<https://bibliotek.vaxjo.se/web/arena>) and the library system used is BOOK-IT provided by Axiell Sweden. The records in the catalog are included when purchasing books and they are provided by BURK (a service from BTJ Sweden, <http://www.btj.se>) and LIBRIS (The Swedish National Catalog). The records are consistent throughout the catalog and follow the same pattern. The catalog offers its users a one-box search interface, like the Vero catalog, but also with no help or instructions of how to search. The only help provided is an instruction "search for books, movies, music etc." On the left-hand side of the screen, there is a cogwheel that leads to an advanced search option, where one can search by free text (same as start page), but also by author, subject, keywords and title. It is not specified what is meant by the latter two fields. In the advanced search option, there is an option to also refine the search by choosing library, category, language etc.

The results interface offers many possibilities of a faceted catalog, but not as detailed as the Vero Catalog. The search results are first ranked by relevance, then there is an option to rank by title, year of publication and author. The search can also be refined by different facets: author, media, subject, language, target group, year of publication, keywords, and tags. Users have the option to choose from available facets.

Results

Catalog search

The study of the catalogs was conducted using ten terms. The terms were searched in Croatian/Swedish: dijabetes/diabetes (diabetes), šećerna bolest/sockersjuka (sugar disease); rak/cancer (cancer), onkologija/onkologi (oncology); depresija/depression (depression), anksioznost/ångest (angst); mamografija/mammografi (mammography); rak dojke/bröstcancer (breast cancer); netolerancija gluten/glutenintolerans (gluten intolerance), celiaklija/celiaki (celiac); moždani udar/stroke (stroke); stres/stress (stress); visoki krvni tlak/högt blodtryck (high blood pressure); trudnoća/graviditet (pregnancy); tjelovježba/träning (exercise), joga/yoga (yoga). Further in text, terms in English will be used for better understanding.

Table 1 below shows the results of the search. The results show considerably higher number of results retrieved by the search in Växjö than in Zadar for most of the cases. The exact reason for this difference could not be explained, but one may assume that this could be because Växjö may have a more complete collection, a better library system or better subject indexing practice.

The table below also lists the terms which were searched. The authors additionally used a second term, a layman form more used according to the knowledge of the authors. The problem of different terminology for health information and its relatedness during retrieval and for deriving automatic suggestions was unclear. For example, in Zadar 13 results were retrieved by term “diabetes”; “sugar disease” retrieved additional 27 results. The terms which were then automatically suggested after search by “diabetes” were all beginning with the phrase “sugar disease”; while when searching for “sugar disease”, “diabetes” was not offered as a related subject term, and results retrieved differed from the previous. The problem with terminology was also viewed on an example of a homonym. In the Croatian language “rak” can refer to cancer, the disease, but also represents the astrological sign. Thus, the search results included records classified by UDC number 615 *Pharmacology. Therapeutics. Toxicology*, 133 *The paranormal. The occult. Psi phenomena or 82 Literature*. No disambiguation help is offered.

There was also a problem in Växjö while using different synonyms. For example, in Sweden, the term “diabetes” has become more used than the Swedish term “sockersjuka” that was used more before. The results also show that “diabetes” retrieved more records (65 results versus 43 for “sockersjuka”). One would think that both searches should give the same results, but unfortunately, it is important to find the “right” words and terminology to get the best result. The results were all classified by the Swedish Classification System (SAB) with *Ve*o for “diabetes” and *Ve*p for “cancer” when classifying textbooks; in addition, some books had *Hc*f for children’s books and *Lz* for biographies.

Table 1. Searched terms results

| Subject terms | Zadar Public Library | Växjö Public Library |
|---------------------------|----------------------|----------------------|
| Diabetes/Sugar disease | 13/27 | 65/43 |
| Cancer/Oncology | 46/9 | 269/149 |
| Depression/Angst | 37/13 | 88/104 |
| Mammography/Breast cancer | 0/2 | 2/21 |
| Celiac/Gluten intolerance | 1/1 | 4/5 |
| Stroke | 6 | 36 |
| Stress | 74 | 168 |
| High blood pressure | 6 | 7 |
| Pregnancy | 37 | 77 |
| Exercise/Yoga | 38/36 | 1346/141 |

When examining retrieved records, it has been noticed that approximately two subject headings are assigned to most records. The Zadar library downloads subject headings from the union catalog. There are no official national subject headings or indexing policies in place. Subject headings create a very general index, e.g. the most relevant record retrieved on “stroke” is indexed by subject heading Stress--Manual and by UDC number 616 *Pathology. Clinical medicine*.

In Växjö catalog records are downloaded from BURK or LIBRIS, which already have the subject headings included, while allowing for the possibility to add or remove subject headings by the local librarian. Subject headings in the catalog are also few and general, e.g. the most relevant record on “stress” was indexed with four subject headings, personal training, personal development, psychology, and applied psychology and classified under *Dok* for applied psychology.

Interviews

Health information queries

In Zadar, the librarians encounter health information queries daily, many users come to the library especially because of their medical collection. They have a great variety of questions and interests related to health. But also, they look for very specific health related information. In Växjö the librarians do not encounter many health information queries, which they believe is because of the Internet. The reference librarian in Växjö (RLV) encounters questions about health information very seldom. When they cannot find relevant books, the librarians refer users to articles (e.g. *Läkartidningen*, a Swedish medical journal) and to 1177.se (a Swedish online database of health information for the general public).

Terminology

The subject librarian in Zadar (SLZ) said that they create two kinds of subject headings, controlled, and freely formed. The controlled ones are downloaded from the

union catalog and can be modified. As discussed above, they are very general in their focus. When indexing with both types of subject headings, the librarian looks up the terminology first in general dictionaries and then in different medical dictionaries. Also, the librarian looks at users' queries (e.g., from the reference interview) when forming freely formed headings, making subject access more user friendly.

Both librarians in Växjö find the terminology very important for quality retrieval by both librarians and users. To find relevant information, the subject librarian in Växjö (SLV) uses both classification and controlled subject headings. The website 1177.se is also an important help for finding the right term for indexing. RLV also uses classes as a tool for the use by librarian, but stated that it is not useful for the patrons.

Subject headings

SLZ said that they are not a special library of a medical institution and by their estimate one, two or possibly three subject terms are enough. But she emphasized that if they observe that users frequently seek out questions about a particular medical problem then they assign additional index terms to existing records. SLV said that the subject terms used (often two or three) are not enough to describe the resource. The subject headings themselves are usually so generic that they are hardly of any help. SLV also stated that their search engine goes through the table of contents as well as the title, subject and so on. Therefore, even if the subject headings are not enough, these other fields may help retrieve the right resources. The subject headings do not usually matter to the patrons, when they want a specific book, they find that anyway.

RLV also said that the subject terms used are not enough to describe information resources at hand. The subject terms in the records are general while the questions the patrons have are specific, which makes it hard to find the material through subject headings. The patrons will probably need help from the librarians to find information regarding specific questions. RLZ also has the same opinion about general subject terms in their catalog but sees their freely formatted headings as extra useful to the users.

Improving subject access to health information

SLV said that there is a lot one can do to improve the subject access to health information, but all the things are time-consuming and not prioritized in their work. It is also a question about the need: since the Växjö Library gets so few questions about health information, this is not really an issue. SLV still gave some examples on how to improve subject access to health information: more (specific) subject headings, good classification (so that it is easy to find resources on the shelves as well as in the catalog), complete records with links to further information, developing the library catalog so it is more like

Google, to get help with suggestions and misspelling. On the other hand, SLZ said that the lack of a controlled vocabulary, whether medical or any kind, is a big problem in the Croatian subject indexing practice. RLZ said that a person with medical background or knowledge would be most useful when indexing health information.

Both librarians in Växjö stated the importance of the information to be up to date, especially when it comes to health information, since it can be dangerous otherwise (RLV). Växjö library weeds all sections of the collection often to get rid of outdated information, so most of the health information books were only a few years old (text books). The librarians also thought that it is important to inform the patrons about 1177.se if they did not know about it. RLV said that the library can provide relevant information about health when it comes to the more general questions. For more specific questions, if they cannot do an interlibrary loan or find articles, the librarians refer users to the local hospital library. RLZ is aware that they hold outdated books on health, but their practice is to warn the users about those resources.

Concluding remarks

Public libraries are recognized as places that offer access to health information. This pilot study aimed at exploring indexing practices of two different public libraries, in two different countries. By analyzing the catalog of the two libraries first and seeing that both libraries index their health information using the minimum number of subject headings and classes, we asked ourselves whether that suffices for an end user and her finding the right information.

According to the librarians, the subject terms used in both catalogs are enough when it comes to answering more general queries, but lacks specific subject terms when the patrons have more specific questions. The subject headings used in the catalogs are not enough, but with the help from the librarians (Växjö) and freely formatted subject headings (Zadar), the user can still often find what they want. We could conclude that a practice of expanding the subject headings with more than two subject headings assigned could be more informative to the user.

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THE IMPORTANCE OF USABILITY EVALUATION WHEN DEVELOPING DIGITAL TOOLS FOR A LIBRARY – A CASE STUDY

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Abstract

Advanced information tools using modern technologies that filter information to address individual needs are not necessarily easy to develop or easy to use. This paper emphasises the importance of both usability evaluation and information literacy, by looking at a case study of an e-dictionary that was developed using modern technology to tailor information to address only specific needs. The e-dictionary is a prototype developed based on modern lexicographical theory and uses advanced search and display options. These options allow a user to receive only information that is relevant to a specific situation. A heuristic evaluation and usability tests were done on the e-dictionary. The findings showed that not all users found the advanced search and display options easy to use.

This paper briefly discusses the usability evaluation done on the e-dictionary and argues that if any e-tools are developed in a library, usability evaluation is paramount. Users and designers do not necessarily share the same opinions and usability evaluation should be used to improve a design.

In addition to usability evaluation, users should be educated on how to use advanced information tools to their full potential. Information literacy training is already used to teach users how to search in databases. However, dictionary literacy should be included and users taught how to use dictionaries effectively. Such training can benefit users significantly, especially if more advanced e-dictionaries are developed, that include tools through which users can find exactly what they are looking for.

Background

The vast amount of information available in the world is staggering. Technological developments have made it easier and faster to create, disseminate and access information. Unfortunately, however, it has been recognised that the surging amount of information can diminish a person's feeling of control and result in stress and even in an inability to complete tasks (e.g. Bergenholtz & Bothma, 2011: 55; Bergenholtz, Bothma & Gouws, 2015: 2).

Within the vast information space that exists, there is an increasing desire that a person would ideally find just the relevant information to satisfy a specific information need and not be burdened with extra irrelevant information (Bergenholtz & Bothma, 2011: 55; Bergenholtz, Bothma & Gouws, 2015: 3). Technology, the medium that made the abundance of information possible, can also be used to enable people to cope with this phenomenon more efficiently (Bothma, 2011). For example, recommender systems to recommend books a person might like based on their profile, filtering mechanisms to reduce the amount of search results according to the characteristics specified by a user, automatically adapting a site to a user's profile or advanced search options to narrow down a search to specific results.

As gateways to information, libraries already utilise many different technologies to enable users to get information to address their specific information needs. For example, subscribing to online databases and journals, managing institutional repositories, digitising material for inclusion in digital collections, making services available through mobile applications and connecting with users through social tools. As the digital world is continually changing, adapting and advancing, more tools and technologies are developed that can be included in the library landscape to empower users to find exactly what they are looking for.

However, as alluring as more technology and tools might appear, their inclusion and development should be done with careful planning and design. Users and developers of technology do not necessarily share the same points of view. This paper therefore argues that it is essential to perform usability evaluation on tools or systems that are designed to help users retrieve information, especially if these tools employ advanced technologies. This will be done by discussing the usability evaluation done on an advanced e-dictionary.

The e-dictionary Afrikaanse idiome- woordeboek

The Afrikaanse idiome-woordeboek is an e-dictionary of Afrikaans fixed expressions. There is no other existing e-dictionary of Afrikaans expressions (Bergenholtz, Bothma & Gouws, 2011: 40). It is a joint project between the universities of Aarhus, Pretoria and Stellenbosch. The dictionary is a prototype, developed with the intention to test various theories and therefore only contains a subset of Afrikaans expressions. It was also the intention to test the functionality and as such, visual design and aesthetics were not considered.

The dictionary incorporates various technologies to allow for the retrieval of exactly the information that a user needs. The design of this dictionary is based on the function theory of lexicography (for a short summary see Bothma & Tarp, 2012). This theory suggests that a dictionary should give only the information that is relevant for a specific task and withhold information that irrelevant for a user in that specific situation (e.g. Bergenholtz, 2011; Bergenholtz & Bergenholtz, 2011; Bergenholtz, Bothma & Gouws, 2015: 3; Bergenholtz & Gouws, 2007; Bergenholtz & Tarp, 2003; Nielsen, 2011; Tarp, 2008, 2011). For example, if a user is reading a text and simply needs a definition or a meaning of a word (communicative function – text reception), extra information such as; example sentences, grammar information or background is superfluous and could hinder the user from effectively doing their task. However, if a person is editing, more examples and information regarding grammar is important (communicative function – text production). As such, it is suggested that one database is used, but that several dictionaries, each addressing a specific situation or need, can be extracted on demand, depending on the user's information need.

It has also been argued that e-dictionaries should make more use of what the technological medium brings to improve e-dictionaries (Bothma, 2011; Tarp, 2011). E-dictionaries do not have the same space limitations that traditional dictionaries have and can include more data, either by including or linking to more data, such as more example sentences (De Schryver, 2003: 157). The use of multimedia can be a differentiation factor for e-dictionaries (Lew, 2012: 344). Furthermore, e-dictionaries can offer improved access to information through advanced search options, such as wild card characters (Verlinde & Peeters, 2012: 147), Boolean operators (De Schryver, 2003: 175), the option to search for a phrase or locating multi-word expressions (De Schryver, 2003: 175), help with lemma identification (Lew, 2012: 345) or type-ahead search (Lew, 2012: 351) or other search techniques (Lew, 2013: 23). The use of other technologies to provide relevant information, such as, filtering, adapting according to a profile, annotations, decision trees can be investigated (Bothma, 2011).

The *Afrikaanse idioome-woordeboek* was specifically designed to test the use of various technologies and has five different monofunctional dictionaries created from one database, each containing information relevant to a specific function, e.g. text reception (help with understanding a text). In addition, the dictionary has advanced search and display fields, allowing a user to be very specific about what is required. A browsing option allows a different access route. Multimedia has been included to illustrate various entries and links to external sources provides additional information. A screenshot of the dictionary is shown in figure 1.

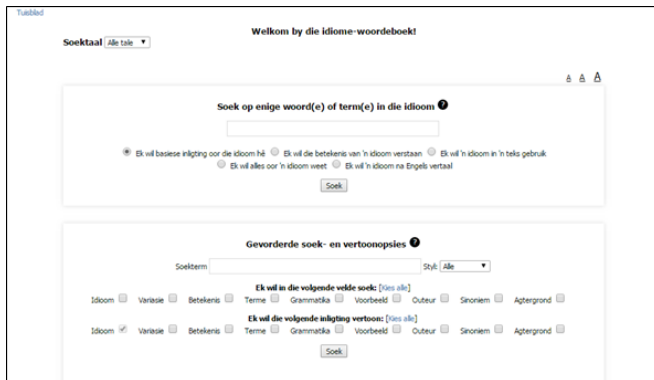


Figure 1 Home page of the *Afrikaanse idioome-woordeboek*

Underneath the main search field are 5 checkboxes, to allow the user to select the function that is relevant for his/her situation. For example, if a user needs help with writing, the function 'I want to use an expression in a text' (*Ek wil 'n idioom in 'n teks gebruik*) will have the relevant information.

Below the basic search are the advanced search and display options. The search term is entered in the field, after which a user can specify exactly what fields should be searched in. For example, a user can specify to search in the author field to find examples by a certain author. The user can then specify the layout of the article by selecting only the fields that should be displayed. For example, to display only the expression, meaning and example sentences. This means only relevant information is displayed. Figure 2 shows an example where only the meaning, example sentences and related expressions in English are shown.

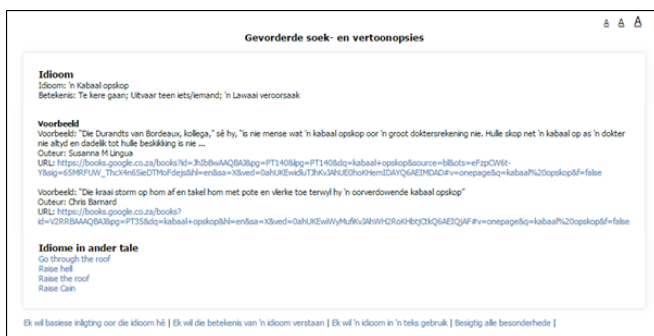


Figure 2 Only meaning, example sentences and English equivalents are shown in the article

Methodology

Usability evaluation was done determine to what extent the Afrikaanse idioome-woordeboek could provide relevant information on demand, specifically to see how users would use the technology in the e-dictionary to get to relevant information. The discount usability methods heuristic evaluation and usability testing were used. The proponents of discount usability suggest that expensive tests are not necessary, but that reliable results can be obtained by using few users (approximately five), experts and simple versions of the system (i.e. prototypes) (e.g. Nielsen, 1993: 17; Nielsen, 2009).

Heuristic evaluation is a method that does not involve any users, but relies on experts. Expert reviewers make use of principles (heuristics) to evaluate an interface systematically (Nielsen, 1995; Schneiderman & Plaisant, 2005: 142). In this study, a set of criteria for the evaluation of e-dictionaries was developed based on an extensive literature review and the heuristic evaluation was done by one expert. The heuristic evaluation is not reported on in this paper, for a detailed discussion see Ball (2016).

Usability testing is an approach where users are expected to complete a set of tasks and their actions can be recorded through a variety of data collection methods (Preece, Rogers & Sharp, 2011: 438). In this study, seven people were asked to complete 16 tasks on the Afrikaans e-dictionary of fixed expressions during which time they were observed. Each task contains a scenario which describes a real information need. After the tasks the participants were asked to complete a questionnaire.

Findings

This paper reports on the most pertinent findings of the usability tests. It is discussed according to the following headings: content, information architecture, navigation, access, help and customisation.

Content

Though the participants commented that the dictionary provided relevant information for the task at hand and did not give too much information, participants reacted differently to the amount of information given while performing the tasks. One participant specifically noted that the perfect amount of information is given. However, others stated that they would have liked or expected more information. One suggestion was that a summary should be given first, with the option of more information. It was interesting to note that participants who displayed more information in the article, sometimes found it easier to complete the tasks.

Participants were positive about the use of external sources and very positive about the use of multimedia. However, during the tests, participants were critical of

examples from external sources that were not formal (e.g. an example sentence from a song by a popular singer). Most participants were negative about the use of labels in the e-dictionary, for example that the labels were too long or used old-fashioned language. The use of uncommon abbreviations was also criticised.

Information architecture

From the questionnaire, it is not obvious whether the participants were either convincingly positive or negative about the over-all organisation of the dictionary (i.e. the functions). However, most participants agreed that it is useful to filter information on a page to show only exactly what the user wants to see. Most participants used the intended functions for the simple tasks (where the match between task and function was clear) and could complete the tasks efficiently and effectively. However, for more complex tasks the functions sometimes caused more confusion than help. Particularly, when a participant did not choose a correct function, or assumed a function would give information that it does not give, they struggled more to do the task than participants who simply chose the function with the most information.

Most participants thought that the data in the articles (page-level organisation) are clearly organised and it was observed that participants typically did not have trouble finding the data on a page to answer a question.

The display fields under the advanced search options can be used to filter data on the article pages. However, it confused most participants, and these options were often ignored; all fields were selected or the same fields for both the search and display options selected. Though most participants found the display options confusing, it does not mean that the functionality is unwanted, as is evident from an incident where one participant specifically commented that the grammar and references that are displayed each time are annoying and (s)he tried to hide these fields. One of the participants commented that a heading should be displayed even if there are no data available for a specific field on the page.

Navigation

Most participants were positive or neutral about the statement that it is easy to find information in the e-dictionary. However, most agreed that they had to scroll too much to find information and the majority indicated that they had to click through too many levels. There are two factors that contribute to the number of clicks in this dictionary, namely the fact that the user has to open the article to view it and the fact that a user then has to go back to the home page to do a new search. Some of the participants were particularly frustrated by what they felt were too many clicks before getting to an answer. One participant commented that (s)he would have liked to see a summary of the expression in the results already and that there should definitely be fewer clicks between entering the search string and getting an answer. Another

comment was that it is not obvious that one does not find the answer immediately, but has to click on a link before finding an answer.

Most participants struggled to find the search results, as they are at the bottom of the page and participants have to scroll between the results and the search field. Some participants had to redo their first search before finding the search results. There were many suggestions that the search results should be more prominent.

Most participants indicated that they did not feel lost and knew where they were in the e-dictionary. However, not all agreed that it was clear where to go next in the dictionary.

Most agreed that the links are labelled in such a way that they understood where they would lead, and most agreed or were neutral that the links did not lead them to unexpected places.

Access (search and browse)

The participants were not overwhelmingly positive that the search field is easy to find, and varied in opinion over whether it is easy to change a search and search for something new. Some suggested that the search field should be on every page, instead of having to go back to the home page.

Most participants found the advanced search confusing. The fact that there were both search and display fields seemed to confuse most and the difference between the two was not apparent and most participants also interpreted the meaning of the search fields incorrectly. A user is expected to select the field (s)he wants to search in, for example, if a user wants grammatical information about an expression, (s)he must select the 'expression' field to search in, then select to display the 'grammar' field. However, many participants selected the search field to indicate what information they wanted to find.

Most participants did not see the browsing option, but once they knew about it they found it easy to use and most agreed that they found the option to browse through the dictionary useful.

Most participants did not struggle to browse internally between expressions in the e-dictionary and it seemed that it could help users to confirm an answer to a task. Some participants found it frustrating that the search results are not saved and other found it surprising that more information was not given with the search results. One participant particularly commented that (s)he would have liked to be able to search in the results.

Help

Most participants did not find it easy to find the 'help', but agreed that the 'help' section provided sufficient help. However, it is important to note that the two participants that consulted the 'help' for something other than

that the task that tested the help function and could not find what they were looking for.

Customisation

Though the dictionary allows a user to save advanced search and display options, most users struggled to find where to store their selection and did not know exactly what was stored. For example, some thought the results were stored and they were searching in the results or others assumed that the results would be emailed to the user.

Conclusion

From this study it is evident that users and designers do not necessarily share the same point of view. Usability evaluation should be used to reveal how tools and systems are really used so that improvements to their design can be made. The designers of the Afrikaanse idiomewoordeboek did not anticipate that the use of functions would cause confusion in some instances. Nor did they expect users to have problems with the advanced search and display options. The usability testing revealed these issues of concern and allowed for various recommendations to the system.

The fact that users struggled with some options does not mean the functionality is unwanted. For example, one participant specifically tried to filter data. This means that there is a need for advanced tools that allow for complex manipulation of data. Apart from refining a design through usability evaluation, more should be done to train users to be able to use advanced information tools. This is essential in an ever expanding information landscape. Information literacy training is already used to teach users how to search in databases. However, there are other information tools that should be included as well. Dictionary literacy should be seen as a subset of information literacy, where users are taught how to use e-dictionaries effectively. Particularly if an e-dictionary makes use of advanced search features or other innovative technologies, users should be educated to be able to make use of these. Users could be taught both typical information literacy aspects, but within the context of a dictionary, for example, how to use advanced searching (Boolean operators and wildcards), linking, or how to distinguish relevant from irrelevant information. Another component could cover work that is from the field of lexicography, for example how to understand the structure of a dictionary, how to interpreting etymological, morphological and syntactic information. A comprehensive list of skills for e-dictionaries can be found in Lew (2013).

If usability is used to identify flaws in design, and users are educated in e-dictionary use, designers and developers of e-dictionaries can confidently create advanced e-dictionaries that include tools through which users can find exactly what they are looking for.

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INTERLIBRARY LOAN IN THE EVER-CHANGING ACADEMIC LIBRARY

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Abstract

Interlibrary Loan and resource sharing departments reflect and embody many pillars central to librarianship, access being at the forefront. By allowing library users to transcend the limits of their libraries' physical and electronic collections and by supporting researchers by bringing them essential materials and resources from states, countries or even continents away, interlibrary loan has a tremendous effect on the furtherment of. This paper discusses the changing role and growing importance of Interlibrary Loan in academic libraries. How have Interlibrary Loan departments been impacted and how have they adapted in a time when physical collections are shrinking, options like demand-driven acquisition are increasingly viable, and requests for digital materials continue to grow?

Some of the trends identified include: more collaboration with other departments, resource sharing consortiums, increased marketing of ILL and e-book lending through interlibrary loan and its viability. Based on these trends this paper reached the following conclusions/recommendations:

- an increased focus on marketing and promotional activities in interlibrary loan department in order to reach potentially underserved parts of the academic population.
- an increased collaboration with other departments in order to streamline services and allow the work going on in individual departments to align more cohesively with the library's missions and vision.
- an effort and commitment should be made to collaborate and work towards a viable, librarian-patron-publisher pleasing platform for lending eBooks and other electronic material between libraries.
- collaboration across institutions in order to leverage shared collections.

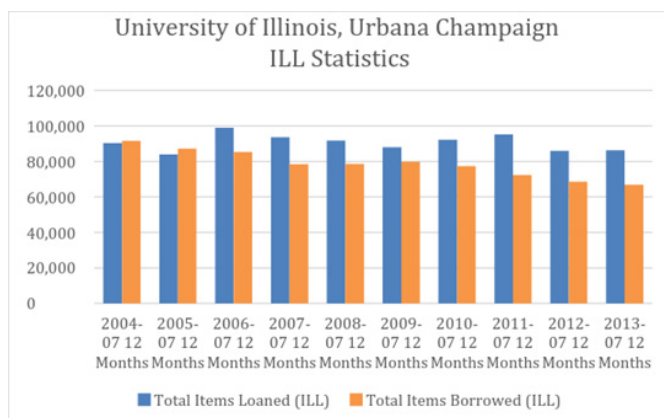
These recommendations can help to redefine interlibrary loan's place in the academic library and raise the library's profile as the heart of the academic community.

Background

Interlibrary Loan in academic libraries is a service that is central to access and research. It allows library users to transcend the limits of their libraries' physical and electronic collections and supports researchers by bringing them essential materials and resources from states, countries or even continents away. This paper's intent is to discuss the impact that recent changes in academic libraries and their collections (eBooks, eResources, shrinking physical collections, Demand or Patron Driven Acquisitions, consortia, etc.) have had on interlibrary loan departments.

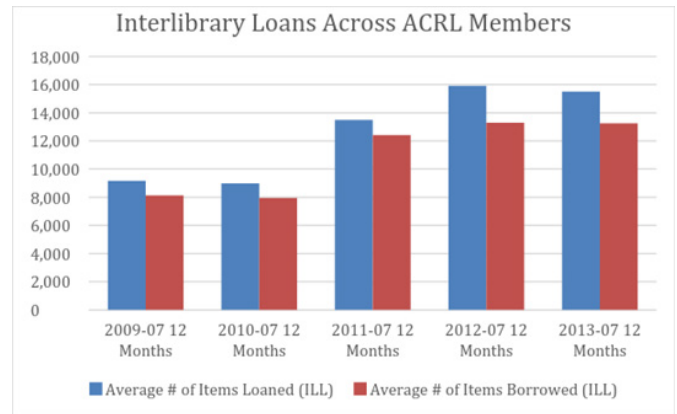
Over a span of nearly three years, as a staff member of the University of California, Santa Cruz' Interlibrary Loan department, I witnessed a tremendous increase in the number of ILL requests, both lending and borrowing. In fact, over the Winter 2013 quarter the department had to increase the number of student assistants from four to eight. Based on this alone I assumed that this trend would be similar across academic libraries. In actuality, when strictly focusing on the number of requests and ILL "traffic" it is difficult to accurately define any trends across academic libraries as a whole. That said recent surveys conducted by the Primary Research Group identified increases in the number of requests by 9 percent in 2009 and 14 percent in 2014 (Leon and Kress 82 ; Primary Research Group). The ARL also reported a large increase in both borrowing and lending ILL requests in two of their studies, though those are admittedly older, from 2004 (Jackson). However, in an interview with Cherié L. Weible, Head of Central Access Services (within which is Interlibrary Loan) at the University of Illinois, Urbana-Champaign she described ILL usage at her institution (one of OCLC's WorldShare Interlibrary Loan's top 10 borrowing libraries) as a fluctuating wave with some busy years and some lighter years but without any significant upward or downward trend over an extended period of time. Indeed, ACRL statistics reports gathered from ACRLMetrics confirm Weible's estimations:

Table 1. Data taken from ACRLMetrics.



No overarching trends are evident, though there does appear to be a very gradual decline in the number of items borrowed. However, a look at the average number of ILL items borrowed and loaned across all ACRL members does show a significant increase over the last five years:

Table 2. Data Taken From ACRLMetrics



Reaching conclusions from these statistics, however, is tricky, especially when it comes to the second figure pictured. Statistics submitted by Doctorate-Granting Institutions and Master's Colleges and Institutions in 2009 and 2010 were pretty similar to their respective figures in more recent years, but Baccalaureate Colleges' figures were drastically lower in 2009 and 2010 than in later years. Therefore, it would not be surprising for there to be an anomaly or some other explanation for this. Additionally, there is a small decrease in both items loaned and items borrowed between 2012 and 2013. As a result of these inconclusive trends and statistics, my curiosity piqued. In general, if ILL departments in academic libraries are not significantly increasing or decreasing over a large period of time, then what impact, if any, are all the changes in academic libraries having on ILL departments, and how are they adapting?

E-books & Occam's Reader

The advent of eBooks and other electronic resources is a natural place to start in asking questions about interlibrary loan for two reasons: 1) since eBooks are traditionally not available to be loaned or borrowed via interlibrary loan, their growing popularity and availability (if eBooks are, in fact, growing in popularity) would have an effect on the number of ILL requests placed as well as the number of requests denied due to format type and 2) Is the increasing number of electronic resources available freely and instantly (legally or illegally) online causing researchers and students to use library resources and interlibrary loan less frequently? eBooks have certainly presented a unique challenge for libraries. While e-publishing sells itself on its flexibility and convenience for users, it has proved anything but for libraries:

What is paradoxical with eBooks, and e-journals for that matter, is that libraries have less latitude to lend from their collections, even as methods of transmitting documents physically and electronically are constantly improving. This restricting trend is dangerous because patrons are able to discover that materials exist outside of the library like never before and then learn that they cannot access the information — further bolstering the popular misbelief that libraries cannot meet the information needs of today's patrons (Gee 24).

Not only are eBooks seemingly unattainable via ILL, but their mere presence in union catalogs such as WorldCat or the UC system's Melvyl may instill a lack of confidence in the ability of libraries to meet their user's growing and changing needs because patrons will see items available at other institutions but because they are in eBook form they won't be able to request and gain access to them. If these feelings grow and become widespread an academic library's perceived impact and importance may be affected.

Libraries have taken action in response to these needs. While the lending of eBooks via ILL has been a very complicated issue due to the licensing agreements as well as concerns over patrons' privacy, a platform has been developed that can circumvent these concerns. In 2014 Texas Tech University and the University of Hawai'i at Manoa in collaboration with the Greater Western Library Alliance developed a platform to enable interlibrary lending of eBooks. It is called Occam's reader. It has had some success; in 2014 alone there were over 500 transactions across GWLA members (Litsey and Ketner 15). The Chronicle of Higher Education describes Occam's reader as a "straightforward, frills-free solution" (Howard). It works as such:

"Using the web-based Occam's Reader software, a lending library takes a stripped-down version of an e-book and loads it onto a secure web server. [...] Borrowed e-books can be read but not copied, printed out, or downloaded. The idea is to give borrowers quick access while reassuring publishers that copyrighted content will remain secure and can be shared without eating into sales" (Howard).

Of course, issues on the limitations it places on patrons' use do come up. The inability to print or download books from Occam's reader might curb patrons from using the service. Additionally, there could also potentially be concerns by publishers over the effect this might have on eBook, or even physical book, sales (Howard). There is a lack of information on Occam's reader's continued success following its initial successful year. It is still in its pilot stage and available in 21 universities across the United States and its developers are "exploring ways in which the program might be used for time-limited access to digitized special collections content or other non-circulating items" (Fialkoff, 44). Despite any reservations, it is clear that Occam's Reader may prove to be a viable

option for lending eBooks (and perhaps other material) via ILL. It will definitely be interesting to see if it expands into more libraries nationwide. If so, it can certainly play a huge role in the growth of ILL departments in academic libraries.

While the unsuitability of eBooks for ILL transactions can be seen as a detriment to the use of ILL, we must also ask and evaluate just how popular eBooks actually are. In *Words Onscreen: The Fate of Reading in a Digital World* (ironically accessed as an eBook) Naomi S. Baron states, "When asked, the majority—sometimes the vast majority—say they prefer reading in print. They comment that print is more pleasant to read, that it is less taxing on the eyes, that they just like hardcopy. Some report they learn better with paper" (Baron 12).

The benefits of eBooks are certainly evident, but how they translate to a library environment is an ongoing conversation. Vendors and publishers' relationships with libraries have been rather strained. Patrons also frequently experience difficulties dealing with eBooks, such as format-device compatibility and confusion over the checkout process and availability/lending restrictions in a digital environment (Zickuhr, et al 52-3). There is clearly still a demand for print materials, perhaps even increasingly so. By extension, then, there should be a solid level of demand for ILL. eBooks' impact on ILL departments, however, can and should not be minimized. For at the very least they have spurred a conversation in the field and have inspired resource-sharing librarians, willingly or not, to think about an ILL department's place in the evolving academic library going forward. From these challenges innovations have emerged that are bringing ILL departments into the 21st century, so to speak, and are increasingly demonstrating their value and, by extension, their libraries' to their academic communities.

Electronic Resources and Open Access

Another related issue that surely has peripheral impact on ILL is the availability of articles and other electronic resources online and Open Access. In a time where so much content is available freely and instantly online are potential patrons really going to spend the time to look for that content via their library or by submitting an ILL request? It certainly does not seem likely. In "Bypassing Interlibrary Loan Via Twitter: An Exploration of #icanhazpdf Requests," Carolyn Caffrey Gardner and Gabriel J. Gardner discuss the sharing of scholarly material on Twitter, "Like peer-to-peer sharing in the music industry, this peer-to-peer access to scholarly material is ethically dubious, and may run afoul of copyright laws, but it is easy to accomplish. The Twitter user simply appends the metadata label, or "hashtag", #icanhazPDF in the tweet rendering it discoverable through traditional linking and search functions" (Gardner and Gardner 95).

Sharing and finding scholarly material today is easier than it has ever been. Gardner and Gardner aptly draw comparisons between the *icanhazPDF* hashtag and peer-to-peer music sharing to demonstrate not just the ease of this sharing but also the fact that despite its unlawfulness it remains widespread and increasingly popular. The issue mainly comes down to whether libraries and their ILL units can keep up with demand and deliver material within a patron's desired time frame. Gardner and Gardner discuss a suggestion, "Interlibrary loan librarians remind us that one focus on scholarly communication initiatives at universities should be to develop cross-library agreements for interlibrary loan prices so that we are not reliant on publishers for content access" (Gardner and Gardner 95). While no specific suggestions are given in their presentation paper, this is a great place to start. Libraries should leverage their combined collections with other libraries. Reciprocal lending agreements and redundancy reduction from an acquisitions perspective can help ensure a larger encompassing collection on a consortial level. However, it remains clear that until ILL services "are streamlined and given more resources" alternate methods of obtaining scholarly material such as the *icanhazPDF* hashtag will continue to flourish (100).

An area where one might expect similar findings is the growing availability of open access material. However, while the existence of *#icanhazPDF* may lead people away from using ILL, the same cannot be said about open access material. Between 2009 and 2013 there has been an increase in ILL requests for open access material each year at Indiana University–Purdue University Indianapolis, more than doubling over the four-year span (Baich 72). Unlike material found instantly via the *icanhazPDF* hashtag or other resources, open access material is not always as easy to find. Ironically, ILL units seem to be best suited for providing access to open access material because to them it is relatively easy and cost efficient to fulfill requests. The fact that it is not always easy for patrons to find this material on their own further increases ILL's usefulness in this context, "The discovery problems surrounding information retrieval do not align with users' need for convenience and ease of access and may result in a greater reliance on ILL to locate information" (Baich 74).

Of course, filling requests for open access material may be seen as not the most efficient use of staff time as this is material that theoretically users can find on their own. However, Baich argues that the increase of these requests is beneficial for three reasons: 1) requests are being filled, 2) the speed at which requests are being filled and 3) the relative low cost, when compared to filling typical ILL requests, of filling requests for open access material (Baich 74). These benefits culminate in an increased value of ILL in an academic library setting. Any opportunity that allows patrons to see ILL services as not only a viable, but an essential option is one that should be pursued wholeheartedly. Thus, Jennifer A. DeVito argues, "The limited research available on the topic, however, indicates that resource sharing services will still be in

demand. Resource sharing staff often can navigate search tools more effectively and efficiently and deliver requested Open Access material to users quickly" (DeVito). DeVito is likely preaching to the choir, but her point does touch on the idea of reaching the patron at that key point in their research. Ideally, one of two events occur at the point that a user discovers or acknowledges that a search engine is not enough or that they simply cannot find the material they are looking for: libraries, not just ILL, reach the user at this point and are able to help them locate the desired materials or, even better, the user knows they can turn to the library and its wealth of resources and services to more fully conduct their research. Libraries need to be at the forefront of the user's mind when it comes to research. Libraries need to be fully associated and tied to the research process as a whole. The question, then, is how can Interlibrary Loan and its services play a role in achieving this?

Demand Driven Acquisition

The recent trend in demand or patron driven acquisition (dda or pda) has also had some impact on ILL and how ILL transactions are viewed or used. In evaluating the implementation and results of DDA specifically as they relate to ILL, there are some concerns, "Many PDA programs are ILL-driven, and several articles on ILL or ILL PDA have noted that patrons frequently fail to effectively assess the adequacy of their libraries' holdings prior to making requests and also sometimes request already owned items. Articles on ILL have noted that academic patrons, even faculty members, not infrequently make requests for recreational reading materials" (Tyler et al 685). Thus, there is a fear that DDA and using ILL statistics to make acquisitions decisions will lead to unbalanced, incomplete collections that are not very useful in filling patrons' needs.

There is also a fear over loss of control in acquisition decisions; are patrons better suited to identify the library's purchasing needs than librarians? The concerns over that possibility certainly have merit. Tyler, et al. do not believe that is a possibility however and attempt to quell these fears: "Authors of the PDA literature have largely conceived of PDA as a supplement to or a means for augmenting traditional collection development methods, not as replacement for them, as a way to more quickly respond to expressed and immediate user needs, and as a way to obtain timely collection-related input from library patrons" (Tyler, et al. 696).

Furthermore, the fear that under PDA collections would allow the acquiring of undesired or inappropriate material are also unfounded as Tyler et al. demonstrate that there are several limits and exclusions placed on what may be ordered via ILL DDA programs (Tyler, et al. 696). It is clear that Patron or Demand Driven Acquisition can be extremely helpful to libraries especially as collections

budgets shrink and limited physical space may restrict the amount of materials being acquired. It makes sense for ILL units to align themselves with this newer method of acquiring material as is a) makes sense to build DDA onto a platform already being used to request materials and b) it allows ILL to expand its role and services to a newer area and further demonstrate its value in an academic library environment. In times of unstable or shrinking budgets, this is essential for service-based departments such as ILL.

Promotion and Marketing of Interlibrary Loan Services.

An area in need of more research and literature is the promotion or marketing of ILL services in universities. The implementation of new services to ILL and their promotion at McGrath Library at Hilbert College saw a 30 percent increase in requests over five years (Curry). The changes that led to this increase include integrating the option to request an article not available in full text at the point that they come across the “not available in full text” page and delivering articles requests via email, which are, admittedly, pretty basic ILL features now. The library implemented a library-faculty liaison program and liaison librarians marketed ILL services to faculty. ILL services also started being marketed during instruction sessions and information literacy courses. It does not appear that any printed material was included in their marketing plan. Of course, the actual impact of this marketing is difficult to gauge as it coincides with significant improvements to ILL services. However, it shows that ILL staff and librarians are beginning to see the marketing of ILL services as worthwhile.

Similarly, at the University of Nevada, Reno Libraries Adams, Ressel and Silva discuss user initiated borrowing in ILL and its ability to get items delivered faster and save money and staff time (Adams, Ressel, and Silva). Their article also details the successful marketing of this service. The authors describe some of the methods used to promote the Link+ service such as: publicizing it during instruction classes and distributing marketing material such as pamphlets, book marks and table tents. These tactics were minimally effective and librarians decided to intercept ILL requests eligible for Link+ and order them through Link+. This had the shared benefit of lightening staff workflow and marketing Link+ to patrons. The University of Nevada, Reno libraries’ experience demonstrates not only the value of marketing ILL services but also the fact that marketing alone is not successful without having a product or platform that meets or exceeds patrons’ expectations.

UC Santa Cruz’ ILL department has recently made it a top priority to focus on the marketing and promotion of its services, especially towards the undergraduate

population which make up the smallest percentage of ILL users. ILL at UC Santa Cruz has teamed up with the Undergraduate Experience Team to help promote ILL to incoming freshmen and the general undergraduate population. They have started by having booths at student orientations, giving short “lightning” presentations during welcome week, and ensuring that information about ILL is included in library tours and information sessions.

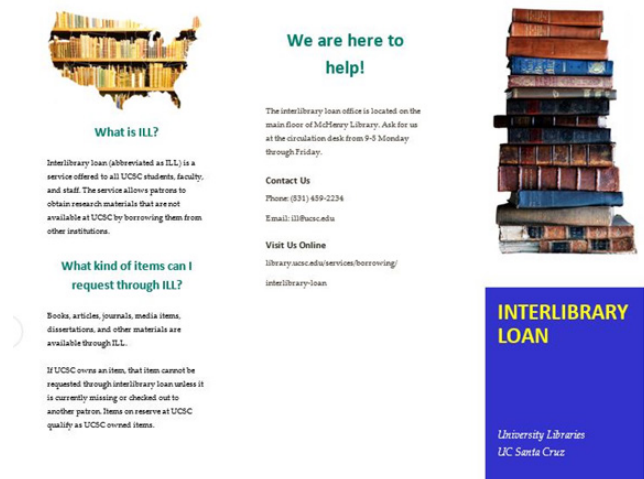


Figure 1. UC Santa Cruz Interlibrary Loan promotional trifold.

It will be interesting to see what impact this has on undergraduate usage of ILL and if the quick turnaround times (especially from UC off site storage facilities NRLF and SRLF) meet the usually more time sensitive needs of undergraduate students. By contrast, via conversations with Cherié L. Weible, Head of Central Access Services at the University of Illinois at Urbana-Champaign, I have found that UIUC’s ILL does not do any marketing or promotional activities. There does not appear to be much written about this topic but it would be interesting to see if other libraries are doing something similar to UC Santa Cruz’ proactive efforts in engaging the undergraduate population or if they are just unique in this aspect.

Recommendations and Conclusions

Regardless of how much of a trend marketing and promotional activities are in ILL units in academic libraries, I would very fervently identify these activities as a recommendation for ILL units. It helps ensure that a large, perhaps underserved part of the academic population is informed about ILL services as well as helps raise ILL and the university library’s profiles across the academic community. The marketing of ILL services also mirrors trends in other library departments that are seeing a greater focus on outreach and promotion. Academic Libraries are increasingly being put in a position where they have to keep demonstrating their value and proving their worth to their academic communities. Any effort that helps raise the library’s profile and increases stu-

dent or faculty engagement is certainly a huge benefit.

Among the recommendations put forth by this paper is also an increased collaboration with other departments such as acquisitions and subject specialists especially in relation to demand or patron driven acquisition. This also mimics the industry wide focus on increased collaboration between departments. This allows the work going on in individual departments to align more cohesively with the library's missions and vision. It also leads to new ideas and innovations such as Occam's reader.

Lastly ILL departments should make an effort and commitment to collaborate and work towards a viable, librarian-patron-publisher pleasing platform for lending eBooks and other electronic material between libraries. Whether that platform exists already in Occam's reader, time will only tell. However, a viable eBook ILL lending platform, as well as a commitment to open access, would transform and redefine ILL's place in the academic library.

Interlibrary Loan and resource sharing departments reflect and embody so many of the pillars central to librarianship, access being at the forefront of these. In a time when academic funding tends to be unstable and libraries are constantly having to justify their worth to administrators it is increasingly important for Interlibrary Loan departments to be more proactive in engaging with their academic communities and advancing and improving services offered to support and raise the profile of the academic library as the heart of the academic community.

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AN INTERNATIONAL ANALYSIS OF LIBRARY RELIEF STRATEGIES

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Abstract

This paper reviews five case studies of countries (Sweden, Norway, Zambia, Japan, and the United States) where libraries engaged in relief-related activities outside of collection care. The strengths of implemented programs are discussed. An acknowledgement of the need for further research is made, with a recognition of the efforts currently being undertaken by Project Welcome to address said need. Through this, the paper seeks to demonstrate that libraries not only can, but should involve themselves in emergency response efforts in and beyond their communities, and outlines the three guiding principles of Communication, Partnerships, and Commitment to Language and Culture for libraries to keep in mind while creating relief programs and services.

Introduction

Much of the currently available literature concerned with ‘emergency response’ and ‘libraries’ tends to focus on how to save collections and contain or prevent catastrophic damage to materials during disaster scenarios. Given that libraries are founded on the common goal of preserving information and then making said information accessible to as many people as possible, such inward focus on collection care during times of instability is neither unexpected nor unwarranted. Moving from the 20th to the 21st century, however, the world has begun to view libraries not merely as repositories, but also as service centers dedicated to their communities.

This, combined with the current refugee crisis and natural disasters around the world, indicates the importance of recognizing that libraries can and should look outward at the ways in which they are uniquely qualified to contribute toward relief efforts. To that end, the purpose of this paper is two-fold: First, it reviews the ways in which libraries around the world responded when faced with large-scale human displacement and/or natural disasters to demonstrate the feasibility of libraries contributing, positively, to relief efforts. Second, it uses that review as a means of outlining guiding principles for libraries participating in relief efforts.

It is the hope of this paper that these suggestions will inspire libraries around the world to create individualized programs to better serve their communities in times of upheaval.

Sweden: Stages of Adjustment in Target Populations

As Syria enters its sixth year of civil war, countries all over have seen an increase in the number refugees seeking asylum. An estimated 11 million Syrians have fled the violence of their home country since March 2011 (“Syrian Refugees,” 2016), and, as of this May, the European Union[1] has registered 663,345 (Migration Policy Centre, 2016). But although these countries continue accepting the majority of refugees requesting asylum, it counts for less than 10% of all displaced Syrians (“Syrian Refugees”, 2016).

As part of the EU, Sweden receives numerous asylum requests: 162,877 applications in 2015, with 58,802 officially decided by the end of the year (Migrationsverket, 2016). Despite decreasing in December 2016 (Migrationverket., 2016), Sweden remains home to a large refugee population, and, in accordance with precedent set by The Library Act, Sweden’s libraries have responded. Established by the Cultural Policy Ministry Department in 1996, the legislation requires all libraries receiving public funds to lend literature freely and make sure all citi-

zens have equal access (Thomas, 126) (Jönsson-Lanevska, 132). Furthermore, it states that libraries “should pay special attention to immigrants and other minorities among other things by offering literature in other languages than Swedish for the needs of these groups” (Jönsson-Lanevska, 132).

In an investigation studying special library services offered to immigrants in Sweden, Jönsson-Lanevska found services divided by level—local, regional, and academic—with each level’s services corresponding to a phase in Herlitz and Nygren-Junkin’s three-phase immigrant adaptation model (131-132, 138). The services of local library Hässlehus help immigrants through the ‘Disappointment Phase’ with programming designed to create a sense of belonging while increasing linguistic competence in Swedish (Jönsson-Lanevska, 138). Librarians make initial visits to families to not only give books and explain services, but also promote the advantages of bilingualism to parents who feel their native language lacks status (Jönsson-Lanevska, 135). Meanwhile, the library’s weekly storytime and song and dance hour, with the Open Pre-school of Hässleholmen allows immigrant families to organically interact in Swedish in an informal setting, ultimately building a support network (Jönsson-Lanevska, 135). All these efforts indicate a personal, encouraging approach that simultaneously guides and educates during a period of frustration.

In comparison, the regional City Library of Borås was best suited at serving immigrants’ information needs during the ‘Balancing Phase’ (Jönsson-Lanevska, 138). With children’s books available in 40 languages, adult educational material represented in 34 languages, 160 foreign language newspapers and periodicals, and online resources in 13 languages, this library provides the most extensive collection of materials of particular interest to immigrants (Jönsson-Lanevska, 133). But the larger collection combined with a broader patron base means that immigrants utilizing regional library services will encounter a hands-off approach that is, per Jönsson-Lanevska, best suited for those in the final stage of adaptation, when the individual can move confidently between their own cultural background and the host country’s culture (Jönsson-Lanevska, 138; 132).

Unlike its counterparts, the academic level Komvux Library—part of an adult education center—and the services it provides did not fall perfectly into any one phase of the adaptation model (Jönsson-Lanevska, 136). Jönsson-Lanevska suggests that the Komvux Library is best suited for the end of the ‘Disappointment Phase’ and beginning of the ‘Balancing Phase’. The library’s educational focus allows immigrants to work through the struggles and frustrations of gaining familiarity with a new culture by first learning about it, and then putting that knowledge to practice by participating in library-hosted activities; though the desire to integrate more fully and the confidence to do so indicates a transition to the third phase (138).

Although the study included only one library per level and did not uncover a perfect one-library-per-phase division of services, Jönsson-Lanevska's investigation nevertheless reveals a model of relief aid service that libraries, especially libraries working within a multiple-institution system, can use. By dividing up services categorically based on where refugees are in their cultural transition process, libraries can more effectively focus limited resources on a few, specific services, instead of attempting to do everything. It is the difference between providing in-depth, specialized information assistance and superficial, generalized assistance, because the library knows another location nearby is providing what it does not.

Norway: Building Trust

Norway, too, has seen its refugee population grow. In 2014, the official number was 47,043 refugees—an increase of 16.85% since 2010 (The World Bank, 2016). With 3,051 total asylum applications lodged between January and November of this year, that number is likely to continue growing (The Norwegian Directorate of Immigration (UDI), 2016). In Norway, residence permit holders must participate in a two-year educational program on Norwegian society and language, while asylum-seekers applying for permits are offered 250 hours of language instruction (Vårheim, 2014). Similar in tone to Jönsson-Lanevska's research, Andreas Vårheim investigated if library attendance during the compulsory Norwegian education program increases the level of trust felt by refugees towards their new home. In other words, can trust in specific institutions create generalized trust in the larger community?

At a public library in Northern Norway, Vårheim interviewed current and former students of the educational program about their trust in the people and institutions around them. The library, in addition to general services offered to any patron, provides refugees with access to a women's book group and homework service—all of which a specialist librarian working as teacher in the cultural program introduced to students by (Vårheim, 64). By having the same staff member work in both the program and library, students gained the confidence that stems from already knowing someone in what would otherwise be an unfamiliar environment and the library gained insider information about incoming refugee groups which allowed them to better adjust their collections (Vårheim, 64).

Vårheim found that students had strong feelings of trust in the library as an institution because they considered it a "safe place" "for everyone" (Vårheim, 65). In turn, this trust extended out to non-refugee library patrons and was higher than the trust felt for both neighbors and strangers, in part due to the perceived connection of having similar interests (Vårheim, 65-66). This trend was not sustained past the end of the program, however. While trust in the library remained, trust in strangers decreased sharply after students graduated (Vårheim, 66).

What Vårheim's research reveals is that libraries positively impact the trust refugees feel towards their new communities, and are a safe interaction point between natives and non-natives. Ultimately, the fact that generalized trust decreases post-program is more an indication that factors elsewhere in the community offset the positive trust generated by libraries than it is that libraries are ineffectual at building trust in the first place. This supports the idea that libraries not only can, but should play a direct role in relief efforts because they succeed in building trust and security where other individuals or institutions perhaps fall short.

Zambia: Information Flow & Information Seeking with NGOs

Although Zambia faces the lowest number of refugees it has seen in years, given the management, settlement, and care of 284,173 refugees the country handled back in 2001, it is undeniable that Zambia has valuable experience on the topic (The World Bank, 2016). In terms of the country's response to refugees, there is the Refugee Control Act of 1971, which designates specific areas, most often rural, where refugees can reside (Kanyengo & Kanyengo, 250). Over the years and in practice, however, the government shifted to a less strict settlement policy, providing refugees with land to become self-sufficient (Kanyengo & Kanyengo, 250). In 2004, the Zambia Initiative was established to better integrate refugees into their host communities while simultaneously developing the region (Kanyengo & Kanyengo, 250).

When it comes to library information services, Brenda Kakulwa Kanyengo & Christine Wamunyima Kanyengo point out that refugee camps are less concerned with traditional library practices and instead focus on the ways information is actually exchanged and disseminated amongst refugees. By understanding the structure and information management practices of the organizations working within refugee camps, as well as the refugees themselves, important information can be more easily shared to those who need it (Kanyengo & Kanyengo, 257).

While the Zambian government formally runs refugee camps with assistance from the United Nations High Commissioner for Refugees, the reality is that actual implementation of many programs are subcontracted to organizations such as Africare, African Humanitarian Action, CARE International, Jesuit Refugee Services, Zambia Red Cross Society, etc. (Kanyengo & Kanyengo, 252). These organizations often utilize innovative library service methods to spread information. For example, peer education—training specific persons in a group to effect change within said group—is especially useful when attempting to circulate information to younger demographics as it promotes questions and discussion without fear of victimization (Kanyengo & Kanyengo, 254).

Pamphlets and posters are always helpful in spreading information, but HIV/AIDs and other disease prevention programs have taken the idea further by printing messages and facts on chitenges—traditional cloth worn around a woman’s waist as a wrap, which can also serve as a means of carrying a baby on one’s back (Kanyengo & Kanyengo, 255). By slightly modifying an already present practice, vital health information can reach more people than pamphlets and posters could alone. With more complex messages, theatre, plays, and cultural dance and drama shows (especially when performed in refugees’ native languages) have higher attendance rates and greater participation than traditional training and workshop sessions, and succeed even if the audience is semiliterate (Kanyengo & Kanyengo, 255-256).

A library’s goal is to make information accessible, which sometimes necessitates serving a community in a less traditional fashion. The practices outlined above demonstrate that engaging in innovative methods of information dissemination is not only feasible, but effective, especially when it comes to communities that may be unfamiliar with the traditional concept of libraries. Furthermore, it reveals the importance of engaging with outside organizations when working together can better serve the information needs of patrons.

Japan: Creating Expanded Communities During Crises

Although not related to refugees as above, the Great East Japan Earthquake of 2011 left 20,000 dead or missing, 240,000 buildings ruined, and 400,000 evacuees uncertain of homes and families (Suzuki & Miura, 403-404). At the 2013 annual conference of World Library and Information Congress (WLIC)/The International Federation of Library Associations and Institutions (IFLA) in Singapore, Shiho Suzuki presented the poster, “The Librarians of Fukushima,” to discuss the ways in which librarians aided communities after the disaster.

Librarians with semi-intact facilities and collections began creating alternate ways to get books to people beyond the traditional ‘Come here, check out materials’ method that remained extremely difficult—if not outright impossible—for most people after the earthquake. Book-mobiles and pop-up libraries were favored methods, the former visiting some 80 sites, and the latter often forming in shelters (Suzuki & Miura, 404; 410). Even those libraries with facilities too damaged to receive visitors, such as the Fukushima Prefectural Library, could often continue circulation services to evacuation sites and other prefecture libraries with more severely damaged collections (Suzuki & Miura, 404). In response to the call for books, organizations such as the Japan Committee for UNICEF and the Japan Book Publishers Association, in addition to private individual donations, sent materials

to rebuild collections (Suzuki & Miura, 405). Unfortunately, overloaded staff meant that many of these boxes went into storage unopened (Suzuki & Miura, 405). Unpacked donations, meanwhile, often contained materials inappropriate or irrelevant to the use for which they were intended, creating more work for librarians who needed to sift through the items for ones they felt could circulate (Suzuki & Miura, 405; 408).

Beyond more library-related work were the experiences of librarians such as Chisato Endo and one of the authors, Suzuki: They found themselves working as child-care providers, helping to entertain and distract children at schools and evacuation centers by reading stories and through activities like origami and puzzles (Suzuki & Miura, 408). Others, like Mayumi Kazama, published newspapers at shelters to provide evacuees information on where they could access medical care, food, water, housing, volunteer work, baby supplies, and disability support (Suzuki & Miura, 408). When some semblance of normal life began to return, many libraries installed partitions to act as improvised classrooms for everything from physics to English lessons (Suzuki & Miura, 409).

The heroic efforts undertaken by the Fukushima librarians demonstrate flexibility as extremely important when dealing with the devastating effects of natural disasters on a community. Their examples prove that libraries are uniquely qualified and equipped to play a myriad of roles necessary to communities after disasters, and that their support—watching children, providing classrooms, publishing news, offering mental and emotional relief through books, helping people as municipal employees—is invaluable. Moreover, the acknowledgement that donations, while well-intentioned, are sometimes less than helpful, is worth noting for future relief efforts and can guide those considering such action to think critically about the types of materials that will be needed versus the types of materials being sent.

United States: The Community Anchor Role

For the United States, we turn to the example set by the Ferguson Municipal Public Library. In 2014, by a police officer in Ferguson, Missouri fatally shot Michael Brown, a young African American man. The shooting, resulting trial, and way in which police handled both, sparked unrest already present in the community, igniting protests, rioting, vigils, and skirmishes with police. The National Guard came in, curfews were enacted, and the chaotic uncertainty of it all left emotions running high.

The FMPL decided to remain open, acting as a “critical community anchor” by bringing a sense of normalcy to surrounding neighborhoods (Barry III, 2015). When the school district closed, indefinitely, at the school year’s start, the FMPL designated one area of their facilities as an “ad hoc school on the fly” with over 100 teachers and

volunteers instructing more than 200 students (Barry III, 2015). Even after the district reopened, the program, with staff from Teach for America (TFA), continued to provide education assistance (Barry III, 2015).

Schools were not the only public service to find space in library facilities. Programs were created or hosted with the specific intent of helping local businesses recover from the economic instability, with sessions held to connect those in need with local agencies and nonprofits who could best assist with recovery (Barry III, 2015). One of which, the U.S. Small Business Administration, set up in the library itself to provide emergency loans (Barry III, 2015).

The FMPL also helped patrons heal from the mental distress of the crisis. Entertainment such as magic shows, crafts, and other fun activities distracted children, alleviated stress, and provided caregivers a break (Barry III, 2015). The library, in conjunction with the Alliance of Black Art Galleries, acted as a gallery for the art show, “Hands Up, Don’t Shoot!”, providing a creative outlet for local artists to respond to the shooting (Barry III, 2015). Staff even created ‘Healing Kits’ for patrons to check out. Each kit contained coping books and worksheets, civil rights history source material, lists of nearby free or inexpensive mental health information, and a teddy bear, all in a library backpack (Barry III, 2015). The worksheets, and, more heartwarming, the teddy bear, could stay with patrons (Barry III, 2015).

As seen by FMPL’s example, emergency relief efforts do not require extensive funds, staff, or equipment, merely the willingness to make a difference. It may involve long and difficult hours, but is not impossible. When people turn to libraries for help, “expecting” them to step up (Barry III, 2015), it seems against the spirit of a library’s mission to not do all it can to help. Moreover, actively participating in emergency relief efforts does not just reward libraries with the moral high-ground, but also the potential for more tangible returns. In response to their efforts, donations totaling \$450,000 poured in; while Hewlett-Packard (HP) teamed up with venture capitalists to present nearly \$170,000 in computers and other equipment to the library (Barry III, 2015). This support came in response to the help the FMPL gave when their community needed it most, so, clearly, there is benefit beyond warm feelings and good publicity in assisting during emergencies.

Current Efforts: Project Welcome

Current literature on library services, refugees, and the ways in which the former can better serve the latter is not exactly extensive, and more research, especially research involving data collection, is needed. On this front, the Mortenson Center for International Library Programs at University of Illinois at Urbana-Champaign is making headway by partnering with the ALA on the IMLS-fund-

ed “Project Welcome”. A one-year planning grant, Project Welcome “aims to learn about and articulate ways libraries can address the information needs of refugees and asylum seekers in order to support and empower them in their resettlement and integration process” (Chu et al., 2016). It has hosted web-conference and twitter chat sessions, been present at various conferences to collect and exchange ideas, and is in the process of collating lists of refugee studies researchers and related academic studies (Chu et al., 2016). More information is on their website: <https://publish.illinois.edu/projectwelcome/>

Conclusion

For now, this review reveals a few, key principles for libraries looking to more actively engage in relief efforts: Communication, Partnerships, and a Commitment to Language and Culture.

Communication

As seen in Sweden, communicating with other libraries allows for greater scope of services minus the loss of in-depth support. Better communication between official organizations donating books and librarians at Fukushima may have resulted in a more manageable number of relevant books. Listening and responding to patrons’ needs during the Ferguson riots turned FMPL into a safe space of healing and normalcy. Norway’s intersection of library and teaching staff meant their collection could respond to the needs of incoming patrons before they arrived. All these examples make it clear that communicating, with other libraries, outside organizations, and patrons, is the first step in effectively engaging in relief efforts.

Partnerships

After communicating with other libraries and organizations, it is important to take steps to work with them. Just being aware of each other’s strengths, weaknesses, and ways mutual support could be provided does little good if all anyone does is talk. The Zambian refugee camps, which subcontracts programs to outside organizations, resulted in innovative information distribution methods tailored specifically to the needs and limitations of their communities. While the partnering of FMPL with organizations like the U.S. Small Business Administration gave patrons access to information and assistance they might not have otherwise received. Libraries can do a lot by themselves, but the change they can affect and the aid they can provide is nearly limitless with partnerships.

Commitment to Language and Culture

Finally, if a library is to adequately serve the needs of a diverse community it is imperative that they commit to expanding language and cultural services. Having materials in foreign languages, as well as a section on

language instruction and learning, are solid first steps. The hiring of staff with multilingual and multicultural backgrounds also goes a long way in addressing patron needs and making the library a welcoming space. But if one's budget is simply incapable of making steps towards these goals, then Google Translate can at least help in the creation of multilingual handouts of library services and policies—it may be neither perfect nor pretty, but some effort is better than none.

More than money, equipment, or facilities, it is passion for information service and a willingness to put in the time and energy that drives successful emergency relief efforts. By keeping this in mind and looking for ways to creatively apply the three principles described above, libraries will have a solid start in creating individualized, relief-focused programs.

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- [1] Specifically, the 28 member states, plus Norway and Switzerland.

INTERNET FILTERING IN SCHOOL LIBRARIES: A COMPARISON OF GOVERNMENT AND LIBRARY ASSOCIATION POLICIES IN THE UNITED STATES AND AUSTRALIA

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Keywords: internet filters, intellectual freedom, school libraries, United States, Australia

Abstract

Parents, teachers, and librarians want to keep children safe online. This can often come in the form of Internet filtering for school computers. At the same time, access to information is critical in the modern world and librarians need to consider how Internet filtering in schools can limit students' equitable access to information and digital literacy skills. The Australian and American governments have both made laws regulating, to some degree, what children can and cannot see online in schools. The two countries' library associations have taken very different approaches to school Internet filtering, however; Australian librarians seem to have no issue with it, while American librarians see filtering as legally problematic. The difference in policy and action may partially be accounted for by the two countries' different approaches to free speech, especially as applied to minors.

Introduction

The world is a scary place; it is understandable that parents would want to protect their children from the bad parts of it. As it is an extension of real life, there are many bad things on the Internet. Child pornography, instructions on how to make bombs, websites touting violent and extremist religious views - no child needs to see those things on or off a computer.

But for every X-rated video blocked by Internet filters, there is a breast cancer philanthropy website blocked along. For every pro-ISIS website blocked is a social network used by teenagers for communicating with their peers. Internet filters are hardly perfect and have the tendency to under-block as well as over-block content. At best they are a restrictive nuisance - at worst they are censorship, especially when mandatory for an entire nation.

The legislation proposed by Australia's Labor Party in 2007 wanted to do exactly that. In the interests of protecting children, all Australian Internet would be filter at the Internet-service provider (ISP) level, before it reached homes, businesses, or libraries. That legislation never passed and was eventually dropped by the Labor Party in 2012 (Bambauer, 2009). But the 'think of the children!' sentiment that initially pushed the legislation remains in Australian politics today. As a result most Internet in schools is still heavily filtered. Australian jurisdictions provide Internet at no cost to government-funded schools, but it comes with pre-applied filters from the ISPs (School Internet Group, n.d.). There is no legislation mandating filtered Internet in school, and private schools may choose whether or not to apply filters - but few schools would purchase Internet services if they didn't have to, and the vast majority of publicly-funded schools accept the filtered Internet.

The United States has not escaped the moral panic over what children may find on the Internet. There have been no serious proposals to filter Internet nationwide in the United States, but there has been plenty of legislation regarding filtering Internet in public schools.

The primary US legislation is the Children's Internet Protection Act, also known as CIPA. Signed into law in 2000, this bill mandates that any school or public library receiving a certain type of discount on Internet or communication technology must also use filtering software on any school computers connected to the Internet. Not every school in the US receives these discounted services, but many depend on them, and filter Internet accordingly.

The library associations of both Australia and the US have reacted negatively to these laws regarding Internet filters. However, only the US association, the American Library Association (ALA) has spoken and acted against filtering specifically in school libraries. The ALA has gone so far as to sue the US government over CIPA, claiming

that the kind of filtering required by CIPA constituted censorship and was therefore unconstitutional.

If both countries' library associations agree that Internet filtering often results in censorship, then why has only the ALA acted and spoken so strongly against filtering in school libraries?

One possible answer is each nation's respective emphasis on free-speech rights for minors. The US has a long tradition of defending minors' rights to free speech and free expression in their schools, starting with the *Tinker vs. Des Moines Independent School District* case in the 1960s. The US courts have decided again and again that minors have an only slightly limited right to free speech in schools, and educators - including school librarians - have taken those rights seriously. Prior to the Internet age, and during it, librarians and the ALA defended students' rights to read and access books that parents and school boards have taken issue with. Through various legal challenges, courts have decided what is allowable and what is inappropriate content in school libraries and curricula. According to Theresa Chmara (2010), filtering software often blocks much of what is considered "allowable content" by the courts, hence the question of whether or not school Internet filters impinge on minors' free-speech rights in the US.

By contrast, the Australian courts and legislation do not have such a strong history of defending minor's rights to free speech. Instead, most political talk about minors and access to media has centered on keeping children safe online - reducing cyber bullying and improving children's security online. This may explain why Australian librarians can take issue with nationwide Internet filtering, but not object to filters in schools.

Problems with filters

One of filter opponents' main issues is that filtering software is unsophisticated and ineffective. According to Electronic Frontiers Australia's "Fact Sheet: Filtering and Free Speech" (2009), filtering software is aimed at mitigating "content risks" - blocking specific content, like images or whole web pages - but most Internet traffic is communication-based rather than content-based. Specifically, most Internet use today is focused around social media, email, chat, etc. Filtering can block communication websites, but it cannot allow a website while blocking specific content on it.

Another problem is the distributed nature of the Internet. Controlling broadcast media like television is comparatively easy because the number of creators is very limited and there is usually only one way to distribute content. The Internet, on the other hand, is widely distributed and takes contributions from all over the world, not to mention that there is a virtually infinite number of ways to distribute content. The only way for filters to work effectively are by white-listing - only allowing

certain sites - or by taking the extremely resource-heavy route of classifying every piece of content they encounter (EFA, 2009).

As discussed in relation to “allowable content” in the US, filters often have the tendency to over-block content. For efficiency, filters block or allow websites based on a very small sample of their contents; there is no way to ensure that such samples are representative of websites (ALA, 2004). Consequently, the numbers of false positives are high (EFA, 2009).

Finally, filters are very easy to circumvent. Anecdotal evidence indicates that teenagers are more than capable of discovering simple ways to evade filters in school, and that in some cases it is as easy as adding an “s” to a URL: “https://” instead of “http://”. Filters are also easily avoided by using a VPN or proxy service, both of which are simple to install (EFA, 2009).

CIPA and the American Library Association

As noted above, CIPA requires that schools receiving E-rate discounts on Internet services maintain a certain level of “Internet safety”. As far as this bill is concerned, Internet safety means that schools must: prevent minors from accessing “inappropriate material”; keep children secure on direct online communication platforms such as email and instant messengers; prevent minors from engaging in illegal activity such as hacking; prevent unauthorized disclosure of sensitive information concerning minors; and include other measures to restrict minors’ access to “materials harmful to minors” (ALA, 2000). CIPA does not define what is inappropriate for minors, and explicitly says that definitions for this term are up to local determination, i.e. local school boards or similar bodies. It does, however, define “harmful to minors” as:

“Any picture, image, graphic image file, or other visual depiction that--

(i) taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion;

(ii) depicts, describes, or represents, in a patently offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and

(iii) taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.” (CIPA, 2001)

CIPA also requires that restrictions be applied to anyone using computers in a school, and to all Internet-capable devices, but restrictions can change, depending on the type of user. Therefore teachers and adult staff may have less restrictive filters for their use, but some type of fil-

tering must be in place. CIPA also allows tailoring of filters for individual schools (CIPA, 2001).

Minor students in the United States have been guaranteed rights to free speech and free expression in their schools. However, courts have also decided that schools may limit students’ access to materials in two circumstances: if materials are “educationally unsuitable” or “pervasively vulgar.” Specific definitions of these cases are left up to individual states and localities to decide, but material cannot be banned if it has any artistic, political or scientific value when evaluated as a whole (Chmara 2010).

With the help of the American Civil Liberties Union, the ALA challenged CIPA in a lawsuit, *United States vs. American Library Association*. A district court held in 2002 that the application of CIPA in public libraries was unconstitutional, but the Supreme Court later overturned that decision based on the fact that an adult patron in a public library could request that filters be disabled. No challenge to CIPA in school libraries has been made, but the ALA recommends that school librarians remain aware of how Internet filters work in their schools, and what kind of material they may or may not be blocking. Because of their ineffectiveness, filters often block constitutionally protected material and librarians and teachers should be able to remove filters in such cases (Chmara 2010).

Besides the legal and technical issues discussed above, the ALA also contends that filtering through CIPA can and does widen the digital divide. The digital divide is the large disparity in Internet access between the wealthy and the poor: Internet access in America is expensive and not something all families can afford. The divide also cuts across geographic lines; rural areas are far less likely to have broadband or other high-speed Internet connections (Kranich 2004).

As American schools are funded by their local communities, schools in poor urban and rural areas are more likely to rely on government funding and E-rate discounts for Internet access, and are therefore more likely to have filtering software. Additionally, children in these areas are less likely to have Internet access at home due to cost or availability. By contrast, children in wealthier areas may still have filtered access at school, but they are more likely to have unfiltered access in other ways, especially from their homes. This imbalance in Internet accessibility has an impact on students’ digital literacy and widens the digital divide (Kranich 2004).

The ALA also has a long history of defending libraries against censorship. Banned Books Week is one of their most high-profile programs and their Office of Intellectual Freedom frequently offers advice and sometimes legal assistance to librarians dealing with patrons or school boards demanding the removal or restriction of certain books. The ALA prides itself on defending citizens’ rights to read and access whatever material they choose. This dedication to intellectual freedom clearly

also extends to Internet access. In regards to the Internet, the Intellectual Freedom Manual (a publication of the ALA) holds that in America, parents are primarily responsible for children's Internet use and the prohibition of certain kinds of Internet use, especially social media, is counterproductive and does not teach Internet literacy (Intellectual Freedom Manual, 2006).

Australian Legal Context

Unlike the United States, Australian citizens have no protected right to free speech. The High Court has ruled that there exists an implied right to political communication, but even this is not absolute (Bambauer, 2009). Thus, the legislature has the power to limit speech in certain ways, which it has taken advantage of.

Currently, Australia has a classification system for films, games, and other media including online content through the Australian Communications and Media Authority (ACMA). ACMA's classification scheme has several categories of "prohibited content" which includes "material that is classified as X18 (non-violent, sexually explicit activity between consenting adults), R18 (likely to disturb or harm minors), RC (refused classification), and, in some cases, MA15+" (Bambauer 2009, p. 503). The 2007 legislation would have required ISPs to filter and remove this prohibited content for all users, no matter their age or status. It is also important to note that it is not actually illegal for adults to have some of this prohibited content; much of the R18-classified material, for example, is perfectly legal (Bambauer 2009).

Though the legislation never passed and was dropped entirely in 2012, the sentiment has not gone away and conservative lobby groups are still pushing for stronger government monitoring of the Internet. These groups, which include the Australian Family Association, the Australian Christian Party, and the Family First Party, have been advocating for ISP-level filtering for years and were strong supporters of the 2007 legislation (Simpson 2008).

ALIA and ASLA

The Australian Library and Information Association (ALIA) and the Australian School Library Association (ASLA) have paid little attention to censorship in school libraries. Two Australian librarians surveyed the issue in a 1993 book and concluded that "censorship in Australia school libraries is widespread and that [censorship] ought to be a matter of concern to teacher-librarians... and associated professionals" (Williams and Dillon, 1993, p. v). As this book was published prior to the wide availability of the Internet, it concerns itself mostly with incidences of book banning in school libraries. ALIA and ASLA did and still do have statements promoting intellectual freedom in schools but otherwise have said very little on the subject. Unlike in the United States, there has not been any legal action in favor of intellectual freedom for students in Australia.

While ALIA came out against the Labor Party's filtering legislation in 2007, they concerned themselves only with public libraries and broader intellectual freedom rights, rather than children specifically. Their main concerns were the restriction of adults' rights to access content.

The only significant action concerning children and their interaction with the Internet was the "13 Project," an initiative to "help kids stay safe online" (ASLA 2013). A joint effort from ALIA, ASLA, and the Integrated Library System provider Softlink, the 13 Project focused on curtailing cyber-bullying and protecting children from illegal content and security breaches. ALIA and ASLA are especially interested in this cyber-safety campaign because of "the special role of school libraries as a place where students often access online resources, and the opportunity library staff have to promote cybersafety [sic] information" ("13 Project Announcement", 2013). This initiative positions school libraries and librarians as the protectors of children online and focuses most of its efforts on cyber-safety in schools rather than at home.

In addition to the 13 Project, ALIA and ASLA have been involved in the Safer Internet Group (SIG), a coalition of school- and Internet-related organizations - including corporations such as Yahoo and Google - who submitted a paper to the Australian legislator's Joint Select Committee on Cyber-Safety. This submission argued in favor of efforts that would keep children safe online while not promoting wholesale censorship (such as that promoted by the Labor Party's proposed legislation). The paper proposes a five-point plan to accomplish this:

1. More effective education
 2. Comprehensive policing of illegal materials on the Internet
 3. User tools that work
 4. A new dialogue about Internet safety
 5. Targeted research of Internet risks and opportunities for young people"
- (Safer Internet Group Paper, n.d., pg. 2)

Censorship is mentioned nowhere in the Safer Internet Group paper, though there are references made to the highly restrictive nature of the Labor's original legislation. The Safer Internet Group were proposing an alternative to the Labor bill but they did not take the free speech angle, as they are still more concerned about protecting children online than promoting unrestricted access to the Internet.

Finally, the ALIA started a lobbying initiative in 2015 called FAIR: Freedom of Access to Information and Resources. Not strictly an intellectual freedom effort, FAIR does emphasize ALIA's opposition to nationwide filtering efforts and the idea that there should be equity of Internet access in Australia. One of their highlighted issues is "Cybersafety [sic] and problems with Internet filtering" (FAIR website), however, once again, no mention is made of the problems with filters in schools specifically. This issue draws significantly from the Safer Internet Group

paper, citing education, policing, and “technical measures” as ways to keep children safe online. They remain staunchly opposed to nationwide Internet filtering on the same technical and intellectual freedom grounds as the ALA, but filtering in schools and for children seems to be the exception to this opposition.

IFLA Code of Ethics in Comparison to ALA and ALIA

The International Federation of Library Associations (IFLA) has drawn up a code of ethics for their member associations. It is intended to be a guide for individual associations’ codes of ethics, and full compliance with the code is not expected. However, the Code of Ethics can be regarded as a norm for member library associations, especially those in Western countries that tend to have similar progressive values in terms of library and information policy. The American and Australian library associations are both members of IFLA.

In regards to Information access, the IFLA Code of Ethics states: “Librarians and other information workers reject the denial and restriction of access to information and ideas most particularly through censorship whether by states, governments, or religious or civil society institutions” (IFLA, 2012). Censorship is not defined, but the idea is clear: intellectual freedom should be respected and censorship opposed, regardless of how it is defined.

The ALA has a Code of Ethics and a Library Bill of Rights. In their words, the code of ethics “states the values to which we are committed” and includes a declaration to uphold the principles of intellectual freedom and “resist all efforts to censor library resources” (ALA, 2008). The Library Bill of Rights are basic policies that should guide individual libraries’ policies, and the third statement concerns opposition to censorship: “[l]ibraries should challenge censorship in the fulfillment of their responsibility to provide information and enlightenment” (ALA, 1996).

In addition to the Bill of Rights itself, the ALA has helpfully provided an interpretation of the Library Bill of Rights in regards to Internet filtering. In this document, the ALA reiterates its stance on filtering in school and public libraries: “The negative effects of content filters on Internet access in public libraries and schools are demonstrable and documented. Consequently, consistent with previous resolutions, the American Library Association cannot recommend filtering” (ALA, 2015).

It is very clear that the ALA policies are committed to combating censorship, like the IFLA Code of Ethics. It is also clear that the ALA is committed to intellectual freedom to children as well as adults, at least where Internet filtering is concerned.

ALIA has one relevant document: their Statement on Professional Conduct. This includes a statement that library and information professionals should “[encourage] intellectual freedom and the free flow of ideas” (ALIA,

2007). There is no statement that mentions pushing back against censorship per se, but the statement promoting intellectual freedom can be interpreted to imply such action.

The ALIA has also published a statement endorsing the IFLA Code of Ethics, which presumably includes the provision to deny censorship. Their action regarding the Labor filtering legislation indicates their commitment to denying censorship – at least when it concerns adults.

Intellectual freedom and free speech are issues that lie at the heart of liberal democracies. As we consider what kinds of rights are guaranteed to citizens of our democracies, it is clear that children ought to be included in the conversation. Librarians of the United States have put some effort into defending the free-speech rights of minors, and perhaps Australian librarians should do the same. Even though Australian citizens are not guaranteed free-speech rights by their constitution, librarians over the past ten years have defended adults against censorship online. Why not do the same for children? Children should be kept safe on- and offline, but safety measures can err too far on the side of caution.

The American Library Association has good reasons to not recommend the use of Internet filters in libraries and schools. Australian librarians could use the ALA’s resources to evaluate how and why filters are being used in their schools and take a stance, one way or another. The current Australian focus on online safety is valuable, but one wonders what might be lost in this effort to keep children safe - what kind of digital literacy opportunities are missing, or how the use of filters could be widening the digital divide. More research ought to be done on this subject, and one hopes that librarians will take these questions seriously in the future.

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KEYWORD SEARCHING FOR VISUAL INSPIRATION? MEETING THE IMAGE SEARCH NEEDS OF ARCHITECTURE STUDENTS

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Keywords: art and architecture libraries, image retrieval, image browsing, visual inspiration, hybrid library, reference services

Abstract

Architecture is an inter-disciplinary field, with an emphasis on creative design skills. Students' questions at the library's reference desk relating to their studio design work can be classified into seven categories: architectural history, building types, materials and technologies, construction details, design manuals, precedents and case studies, and visual inspiration. Whereas the first six are similar to those encountered in other disciplines, and can be fulfilled in a straightforward manner using standard library search and discovery tools, visual inspiration poses a challenge to students and librarians.

Where does this challenge originate? For over a century the tools and methods used by libraries for subject access, have been developed for predominantly textual materials. A key assumption underlying classification and indexing is that a document is about something, and that this something can be expressed in words. But how can this notion of aboutness be extended to a medium using nonverbal symbolism? This implies that the library's search and discovery tools and the accepted models for information seeking behavior are not well suited for visual searching.

Recent studies in human cognition have shown that the brain is capable of rapid image processing, requiring just a few tens of milliseconds to recognize an image that meets a predefined criteria presented among other images. Therefore browsing images appearing in search results is more efficient than browsing text. This can be implemented by extracting images from documents in databases and library collections, and displaying them as thumbnails in previews of documents that appear in search results.

Introduction

Architecture is an inter-disciplinary field drawing on several disciplines: art and architectural history, engineering and the social sciences, while being at the same time an applied art, with a strong emphasis on creative design skills.

The issues raised in this paper were stimulated by the author's experiences during the last 5 years as a reference, collection development and faculty liaison librarian at Tel-Aviv University's D. Azrieli School of Architecture. During this time it was observed that students' everyday questions at the reference desk relating to their studio design work could be broadly classified into seven categories: architectural history, building types, materials and technologies, construction details, design manuals, precedents and case studies, and *visual inspiration*. Whereas the first six are similar to those encountered in other academic disciplines, and could be fulfilled in a straightforward manner using standard library search and discovery tools and subject databases, it was the seventh category *visual inspiration* that usually posed the greatest challenge to the students as well as to the librarians.

Previous Studies

The information seeking behavior of architecture students, studio art and design students, including new practitioners in these field has been under-researched in comparison to other academic disciplines (Bennett, 2006; Cowan, 2004; Hemming, 2009; Lo & Chu, 2014; Mason & Robinson, 2011; Makri & Warwick, 2010). Some of these studies are outdated being more than ten years old, pertaining predominantly to printed materials (Beaudoin & Brady, 2011; Makri & Warwick, 2010), and to users that are quite different in their information behaviors from the Millennials that comprise most of today's students or new practitioners.

Visual information and textual information are equally critical in the collections of art, architecture and design libraries, as users require a wide selection of visual materials to document, compare and inspire (Craig, 2003). However, only a handful of studies specifically addressed the use of images by these user groups (Beaudoin & Brady, 2011). Greer (2015) emphasized the importance of information seeking by student studio artists for "forging connections with larger concepts and cultural references", and as part of the inspiration seeking inherent to an artist's formation.

Inspiration

Unlike other academic disciplines, visual inspiration plays a central role in the study and practice of architecture (Beaudoin, 2014; Beaudoin & Brady, 2011; Makri & Warwick, 2010), as well as in other fields of studio arts and design (Gregory, 2007; Hemming, 2009; Littrell,

2001; Lo & Chu, 2015; Mason & Robinson, 2011).

In a study of graduate students in architecture Makri and Warwick (2010) reported: "A key overarching theme was that inspiration was found to be both an important driver for and potential outcome of information work in the architecture domain, suggesting the need to design electronic information tools for architects that encourage and foster creativity".

Gregory (2007) found that the main reason for browsing library collections by studio art faculty was to seek inspiration. Beaudoin (2014) noted that images were most often used by architects and artists for stimulating inspiration in the beginning stages of the creative process.

Information Encountering

Erdelez (1999) defined information encountering as: "a memorable experience of an unexpected discovery of useful or interesting information. Information encountering occurs when one is looking for information relating to one topic and finds information relating to another one. However, it also occurs upon bumping into information while carrying on a routine activity".

There is evidence that information encountering plays a role in the information behaviors of architects and studio artists. Mason and Robinson (2011) noticed that emerging artists were "not actively searching for inspiration in the world around them but being inspired all the same by odd occurrences, daily life or things they find lying around". Makri and Warwick (2010) found that information encountering was important to the architecture graduate students in their study, as it gave them "a feeling of inspiration because much of the encountered information provided ideas for their current design project or for future projects." Similarly, Beaudoin and Brady (2011) reported that for architects and artists "it is likely that direct personal engagement with visual stimulus in their daily lives plays an important role in what each of these two groups perceive as image seeking".

Image Searching

For more than a century the tools and methods used by libraries for subject access, most notably classification and indexing, have been developed for subject access to predominantly textual materials, as used for most academic disciplines. A key assumption underlying classification and indexing is that a document is about something, and that this something can be expressed in words. But how can this notion of aboutness be extended to a medium using nonverbal symbolism? An image document that is wordless may defy subject indexing and classification (Svenonius, 1994). Thus, the standard search and discovery tools as well as the accepted models for information seeking behavior are not well suited to the task image searching.

Additional complexity arises “because some classes of image[s], especially in architecture, engineering or medicine tend to occur as adjuncts to parent records, and it is these parent records which are usually the object of retrieval, rather than the images themselves” (Enser, 2008). Thus, important images, e.g. plans, maps, drawings, etc. which comprise part of a parent record are rarely indexed explicitly, while the parent record may receive only a vague mention concerning the existence of visual material. Similarly, Gregory (2007) noted that most online library catalogs do not index book illustrations.

Browsing Images vs. Browsing Text

Recent studies in human cognition have shown that the brain is capable of extremely fast image processing, requiring just a few tens of milliseconds to recognize an image that meets a predefined criteria presented among other images (Potter, Wyble, Haggmann, & McCourt, 2014). So while browsing long lists of search results represented as text is tedious and inefficient, which is the reason for the traditional librarian emphasis on achieving high precision in online searches; for images it may actually prove more fruitful to allow rapid browsing of a large number of search results presented as thumbnails without attempting to increase precision at the inevitable expense of decreasing recall.

A common thread in the information seeking studies of architecture students and studio artists is their preference for browsing (Gregory, 2007; Hemming, 2009). An important advantage of browsing is that relevant images could be identified or recognized almost instantaneously by users (Albertson, 2015). And being able to browse thumbnails of images in search results is important because it saves users’ time (Makri and Warwick 2010).

Some studies reported that browsing promoted inspiration, and was therefore considered by users as a worthwhile activity. Not being as narrowly focused as searching it supported accidental discovery (Gregory, 2007; Littrell, 2001), and often took place as a preliminary activity before becoming more specific when looking for inspiration (Mason & Robinson, 2011).

Assessment of Current Search Tools

Google Images

Beaudoin and Brady (2011) as well as Marki and Warwick (2010) reported that Google Images was the main source used by architects and architecture students for searching images.

Although it contains many millions of images, and is a very powerful and useful tool for many user groups. However, its weakness as an image search tool for architecture students lies in not being able to limit search re-

sults to images within scholarly publications or to images in books, i.e. those images that are parts of documents indexed by Google Scholar or Google Books respectively.

Library OPACs or Search and Discovery Tools

Library automation system vendors have made great progress in improving the graphical user interfaces, for example by allowing searchers to limit results by facets. Catalogers have added additional content, such as tables of contents for publications. Nevertheless, not much has been done to provide subject access to images within publications, as it would require enormous effort. However, the author of this paper believes that providing thumbnails of the images contained in publications, that would be integrated in the display of search results, or could be browsed along with the bibliographic descriptions of items, would prove a desired and useful aid. This is in accordance with the general preference for browsing among this user group. For electronic publications this could be automated by using commonly available software for extracting images from the files of the retrieved items, which are in standard electronic publishing formats.

The Disciplinary Bibliographic Databases: The RIBA’s API, and The Avery Index

Both the Royal Institute of British Architects (RIBA) Architectural Periodicals Index (API) (Kamen, 1983) and Columbia University’s Avery Index to Architectural Periodicals (Fabian, 2011) should be commended for the high quality of indexing at the documents level and breadth of coverage of the literature of architecture. However, neither one has changed significantly with regards to what is included in the indexed record in the last twenty years, since the author of this paper has used them for the first time. It is unfortunate that they have not been the subject of recent user studies. It would be fruitful to add indexing for images that are part of parent documents, i.e. architectural publications, as well as adding modern day database search features: full-text document search, previews of images and search results, and links to cited and citing documents, bringing them up to the highest standards of present bibliographic databases in other disciplines.

Conclusions

The Need for Seamless Integration of Resources in the Hybrid Library

The main paradigm for libraries of the last twenty years has been of the hybrid library, a “hybrid environment where electronic and paper-based sources are used alongside each other” (Oppenheim & Smithson, 1999); recognizing the diversity of materials in the library but striving to unify their search and discovery by pursuing seamless integration of resources. An overarching theme of this study is the need to close the gap in the tightness

of the integration of the search tools with their objects, the resources used by the users.

Develop Library Tools and Services to Meet the Demands of Today's and Tomorrow's Students and Professionals

Most of today's students were born after 1993 and are Millennials or members of the Google Generation. Rowlands et al. (2008) described them as "diverse information seekers", exhibiting "a strong preference for expressing themselves in natural language rather than analysing which key words might be more effective", with a preference for visual information over text, demanding library "services that are integrated and consistent with their wider internet experience", and having a low tolerance for barriers to access such as additional log-ins or print formats.

Enable and Promote User Generated Tagging

"The phenomenon of social tagging has brought a new dimension to the representation of the semantic content of visual materials... the ability to contribute personal tags to image and video metadata challenges the supremacy of professionally sourced, authoritative subject representation, whilst introducing opportunities for beneficial enhancement of both exhaustivity and specificity in subject indexing" (Enser, 2008).

Enabling and encouraging the use of user generated tagging in the context of library search and discovery tools could alleviate some the vocabulary problems caused by the difference in terminology used by librarians and scholars vs. practicing architects or students (Woll, 2005), as well as allowing useful notes concerning some aspects of documents, that in the view of a professional indexer do not merit specific mention within the context of their parent record.

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THE LIBRARY-SCHOOL PROJECT – IMPROVING THE LIVES OF CHILDREN THROUGH THE LIBRARY

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Abstract

In the Barceloneta, a neighbourhood of Barcelona (Spain) with a high level of immigration, 31,3% of the total population (Ajuntament de Barcelona, 2015), there's the Fraternitat library. In this library, they are carrying an innovative project to bring the children of the neighbourhood closer to the library so they can educate and improve their quality of life. It is innovative because the activities are directly designed with the collaboration of the teachers of the neighbourhood's schools so they show them how useful can be the library for them.

In this article, we analyse this project by carrying an important fieldwork where we asked everyone involved in the project: children, teacher, parents and librarians. In this surveys we found that even though the children likes the activities, half of them don't go to the library after school, but we also find that the number would be lower if it wasn't for the project because their parents are not interested in the library so they don't bring them.

Introduction

Barcelona is a city with a total of 1,604,555 residents (IDESCAT, 2015). It is divided into several neighbourhoods and in this article, we will focus specifically in the district of Barceloneta, a coastal suburb with many immigrants, that form 31.3% of the total population (Ajuntament de Barcelona, 2015), that come from many different countries, and it increased 2.6% since 2014 (Ajuntament de Barcelona, 2015).

Barcelona has a network of libraries led by the Delegation of the city. The network carries out diverse projects for everyone, promoting something as essential and necessary as reading, for example “Bona Lletra” (Libraries of Barcelona, 2013) a plan where students become accustomed to reading from a very young age, or the “LECX-IT” (Ajuntament de Barcelona, 2014) that tries to involve schools and families to promote reading, and thus improve the performance of students in school.

According to surveys made in the last couple of years by the Barcelona City Council, Barcelona Library Network Services has been a more positive rating steadily. Even this year in an international book congress called Liber it has won the award in 2016 to promote reading in libraries open to the public for its service and relationship with users. But there is still a long way to go, since less than half of the population (46%) have a library card, and the use of the younger population of this service is still very low with 16.3% this year (Diputació de Barcelona, 2015).

That is why in this article we want to focus on a very innovative project which is being carried out to bring children and young people in the neighbourhood of Barceloneta to the library, the school-library project. This project aims to motivate children to use the library through school, specifically through activities directly consortium with the school, so that children see the importance of the library and how it can help improve their quality of life. Yet to be assessed is often very difficult for the activities carried out by the library to motivate children to use them and take advantage of all the services it offers, which is why the paper is a critical analysis of this project.

Preparing this article, we have done a significant work in the field, we asked about the project to all those involved: first the library but also teachers, parents and pupils in one of the schools, the Mediterrània school, that has participated in the school-library project from the beginning. And we know the results by measuring their opinions towards the project.

Library context

The library La Barceloneta-Fraternitat is a public centre opened in 2001 by the Municipal Libraries Network of Barcelona.

One of the characteristics that make it special, apart from their subject specialization, are all projects carried out with the collaboration of the entire neighbourhood.

The neighbourhood itself is well known for its high immigration, but also for their constant movement. For this reason, centres like schools (Mediterrània. Alexandre Galí and Sant Joan Baptista) have had to adapt not only to language difficulties but also the high probability that a student may not complete the course and another one arrives in the middle of the course. But this does not only happen in schools, the library also need techniques to approach this whole people, starting with the children, because they are the future of not only the library but also of society. And with that the library La Fraternitat know the importance of children and always try to follow the public library manifesto of UNESCO (UNESCO, 1994), as the director says. The particular case of Barceloneta-La Fraternitat is that the children who come to visit it, often use the library as another after-school or centre reinforcement for their studies, since many of their families can not pay a real cost price of an after-school. The library has meanwhile started helping those children who need help.

School-library project

Everything began in 2009 when, thanks to a grant from the neighbourhood without a defined purpose, the idea of a book born in collaboration with various associations and services of the neighbourhood: the historical memory of Barceloneta, the adult school, three primary schools and the library Barceloneta-La Fraternitat (who had the idea and energize the process). Thanks to the enthusiasm of the final publication of the book “ABCedari Barceloneta” collaborative relationship between organisms changed to positive, leaving a desire and motivation to continue participating in other activities and giving room to the creation of the project of which this article is based.

First of all, school-library project is under construction, and constantly growing, as being a creation of different people together, both the library and the schools.

The first idea was that they do not wanted to continue doing the usual activities within a range of helpful resources for learning such as the trip to the library, where you see the centre as if the bookshelves and the books were part of a museum, because one does not interact with them. They have the desire to create an innovative project from scratch, unique as it is the only library project involving children that is done directly collaborating with the schools.

Thus, was born Read to Read, it started in the academic year 2011-2012, it was held in the library and with the participation of Mediterrània and Alexandre Galí schools. It was an interscholastic project, that means that the classes of the two schools joined together and

then they were separated by groups, with the idea that in the library you aren't always with the people you know in your class group. At that time, all this consisted more of a program of motivation and incursion reading, but always giving a step further (even considering the age of the students). This reading plan is divided into three parts: image reading (comics and album), reading aloud (poetry) and reading and discussion (prose), all counting with the participation of professionals in the like: illustration, poetry, prose and some school teachers. Also, to give a visual step each year they asked an artist to perform an installation relating the experience of reading students. In 2011-2012 was in the hands of Raimon Carnicer and in 2012-2013 of Daniel Rojas.



Figure 1. The work of art that Daniel Rojas created in the library. Every little fish has the poems that the children worked in the project and the big fish has all the faces of them. Copyright: Daniel Rojas

Currently, the interscholastic project does not longer exist because some proper factors of time and the *modus operandi* between the two schools, which are very different. But they are still conducting activities in different schools separately converted into small projects, and it's being involved in the educational plan in the district of Ciutat Vella. This new phase can be considered as a second stage where it was decided to change and return to dialogue with teachers to know what they really want and need, because the library can always energize, but the ones that really know the students and know how to educate them are their own teachers.

Appraisal of the involved in the project

To evaluate the project develops from the library, we asked the opinion of everyone involved first the library and then we surveyed the teachers, pupils and parents of a school participating in the project: the Mediterrània school. We have contacted this school because from all the participants in the project, because it has the higher percentage of new students, and also has its own project to promote reading (that's why they see it as a clear reason of great importance to the relationship between the school and the library).

To start, we did an interview with the director of the library on the activities carried out and what was her opin-

ion. In this interview, it was observed that there was a great involvement from the library in order to motivate children to use the library: they were putting lots of effort and making attempts to reinvent themselves to make more interesting activities for children. However, he also admitted that there was still a long way and that there were many children who were not going to the library.

Surveys were made to students from 3rd and 5th grade, because they were the groups that carried out the activities of the library the previous year. And the surveys of the teachers were answered by the kindergarten and the 2nd, 4th and 6th tutors, the courses that carried out the activities. The director of the centre also answered to the survey as she has an overview of the activities carried out in all courses.

In surveys made to parents we did not get a significant response because the number of responses was very low. Many families found it difficult to answer because of the language and in general they were not motivated to respond a survey about a school activity.

The results we obtained from children surveys stated that 86% enjoyed the activities they had done in the library. In 3rd grade all the students enjoyed the activities, but in 5th grade 29% of the students had not liked the activities.

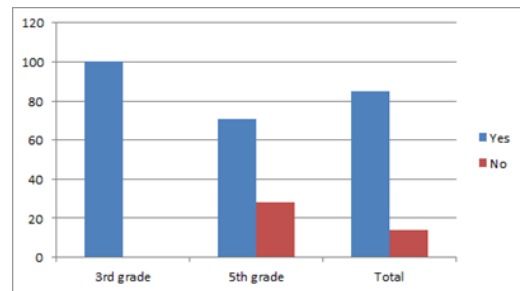


Figure 2. This graphic shows us the percentage of children that liked the activities of the project

Nonetheless, despite the high percentage of children that enjoyed the activities, less than half of the children (47%) goes to the library outside school hours. When it was asked if anyone was brought by their family to the library, half of the students responded that if it wasn't for the school nobody would have taken them.

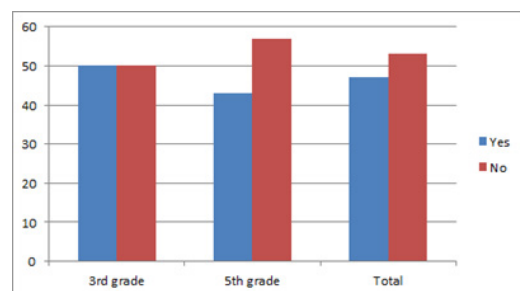


Figure 3. This graphic shows us the percentage of children that goes to the library after school

Another worrying aspect is that 33% of children say that when they go to the library they only use the library computers or the Wi-Fi. Again, this percentage is higher in students of 5th grade, where 50% of students go to the library to use only the computers or the Wi-Fi.

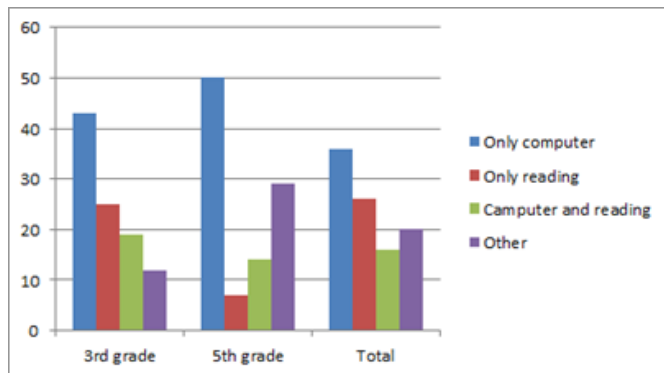


Figure 4. In this graphic we can see the percentage of what children in 3rd and 5th grade liked to do when they were at the library

In surveys made to teachers, it could be seen that they all share the same opinions (except in some aspects). First, we asked if the library was considered a useful service to the age of children they were working, all of them confirmed that the library is a very useful service, especially because it motivates children from an early age to read. Even a teacher praised the fact that the library offers services that otherwise could not be accessed because of their economic level.

In assessing the activities carried out in the library, they also agreed that as the activities are very dynamic and playful, it favoured students to show more interest in the library and reading in general. However, when we evaluated if children really go to the library, primary school teachers had a very real vision of the behaviour of their students, so they valued that only half of the class must go to the library, which were confirmed in the children's surveys. When we asked if they believed that the number of children who are library users would be different if it was not carried out by the library-school project, all of them say that the number would be much lower. But this changes in kindergarten, where we say that probably only 20% of children go to the library, because in that age children are absolutely dependant of their parents and there are few who bring them to the library. Therefore, when assessing whether the project library-school encourages children to go, they were not very clear, because once again it is not up to them but to the parents, and the impact of this activity is minimal. However, the assessment of the project is positive because they believe that kindergarten's stage is where children create the foundations of a taste for reading.

Another aspect in this case in which all the teachers agree, both kindergarten's and primary's tutors, is that the library is a tool that promotes social inclusion. However, the perception of teachers is different when they are asked about the reason that leads its students to become library users: while some considered that

there was the suggestion of the school (for information search), only a small part think that it was because they like the library, also others say that it is a meeting place where you have at your disposal services that there may be interesting. Students in kindergarten apparently made more use as a recreational activity.

Conclusion

In general, we see that the work done by the Library of La Fraternitat in the relationship with schools is a very ambitious project that denotes the will of a service to the public and is made from the aim of achieving social inclusion to promote reading and access to culture.

Since this project has been developing, it has not been set elements of control or indicators to assess the effectiveness of the program and this has led us to conduct surveys to know the opinion of those that are involved (students, teachers, parents).

The aim of introducing children to the library and the services they offer reached the objective and all the children are left with the memory of positive activities. However, this project didn't achieve its objective completely because although many of the children liked the activities, less than a half became library users. The main reason are the families of children, that do not encourage them to go to the library. The little interest of the parents towards the library it is shown through the low response to the questions we asked them.

The library Barceloneta-La Fraternitat considers the early education of children is really important so they can value the library, because when they use the library they can gain more culture and education, a basic aspect that improves life quality.

However, the activities carried out in the school-library project are very dynamic and have a lot of significance for the students because there are directly related to what they are working in school (as mentioned, the library designs the activities after speaking with teachers and they notify content they are working with children to the library). Children can really see that the library is a useful tool which can be used to support education and it is also a place where they can have a good time. Through the coordination established with teachers, it also encourages the students to go to the library to do their homework and to find information.

After all, as shown in the surveys and how the director of the library itself told us, the older the children are, the more difficult it is to make these activities enjoyable and useful, while none of the children of 3rd grade said they didn't like the activities carried out in the library, there were a few of 5th grade who said that they did not enjoy them. And even though it is also a project that would be even interesting to do in High School, it is not carried out in any school; in fact, outside the project library-school,

the library La Fraternitat did some activities for teenagers, but they had very little success.

Therefore, we can say that we have a project full of enthusiasm and a library where is given much importance to children and where they are trying every day to bring closer the library to the children and thanks of that, improving their life quality.

Acknowledgements

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MAKING THE CASE FOR INTERNATIONAL LIBRARY COLLABORATIONS WITH THE GLOBAL SOUTH: A COMPARATIVE CASE STUDY OF BODLEIAN LIBRARIES, UNIVERSITY OF OXFORD

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Keywords: international collaborations, north-south collaborations, Bodleian Libraries

Abstract

North-south partnerships are valuable tools, not only for the scientific development of southern institutions, but also for the improvement of northern ones. What cross-border collaborations does The Bodleian Library have with institutes or libraries in the Global South? What do these collaborations consist of? How are they built and sustained and why?

The investigation is based on a number of case studies (The Latin American Centre Library, The Law Library, The Taylor Institution Library and The Social Science Library) all within The Bodleian Libraries system at The University of Oxford. The case studies were chosen, based on work placements undertaken at these institutes, with the addition of The Law Library, as a widening of the sampling. Interviews were chosen for this enquiry through snowball sampling.

This research found only one current partnership with a country in the Global South, between Myanmar and The Law Library. Former collaborations studied here are the exchange programme with Eastern Europe and the Refugee Studies Centre library networks. The latter two however, dwindled with the rise of the internet. The perception that “everything is now online” made some librarians feel a gap has now been filled. North-South collaborations however, are needed today more than ever due to the growing knowledge gap between the North and the South.

Introduction

The University of Oxford Bodleian Libraries has had, since its early beginnings, a lot of international weight and recognition. Its prestige and global standing has meant that it has been a desirable destination for scholars and visitors, but also a global centre of knowledge. Having the opportunity to investigate something about The Bodleian, I wanted to enquire about its international collaborations, particularly with the Global South. The reason for this, is the importance of North-South collaborations for science and knowledge today. North-South partnerships are valuable tools, not only for the scientific development of southern institutions, but also for the improvement of northern ones (NCCR, 2013).

Research today is a globally linked phenomenon, due to the internet, the growing strength of Open Access, but also the internationally growing personal networks of researchers. Research libraries, whose sole purpose is to support research and scholarly communication, must align themselves to this trend (Mark, 2007). International collaborations between northern institutions are growing. The problem is that collaborations with the South, are not growing to the same extent, and our “knowledge gap” between North and South is widening. In order to build research and technological capabilities in the South, collaborations with the North are essential (Velho, 2002). As institutions of democracy, libraries have an interest in promoting sustainable development globally and should therefore be at the forefront of collaborations with the Global South, or at the very least helping to promote them.

I wanted to find out how some of the libraries of the Bodleian library system interact internationally, to see what lessons can be learnt from their experience. What cross-border collaborations do The Latin American Centre Library (LAC), The Taylor Institution Library (the Taylor), The Law Library and The Social Science Library (SSL) have with institutes or libraries in the Global South? What do they consist of? How are they built and sustained and why?

Research Methodology

Interviews were chosen for this enquiry through snowball sampling. Documentation was offered and used by some of the informants to support and complete their answers.

Site selection

This investigation is a preliminary and convenient study of the LAC, the Taylor, the Law Library and the SSL, all within The Bodleian Libraries system at The University of Oxford. The libraries were chosen, based on work placements undertaken at these institutes, with the addition of The Law Library, as a widening of the sampling.

Population

The first stage of the population sampling process was to set up open and informal interviews or orientation conversations with each main contact at the institutions of my work placements: Subject Librarian and Team Leader of The Taylor Institution Library, Operations Manager and Head Librarian of The Latin American Centre (LAC) and The Bodleian Social Science Librarian and Subject Consultant of the Social Science Library (SSL). These start-off interviews were the beginning of a snowball sampling process, which led to the interviews with the people in charge or involved in, the specific international collaborations. They also led to The Law Library as an example of a Bodleian library with many current international collaborations and therefore a good point of comparison.

Delimitations

The three main libraries studied, were not of my choosing due to the workplaces being selected for me by the Bodleian beforehand. Normal limitations of time and resources are present in the investigation. I believe that this research lacks a crucial interview from the special collections department at Osney Mead, which was brought to my attention at the end of the research period. As a preliminary study, there is a lot of research missing from this study, such as further and more in-depth interviews with the Law Library. Also missing is the impact and effects of these collaborations on the institutions of the Global South.

Findings

Phase 1: Open and informal orientation conversations

Subject Librarian and Team Leader at the Taylor Institution Library

There were no current international projects at the Taylor that the interviewee knew of, except the international library loan scheme. The Taylor lends to, and from, libraries in Europe and the US. Even though they house a Latin American collection, for inter-library loans on Latin America they use the American libraries, as they have the best collections on Latin America.

I was directed to the Law Library as an example of a Bodleian library that undertakes international projects and with many countries outside Europe.

Operations manager and Subject Librarian for the Latin American Centre (LAC)

The LAC is very small and cannot support financially or otherwise any international projects at the moment. There is a lot of personal networking that goes on internationally. The centre is staffed mainly by international scholars and thus has many international connexions. The library does networking with US libraries due to

their closeness with Latin America, but this means seminars and conferences and personal networking. These however do not materialise into outright collaborations for the libraries.

Bodleian Social Science Librarian and Subject Consultant of the Social Science Library (SSL)

There are no international projects currently at the SSL including no international library loan system either. Any international collaborations at the SSL would be through the Migration Studies division in the library. The SSL integrated the Refugee Studies Centre (RSC) collection in 2009 into its physical collection. So, the networks that the SSL currently has are all linked to the RSC. This is the side of the library that has a history of international collaborations with the Global South.

Phase 2

Interview 1. International library loan main Bodleian Library

The international inter-library loan scheme is not a project, but it is a collaboration. It is a decentralised system of reciprocal agreements based on individual requests for documents. The informant did not know when this collaboration started but knows that it has been around for “many” years / early in the 1900s perhaps. Each Bodleian library decides whether it wants its inter-library loan scheme to be international or not. The document delivery services team decides each request on a case by case basis whether they will go ahead with the international inter-library loan or not. They prioritise preservation and conservation rather than international lending.

This scheme is based on non-formal agreements, which the informant described as “an old gentleman’s club”. There are some libraries they work more closely with than others (the names of these libraries were not given). They only lend to well known, trustworthy libraries. The countries used most in these agreements are the countries nearest in vicinity to the UK. The informant would not say whether they lend to countries in the Global South. There are more requests from abroad to the Bodleian than there are from the Bodleian to libraries abroad. That is due to the nature of the Bodleian collection, which is one of the largest in the world.

The benefits of this collaboration are for the users of the library and their research. The library benefits through the end result of users’ research and study. Disadvantages can be that some documents might tear or get lost, but as they are not historically valuable and can easily be obtained again then it isn’t considered a much of a disadvantage.

Interview 2. RSC Librarian

Pre-internet, the RSC library had links with many libraries and documentation centres around the world, particularly in the Global South. RSC library was a small documentation unit, in the International Development Centre at the University of Oxford. It started in the 1980s when

the founder Dr. Barbara Harrell-Bond began collecting field research, conference and seminar papers, agency reports, newsletters and working papers from a wide range of NGOs, academic departments and individuals, all on the issue of migration. The aim of Harrell-Bond was to digitalise this collection at a time when nothing was online, so that the Global South would have access to it. They created an online catalogue for the collection before the University of Oxford had an online catalogue for its own collection. This digital library of full-text documents was complemented by collections of partner institutions. Many other organisations donated documents to the RSC due to its Open Access policy.

It was the policy of dissemination and the success of the digital library, which produced the online resource Forced Migration, an international tool for policymakers, media or forced migrants themselves. It also brought a collaboration with UNESCO, and many documentation centres and libraries from the south. This was formalised in the establishment of networks such as Oxford Migration and UNITWIN-UNESCO in 1996.

From 1996, the RSC library received people from documentation centres around the world and trained them in the RSC classification system, Huridocs standards and the use of the refugee thesaurus created by UNHCR and used by all the refugee councils in the UK and Europe. The visiting librarians came from places such as Moi University Kenya, University of Dar es Salam, Tanzania and Chulalongkorn University, Thailand. The foreign librarians would return to their home institutions and adapt these classification schemes and what they had learnt for their own collections. The training was central to the network. Library staff at the RSC trained librarians from many countries and sent duplicates of grey literature and monographs to create the basis for new library collections in the Global South. Funds were made available for these people to fly over to Oxford and the university would host them. At the same time, the Oxford librarians would travel to these documentation centres to offer advice but also to learn from their experiences. Students joined these field trips as well. Most of the international collaboration occurred through these networks. UNITWIN-UNESCO was sponsored by UNESCO and was hosted by the RSC. Member countries were Jordan, Morocco, Mozambique, South Africa, Tanzania, Kenya, and Palestine, among others. The members of the network, worked democratically together in any decision-making process.

The links fizzled out with the arrival of the internet. All the documentation regarding migration is today found online and so are archiving procedures, rules and training programmes. Another factor for the decline of the collaborations was that many documentation centres were integrated with larger libraries, such as their university libraries. The same happened with the RSC, which became a part of the SSL.

Interview 3: Head of the Bodleian Law Library

From the get go the interviewee spoke about the importance of networks and international collaborations for law libraries. The Law Library has one of the biggest foreign law collections in the country and thus the international inter-library loan scheme is their most crucial and long-standing scheme. It is the need to share information more immediately with researchers and law firms around the world, which creates crucial differences between the Law Library and the other libraries. The Law Library carries legal documents of over 80 jurisdictions both online and in paper. As well as this, it has strong personal and professional connections to libraries around the world, and particularly with the Global South, where they travel to all year round to help train, build capacity and donate books.

The Law Library is one of the Bodleian libraries behind the Oxford University - Yangon University (Myanmar) partnership that aims to develop each other's higher education standards[1]. In November 2013, it donated 5000 books to Yangon's law library and in 2014 the librarian visited Yangon to teach development aid for law library facilities. The head librarian also has taught legal research methodology and the use of legal databases at Yangon. Yangon was also assisted in listing and numbering their law books. Major legal databases have been provided by the Electronic Information for Libraries initiative with advice by the Law Programme. These collaborative projects with Myanmar, as well as others, continue strong and have existed before the internet. Another of the reasons she believes the collaborations and networking of law libraries to be so good is because all law firms have libraries or archival systems, some that are small and thus need help from larger, or academic, law libraries.

Interview 4: Head of the Slavonic Section at the Main Bodleian and SSL.

An exchange programme existed until very recently at the main Bodleian Library's Slavonic section, which is now at the SSL. It was based on many individual partnerships with libraries all over the world. The majority of them ended in 2012. The Bodleian Library's exchange programme started in the 1970s due to the difficulty in obtaining books from the Soviet Bloc and the lack of hard currency of Soviet Bloc countries with which to buy foreign books. Agreements were made between many western libraries, meaning European Union and North American libraries and libraries in Soviet countries. The agreement at the Bodleian Library started with the Oxford University Press donating £30,000 worth of books to the Bodleian, for barter in exchange for books. 120 different exchange agreements were set up. The Slavonic section exchanged books with countries from the Soviet Bloc, and amassed a large Slavonic collection. Nevertheless, there was more than just books being exchanged. Librarians would travel to Russia and other Soviet countries to discuss and negotiate with their exchange partners. A lot of it was diplomacy and cultural exchange. There was a lot of building bridges and exchange of ex-

periences, practices and management structures. The agreement was not legally binding in anyway. Just honour bound. Oxford University Press funded the entire project with the Bodleian Library but soon it was realised that it was very expensive to maintain due to the labour intensiveness of the operation, the travelling to and from exchange places and the negotiations. The exchanges started diminishing once the soviet books were available on the market, mainly from the 1990s onwards. In the 2000s, many books and sellers were online, and it was cheaper for libraries to buy online than continue the exchange program.

Analysis of Findings

Of all the interviews made and libraries visited, only the Law Library has a current international collaboration with the Global South. The SSL, through the RSC, has had a number of very valuable collaborations with countries in the Global South in the past, which ended in the early 2000s.

International Interlibrary loans

What constitutes an international or cross-border collaboration was a source of confusion for some of the people interviewed. At the Taylor, their international inter-library loan scheme was not immediately considered an international collaboration. But for the Law Library, it is considered their "most crucial and long-lasting". International inter-library loan schemes are indeed collaborations of international partners, which are promoted by IFLA's Guidelines for Best Practice in Interlibrary Loan and Document Delivery (IFLA, 2009). Nonetheless, it is a collaboration which includes only institutions which are "trustworthy" or well known, and with collections large enough to be able to reciprocate. It would be interesting to find out to what extent to libraries in the Global South participate in international library loan schemes with northern institutions. It is a system that promotes international librarianship and has the potential to help many libraries in the Global South.

Building capacity

One of the most interesting results of the international collaborations investigated here, was the capacity building produced, in the case of the RSC, and continues to produce in the case of the Law Library. In the case of the RSC, building capacity was quite deliberate, to give the Global South access to knowledge about forced migration. Yet, there was a clear exchange of knowledge and building of capacity at both sides of the spectrum, simply due to the exchange of experiences.

Belonging to networks such as Oxford migration and UNITWIN-UNESCO really gave the RSC library a way to connect to libraries and centres all over the world and exchange experiences and learning tools. "It had very close links to NGOs, practitioners and policy-makers

worldwide” ... “The focus was on external users (of the library) as it was assumed that internal readers would most likely be catered for” (Rhodes, 2000, p 38). Today the RSC library is no longer exists.

The Law Library’s collaboration with Yangon University continues today and it is helped by the fact that this collaboration is one that is supported by the Bodleian’s overarching administration, and that other colleges and libraries are also involved such as St. Hughes College (The University of Yangon, n.d).

Regarding the cases of the RSC and Oxford-Myanmar, they are more beneficial to the institutions of the Global South. Yet, an end result is an exchange of knowledge. Exchange is clearly what the collaboration of the Slavonic exchange programme was meant for, and yet here we have another resulting consequence which was diplomacy between the Soviet Bloc and western countries.

The international collaborations that I found at these different libraries have all been started on a rather *ad hoc* basis, many times depending on the networking skills of the founder or head librarian. However, The RSC and Oxford-Myanmar collaborations both integrated these projects into the development vision of southern institutions and held a wider view of sustainable development.

The name of the University of Oxford seems to give these libraries accessibility to international networks and connections that would probably be more difficult to achieve were they independent. All these libraries are connected to the Bodleian libraries system which pursues international collaborations of great recognition and this perhaps takes pressure off some of these smaller libraries to pursue international collaborations.

The Internet

It seems the internet, in the case of the RSC and the Slavonic exchange agreement, had a detrimental effect on these collaborations, because the internet was able to fulfil the role that the northern institutions once had. However, in the case of the RSC, the ending of these collaborations also coincided with the retirement of the founder of the collection who was the primary networker for the collection. For the Law Library, the internet has facilitated communications. It has not affected the pursuit of international collaborations. The international library loan schemes have not been affected either by the internet, in that they were set up pre-internet era and continue strong today.

Conclusion

There are collaborations and partnerships on many levels within the Bodleian system. At the overarching level of the Bodleian Library system there is the international inter-library loan agreement, but also a vast digitalisation project coordinated with the Osney Mead division of

the Bodleian Library. However, at the individual library levels, each library works individually, and sets its own policies. There seems to be no coordinated or centralised effort at the Bodleian libraries to promote international collaborations with the Global South in their different libraries. Each library and institute establishes their international projects or collaborations in a rather ad hoc manner depending very much on the networking skills and efforts of the librarians employed and in charge, but also on the funding and resources available to do so.

The Taylor, the Law Library and the SSL were the ones with the resource capacity to have international collaborations. Currently, only the Law Library has a North-South partnership. The SSL and Taylor had in the past, but no future North-South collaborations are currently planned. In the case of the SSL, they occurred not directly with their institution, but with a smaller collection, the RSC library, which was only later integrated in the SSL. Although small, the RSC managed to do capacity building and have international collaborations with the South, mainly because of the subject it dealt with, forced migration. Collaborations with the South were practically their central aim.

Much depends on the conditions and circumstances of partnerships with the South, whether they are geared towards sustainable development or not. In the cases mentioned above, the exchange program with Eastern Europe, the RSC networks and the Myanmar programme, there has been a clear practice of knowledge exchange, and not only knowledge transfer. They all seem to have acknowledged the importance and worth of the commonly neglected indigenous knowledge of southern institutions.

The internet facilitates communication worldwide but it is not the central vehicle of international collaborations. That seems to be down to the willingness and networking skills of the librarians employed. Even when international collaborations are built into the central aims of the institution, as in the RSC, then their survival seems to be down to the skills and willingness of the people at the library.

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[1] For more info: <https://www.law.ox.ac.uk/research-and-subject-groups/oxford-burmamyanmar-law-programme>

MONTESSORI PEDAGOGY METHOD – CAN WE INTRODUCE IT AT THE LIBRARY?

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Abstract

Almost all institutions and organizations think about different approach to adjust to individual's needs. It is not only about people with special needs, but also simply about people with different thinking or perception. There has always been many different alternative pedagogy methods but mostly they were introduced for children with special needs. As the mentality has changed through years, the perception has also changed and alternative pedagogy methods are used for children with no special needs. Different pedagogy methods support child in need of different approach to understand the information that is thought at the school. As library is a place where a child spends a lot of time, librarian is also a teacher. Librarian organizes events, storytelling and other activities to teach children different things. Therefore, the study has been made to find out if it is possible to introduce Montessori Pedagogy Method at the library to create events and environment more suitable for child. This study is unique because Maria Montessori method has never been researched in the context of library science and it reveals that it is possible to adapt the method for library use for children. It is useful for creating events that are more suitable and to promote literacy and reading for children.

Montessori Method

Pedagogy methods of Maria Montessori are being studied and applied more and more widely. These methods are used not only to work with children who need special care, but also with children, for whom such care is not needed. Maria Montessori created children houses to help children to socialize and to learn a variety of exercises. Thinking about the special treatment and special services for children at schools and kindergartens is increasing in today's fast-paced rhythm of life. Variety of alternative pedagogical methods such as Friedrich Fröbel method or Rudolf Steiner method are used more common and also the Montessori and Waldorf schools are created more often. There are several Montessori and Waldorf schools in Latvia. Mostly Alternative schools are created in Latvia and they include elements from all of the alternative pedagogy methods to create the best educational environment for a child.

Children spend a lot of time at school and home but libraries comes as the third place for children to spend their time; therefore the author believes that the various elements of the Montessori pedagogy methods are applicable to the library environment. Pedagogy and library science is allied and cooperation of these sciences promote child development – to educate, to promote literacy and a desire of reading.

Maria Montessori was born in 1870; she was the first woman, who graduated medical studies at University of Rome. The first children's house where Maria Montessori began setting up her own methods was opened at 1907 (Pitamika, 2008). Montessori Method is used and developed for 109 years. Initially, the Montessori Method is used when working with children with special needs until age of six to seven. Currently, this method is applied to teachers all over the world; it tends to be among the most frequently used alternative methods. It has been argued that this method is not sufficiently widely studied and is based on a variety of views and theories and that Maria Montessori has often changed her point of view (Beļickis, 2001). Maria Montessori basic principles are:

1. Respect for the child's individuality;
2. The sense of movement and development;
3. Freedom;
4. The focus of polarization;
5. The child's environment (Beļickis, 2001).

Mostly Maria Montessori method is created and used for children under age of six. It is believed that child at the early age has an absorbent mind that allows the child to perceive the environment, feelings, gestures, language, etc. Montessori children's house and the school, thanks to free choice of employment, the child develops his unconscious internal processes, so that the child is not required to focus, but the concentration resulting from the child's free will. School is a place where children spend

their life in the beginning most of, so it should be a place that helps to develop and form the rest and maturation (Helming, 2006). Children who attend school and children's libraries, is curious and unconsciously focused on the acquisition of knowledge. Thus, the library environment can help to promote a feeling of freedom, providing the opportunity to freely choose activity or reading material. One of the elements of Montessori Method is the promotion of the senses and development of perception through easily understandable materials, for example, for cosmic education Maria Montessori used a map with terrain. Child perception can be developed by library environment. Library can locate books for children at the proper height and show book covers not spines. The author in her practice observed that children are attracted to interesting book covers and they are more focused on the books that they can easily access.

Maria Montessori pedagogy method is widely studied among pedagogy students and teachers from schools and kindergartens. As a part of research, the analysis of other researches has been made. Maria Montessori method has never been researched in the context of library science. Therefore, some of the pedagogy researches has been analyzed. As an example for further research, the thesis of student Vita Dzērve from the University of Latvia will be mentioned. Her thesis "Pedagogical principles of Maria Montessori of the sense development for three to four years old children." written in 2012. Her main research question was "How to promote children's sense of the development at the age of three to four through the Maria Montessori pedagogical principles?" The aim of the research was to study and practice appropriate M. Montessori educational principles for three to four year old children to develop their sense. The results of V. Dzērve study emphasize that the full use of Montessori pedagogy elements are not necessary, but it is important to take some of the principles for modern pre-school institutions. Vita Dzērve recommends it because it gives good results if:

1. Compliance specialist, developing environmental principle;
2. Draws attention to the second youngest group of children sensitive period;
3. Is designed and developed in a child's self-esteem, self-assessment and confidence in their own abilities;
4. Promotes creative expression of the child;
5. The participation is more important than the result obtained (Dzērve, 2012).

Interview results

The problem of the research is the lack of data on whether the library use Maria Montessori pedagogy elements in work process or environment and whether it is necessary. An interview with the librarian Vita Ozola who participated at the non-formal adult education program "Practical Montessori pedagogy" was held for this study

“Montessori Pedagogy Method – Can We Introduce It at the Library?”

While being asked about Maria Montessori method in general Vita Ozola emphasizes the main point at the beginning of the interview:

“It is important to understand what Maria Montessori pedagogy is in general and for that it would be useful to attend educational courses. It must be seen in real life. I have studied pedagogy before, but I fully understood Maria Montessori pedagogy just after seeing it in real life and action.”

Author asks to Vita Ozola if it possible to introduce this method at the libraries and her answer is positive:

“It is possible to use some elements of the Montessori Method. This method is unique because of the didactic materials that Maria Montessori created and those materials a librarian could use at the library to communicate with child. A teacher just has to demonstrate the materials and a child has to take an action itself. Materials are frequently used with child in different age groups.”

There are mostly different age groups mixed at the events at the library. Therefore, author concludes that the materials are good to use for events at the library to promote the interest in child.

Vita Ozola has emphasized that the first thing that librarian has to learn from Maria Montessori method is – attitude:

“The most essential thing is that the teacher does not teach. A teacher has to lead the child, has to help to open up. A child has to make an action by his own free will.”

Usually librarian creates an event and persuades child to do the specific things and that is one of the conservative things that has to be changed in library. Maria Montessori emphasizes that a teacher need to let the child to choose the activity or game. Vita Ozola share some of the activities of Maria Montessori pedagogy at her everyday work at library:

1. **Silence tasks** – to put on the music and tell the story, while the child closes the eyes and imagine the story themselves or to set up the sand timer and to give a task for a child to open the eyes when they think the sand timer has ended. It keeps them more peaceful, lets them to concentrate and it is a good way how to develop the imagination. A child learns the feeling of the time, learns not to disturb others while they are with eyes closed.
2. **Cosmic education elements** – is good option to use a day chain for storytelling activities. Day chain is a didactic material and it shows how the day times are

separated – morning, noon, evening, night. There is a little ball for every hour of the day. When librarian reads the story about sleeping, waking up and other daily routine, the child can learn about the importance of day times. There is also a year chain and moon chains.

There are descriptions how to use Maria Montessori method for child activities at the book “I Can Do It” by Maja Pitamic. Several activity descriptions would be useful for the use at the library. For example there are descriptions at the chapter No.3 “Language development” how to teach the child the love of books and to choose reading material (Pitamika, 2008).

Results and conclusions

The Montessori Method has never been researched in the context of libraries before. The topic is very wide and its must be researched more specifically. At the interview librarian Vita Ozola promote that “This topic is worth to research.” In comparison with Vita Dzērve research and the interview with Vita Ozola, author concludes that it is possible to introduce some elements of the Montessori Method at the libraries. Some of these elements are already used at the libraries for example to create the comfortable environment. The basic elements that could be introduced at the library for creating events more suitable for children are:

1. Suitable environment;
2. Practical tasks;
3. Librarian as a guide;
4. Individualized lessons and events;
5. Independence of the child.

Based on the results of the interview, author decides to do the further research about Montessori Method and its use for creating events and promoting literacy. The study guide “How to Use Montessori Method at the Libraries” could be created as a result for the further research.

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NAVIGATING THE INFORMATION LANDSCAPE OF AN EDUCATIONAL ALTERNATE REALITY GAME

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Abstract

As technology evolves, the use of multimedia and interactivity is becoming increasingly important in traditional teaching environments in the hopes of finding new and engaging ways to teach. With this technological evolution, games have risen to prominence as an enjoyable, engaging pastime. As such, utilising games as learning tools – game-based learning – is an avenue explored in an attempt to make educational content more engaging.

The alternate reality game (ARG) genre is unique as a game genre due to its use of the multiple forms of media used in digital games within a real-world game setting. These games, due to this unique integration of digital assets with reality, provides a unique player experience that can additionally be educational, due to the game's strict integration with the real world. This paper discusses the case study of Nomad, an educational alternate reality game that was developed to teach information literacy. During play, the ARG had players navigate a multi-faceted information landscape both digitally and in the real world, in an effort to exercise the learning outcomes of library and information literacy modules.

These outcomes were achieved through the use of puzzles during gameplay. These puzzles were integrated into an epic time travel narrative to engage the players and provide them with an exciting player experience.

The paper discusses these puzzles and the game's approach to guiding players through its complex information landscape. It then presents qualitative findings of the player experience regarding the game's use as an educational tool.

Introduction

Digital technology is a hallmark of the 21st century. As various aspects of everyday life become increasingly digital, so too does information (Bates & Poole, 2003; Sandholtz, Ringstaff, & Dwyer, 1997). As such, information literacy becomes a skill of paramount importance in navigating the information landscapes of the new millennium (Owusu-Ansah, 2004).

Core information literacy skills such as information location, search strategies and information retrieval (de Boer, Bothma, & du Toit, 2011) are taught at tertiary institutions to help develop this literacy, with institutions such as the University of Pretoria, and others, presenting compulsory information literacy modules to all new students (Badke, 2005).

However, engagement with these modules often suffer as students struggle to understand the importance of learning information literacy skills, especially if this learning is viewed as compulsory (Maybee, 2006). This lack of engagement results in a barrier to learning. It is suggested, however, that digital games can be used as an effective solution in creating and stimulating engagement with educational content (Whitton, 2011).

This paper discusses the use of alternate reality games (or ARGs) for educational purposes by discussing the case study of *Nomad*, an educational ARG developed to help teach information and library literacies that extended work done by De Beer and Holmner (2013).

An ARG was created instead of a traditional game due to the unique information landscape the genre presents: ARGs are multimedia-rich experiences that unfold both within the real world and digitally (McGonigal, 2003b). Navigating the landscape of an ARG also requires collaboration between groups of players (McGonigal, 2008). The marriage of multimedia, collaboration and real-world experiences mirrors aspects of an evolving tertiary education system, allowing the genre to be complementary to traditional teaching methods (Zhang & Nunamaker, 2003).

The information landscape of an ARG comprises a few key elements: the integration of game elements on real-world and digital platforms to create a feeling of authenticity (McGonigal, 2003a), a fragmented narrative scattered across these real world and digital platforms (Dena, 2008), and the creation of a game world large enough that collaboration is necessary to piece the fragmented narrative together (S. Stewart, 2006).

This paper continues by describing these key elements. It then discusses the research methodology of *Nomad*, details of its implementation and the findings of the study.

Immersion through Integration

ARGs are played, unlike digital games, in the real world. This is done through the integration of game elements into aspects of the real world, such as through phone calls from game characters or coded messages left in physical books (McGonigal, 2003b). Throughout this integration, there is never a strict delineation between what elements in reality link to the game world and which do not. This granular integration echoes the ARG genre's mantra: "this is not a game", as game elements masquerade as part of reality (Szulborski, 2005).

This integration makes the game seem more real and authentic, as players immerse themselves in a "performance of belief" (McGonigal, 2003a). The players of ARGs know that they are playing a game, and can separate "game-integrated reality" from "true reality", yet they still choose to pretend to believe that the game-integrated reality is true reality in order to better benefit from the game experience.

As such, ARGs are immensely immersive, and the integration with reality makes game events feel more real within the player context. This makes ARGs incredibly engaging vehicles for potential educational content, as the educational content can be integrated into both the game and the real-world environment in which the content is applied.

Fragmented Narrative

As noted above, ARGs integrate with multiple forms of media in order to create the game world. Placing narrative exposition across these myriad media leads to "transmedia fragmentation" (Dena, 2008). Solving the fragmentation problem is one way in which the ARG genre teaches the information literacy skills discussed earlier.

Players must *locate the information* across multiple channels. This is done using effectively utilising *search strategies*. Players must determine *information relevance* for any information they find, as not all information may be related to the game. Once relevant information is found, *information is retrieved* from the source. Players must then *contextualise the information* by understanding how the fragment integrates with the overall narrative. Players must then *organise the information* by piecing together various narrative fragments into a cohesive whole. This is often done through the creation of a timeline or game chronology (Bonsignore, Hansen, Kraus, & Ruppel, 2012). This information behaviour allows for an ARG to act as a "zone of intervention" (Kuhlthau, 2004), effectively aiding players in completing information seeking that they may otherwise struggle with.

These timelines are common in ARGs, as centralised information points, such as player-created “game guides”, allow new players to integrate more easily into the player community (Dena, 2008). They also allow members of the community to collaborate on building and understanding the game’s chronology as play progresses.

Genre Scope and Collaboration

Transmedia fragmentation naturally lends itself to a wide scope (to ensure that the narrative is properly fragmented), and as such, collaboration is paramount to the successful play of an ARG. McGonigal (2008) calls this collaboration the “collective detective”.

In the “collective detective”, individuals work together to construct a shared meaning of the game world from their various understandings and representations of game elements and events (Lévy, 1999). This creates discourse amongst the community which leads to a greater overall understanding of the game, its systems and its narrative, over time.

This shared meaning making is an important educational benefit of the ARG genre, as communication is an important 21st century skill (Binkley et al., 2012). The exercising of such communication skills reinforces the learning and exercise of the information literacy skills done through solving the fragmentation problem, as it provides players with another avenue in which to examine and communicate game information.

Inherent Learning in ARGs

Bonsignore et al. (2013) posit that the ARG genre as a whole teaches and exercises information literacies, regardless of the educational content of the game itself. Their Unified Metaliteracies Framework describes seven action categories that relate to the exercise of information literacy skills:

- “Gather” refers to the finding of information and evaluating its relevance within the game. This also involves the separation of game artefacts from real-world objects.
- “Make sense” refers to the aggregation of gathered information, using skills possibly taught and exercised during earlier gameplay, to form narrative and gameplay-based conclusions about the nature of the alternate reality.
- “Manage” refers to the careful organisation of these conclusions for personal, communal and/or archival use. These organised conclusions can be compiled into game guides or similar assets for future use.
- “Solve” refers to the ability to solve problems or puzzles

in order to advance the game’s narrative.

- “Create” refers to the player ability to, through their own doing, create game-related artefacts, either for use in the game itself, or externally in order to assist the community.
- “Respect” refers to the social aspect of play within ARGs where a respect for culture, ethics and legal systems is employed within the community in order to facilitate collaboration.
- “Collaboration” inherently manifests in ARGs, as noted above, in order for players to fully participate in the gameplay and community of the game. This is often done through social media and Web 2.0 tools, further exercising communications and media literacies.

Research Methodology

The research concerned itself with the following question: *How does the navigation of an ARG’s information landscape engender the exercise of information literacy competencies?*

In answering this question, *Nomad* was examined as a case study (Gerring, 2004; Pickard, 2013, p. 101; Yin, 2013). The data collection techniques used were non-participant observation (Patton, 1987, p. 81; Pickard, 2013, p. 229), document analysis (Pickard, 2013, pp. 252–254), log file analysis (Pickard, 2013, p. 256), questionnaires (Pickard, 2013, p. 207) and focus groups (Gorman, Clayton, Shep, & Clayton, 2005; Powell, Single, & Lloyd, 1996; D. W. Stewart & Shamdasani, 1990).

Due to these data collection techniques, the study focused on a qualitative evaluation of *Nomad* as a learning vehicle for information literacy. Due to this qualitative nature, findings may not be generalisable. However, it is hoped that the presentation of the *Nomad* case allows for similarly designed ARGs to be developed in future.

Qualitative data collection largely focused on the player experience of the ARG, whether players found the ARG educational and what players thought about the use of ARGs for the purpose of skill teaching and exercise. Data from these sources was subjected to constant comparative analysis (Pickard, 2013, p. 269; Strauss & Corbin, 1998, p. 67).

The Players

During design, the ARG was targeted towards students registered for three modules at the University of Pretoria. Two of these modules were first-year level modules: Introduction to Information Science, and Markup Languages. It was hoped that the content of these two modules would complement the ARG’s gameplay, as a basic understanding of HTML as well as core Information Science concepts would help in the navigation of the ARG’s largely online information landscape. The third-year level module was a game design project. It was hoped that

students from this module who decided to play the ARG could aid the first year participants due to their more advanced information science and markup languages knowledge, as well as their basic game design knowledge. Altogether, the target audience comprised approximately 300 students.

By the end of gameplay, *Nomad's* game website had registered approximately 90 unique user accounts. While it was not confirmed that these 90 accounts were registered exclusively from the 300 student pool, as the game website was open to any registrants with the URL, it is assumed that most of these accounts were created by students. This was verified by checking website handles, a large portion of which were simply University of Pretoria student numbers, the unique identifier given to students upon registration at the institution. Of these 90 accounts, approximately 20 players were active on the game's website and forum, as well as during the game's "live events".

Of these 20 active players, 9 were interviewed during post-game focus groups, along with a further 2 non-players who knew about the game, but did not play it. Post-game questionnaires distributed to these active players garnered 11 responses.

Narrative Overview

Based on a previous encounter with the game's eponymous character, a girl named Ana Kirlitz attempts to discover the mystery behind The Nomad, tracking her findings on a personal blog. When Ana mysteriously disappears her friend, Mia Schoemaker, attempts to find both Ana and The Nomad.

Mia does this with the help of students at the University of Pretoria whose classes have been interrupted by mysterious messages from The Nomad. The Nomad's messages lead Mia and the players to the university's library where players must complete tasks such as finding books, decoding ciphers and academic referencing. Completing these tasks provides opportunities for the players to communicate with The Nomad, where they discover that he is a time traveller desperate to return to the present time. Working with The Nomad and Mia, players must race against time itself to free The Nomad, and against the insidious Observer organisation to free Ana from a time prison.

Nomad's Information Landscape

Like other ARGs, *Nomad* made use of multiple platforms and types of media for information dissemination throughout the game. However, *Nomad* presented its information landscape in a unique way. While most ARGs hide the game's overall structure from the players, to be

found piece by piece (through the fragmented narrative principle), *Nomad* aided the players' initial understanding of the game through the game website's home page. It contained an interactive node structure, pictured in Figure 1, that represented the overall structure of the game's information landscape, with each node representing a puzzle, message or task. In this way, players had an understanding of the game's information landscape prior to playing the game. This aimed to make playing the game less daunting to potential players. It also served to showcase player progress through the game and help minimise player documentation, as crucial gameplay and information was available in a centralised location.

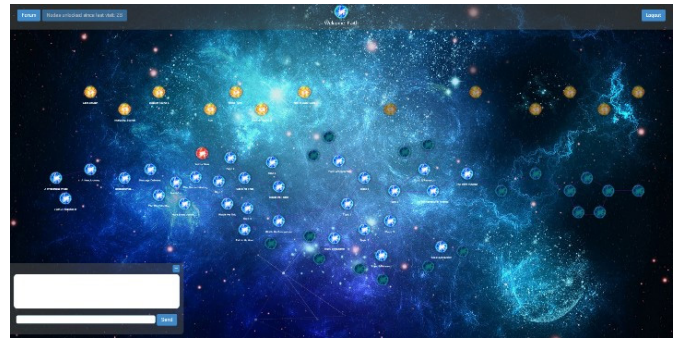


Figure 1: Nomad's node structure

Despite the use of this node structure to centralise information, *Nomad* still utilised narrative fragmentation conventions of the ARG genre. The game's initial player communication was through video puzzle, for instance, played out largely through information hidden in books in the library, and is discussed in detail below. The puzzle's solution resulted in a live event where players had a phone conversation with The Nomad. Later puzzles included information being sent to players through email, exposition being given through audio clips and various puzzles built into the nodes of the node structure itself. As such, the information landscape of the game, though centralised through the node structure, remained fragmented across mediums in both the physical and digital landscapes. This promoted the various information literacy competencies Bonsignore et al. (2013) suggest that ARGs exercise inherently.

Nomad's Puzzles

Though the traversal of *Nomad's* information landscape inherently exercised information literacy skills, it was decided that *Nomad's* puzzle design should additionally reinforce various information literacy skills as well. In this way, the design, game genre and the content could all reinforce the learning that the game aimed to achieve. A selection of these puzzles are discussed below, with a more comprehensive account described by Jerrett (2016).

In the game's initial puzzle, players were tasked with finding the book *Alice's Adventures in Wonderland* (Carroll, 1865) in the university library. This puzzle aimed to familiarise players with information location and retrieval.

al within the physical library space. Once players found the book, they also found a QR code that unlocked a list in one of the online nodes containing a list of five books, along with a single letter of a library collection number. In finding four of these books, players found four business cards containing first person notes made by The Nomad (one for each book). One of the books in the list contained another QR code that contained a further list of five books, and another letter of the partial collection number. This puzzle structure was repeated multiple times as players built up the partial collection number, which led to *The Oxford English Dictionary* (Simpson & Weiner, 1993) and another QR code, which unlocked a node containing the date, time and location for a live event. Progression through the puzzle is shown in Figure 2. Blue nodes represent the books that contained QR codes that extended the puzzle, while white nodes represent books containing narrative fragments.

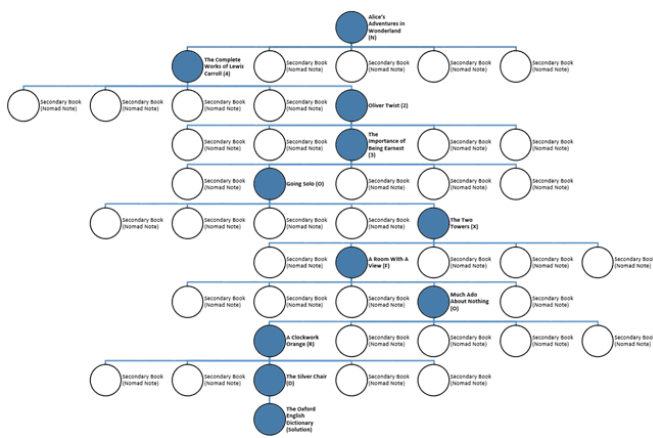


Figure 2: Progression through Nomad's first puzzle

A later puzzle tests players' critical thinking. Players had to solve five riddles that allude to scientific concepts. An example of these riddles, referencing Morris-Thorne wormholes, is as follows:

Mike and Kip cross an exotic bridge: the year is 1996. Upon making their passage through the calendar reads 1972.

This puzzle encouraged collaboration, as groups of players would research the potential concepts and test if their answers were correct. The puzzle also required collaboration as 15 separate user accounts had to input the correct answer to each riddle in order for the game to progress. The players' proficiency in disseminating information was also tested here, as each riddle answer was dispersed amongst the player groups.

Lastly, the final puzzle players attempted to complete required players to correctly reference academic work. Players are instructed to find articles related to various time travel concepts (introduced through the earlier riddles) that may aid in The Nomad's rescue. To do this, players need to submit details of useful articles in the University of Pretoria's Harvard method bibliographic format. Submissions were checked against a regular ex-

pression, and only accepted if correct. The puzzle accepted references in the following format:

Surname, Initials. Year. Article name. Journal name, Volume(Issue): Page range start-Page range end

As such, it accepts the following reference, as shown below:

Table 1: The accepted reference format

| Surname | Initials | Year | Article name | Journal Name | Volume | Issue | Page range start | Page range end |
|------------|----------|------|------------------------------------|------------------------|--------|-------|------------------|----------------|
| Richardson | G.P. | 1986 | Problems with causal loop diagrams | System Dynamics Review | 2 | 2 | 158 | 170 |

Once players submitted an adequate number of articles for each topic, they would be rewarded. However, due to time constraints, unbeknownst to the players, on the ARG's length, the game had to be ended prematurely prior to their completion of this puzzle.

Despite this, players did submit some references, as shown in Figure 3 below.

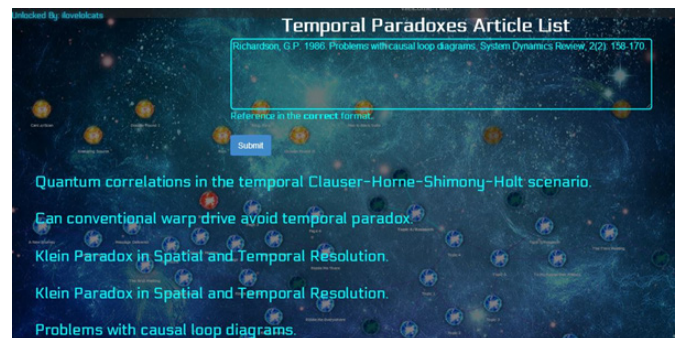


Figure 3: An example of correct player input for this puzzle

Players were required to use a variety of online research portals, library services and web searches to find relevant journal articles on the given topics. In utilising these resources, players learned the differences between these resources as well as how to complete goals (such as finding articles) using these platforms (Bothma, Cosijn, Fourie, & Penzhorn, 2014, pp. 84–91)

Findings

Players noted that *Nomad* was an exciting and engaging game, despite its educational design. This is important as players reported being aware of the game's educational approach (due to the game's use of the library and library-related tasks), but, as one player reported, that "when you're playing a game, you're focused on the play, not the learning". As such, the integration of information literacy learning outcomes did not hinder the enjoyment

of the game. Another player noted that “the educational bits were well hidden by the story”.

When asked about the use of a game to teach information literacy skills and landscape navigation, players praised the ability for a game to provide engaging framing and purpose to the skill exercises. Of this, one player said “it was very motivational. You had to find the books, but there was a reason for it. Usually you have to find the motivation to do these things.” Another player noted that “it’s better to learn these things now rather than next year when I fail [because I don’t know how to do them]”. The players often suggested that ARGs be used as a practical component to various educational contexts, as they provide an authentic context in which to practice learned skills.

Regarding the information landscape of the game itself, players particularly enjoyed the varied use of multiple platforms and media types, noting that “you never knew where the next clue would come from”. The player group followed this philosophy meticulously, examining each piece of information and object presented to them with intense scrutiny as a game clue. In one instance, a cup of coffee was present at the site of a live event. Even though this was not part of the game, the players were convinced that The Nomad had just been at the site and left this cup of coffee as a clue.

The node structure was well received, both for its interactivity (“I liked tossing the nodes around the screen”) and the overview it gave of the game’s information landscape. One thing players noted was missing, however, was a timer denoting how long they had before the game needed to come to an end (due to the aforementioned time constraint of a six week runtime). This would have been useful, as the game implemented timers for information dissemination throughout the game, and thus an additional timer denoting how long players had to save The Nomad would not have been out of place.

Despite *Nomad* not running to completion, players were satisfied with the alternate ending presented to them, and expressed interest to play educational ARGs covering a variety of topics in the future. One player suggested the use of an ARG for campus orientation within university residences, similar to orientation-based ARGs *Who Is Herring Hale?* (Piatt, 2009) and *ViolaQuest* (Whitton, 2009). This suggests that there is great potential for the educational ARG genre going forward as authentic sandboxes for the exercise of theoretical knowledge.

Conclusion

The research question of this paper was answered by presenting *Nomad*, an educational alternate reality game with puzzles that exercised information literacy skills. This marriage of inherent literacy exercise through alternate reality gaming and explicit literacy exercise puzzles is an effective way to teach information literacies, as

moving through the game landscape results in learning.

It was found that *Nomad*’s run at the University of Pretoria succeeded in its goal of teaching players and, more importantly, that the game was engaging to play. This is important due to the stigma surrounding educational games as “chocolate covered broccoli” (Laurel, 2001), whereby educational games merely abstract educational content while remaining functionally identical to the content, resulting in less engaging game experiences. *Nomad* was a marriage between the inherent teaching of ARGs and explicit teaching through design. It is hoped that the example puzzles and overview of the game presented in this paper inspires future designers to create similar educational experiences to help dispel the “chocolate covered broccoli” stigma surrounding the educational game genre.

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THE NEW DIRECTIONS IN BIBLIOGRAPHIC CONTROL: THE STATUS QUO AND PROSPECTS OF RDA CATALOGUING CODE AND BIBFRAME CATALOGUING FORMAT

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Keywords: bibliographic control, cataloguing, cataloguing rules, library catalogs

Abstract

This paper concentrates on the new directions in bibliographic control. The study's main areas of interest are the new cataloguing code, RDA (Resource Description and Access 2008), and the new cataloguing format, Bibframe (Bibliographic Framework Transition Initiative), which is still in-development. FRBR (Functional Requirements for Bibliographic Records 1997), which is behind the creation of RDA, is a model developed for pointing out the bibliographic relations between resources. It plays a very prominent role in the future of bibliographic control. On the one hand, this study discusses the realization of FRBR's idea in RDA and the potential added value, which comes along with the usage of RDA in relation to AACR2 (Anglo-American Cataloguing Rules 1978)-based cataloguing codes. On the other hand, this paper ponders the potential added value which comes along Bibframe in relation to MARC (MACHine Readable Cataloguing)-format. This study answers the following research questions:

1. How is the idea of FRBR actualized in RDA-based cataloguing?
2. What added value does RDA bring to library cataloguing in contrast to AACR2-based cataloguing codes?
3. What added value does Bibframe format and model bring to library cataloguing in contrast to MARC21-format?

The results imply that RDA cataloguing is very much in line with the FRBR's idea. It instructs the description and identification of works, expressions, manifestations and items in detail. RDA also potentially brings a lot of added value in library cataloguing because of its hierarchy, specificity and machine readability. However, the ongoing usage of MARC prevents RDA from reaching its full potential. Above all, RDA is a content standard which means that the user's needs have been made a priority. With the help of demonstration, it is shown that enriching the MARC-records with RDA-elements brings records a little more towards the FRBR's idea, but RDA's greatest benefits won't be realized by doing so due to MARC's structure. For a long time, MARC has been considered as an outdated and insufficient format in terms of modern library. As a new cataloguing format Bibframe aims to be flexible and promotive when it comes to finding, identifying, selecting and obtaining resources within the library catalog. Bibframe also aspires to point out the bibliographic relations likewise FRBR and RDA. This happens by deploying the linked data, which allows linking the records to one another. Thus bibliographic relations will become clearly visible.

The purpose of the study

This study discusses the status quo and the prospects of bibliographic control. The study primarily concentrates on description of information resources in libraries and scrutinizes the new partially already deployed Resource Description and Access (RDA 2008) cataloguing code and its' relationship to Anglo-American Cataloguing Rules (AACR2 1978) based codes. The other prominent topic of the study is upcoming cataloguing format, Bibframe (Library of Congress 2016), and its' relationship to Machine Readable Cataloguing (MARC21 2008). Functional Requirements for Bibliographic Records (FRBR) (IFLA 1998) are also closely associated to these new directions of bibliographic control.

The objective of this study is to argue how the new gradually emerging knowledge models and cataloguing codes influence the library cataloguing and indexing. The libraries have been in a time of transition for a while now, which is leading to a change in library's role and job description. Along with the new technologies, libraries, as well as the whole of society, need to re-evaluate their and consider their actions in requiring and constantly changing circumstances of the present day. Keeping up to date and answering the diverse information needs are the factors which are very broadly speculated in the library community. Introduction of the new cataloguing format and cataloguing code and their possible consequences to libraries' information systems have been widely discussed in scientific journals and international events of library science in recent years.

The background of the study

Functional requirements models

In 1997 International Federation of Library Associations (IFLA) published Functional Requirements for Bibliographic Records (FRBR). FRBR is a conceptual model which originated from the report of IFLA's working group addressing the usability of bibliographic data produced in libraries. The aim of FRBR is to describe such metadata which could potentially be useful to users. FRBR consists of three so called entity groups. Group 1 entities are work, expression, manifestation and item. Those entities are in hierarchical relation: work is an independent artistic or intellectual creation which can be realized through expressions, manifestations and items. Expression refers to different versions of work such as a book written in original language and its' versions translated to other languages. Manifestations could be considered as editions from expression of works. Item in turn refers to a single manifestation and thus it could be said that every item of manifestation is identical to one another. Group 2 entities are persons, families and corporations

which relate to group 1 entities in some way. Persons and corporations can be creators of works, translators of expressions, publishers of manifestations and purchasers or owners of items. Group 3 entities are mainly associated with indexing since they are elements that have something to do with the topic or contents of the work. Group 3 entities are related to group 1 entities since they describe content related elements of the work, expressions, manifestations and items. (IFLA 1998, 13-17.)

The basic principles of FRBR are the usage of data to find, identify, select and obtain the documents. Finding refers to discovering such documents from the library catalog which correspond to user's specific search criteria, when the user is, for example, searching all available documents on designated topic. Identifying in turn refers to verifying that discovered document is the one user really wanted to discover and not some other document published under the same title. Since some works can be found in various different versions user should be able to select which particular document or bibliographic resource corresponds to his or her needs. Obtaining refers to localizing and accessing the resource by, for example, submitting a book reservation or reading the electronic resource with an own gadget. (IFLA 1998, 8).

The goal of FRBR is to create a uniform title to all expressions, manifestations and items of the same work regardless of the language in which they are published. In FRBR this is closely related to identification of the work. (Suominen, Saarti & Tuomi 2009, 65-66, 105-106.) Functional Requirements for Authority Data (FRAD) and Functional Requirements for Subject Authority Data (FRSAD) can be considered as extensions of FRBR. FRAD was published in 2009 by IFLA. It is strongly based on FRBR, but its' main focus is on group 2 entities addressing the attributes concerning persons and communities. The basic principle of the model is to define and identify the functional requirements of the authority records. FRSAD model is very much alike but its' main focus is on group 3 entities addressing those factors and relations which can be subjects of the resource. IFLA's report of FRSAD model was accepted in 2010 and published in 2011 and that is why it was not possible to include it to the RDA cataloguing code. (Hider 2012, 119-120.)

Resource Description and Access (RDA)

RDA is based on Anglo-American cataloguing codes and description practices which have defined them. RDA's goal is to offer equally good description opportunities for printed and modern digitized resources. It has been outlined that RDA-based description will satisfy users' needs better than earlier described methods and it will also help users to find, identify, select and obtain described resources. In the background there are functional requirements models, in which FRBR belongs to. The aspiration of RDA is to provide a possibility to browse databases and utilize the relations created between FRBR entities as well as help users to understand the entities between relations more adequately. (RDA Toolkit 2016).

RDA consists of 10 separate sections. Sections 1-4 cover attributes of FRBR and FRAD entities and sections 5-10 cover elements dealing with relations between resources according to FRBR, FRAD and FRSAD models. (RDA Toolkit 2016.) Sections 1-4 adapt more or less AACR2-based description and search elements. However, Hider (2012, 115) and Suominen, Saarti & Tuomi (2009, 71) point out that RDA is significantly more precise than AACR2 and it aims to create specific identification of search elements as well as to indicate the relations of search elements to a described resource. RDA defines elements more narrowly as it differentiates between the main title originating from the resource itself and the main title generated by a cataloguer, for example. It should be also noted that RDA is not restricted to International Standard for Bibliographic Description (ISDB) based description elements and it aims to cover all such elements which could be included to authority records and bibliographic records. AACR2 only covers subject headings and cross references from one index term to another in authority files. (Hider 2012, 115, Suominen, Saarti & Tuomi 2009, 71.)

Bibliographic Framework Transition Initiative (Bibframe)

Bibframe refers to a knowledge model and to an upcoming cataloguing format. At the moment, Bibframe is still being developed and in a piloting stage. In the 1960's, Library of Congress developed still deployed MARC (MACHINE READABLE CATALOGUING)-format and in 2011, they initiated Bibframe project. Bibframe is expressed in RDF-format which is primarily meant to describe online resources and their reciprocal relations. At first the project's target was to create in two years such a follower for MARC-format which would be better suited for producing open and linked data. Bibframe is meant to be fully compatible with RDA cataloguing code and according to various specialist it would finally mean breaking free from the psychical shackles of the card catalogue. (Hakala 2012, 40, Library of Congress 2012, 6-8.) It is very probable that the topic will be discussed broadly because MARC-format and the old cataloguing codes, like AACR2, are seen partially outdated and they are not able to respond to modern needs of library catalogues satisfactorily.

Bibframe consists of three main entities: work, instance and item. Work entity is roughly analogous to FRBR's work and expression since it covers the original work and translations and other versions based on the original work. Work entity has other properties as well, such as agent referring to a person, family or corporation, subject referring to subject headings and event referring to a conference or happening concerning the work. Instance entity includes various distinctive material embodiments of the work. One work could have various published forms, formats like printed book or digitized magazine. They are called realizations which describe the publisher, edition, place and publisher's location. Item entity refers to a singular physical copy of the realization of the work. It includes information about item's physical or digital

location, shelf class and accession number. (Library of Congress 2016.)

Research methods and materials

This study aims to answer the following research questions:

1. How is the idea of FRBR actualized in RDA-based cataloguing?
2. What added value does RDA bring to library cataloguing in contrast to AACR2-based cataloguing codes?
3. What added value does Bibframe format and model bring to library cataloguing in contrast to MARC21-format?

The research questions are answered by the means of integrative literature review and empirical reconstruction of different kinds of bibliographic records. Research material for the literature review is collected from the topic related research literature, which mainly covers scientific peer reviewed articles published within five years. Through the collected materials, it is possible to partially answer and analyze the questions. Empiric section could be characterized as demonstration. It is meant to complement the literature review while it also demonstrates the nature and structure of the future bibliographic records.

Since the premise of the libraries and especially the technology of library environment is changing considerably, it is worthwhile to study what kind of solutions and alternatives there are to libraries. It is also essential to ponder how libraries might get the highest possible benefit from their catalogues and how might they be made as user friendly as possible for library employees and patrons alike. Modern library catalogues should be pleasant and effective information retrieval tools. These issues can be addressed by means of reasoning the themes of the stated research questions. It is important to study the questions via more than just one research method. Thus it is possible to get a better general view of research topic's nature.

Results

The results imply that RDA cataloguing is very much in line with the FRBR's idea. It instructs the description and identification of works, expressions, manifestations and items in detail. The basic idea of RDA is that it structurally consists around FRBR's entities and user tasks. FRBR and its' counterpart FRAD provide framework for the basis of RDA. This is why RDA is comprehensively able to support all media and content types. FR-models also provide flexibility and extensibility which are needed in the adaptation of described resources' new attributes. They also provide adaptability which is essential for producing the data to various technological environ-

ments. RDA draws a clear difference between the recording of data and the presentation of data. This stems from the FRBR and FRAD models since it is possible to point out the relations between the attributes and entities. The main objective is to provide a normative ensemble for recording and presenting the data in modern library catalogues. The aim is to provide a set of instructions for recording data that can be applied independently of any particular structure or syntax for data storage or display. (The RDA Prospectus 2009. 1-2.)

RDA also potentially brings a lot of added value in library cataloguing because of its hierarchy, specificity and machine readability. It encourages cataloguer to record all such information which can potentially be useful to users. In contrast to AACR2 code, RDA instructs cataloguers to record so called core elements which makes it easier to identify persons, communities, works and expressions. In addition, it is integral for web environment that RDA provides relationship designators for pointing out the bibliographical relations. RDA enables description of how various works are related, for example, how derivative works link to motion pictures or books based on other works, musical works and their librettos, and to link textual works and their adaptations. (Tillett 2011, 268-269.) However, it is prevented from reaching the its full potential by ongoing usage of MARC. Above all, RDA is a content standard which means that the user's needs have been made a priority. With the help of demonstration, it is shown that enriching the MARC-records with RDA-elements brings records a little more towards the FRBR's idea, but RDA's greatest benefits won't be realized by doing so because MARC's structure. (Library of Congress 2008, 24-25, Smith-Yoshimura et al. 2010, 27.)

For a long time, MARC has been considered as an outdated and insufficient format in terms of modern library. As a new cataloguing format, Bibframe aims to be flexible and promotive when it comes to finding, identifying, selecting and obtaining resources within the library catalog. (Rollitt 2014, 16.) Bibframe and linked data represent a road to an innovative environment in which metadata can be exchanged seamlessly and economically between the libraries. On the other hand, Bibframe represents a paradigm shift in how libraries have historically managed, exchanged and shared metadata. (Tharani 2015, 6-7.) Bibframe also aspires to point out the bibliographic relations likewise FRBR and RDA. This happens by exploiting the linked data, which allows linking the records to one another. Thus bibliographic relations will become clearly visible. Linked data and Resource Description Framework (RDF) format are backbones of Bibframe. Bibframe is expressed in RDF which enables the storage and transfer of data in web environment. From the viewpoint of regular library user, it can be said that if user finds one library resource, it is likely that other resource related to first one is also found. Bibframe demonstration illustrates how Bibframe records could possibly look like and how they work in practice. (Sprochi 2016, 132-133.)

There is also a number of challenges for Bibframe. Libraries may be pondering whether it is profitable to embrace Bibframe since there is considerable lack of concrete display of the way Bibframe's functions Piloting and testing Bibframe is not possible in many present library systems and the system developers are not very eager to develop compatible programs because they do not profit from their efforts. The solution would be the broad and seamless cooperation of libraries, system developers and the whole of information community. (Kroeger 2013, 884-885.) Bibframe is also required to illustrate its' worth as a follower of MARC-format. At the moment MARC's grasp of libraries is still extremely strong and it is widely expected that at the earliest, Bibframe will truly challenge MARC after several years. Conventionally bibliographical practices, such as cataloguing, indexing and classification have mainly centered to printed materials like books and journals. In a way, Bibframe challenges libraries to re-evaluate their traditional perception of text and textuality. (Tharani 2015, 16.)

Conclusion

All the research questions addressed the future of bibliographic control. The pivotal phenomena, FRBR, RDA and Bibframe, are intertwined with each other in an interesting way. FRBR has been a significant model right from its' development but the model's concrete actualization has nevertheless been in its' infancy before RDA. When the old ISDB-based AACR2 cataloguing code was first seen as an outdated and unsuitable for modern libraries, it was clear that a new stand-alone cataloguing code was needed. The developed code was eventually named as RDA instead of AACR3. FRBR-model was acknowledged to be better suited for description of digital resources and its' entity-relation thinking was seen as the right direction for the development of library catalogues. From the viewpoint of FRBR, RDA illustrates more comprehensive cataloguing than AACR2-based codes since RDA covers all the levels of bibliographic hierarchy, work, expression, manifestation and item levels. Hierarchy on its own can be rather meaningless but when it comes to FRBR's user tasks (finding, identifying, selecting and obtaining) it becomes a way more relevant. Hierarchy and pointing out the bibliographical relations are precisely those factors that make RDA compatible to FRBR and since RDA carries out the user tasks it is more suitable cataloguing code than AACR2. RDA's structure is very broad and detailed and supposedly at least a little bit more complicated than AACR2, but then again its' main purpose is to serve users' needs. RDA cataloguing may be more challenging to carry out in practice but it brings a lot of added value to library catalogues and library users.

Regardless of all the potential and alleged added value, it should be noted that usage of FRBR, RDA and Bibframe are not without obstacles. As for FRBR, it is a knowledge model that can provide a basis for cataloguing code or format and without any FRBR-based codes or formats it merely remains as an idea. Modifying the catalogues

more FRBR-like, so called FRBRization, is possible but its' influence on catalogues won't be particularly notable because of limitations of MARC-format. RDA's problem is also poor compatibility with MARC. Enriching the MARC-records with RDA elements is not unusual today, but RDA's greatest strengths will still be unrealized. Cataloguing based on FRBR and RDA would be possible to accomplish with Bibframe format but since Bibframe is still being developed and present library systems do not support it and its' linked data structures it means that gaining the full benefit from these new directions is still in the distant future.

The landing of these new directions of bibliographic control is very dependable of format and system solutions. Current library systems are not fully compatible with FRBR, RDA and Bibframe and therefore they cannot be extensively used today. The subject of a future study could be development of such bibliographic system and catalog which would be equivalent to the requirements of FRBR, RDA and Bibframe.

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ONLINE GAMING COMMUNITIES IN CROATIA

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Abstract

There is a big number of video games on the market, and a large variety of video game genres. They became a part of new media due to increase in popularity of computers, game consoles, and the gaming themselves, and we see emergence of e-sports and impressive revenues in gaming industry. Most of those games have fans who are a part of one or more gaming communities, which are dedicated to video games and are connected with the video game culture, which, by now, can be viewed as a specific subculture. The structures of such communities are complex, with an video game title in the center of them. A lot of community members self-identify as gamers.

This work explores and describes the most common online gaming communities in Croatia. The results will showcase which of the online gaming communities are the most prevalent in Croatia, as well as their structure.

Introduction

There is, despite the importance of phenomena of video-game playing, still relatively low amount of research of the field, which can be attributed to it's relative recent appearance, as they appeared, on a massive scale, during the 1990s. (Griffiths, Davies, Chappel, 2003). Yet today, their impact on economy is bigger than of any other entertainment industry (Arena, 2015).

There is still no strict definition of gamers, as it still remains uncertain whether do any person who occasionally play video-games fall under that term, or do only people who are dedicated to video-game play and culture fall under that term (Krolo, Zdravković, Puzek, 2015). Authors cite Crawford (2011) who offers several approaches to answering this dilemma. This research uses the first approach, whose aim is to answer the question of what kind of people play video-games through creating a psychosocial profile of video-game players.

The most important fact about video-games, especially when played on-line, is that they are, usually, played without direct contact with other people, unlike older, "pen-and-paper" games (Seay et al., 2004). This fact, that there is minimal amount of repercussions for negative behaviour due to anonymity of players, can bring out a variety of negative behaviours and attitudes towards other players of an on-line game. This work wants to show what kinds of attitudes towards other players, as well as what kinds of behaviour, prevail amongst gamers in Croatia.

Same fact also applies to various communities that grow around various video-games, and, combined with the fact that gamers do not form a homogenous community, as can be seen from demographic data that shows that gaming community is made up from people of various ages, genders, and backgrounds (Ćirić, Volarević, Mrkela, 2015), and, therefore, it is important to see how do (if they do) attitudes and behaviours change as the demography of players changes.

Research goals

The aims of this research are to see which gaming communities do exist in Croatia, whether do connections between them exist, and how do they perceive each other, as well as determining their characteristics. In order to achieve those aims, we set out several goals:

To see the demographic and psychosocial characteristics of gamers.

1. How do they perceive players who play on other game consoles.
2. How do they perceive other players of their favourite games.
3. To see their attitudes towards gaming in general.
4. To check if there is any regularity considering personality traits.

Methodology

We used online survey via SurveyMonkey service to gather data. Information about survey were placed on social networks as well as gaming magazine websites and forums. Survey consisted of 194 items, and is divided into five parts: the first one gathers sociodemographics data, the second is about rating some of the most popular games in recent 6 months, the third is Hexaco personality questionnaire (Aston & Lee, 2009), the fourth part is about gaming community attitudes and behaviours, and the last one consists of the subject's comments. We got 323 subjects, 166 of them entering survey completely, making completion rate 51.4%. Since middle parts of survey were rotated (those considering Hexaco, gaming community and game rating items) and each question on corresponding part were rotated also, we compensated for any systematic effects (i.e. fatigue, motivation loss, quitting); thus for any analysis provided number of participants may vary, and this data is provided. For inferential statistics, pairwise deletion of missing data is implemented.

Results

Our participants reported age span from 13 to 43 years of age ($N=166$ $M=23.90$ $sd=5.54$ Shapiro-Wilk's= $.946$ $p<.01$). Majority of ($N=312$) them were males – 76,3%, 20,4% females, while 2,9% identified them on LGBTQ spectrum. Almost half of participants ($N=322$) were pupils/students (45.7%), second major group being employed (36.7%). Their monthly budget is up to €500 for almost two thirds of them (61.7%), while only 11.1% claiming to have more than €1.000 on their disposal. Thus, monthly entertainment expenditure is for almost half of them (46.5%) less than €35, and 17.0% claiming to spend more than €100. We wanted to know if and how regularly they spend on activities such as buying ingame objects, game merchandising, cosplaying game characters or going to conventions. They almost never (95.5%) cosplayed, or went to conventions (77%), and just quarter of them (24.1%) sometimes bought merchandising, and almost half (46.1%) buying ingame items. Most common form of entertainment (multiple answers were possible) was computer games (85.9%), which is of no surprise since our target group were gamers. Two other most represented forms of fun were gathering with friends ($N=319$ 65.2%), and watching TV (45.1%). In spite of the stereotype, a third of them (34.8%) reported to hanging with their partner, although less than half ($N=317$ 44%) said they do have a partner; almost the same percentage reported having a pet (49.5%), although no significant correlation was found between those two answers. The majority ($N=314$ 64.7%) of our participants reported to live in their own apartment, and to live with parents ($N=318$ 48.1%), only fifth (20.3%) to live with partner. Results are no surprise if we check the age – median being 23 years, and mode 22. Our participant's real-life social networks includes most commonly includes 5-10 member (44.2%) while one fifth reports to have between

11 and 20 friends, as well as less than five of them; only 15% reported to have more than 20 friends.

Considering gaming habits, the majority of our gamer sample reported to play on PC, both desktop (75.7%) and laptop (34.5%) (multiple answers were allowed); second most common platform was smartphone (44.7%), and the third was Playstation (26.1%); other options combined together makes less than 15% picks. They play almost exclusively at home (N=226 97.4%), either by themselves (46.5%) or online (45.6%), while just 8% plays in company of friends, thus making gaming experience solitude one, at least considering physical presence. When asked to identify gaming genre preferences, majority (N=226 71.7%) opted for eclecticism, only 11.5% being focused on one genre only. When asked to rank most preferred genres, they graded action adventures most favourably, then FPS, cRPG, MMORPG MOBA, and finally casual play. We used those categories in order to have comparable results with previous research finds on Croatian gamers (Krolo, Zdravković, & Puzek, 2016). This is in opposite to grouping average rating of 25 most popular games according to gaming magazines and website: highest graded were casual games (M=4.2), then MOBA (M=4.04), MMORPG (M=3.5), cRPG (M=3.26), FPS (M=3.15), and action adventures (M=2.6). The most favourite games were (alphabetically) Assassin's Creed series, Battlefield series, Call of Duty series, Counter Strike: Global Offensive, Fallout series, GTA series, League of Legends, Overwatch and The Witcher series. The best feature of their most beloved game was either gameplay or the multiplayer option. The least favourite feature was community, graphics, and brief gameplay. We also asked player to pick the game-world where they would like to live and most of them picked The Elder Scrolls setting (Skyrim being the most frequently mentioned), and San Andreas from GTA was the second option. The least desirable game-world to live in was Fallout, then followed Dark Souls, World of Warcraft, Witcher, and GTA. It is worth noticing that one participant picked Playboy: The Mansion as the most desirable location. Considering additional activities related to their most favourite game, most of our participants did either discuss game on forums or meet with fellow players in real life; the least common activities were writing blog or visiting tournament. The last option is of no surprise since tournament scene is just emerging in Croatia. Provided there is opportunity, half of our gamers (50.0%) would be interested or very interested to go to e-sport tournament, but half of them (51.3%) disagrees or strongly disagrees with claim on building career as professional gamer.

We wanted to know where our gamers get their fix – majority buys games online (N=224 70.5%), piracy being the second option (56.7%), then comes bargain sales (46.0%), optical medias (15.6%), and, finally, borrowing from friends (14.7%).

When confronted with stereotypes, our participants are disagreeing (partially or strongly) with claims that “video games make no material gain” (52.2%), “typical gamer

has no life beyond video-games” (86.2%), “cosplayers are weird” (48.9%), with exception of “smartphone games make no one a gamer” (20.7%). When confronted with female-gamers related stereotypes, disagreement rate is “female gamers are marketing gimmick” (60.2%), “female gamers are as successful as male gamers in action, strategy and shooters” (13.1%), “females gamers, even if they play computer games, they play them casually” (55.3%), while they are divided on question of “female characters in video games are over-sexualized” where majority answers are neutral (34.6%).

Participants also took Hexaco personality test. We correlated scores on each of six subscales (honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience), and some results are rather interesting. We found no significant correlation between any personality subscale and genre preference. Honesty-humility was correlated ($r=.19$ $df=136$ $p<.01$) with writing game instructions for one's favourite game, extraversion was correlated with meeting with other gamers in 'real-life' ($r=-.19$ $df=136$ $p<.01$). When we asked them to rate the list of 25 games, some regularities were found: openness to experience seems to be related to cRPG games, honest-humility to be negatively related with FPS and action adventure, and emotionality with action adventure games, but correlation factors are rather small (between .21 and .27).

We used scale for measuring video game problems (Salguero & Morán, 2002) and found comforting results – average score was 10,99 with range from 5 to 39 (theoretical maximum of 45). Results on this subscale were significantly correlated with all six Hexaco factors ($r=-0.29$; .33; 0.41; 0.46; -0.27; 0.70 respectively; $p<.01$).

Finally, we measured social distance between preferred gaming platforms. Participants were asked to estimate if majority of their friend use certain platform (PC, Playstation, Xbox, Android), would they would hang around such players, befriend them or if they would be emotional partners with them. No significant distance results were found. The same procedure were taken for Pokemon Go players, no significant effect was found either. To test their perceived tolerance further, we asked them about acceptability of homosexuality, and effects could only be found on extraversion ($r=-.18$ $df=126$ $p<.01$) and openness to experience ($r=.20$ $df=126$ $p<.01$). No correlation is found with genre preference, which is in disagreement of other research (Krolo, Zdravković, Puzek, 2016). The last question in survey was open type and offered opportunity to comment on results. Some of the participants expressed their disagreement with homosexuality question, and just three of them provided negatively connotated answer. Thus, we may conclude our participants are rather tolerant group of young people.

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OPEN ACCESS INITIATIVES IN AFRICA: SITUATING ONGOING BARRIERS TO THE DISSEMINATION OF INFORMATION

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Keywords: open access, academic publishing, scholarly communications, developing nations; Africa

Abstract

Since the signing of the Budapest OA Initiative in 2002, open access publishing has been offered to the world as an unprecedented public good. This movement, poised to improve quality of life by allowing for free and unrestricted access to scholarly research, promises to hasten the progression of scientific knowledge and to improve quality of education, as well as that of healthcare and health education in developing nations. Yet today, scholars within Africa fail to see the promised benefit due to a multitude of ongoing barriers to the production and use of open access resources, including significant technological and infrastructure-related barriers, copyright restrictions, and low levels of education and awareness surrounding open access. Additionally, lack of funding and foreign perceptions of quantity and quality of scholarship produced in Africa further prevent the success of these movements. Through examining existing scholarly literature on open access publishing, this paper seeks to highlight ongoing barriers that prevent the creation, use, and dissemination of these resources in Africa, as these barriers must be overcome in order for the promised benefits of Open Access publishing to be reaped. Access to knowledge, and the ability to share the products of one's knowledge, are fundamental requirements for development, and without reciprocal sharing of information, scholars in Africa will continue to struggle to reap the benefits promised by the open access movement, preventing them from taking the future of research and development in their countries into their own hands.

Introduction

With the birth of the internet and the ability to share digital works infinitely and instantaneously, academic publishing is in the midst of a revolution- an access revolution in which existing print-journal publishing models are quickly becoming antiquated. With the signing of the Budapest Open Access Initiative (BOAI) of 2002, open access (OA) publishing has gained recognition as a viable alternative to existing models, with the promise that it would act as an unprecedented public good, one with the potential to improve access to information and quality of life worldwide.

Fifteen years after BOAI, African nations have yet to see the promised benefits of this new model, due to significant barriers to the creation and dissemination of these resources. Technological and infrastructure shortcomings, copyright restrictions, and lack of education and awareness surrounding open access have been cited as explanations as to why the movement has failed to make its mark on a global scale. Additionally, factors such as lack of funding and foreign misperceptions of the quality and quantity of African scholarship, continue to hinder success.

Methodologically, this paper is an opinion piece, relying on empirical evidence to support its arguments as it synthesizes, infers, and interprets existing scholarly literature on open access publishing to highlight ongoing barriers that prevent the creation, use, and dissemination of these resources in Africa. In order for Africa to see the promised benefits of open access, these barriers must be overcome; and without reciprocal sharing of information, scholars in Africa will continue to struggle to use open access publishing to take the future of research and development in their countries into their own hands and to bring about the promised improvements in quality of life.

The Open Access Revolution

Throughout the world, academic publishing is built upon a tradition in which scholars share research in reputable journals, without financial compensation. Instead, works are distributed to stimulate scientific inquiry; to produce knowledge; and to meet the demands of tenure systems that expect faculty to publish works with measurable impact (Harnad, 2001:16). In the past, few publishing opportunities existed for faculty outside of these print journals. However, the world of academic publishing is in the midst of an access revolution- a revolution that is leading scholars away from this traditional arrangement. Thirty years ago, this revolution began with the shift from paper to digital text, allowing the creation of digital replicas of existing works. Shortly thereafter, the shift from isolated computers to a worldwide network allowed for these copies to be shared internationally, at relatively no cost

and almost instantaneously (Suber, 2012:1). In practice, however, this ability to share has not yet reached its full potential, as it has been crippled by an antiquated publishing model that limits access to information via significant technological, legal, and financial barriers.

Open access publishing (OA) has been offered as a viable alternative to this system. Although there are many individual definitions of what constitutes 'open access,' generally-speaking OA literature takes the form of works: "free availability on the internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles... or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from distribution" – Peter Suber (2012:7).

The push for this openness in academic publishing began with the Budapest Open Access Initiative (BOAI) of 2002. Premised on the belief that it is beneficial to the world for researchers to make findings openly available online for use, the movement promises opportunities to improve quality of education; to address global health concerns and develop new approaches to treating diseases; to address environmental concerns surrounding water quality and global warming; and overall to develop new means to better quality of life in innumerable and immeasurable ways via this free sharing of information. Access to new information can lead to new breakthroughs, and as such access to knowledge is "clearly a fundamental requirement for development" that can help to reduce child mortality, improve maternal health, combat HIV/AIDS, malaria, and other diseases (Cockerill and Knols, 2008: 1). Scholars in developing nations, including those of Africa, perhaps stand to gain the most from this movement – both in terms of gaining increased access to existing research and in opportunities to disseminate research produced by their institutions.

The BOAI specifically recommended that institutions work towards achieving self-archiving and the creation of a new generation of OA journals (BOAI, 2002). For the former, it concluded that scholars must have the ability to deposit their works in electronic archives of their own volition, a practice that many universities worldwide have begun implementing within the last decade. OpenDOAR, the Directory of Open Access Repositories, lists a total of 3285 open repositories worldwide, 2087 of which are located in North America and Europe. By comparison, the 54 African nations collectively house only 147 open repositories, more than half of which are located in Kenya, Nigeria, and South Africa alone – highlighting a global inequality with regards to access to these repositories (OpenDOAR, 2016a; 2016b).

The initiative also called for a new generation of OA journals, which would ensure permanent access to the materials they chose to publish (BOAI, 2002). To date, the Directory of Open Access Journals (DOAJ) hosts 9,419 openly accessible journals in its database, accounting for more than 2.3 million articles from 128 countries (DOAJ,

2016). As was the case with open repositories, most open access journals in existence originated in North America and Europe, with only two African universities listed among the ranks of DOAJ members (DOAJ, 2016).

Global Barriers to Open Access

It is easy to see the uneven success experienced between the global north and south with regards creating both OA repositories and journals. Since its inception, proponents of the open access movement have acknowledged significant barriers to participation, noting in particular issues of technology and infrastructure, education and awareness, and copyright as critical obstacles to access that must be overcome in order for OA publishing to succeed worldwide, but particularly so in the global south.

Technology and Infrastructure

For much of the world, technology and infrastructure continue to be among the greatest barriers to the dissemination of information; and although worldwide access to electricity and to the internet have grown in the past few decades, levels are still low in many regions. Worldwide, 84.585% of people have access to electricity, though the numbers in Africa are considerably lower than the more developed nations of the global north (WorldBank, 2016a). As of 2012, the Democratic Republic of the Congo, for example, only had 16.4% of its population with consistent access to electricity; while 23% of Kenya's population did and 9.8% of Malawi's, compared to 100% in many countries of the global north (WorldBank, 2016a). Since the use of OA resources has long been premised on having access to the internet, due to their digital nature, electricity and a device on which to access the articles are a fundamental requirement for their use.

Yet some success is being seen in efforts to reduce these technological barriers. In 1993, only 0.254 out of every 100 people worldwide had access to internet service. By 2005, that number had risen to 15.789, and by 2015 to nearly 44 out of every 100 (WorldBank, 2016b). While there has long been a digital divide between the global north and south, many countries of the south have reached, or are rapidly approaching, statistics as high as 50% of their population having internet access in some form – marking the slow dissolve of these technological barriers (WorldBank, 2016). Scholars who have grown up with access to the internet are rapidly replacing the number of those who did not, as are the number of researchers willing to use the internet as a means of distributing and accessing information (Suber, 2012: 164).

Copyright Restrictions

However, the existing publishing models, in which authors give articles to print journals for distribution, of-

fer another barrier as they generally require authors to surrender their copyrights to companies, who then have the sole rights to the works. It is this system that allows publishing companies to create artificial access barriers; barriers that are to their own benefit and not to that of authors or users.

While the OA movement seeks to alleviate some of the copyright restrictions on accessibility, copyright continues to act as a barrier to the movement in that works cannot be made 'open' unless their copyright holders make them so; and so long as researchers continue to give articles to publishers, companies will continue to use the rights gained in the transaction to restrict access. The deeper problem, as Suber (2012) notes, is that "we donate time, labor, and public money to create new knowledge and then hand control over the results to businesses that believe, correctly or incorrectly, that their revenue and survival depend on limiting access to that knowledge (pp.36)." Without permission, users are restricted from accessing materials – they cannot translate them, distribute them, mine them with software, reformat them for new technologies; or many other potentially useful actions (Suber, 2012:5); and unless authors gain an awareness of the movement and the alternatives it provides, restrictions will continue.

Education and Awareness

Yet awareness of the open access movement continues to be low; and even if scholars and institutions gain an awareness of its benefits, understanding how to undertake such initiatives can be difficult if done in isolation. Accessing and using these resources requires the information literacy skills to both locate the materials and to judge their relative merits for the research topic at hand, and to do so confidently and efficiently. Understanding the motivations for the movement and how to find the resources, but not how to "pay for it, how to support peer review, how to avoid copyright infringement, how to avoid violating academic freedom," or how to answer many other crucial questions can be significant barriers in themselves to the creation and use of OA resources (Suber, 2012:163).

Open Access in Africa

As of 2015, 27 out of 54 African countries had neither OA repositories nor journals headquartered within their borders. Seven had at least one repository, but no journals; while six had journals, but few had more than one. This means that only 12 African nations have at least one OA repository and at least one journal created in the fifteen years since the first push by the BOAI, a crucial step outlined as necessary for OA to succeed (BOAI, 2002).

The aforementioned barriers play a significant role in Africa's lack of OA initiatives. Alongside India, sub-Saharan Africa continues to be the lowest region in the world in terms of per capita electricity consumption, with

600 million people lacking regular access (Rosnes and Vennemo, 2011: 1318). At present, the financial burden of providing electricity access to the whole of sub-Saharan Africa is too great for many countries and investors, as Rosnes and Vennemo (2011) estimate the investment cost to provide electricity to be between 160 and 215 billion U.S. dollars.

Similarly, internet access in Africa is low compared to other regions of the world. By 2015, an estimated 43.7% of inhabitants in the Middle East and North Africa had access to internet in some form, while less than a quarter of individuals living in sub-Saharan Africa had access (World-Bank, 2016b). There is some progress, as today Nigeria alone is eighth in the world in terms of the number of individuals with internet access, with more than 67 million people having reliable connections; illustrating progress has been made to help eliminate technology as a barrier to the dissemination of information in general (Samuel, 2016: 21).

Additionally, education and awareness about open access continues to be a barrier in Africa, as from the earliest founding documents of the movement there is a noticeable lack of inclusion and engagement with researchers from developing nations. With the BOAI, only 35 of the 679 signing organizations were from Africa, representing just 18 of 54 nations (Fox and Hanlon, 2015: 705). Bowden (2011) notes that, although sub-Saharan Africa represented 12.5% of the total world population in 2010, its research accounted for only 1.1% of the journals produced in DOAJ, and only 1.6% of use within the holdings of DOAJ and during the time of his study.

However, these factors cannot continue to be blamed as the sole barriers to the sharing of information, as the gap between rich and poor countries continues to be too significant. Rather, additional barriers related to funding, and ideological barriers related to perceptions of quantity and quality, continue to worsen the existing divide.

Lack of Funding

Scholars in Africa are not exempt from institutional pressures to publish, and a lack of means to publish is not a reprieve from these demands (Darley and Luethge, 2016: 332; Samuel, 2016: 22). Nigeria's University of Ibadan, for example, implemented a policy that all candidates "being put up for promotion to the grade of Senior Lecturer and up to the grade of Professor should have a reasonable number of journal articles published outside the country (Samuel, 2016:17; University of Ibadan, 2014:8). Similarly, Covenant University of Nigeria requires that, "for promotion to the grade of Professor, not less than 70% of the articles shall be published in international journals (Samuel, 2016: 17; Covenant University, 2010:6)." Similar requirements exist at the University of Cape Coast in Ghana, as well as at the University of Botswana, among many others (Darley and Luethge 2016: 333-334).

Robust funding is a critical requirement for the establishment of strong research networks in Africa, whether

or not the authors decide to publish the findings of this research openly. Yet many African countries lack the support structures necessary to adequately fund the research pursuits of their faculty, particularly in comparison to universities in the global north. Africa as a continent spends an average of 6% of its gross domestic product (GDP) on the entire education sector, and approximately 1% on higher education (Darley and Luethge, 2016; Kig-otho, 2014).

Nigeria, for example, is seventh in the world in terms of population; yet only 0.22% of its GDP between 2005 and 2014 went to research and development (R&D). Comparatively Russia, with 35 million fewer inhabitants, spent 1.1% of its GDP on R&D; and Japan, with more than 52 million less inhabitants, spent a staggering 3.47% of its GDP in a similar manner (Samuel 2016: 19). As such, many scholars turn to foreign support for funding, and as much 70-90% of research funding in Africa comes from foreign donors and organizations, which often have influence over the topics researched (Darley and Luethge, 2016: 327).

With funding deficits in mind, many institutions in these developing countries cannot afford to maintain good libraries, let alone fund faculty research (Arunachalam 2003:16). This lack of funding, coupled with the existing publishing system, has led to vital African-based research remaining inaccessible to those who need it most, as subscription charges of publishers are often too prohibitive for African researchers or institutions to pay (Fox and Hanlon, 2015:699). Some traditionally-published journals can cost institutions as high as \$10,000 USD a year for access, while individual access to articles can cost as much as \$30-\$60 USD- costs too steep for struggling institutions to cover (Elsevier, 2016; Porter, 2012). In many ways, then, access to information and support of research in Africa has been inseparably tied to the benevolence of developed nations (Nwagqu 2016:75).

Perceptions of Quantity and Quality of Scholarship

Access to outside information is only half of the equation. In order for knowledge produced in Africa to be useful, it must in turn be shared with other researchers worldwide so that new knowledge may be produced (Arunachalam 2003:16). As such, relationships based on the reciprocal sharing of information from Africa to the rest of the world are a must in order for open access initiatives to be truly successful in Africa. Yet too often, African scholarship goes unnoticed. Nobody quotes it, nobody uses it. A study by Emerald Publishing group highlighted just how underrepresented African scholarship is in international journals, with just 2.16% of authors contained within its database working in Africa at the time their articles were published (Foster, Heppenstall, Lazarz, & Broug, 2008). Other studies have shown similar results- the almost complete lack of African scholarship amongst top journals, highlighting the severe divide between African scholars and the rest of the world (Murphy and Zhu, 2012; Darley and Luethge 2016:328). So while the

invention of the internet and the access revolution have made possible the sharing of information on an infinite scale, scholarship produced by researchers from African nations have maintained a state of relative invisibility in relation to that of researchers from developed nations (Samuel 2008: 21). This lack of attention to African scholarship has created for many a false illusion that there is little notable scholarship being produced in the continent.

Similarly, there are firmly rooted misperceptions surrounding the quality of scholarship being produced in Africa. Africa and Africans have long been looked down upon by the West, as creating an inferiority complex amongst colonized Africans was essential to the longevity of the colonial powers. More than fifty years after independence, Africa has continued to be looked upon in similar inferiority. Negative perceptions and stereotypes of civil wars and genocides; hunger, poverty, corruption, disease and decay; dirt, and general backwardness remain the most prominent impressions that many have of Africa (Poncian 2015: 72,74).

In his discussions on the lack of Third World perspectives in the field of International Relations Theory, Dietrich (2008:50) discusses debates regarding the parameters of “good social science,” and in these contexts, he notes a global system of knowledge that is dominated by one specific ethno-scientific paradigm (62). This hierarchy within academia is one in which “third world academic” scholars can only gain respectability by working in collaboration with these so-called elites (2008:62). Today, western institutions continue to define what constitutes “proper” science, in a sense acting as gatekeepers for what constitutes legitimate scholarship (Dietrich 2008:62). This hierarchy of knowledge production inherently situates Third-world academics at the bottom, indicating that in some way they are deficient or of poorer quality. Thus, the products of these universities must inherently be weak, and too often these scholars have difficulty in gaining admittance to the most prominent of journals, forcing them to find alternative publishing locations, meaning that even once access and funding barriers are overcome, outside fears of quality prevent the use of these resources.

Conclusion and Possible Solutions

Open Access publishing has been offered to the world as an unprecedented public good, poised to improve quality of life, to hasten the progression of scientific knowledge and its impact worldwide, and to improve quality of education, healthcare, and health education in developing nations. In theory, these nations are positioned gain much from the removal of barriers to said research, yet today scholars within developing nations fail to see the promised reward, despite concentrated efforts to remove existing barriers to access. In addition to technological

and infrastructure shortcomings, copyright restrictions, and a lack of education and awareness surrounding the OA movement, lack of funding remains one of the largest barriers to OA uptake in Africa, and third world universities that struggle with budgetary constraints by nature do not have the capacity to generate their own intellectual and publishing output; not with any hope of competing with prestigious international institutions (Dietrich 2008: 64). As such, finding funding sources is crucial to the success of OA in Africa.

Many non-governmental organizations have recognized the value in promoting open access, and have begun to include OA mandates in their awards so as to encourage the creation and use of such materials. After January 1, 2017 all research funded by the Bill and Melinda Gates Foundation, for example, must be published open access so as to be discoverable and accessible online. The foundation will pay all necessary fees required by publishers to see the research published in this manner (Bill and Melinda Gates Foundation, 2016). Public Library of Science (PLOS) has created a partial list of organizations from more than 20 countries that currently provide OA funds, to help authors offset the initial cost to publish—though incidentally none of the organizations listed are located in Africa (PLOS, 2016).

Many government entities have also begun to realize the great potential of open access research, and have set up similar funds to promote the creation of OA publications. In the United States, the National Institute of Health (NIH), the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA) all have funds or policies that help researchers to offset the costs of publishing OA. The European Commission also offers a number of OA grants, as do a large number of national science foundations and research councils throughout Europe and North America (PLOS, 2016).

However, funding alone will not ensure the increased sharing of information between the global north and the global south, as there is a tremendous need for a global partnership amongst researchers, one that will ensure that researchers from developing and developed nations are not working and publishing in isolation from one another. By changing perceptions of African scholarship, and allowing for greater inclusion of this scholarship in international journals and conferences, African scholars will gain new avenues to share their work internationally. As such, they will no longer remain invisible in the eyes of many northern scholar, and will truly have an opportunity to reap the benefits promised by the open access movement.

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PUBLIC LIBRARIES AND FLEXIBLE PLANNING: ISTANBUL PUBLIC LIBRARIES CASE

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Abstract

In this study, architectural design parameters are discussed in concept of flexible planning for public libraries, regarding different needs of the community. Public libraries have an important role in the community. They are not only information centres but they are also informal education areas, cultural interaction places which their network expands to the smallest settlements of the country. Nowadays, the distribution and sharing of the information sources in electronic media show the increase and in a way they need new spaces in library planning in order to be able to implement these needs at the building level. The purpose of the study is to discuss for flexible planning for public libraries and searching new parameters for today needs.

The study focuses on the assessment of the existing public libraries in Istanbul. Public libraries serve more than 23 million users in total which more than 1,3 million of them are registered members of libraries within the boundaries of Turkey. There are 1130 public libraries which are subject to The Ministry of Culture and Tourism, General Directorate of Libraries and Publications all across the country where 35 of them are in Istanbul. Updating and upgrading the public libraries to meet the contemporary need of today's world will support the information exchange and also create opportunities of studying together. The location of public libraries in the communities affects the use and the user. It should be within town planning policies and their location must support the spatial planning to strength the social ties.

Introduction

Public libraries are centers whereby members of the community can reach information, educational resources, documents and all other needs with no limitations. Public libraries also have an important role in lifelong learning. As it is emphasized Key missions in the IFLA/UNESCO Public Library Manifesto (1994), such as information, literacy, education and culture are main services of public libraries. Therefore, a public library is not only an information center, but it is also the core of the community. Physical sufficiency, rich and qualified inventory and good serving are the main elements of the public library.

The library design depends on local characteristics such as demographic, cultural and economic aspects. The profile of the public library users may change according to the settlement characteristics. In general it should be considered that function, size, designated space, design features, accessible shelving, sign-posting, ambiance of the library, electronic and audiovisual equipment, safety and parking are important for library planning (IFLA, 2001).

Architectural Design of Public Libraries

IFLA has progressed basic library building standards (Library Building Standards –Ontario, Canada and Barcelona, Spain) (with public areas, Areas Reserved for Staff, Service Areas) , which are prepared according to the scale of the area. The recommended size of a design area is 300-500 to 2200-3300 square meters, depending on settlement population (5.000-50.000). But population limits can be exceeded especially in large cities. Settlement population data is not enough information solely about community profile for library designing. Hence, it is important to determine the public library user specifications. Demographic changes, inventory, sitting capacity, physical problems of building, location of library, standards for libraries are important problem area in case of existing libraries (Sannwald, 2003). Due to the demographic changes in community, new requirements are needed in the libraries for adaptation, such as additional services area. Some service areas may be out of use because of demographic changes in the community also.

The checklist prepared by IFLA for evaluation of existing libraries for new library design, includes general information, building and services issues (IFLA, 2013). In this checklist, at general information section facts and figures, location, accessibility, sustainability, safety and security and flexibility issues are considered. Entrance area, materials, flooring, ceilings, acoustics, openings, lighting, furniture, heating, ventilation and air conditioning, installations fed through a wiring system, data, and

issues to do with sanitary areas are “buildings section” in the checklist. The “Services” section of the checklist includes service areas, shelving, user areas, children’s area, young adults, staff areas, automation, and maintenance issues. In this study, existing libraries are evaluated with regards to their flexibility.

According to IFLA (2013), the flexibility assessment includes questions such as:

- Are spaces flexible enough to allow for change?
- Does the building allow you to provide a variety of services?
- Is it possible to extend the building at a future date?
- Is it possible to use some areas of the library outside of normal opening hours for other activities (multi-purpose halls, classrooms, etc.)?
- Are there external areas pertaining to the library? If this is the case, is it possible to enter them without going through access control (electronic alarm system)?

Most of the questions are related with physical changing capacity of libraries. Also existing open area is important for expanding the library in the future. The location of the library is also important. Even if it is located at the center of the settlement, there should be enough expanding space or open civic areas for activities.

The top ten qualities of a good library space (IFLA, 2009; McDonald, 2007) are: functional, adaptable, accessible, varied, interactive, and conducive, environmentally-friendly, suitable, safe and secure, efficient, suitable for information technology. During the construction of a new library, knowing the community specifics, the library users’ needs, the role of library in the community, the library inventory, the librarian-user interactions, relations with other institutions and NGOs are factors which affect the planning. Libraries have an important role in communities during disasters; they should serve the community if a disaster occurs.

Public Libraries in Turkey

Public libraries in Turkey have developed significantly with the establishment of the Republic. Community centers established in 1932 also had similar impacts on the community with the establishment of the Republic of Turkey. The community center regulations required each community center to include a library and a reading hall. Over ten million people learned reading and writing in these centers during the first ten years (CHP, 1942). There are 1130 public libraries subject to the rules of the Ministry of Culture and Tourism, General Directorate of Libraries and Publications of the country (KYGM, 2015; TUIK, 2015). Furthermore, there are 51 mobile libraries in case of where community cannot reach library. Today, public libraries serve more than 23 million users, however only around 1,3 million of those are registered members in Turkey (KYGM, 2015; TUIK, 2015).

Most of public library buildings give services in their original building, which are not designed as libraries. Only a small part of them is designed as a library. From this point of view, it is necessary to examine existing public libraries and evaluate them together with usage profiles and to determine priority issues in library design. Some conditions are required for the establishment of new libraries in the allocated or donated building.

Some of the conditions include: being situated on the ground floor of the building or the independent building, being physically appropriate, having at least 80-100 square meters reading hall and management offices, controlled noise and traffic. (KYGM, 2016). The location of a library should be chosen according to the building principles and standards identified by The Regulations of Public Libraries (2012). In The Regulations of Public Libraries, the condition laid out states that the settlement population should be at least 50000. Minimum sizes (branch minimum 500m², minimum for the central library 1200m²) for branch or center library buildings have been determined with the same regulations.

According to the General Directorate of Libraries and Publications KYGM (2016), only 13% (150 libraries) of public library buildings were invested. These types of libraries are built as two, three or four-storey buildings according to the project type. Each floor approximately has an area of 465 square meters. The library building also includes a multi-functional hall, an exhibition hall, a reading hall for children and youth and administrative units.

Except for independent library buildings, The Ministry of Culture and Tourism has built 35 cultural centers which also included libraries. Other public library buildings have been obtained through allocation or donation. Only 13 libraries have audio library (KYGM, 2016). Audio library services can also be obtained online.

Public libraries, depending on the number of staff, are open all week days except for Sunday. Events organized in the libraries include the library week, world children books week and national holidays. Reading days, creative drama and reading activities are also organized in the activity areas in or outside of the library. Users are young and use the library mostly to study.

According to address based population registration system result, total population in Turkey is almost 79 million and 24% percentage of the population is between 0-14 years old (TUİK, 2015). A significant portion of the population is young. Hence, the needs of the young population should be taken into account in public library design strategies.

Istanbul public libraries case

The purpose of the study is to discuss the flexible planning of public libraries and searching new parameters for today. The study is based on the assessment of existing public libraries in Istanbul which are subject to the rules of the Ministry of Culture and Tourism, General Directorate of Libraries and Publications.

Methodology of the study is to review the related literature, assessment of existing public libraries and assess the interviews was held with the public libraries managers. Flexible planning parameters are evaluated on the existing public libraries in Istanbul. Though the flexibility parameters are referenced from IFLA samples, some local specifications are also taken into account. In the study, literature review includes IFLA standards for public libraries and also the regulations which are related with the public libraries in Turkey.

The study was carried out in parallel with the accessibility and vulnerability research of existing public libraries which was held August-December period of year 2015. In total, 13 libraries of 35 libraries are examined. Which one of the library was closed during the research study). Two of them are children libraries which one of these children libraries is located within the historical building.

During the interview with library managers, changing conditions, physical conditions and flexibility problems are discussed as well as the solution suggestions are discussed during the interview. Main problem is not to have sufficient physical conditions and changing restrictions. Big part of libraries do not have open plan and does not have expanding areas or open areas. Physical changes or adding new annexes are restricted or it is impossible due to the conservation criteria's in historical buildings. Rapid changes in user profile are another problem to respond the new needs of the users.

Most of the public libraries are within the multi functional buildings such as they are either within cultural centers, theaters, youth centers, official institutions or within private offices. Parallel functions within the buildings affects the libraries positively, such as if they are located within the cultural centers or institutions. If the case is sharing, most examples are placed in the upper floors of buildings. Most of public libraries in Istanbul need some arrangements for accessibility in scope of physical aspects (Yücel, 2016a). Important part of public libraries in Istanbul is vulnerable for disasters (Yücel, 2016b). Even if they are invested or allocated buildings, public libraries should be prepared and strengthened for the natural disasters.

Discussion and Conclusion

The public libraries can provide services at the rate of being able to meet all kinds of information or service needs without interruption and unobstructed physical condition depending on the dynamic structure of community. Planning except the basic service areas in public libraries should be flexible enough to meet the needs in during using period.

Open and flexible planning can be changeable according to the new needs and any changes that is going to be needed. During the allocation decisions for library buildings, should be preferred a suitable building for open and flexible planning. Even if, cultural centers or other related complex building, libraries affect negatively, unless if it has the ground floor location. Library architecture should be flexible and must be easily reorganized depending the settlement conditions of the area.

History, historical buildings and public library connections are important for community. For refunctioning the historical building, location and plan of building are very important. Historical building using process, new library program or special program should be progressed for historical buildings. Accessibility must be provided at all conditions even if it is historical building.

Standard and/or typical library projects are not suitable for every plot when it is considered the needs of the community and users. Because public library building projects must be designed and implemented locally according to the community needs and specifications.

Even if, new or allocated existing building, basic issue is accessibility at all level in the public libraries. User security also should be considered at physical planning level for library planning. Public library is informal learning place also, even though we are in digital era. Updating and upgrading the public libraries to meet the contemporary needs of today's world will support access to the information, exchange information and also creates opportunities of studying together. The location of public libraries within the communities affects the use and the users. It should be implemented within the town planning and policies and also their locations must support the spatial planning of the country to strength the social ties within the community.

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QUALIFIED LIBRARY - A HUNGARIAN METHOD FOR CORPORATE SOCIAL RESPONSIBILITY

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Keywords: qualified libraries, corporate social responsibility, sustainable development, voluntary work

Abstract

The purpose of this study is to show a Hungarian practice for social responsibility and to emphasize all over again the advantages of using the methods of the private sector. Corporate Social Responsibility programs aims are “to improve quality of life for staff, impact positively on the environment, community and wider society and also demonstrate our ethical behaviour as an organisation” as we can read in the British Library’s CSR eReport.

In Hungary, the Government’s policy for quality improvement achievements come true under the Library Qualification 21 Project where candidates can get the Qualified Library Title and each year, only one institution will be rewarded with the Library Quality Award. The facilities entitled to use the Title for 5 years and after that, it can be applied again.

I have analyzed all the Qualified Libraries in the meaning of how their services, programs, policies can serve social responsibility, assure equal opportunities and make options for voluntary work. In these libraries’ quality management handbook and among the services I have found special working groups, guidelines for sustainable, social- and environmentally responsible activities.

Introduction

The background of this study is one of my master's lecture tasks where the topic of the Corporate Social Responsibility (CSR) had to be worked out and presented in the meaning of the benefits for librarianship. The Qualified Library project is the realization of a corporate's social responsibility in librarianship.

The Qualified Library project also is the base of my master's thesis. In my opinion not only it is as important as funding issues but effectiveness and popularity can be measured by the self-evaluate framework created with the help of the Common Assessment Framework. The guideline helps target areas which have to be developed.

About Corporate Social Responsibility

Its roots reach back to the 19th century in the USA when small businesses' leaders reacted corporate leadership's exploiter practices with charitable activities for the less fortunate groups of the society. In the 20th century, supporter activities were expanded and business' social responsibility manifested in actions like: community projects, maintain local community's welfare, concern for employees, occupational safety, ethical advertisement and environmental protection (Málovics, 2011).

There is a survey (conducted between 2004-2007) about companies' social inclusion and equal treatment (Tardos, 2010). During the survey, 149 firms was asked questions like "do they employ minorities and what is the proportion of the employees", "in the last five years has a minority person offered a position in leadership", "does the working place barrier-free and family-friendly", "does the company planning to strengthen the multicolor of the workforce composition", "do they currently have an equality plan" and "is there a passage in the ethical codex about the respect for otherness and non-discrimination". The author points out, it is important to be aware of it is a different thing to employ people from a minority group and another thing if they have the opportunity for career advancement. The survey pointed out that 58% of Hungarian firms are not socially inclusive. It is not a surprise that apart from the small business, multinational firms - which have more than 500 employees and have men majority - are more likely to be socially inclusive.

Corporate, social and personal volunteering

In a corporate level there are lots of ways to accomplish volunteering work: secondment, volunteering based on expertise, personal volunteering, offering the place of employment as a place for the activities, mentoring, taking positions, team building activities and source collecting among employees (Molnár, 2011).

Molnár says, along with these activities all stakeholders have their results and benefits: on the employee level personal effectiveness can be increased so is management and business efficiency. On the other hand corporate benefits can be measured as well by business, reputation and consumers. In business, volunteering work affects and benefits appear in employees' behavior, working mood and loyalty improvement and the increasing proactivity among employees. In reputation, the value of press release, building trust among stakeholders. In consumers, the benefits can be realized when organization and consumer expectations meets.

Qualified Library Title

To realize the aims and principles of CSR there is a project called Library Quality Improvement 21 in Hungary. For the qualification a government decree has been determined[1].

To improve quality and to encourage quality assurance the minister has established a tendering process.

For the Qualified Library Title libraries have to tender with a series of documentation and they have to prepare self-evaluation. Libraries rewarded with the title are entitled to use it for five years. Each qualified library can apply to another tender after the five years have passed. Every year one qualified library which accomplish the tender's conditions the most successful is rewarded with the Library Quality Award.

Since 2014, the Title and the Award handed out by the under-secretary of the Department of Human Resources in Hungarian Culture Day.

First, I examined the Common Assessment Framework, which has been developed for the project, and then I took a closer look to the awarded libraries quality management (for example to their documentation, handbooks, website, news and events).

Documentation for self-evaluation

The framework for the self-evaluation called Common Assessment Framework has accepted by the European Union. It has been determined by the Library Committee for Quality. The aims of the framework are: to explore the organization's strengths and weaknesses, designate the most important areas to develop, determine the directions for further development.

Aspects of the framework

To help evaluate an organization, the framework contains ten steps in three stages.

In the first stage (the beginning of the self-evaluation), the first step is to decide about the planning and organi-

zation's methods of the self-evaluation and the second step is the communication of the project. In the second stage (the process), the third step is to set up working groups, the fourth one is to organize training. The fifth step is transaction and the sixth is to make reports about the findings.

In the last stage of the process an action plan has to be developed and priorities have to be made. The seventh step is to make an action plan, then communicate it. The action plan has to apply in the organization according to the ninth step, and the last step is to make the next self-evaluation.

The process is based on the capabilities and the accomplishments thus 9 criteria have been determined. From 1-5 criterias deal with the organization's endowments. From 6-9 criterias, the framework measures the accomplished results in fields like partners, colleagues, society and key achievements. Each criteria have a section with detailed information with sub-criterias. To help scoring to the organization's self-evaluation process further questions have been worked out in detail to understand sub-criterias' meaning.

Along with these criterias related documents and examples have been specified in the end of the framework.

Documents

The framework specifies the list of the documents that must be and could be developed for tendering procedure. The documents are grouped along with the 9 main criterias. I only mention the mandatory elements.

1. Leadership: Quality management handbook, Quality policy, Organizational structure, Internal and external communication plan, Training plans.
2. Strategy and planning: Strategic plan (included: Mission statement and vision, PGTTJ and SWOT analysis), Annual reports, Action and/or work plan for the current and former year.
3. Human resources: Strategic plan for human resources, Equality plan, Project descriptions (with employees' participation), Evaluation policy and promotion strategy.
4. Partnerships and resources: Documentation about partners.
5. Processes: Local system about process control, Flow charts, process description, service regulations. Guidelines and policies regarding users and the evidence of accessibility.
6. Feedbacks and results about service usage: Results from user satisfaction survey, Handling complains (methods and results).
7. Result about employees: Result from employee survey.
8. Results about the social environmental effects: Press review list (from current and the former year).
9. The facility's key results: Services cost-effectiveness

with cost accounting, Inspectorate reports, Results about tenders and community events from the last 3 years (journeys, team building trainings).

The documentation for the criterias mentioned above shows how complex the system is. It deals with internal and external environment, from users to employees, related partners and partnerships. Through the whole process, surveys have to be made and results have to be built in the project for further progression.

Analysis

Documentation overview among Qualified Libraries

For analysis I examined the institutions' quality management handbooks, strategic plans, mission statements and equality plans. I took a careful look on the libraries website listed below. The list is in a chronological order according to the date of the acceptance of the certification.

List of Qualified Libraries Title:

- University and National Library University of Debrecen, Debrecen (2011)
- Zsigmond Móricz County and City Library, Nyíregyháza (2011)
- Bródy Sándor County and City Library, Eger (2012)
- Bács- Kiskun County Katona József Library, Kecskemét (2012)
- University of West Hungary's Savaria Campus Library, Szombathely (2012)
- Municipal Library and Information Centre of Gödöllő (2013)
- University Library of Pécs and Centre for Learning, Pécs (2015)
- Méliusz Juhász Péter Library, Debrecen (2015)
- Mezőkovácsház City Library (2015)
- National Technical Information Centre and Library at the Budapest University of Technology and Economics (BME OMIKK), Budapest (2015)

Qualified Library Award:

- Bács- Kiskun County Katona József Library, Kecskemét (2014)
- Bródy Sándor County and City Library, Eger (2015)

I chose three aspects (equal opportunity, volunteering and social responsibility) to analyze libraries and some of their best practices.

Equal opportunities in Qualified Libraries

Every library developed their website for disabled people.

At BME OMIKK there were a survey (Juhász, Lengyel 2012) in 2011 about disabled people group's library usage habits. In the University there are 150 students, half of them suffer from dyslexia, 20-20% are handicapped

and hearing impaired, 5-5% visually impaired and chronically ill. Only 24 students filled the survey. The results show that most problems are with accessibility and that participants are satisfied with the librarians help.

Another example is in Municipal Library and Information Centre of Gödöllő. In 2012 the library joined the IVE-TAGR project (Innovating Vocational Educational Training Applying Games Realities) to help develop a method for educators and work consultants. The aim was to help learn those skills and competencies with information and communication technologies which can promote the participant's employment opportunities. The targeted group was young and active-age disabled people.

Méliusz Juhász Péter Library worked out an Equality Plan in which an equality rapporteur (with social worker degree) has been appointed with detailed job description. In the Quality Management Handbook we can be informed about the number of services, programs (for example anti-discrimination, awareness-raising, foster tolerance and multicultural programs) and info-communication tools which aims are to help disabled people.

Volunteering in Qualified Libraries

Also at BME OMIKK there are three volunteer librarians according to its website. One person helps in catalogue and two of them fulfill reference work.

In another library (where I currently work as a student worker) the University Library of Eötvös Loránd University has volunteers in its Foundation not just librarians but professors as well.

Social responsibility in Qualified Libraries

Méliusz Juhász Péter Library describes in Quality Management Handbook's training plan section the impact of environmental activities carried out by employees. In the Work Plan they evaluate last year's programs, make plans for next year and evaluate the changes based on library usage. There is a service mission table where the library makes suggestions for trainings and programs which can help in social coexistence and in the integration for disabled and poor people.

These are just a few examples from an effective, well developed system in librarianship.

Conclusion

This project continuing in Hungary and it is in my intention to take part of a library's tendering process. It is my strong belief that through the Qualified Library project libraries in Hungary can be and will be socially more sensitive. We all feel and fear the dangers libraries have to deal with but with strong community, the ability to learn from each other, creative and innovative ideas are a very powerful list of our profession's characteristic.

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SOCIAL IMPACT OF POLISH PUBLIC LIBRARIES - FIRST FINDINGS AND RESEARCH PERSPECTIVES

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Keywords: job seekers, public libraries, social impact, unemployed, young adults

Abstract

Impact assessment might be seen as a next step in research in a field of library science and its practice. Impact is defined as 'difference or change in an individual or group resulting from the contact with library services'. Social impact is one of the types of impact of library and it refers to individuals, community and general public, and includes impact on: social life, access to information and education, cultural heritage preservation, local culture and identity, cultural diversity, community development and individual well-being. Social impact studies have never been conducted in Polish libraries. It is a research gap, which presented study is trying to fill. Social impact of public libraries is showed on the example of activities for young job seekers. The paper presents first findings from the pilot edition of study and future research perspectives. Pilot project gives some evidences that libraries might be considered as an alternative, unbiased, 'safe' place to gain competences useful on the labour market.

Introduction

The paper concentrates on research process of first Polish study on public libraries' social impact. At the beginning I depict a societal background, which shows my motivations to undertake the mentioned topic. Theoretical background is summarized as well. In second part of paper I describe main research foundations, instruments and realized procedures as well as actions planned for 2017. Study is based mainly on qualitative methods, although as there's a strong need to show the scale of public libraries' impact, some quantitative elements was introduced. After that I present first results from pilot edition of educational programme and study, which took place in one of the Warsaw public libraries in 2015 and 2016. In discussion section I mention important factors forcing to pose further questions about the study design and potential bias. At the end I show some conclusions, but according to qualitative character of the research and the fact that it's still in progress, it can not be considered full or final.

Background of the study

Societal background of the study

Problem of unemployment, although it seems to decrease, is still considered to be one of the major social issues in Poland. According to data from last five years it affects 10% of adults. Some research shows that young adults (between 18 and 24 years old) are severely exposed to unemployment. They are almost quarter of the unemployed registered in labour offices (an average of 23% in 2010-2016) (BAEL, 2015). Specialized public employment services have a wide range of form of support of job seekers, but negative stereotypes make people perceive the use of those institutions' offer as a 'failure', so people in need try to avoid it. Their efficiency is also called in doubt (Trzciński, 2009). On the other hand school curriculum cover only a few topics related to coping with finding a job. Therefore in this context libraries might be considered as an alternative, unbiased, 'safe' place to gain competences useful on the labour market. Some studies seem to confirm that statement. Information Society Development Foundation estimated that 10% library users searched for job using library computers and 2% thereby found a job (Borowski, 2015).

Theoretical background

Impact assessment might be seen as a next step in research in a field of library science and its practice (Belanger & Hiller, 2014). Impact is a broad, elusive, relatively hard to define term and must be described in a context of outputs, outcomes and value. ISO 16439:2014 Information and documentation - Methods and procedures for assessing the impact of libraries standard gives some terminology framework to deal with this issue. Impact of library is defined as 'difference or change in an individual or group resulting from the contact with library

services' (ISO, 2014). In other words it might be any change resulting from the library's activity and library as a organization, including intended as well as unintended, negative as well as positive, and long-term as well as short-term effects (Laser..., 2005). Social impact is one of the types of impact of library and it refers to individuals, community and general public, and includes impact on: social life, access to information and education, cultural heritage preservation, local culture and identity, cultural diversity, community development and individual well-being (ISO, 2014).

Social impact studies have been held more and more intensively since 2010, but we can not forget that it was conducted earlier as well (although they might not be called specifically 'impact' studies)[1]. However social impact studies have never been conducted in Polish libraries. It is a research gap, which presented study is trying to fill.

Methodology

Purpose of the study

The analysis of studies carried so far can lead to the conclusion that it is possible to examine for libraries' impact in two perspectives:

- due to the category of research subject :
 - impact of programme, service or library process,
 - advantages in specified areas of life, which come from using a library or the libraries,
- due to the used measures:
 - using solicited evidences, based on library users' (sometimes also non users') declarations on actual and/or potential impact,
 - using observed evidences based on observations and test results (Vakkari & Serola, 2012).

The study presented in this paper tries to combine these perspectives by looking at benefits, observed on the example of the initiative of the library, in the wider context of the more general impact resulting from contact with the library, estimated on the basis of survey of library users. Therefore the goal of the research is to measure social impact of public libraries as:

1. The impact of library initiative, which tries to generate sort of social benefit, ie. activities supporting job seekers. To obtain that educational programme 'Rise on labour market' ("Wykierkuj na rynku pracy" in Polish) dedicated to strengthen competences related to job market was designed. It will be analyzed in following way to find:
 - changes in knowledge, skills and attitude of participants,
 - changes in participants' career, eg. finding and starting job, changing profession, taking some additional courses or study programmes, decision of starting their own business and others,

- The general impact of libraries understood as impact in area of social life, including social inclusion and cohesion, access to information and education, community development and individual well-being.

Instruments, procedures and research perspectives

For this reason the study was divided into two modules, which will fulfill major research goals outlined above. Empirical study was preceded by desk research and review of Polish and foreign literature on impact in general, libraries' impact, functions of public libraries and activities taken by them to support job seekers.

Module 1. The impact of library initiative. The educational project 'Rise on labour market' are directed to two groups of people, who are a research group as well: high school students dealing with decisions about their future career and unemployed university students and graduates.

Changes in knowledge, skills and attitude of participants are examined by comparison of results of survey taken at first and at the last meeting. Respondents are asked to assess how confident do they feel in following areas, which corresponds with curricula, ie. planning a career, sources of job offers, finding information related to job market, CV preparation, cover letter preparation, building public image on the Internet, behaviour at a job interview, labour market institutions, labour law, mobbing, practices and internships, sources to start non-formal education, time management. They are also asked to describe how do they think employer would see their strengths and weaknesses. Both of this topics are later discussed during in depth interviews conducted after completion of the programme and three months later. Goal of IDI is also to find changes in participants' career and if and eventually how do they associate it with taking part in programme.

Module 2. The general impact of libraries. Second part of the research is to find answers to more specific research questions that can be divided into two main groups :

- According to which library activities users feel impact on their personal life and social life? How do they perceive this impact? How do they describe its strength?
- Are there differences in the impact if we take into account region of country, size and type of library? Are there any differences if we take into account respondents' characteristic (gender, age, social status, frequency and manner of using library)?

Because of the exploratory character of research there are no strong thesis assumed. The questionnaire was designed based on desk research, data collected during pilot edition of educational programme, research workshop in which Warsaw public libraries' workers took part and some pilot tests. After answering general questions about frequency of using libraries, respondents will be asked to indicate if they perform in public libraries

certain actions (eg. borrowing books, learning, meeting other people, participating in cultural events) and then how do they think it results on their personal and social life (eg. gaining information and knowledge, relaxing). It is highly desirable to achieve a representative sample of Polish public library users. Computer-assisted telephone interviews are scheduled for January and February 2017.

Pilot edition results

Before implementation of the educational project and the research I decided to conduct a pilot edition of both. It took place in one of the branches (called Book Stop - "Przystanek Książka" in Polish) of Warsaw Public Library in Ochota District between November 2015 and March 2016. Up to six people took part (including high school students, university students and graduates) in meetings and two of them finished the whole programme and participated in project evaluation and study.

Change of competences

It might be said that these respondents feel they gained some knowledge and skills and their attitude changed in some way. Internalisation of curriculum is seen when we look at answers given in both closed (table 1) and open (table 2) questions of survey as described above[2].

Table 1. Perceived differences in participants' knowledge and skills at the beginning and at the end of the programme.

| | Person A | | | Person B | | |
|---|----------|----------|-------|----------|----------|-------|
| | Survey 1 | Survey 2 | Diff. | Survey 1 | Survey 2 | Diff. |
| Planning a career | 3 | 4 | 1 | 3 | 4 | 1 |
| Setting career goals | 1 | 5 | 4 | 3 | 5 | 2 |
| Knowledge about information sources related to job market | 3 | 5 | 2 | 2 | 5 | 3 |
| CV preparation | 1 | 5 | 4 | 3 | 5 | 2 |
| Cover letter preparation | 1 | 5 | 4 | 2 | 5 | 3 |
| Building public image on the Internet | 1 | 5 | 4 | 4 | 5 | 1 |
| Behaviour at a job interview | 1 | 5 | 4 | 2 | 4 | 2 |
| Knowledge about labour market institutions | 1 | 5 | 4 | 1 | 5 | 4 |
| Knowledge about labour law | 1 | 4 | 3 | 1 | 4 | 3 |
| Knowledge about practices and internships | 1 | 4 | 3 | 3 | 5 | 2 |

Table 2. Perceived differences in participants' knowledge and skills and attitude at the beginning and at the end of the programme.

| | Person A | Person B |
|----------|--|--|
| Survey 1 | Strengths: diligence, willingness to work, perseverance, sincerity and loyalty (loyal employee), responsibility, ability to set myself challenges Weaknesses: disposition to Irritability, anxiety, fussiness, I like to have the power, ability to communicate between people if necessary | Strengths: ability and willingness to learn and change, pursuit of the good performance, the desire to perform changes Weaknesses: lack of experience, I need to learn a lot of things, poor ability to organize duties |
| Survey 2 | Strengths: Punctuality, commitment, responsibility, desire to change myself and to develop the company (etc.), team working, pleasure of working at sth that interests me, and thus a higher efficiency Weaknesses: Laziness, bad days from time to time, poor motivation (if I don't like the work) (Even so, I wouldn't tell that to employee ...) or I'd changed it into my strengths :)) | Strengths: desire to change, openness to changes, ability of performing (objective) discussion, TIME MANAGEMENT Weaknesses: lack of practical experience (but it's better now than before thanks to the knowledge from classes) |

More in depth analysis was possible thanks to individual interviews carried on just after programme end and three months later. One again participants claimed to feel some change in their knowledge and skills, as well as attitude according to thinking about themselves and about their future job. They described it as follows:

- **Person A:** Certainly there's a change. First of all that more or less I know what will happen next. I'm still afraid all of this, this process, and in general, getting a job, apprenticeship, and so on, the interview and if I can keep it up. Now I am a little less afraid, simply because I know, what awaits me. I think this is the biggest plus of all that I learned that I know where to look for.
- **Person B:** I'm somewhere closer than farther, let's say, to my future career. I know better where to start, in fact I have already decided, I have 2-3 months of free time and I want to do something about it, I actually know where to start. Certainly there's some uncertainty associated with the first work, but when it comes to the process itself, I definitely feel more confident. I do not feel that there was something that I thought differently, and it completely changed. But it seems to me that all is more in order now. This is such an important part of my future, let's say. Maybe I have a little bit more positive approach to that. Or something like that, that feeling that I did something cool. It also builds my confidence a little.

Self-assessment of position on the labour market

Participants were asked to describe their own position on the labour market. They considered their current position to be difficult. Person A told that outright: I think I am at the lowest, the lowest of the lowest. I'm still a student and I don't work - I think I'm at the lowest level of all. It is connected mainly with the fact that person A till that time did not have any job, even temporary or seasonal. Despite of that this participant wanted to find job for summer. Person A was more willing to work in Warsaw than in her hometown, even thought living expenses in capital are much higher. This decision was motivated by the fact that in this smaller town young people working are perceived negatively, it provokes rumors that certain person has financial problems (What? You have so little money, you have to go to work?). However person A was willing, despite the negative attitude of community, to start there her first job. Person B did not plan to take job during summer vacation.

The participants had some concerns about unemployment and if they are able to find job and how they can handle it. In the case of person A it was associated with some difficult experience of one of her parents (I had no particular authority how ones should work) and fear to not to repeat parent's situation. This person had also fear that if she were unemployed, it would be 'for a reason', meaning - she's not a good employee. For person B having no job is also associated with negative thinking about himself: In this situation I might not quite believe in my abilities, capabilities, that I can not do anything good enough that someone wants to hire me. So let's say those would be my concerns. But it always seems to me that I will try in different places. Person B had a slightly more positive experience, because as he pointed out, in the countryside, where he comes from, people are work-

ing seasonally or occasionally and unemployment is not as negatively evaluated as in the cities, where it is associated with poverty and even homelessness. The participant noted, however that it's extremely difficult situation, when one is forced to return to the village, because of problems with finding job in the city. And here is some pressure, but at this stage it is motivating for me – person B said.

Library as a place for job seekers

Participants were asked to declare whether or not the library is the right place to provide services for job seekers. They answered as follows:

- **Person A:** I do not know where else. I didn't even know that something like this might be for free, that you can go there and learn something.
- **Person B:** It seems to me that it's a right place, because I do not see other place that would be better. Library is a place that everyone has access to and it's in some way associated with knowledge.

Although, as person B noted, the library is not associated primarily with such topics as labour market. After reading the announcement of the project this participant expected that lessons will be given by specialist in the field of HR. On the one hand – he said – it would prove professionalism, on the other – it might arouse distrust: If it were HR specialist, I would have more suspicions to what he or she says and it might not be unselfish in this case. Person B claimed that librarians must somehow 'prove' that they are able to be a trainer during such workshops: It seems to me that young people would think that the library is a place with books only and that these ladies are just dealing with books. So there's this stereotype.

As the alternatives place to conduct such meetings participants listed: local community centers, universities and schools, mainly because they have enough room. Person A said that she would participate in workshops in labour office if it was specially addressed to young people. She motivated this in this way: Despite the fact that I'm rather not interested ..., I wasn't interested in labour office's services, I wouldn't go because I wouldn't know about that. If - by some miracle – I got to know about it, I'd think that's a higher level. In libraries this type of barrier does not occur.

Changes in participants' career

In the second interview conducted three months after 'Rise on labour market' programme had finished, participant were asked to rehearse about changes in their career.

Person A didn't find job in Warsaw, although she sent approximately twenty offers and had about five responses. She had three serious, as she stated, interviews, but either she was not selected or she did not like the job

offered. One month after school final exams she came home and very quickly found job at small bookshop as a clerk. Person B described her job as alright, but boring, but she perceived it as a first step in her future career in publishing market, because this job, although sort of uncomplicated, gave her some experience both in trade and book market.

Person B, who primarily hadn't planned to start a job, changed his mind and after some time searched for job. He sent several offers and had the interview in IT company he was interested in, but did not succeed. Therefore this participant came back to his home village and had a free time for the rest of vacations. When needed he helped his family on their farm. He interpreted his searching for a job as a 'trial' and getting some experience.

What is worth to mention, both participants cooperated in searching for job, sent each other interesting offers and announcements. They found themselves interested in job market topic and read once again materials from the training when they needed it most, as well as they broadened their knowledge by reading some blog articles. Additionally person A helped her school mates and her sister in writing CV.

General libraries' impact

During second interview participants were also asked if they see any libraries' impact on their life, in other words – what do they do at libraries and what does it give them? Person A generally perceived library as a place for borrowing books. She doesn't use it frequently while being at school to not to be distracted from learning, but she claimed that during summer vacations she goes there almost every day, so often she knows everybody, who lives near by and she knows every name on tombstones on the cemetery that is on the way to library. She becomes so absorbed by books, that she forgets about the world around her. It gives her a real pleasure, relax and living the feelings of literature characters. It is also a method for spending free time and the expulsion of boredom.

Additionally person A uses library as the Internet access point, when she has no access at home. It is also a place for a collaborative learning. During 2016 summer vacations after work she gave her colleague math lessons in public library.

Person B had sort of mediated contacts with libraries. Because he lives at countryside he had no direct access to library, but he found a way to use it anyway. He used county library catalogue extensively and then asked his father to borrow searched books, when he was in this bigger town. After he got an e-book reader, he partially resigned to use library in described way.

Person B sees the libraries as a great place for learning. During his stay at Warsaw he frequently visited National Library[3], located near his school, where he did his

homework and learned in silence and comfortable conditions. He had feeling that he had the access to the widest range of resources of information and knowledge.

Discussion

After pilot edition of project, programme was presented to public libraries in September 2016 and programme materials were given. Twenty free libraries from all over the country decided to participated in project. However till mid December 2016, ie. moment of closing this article, only one library started trainings and it wasn't delivered to the assumed target group. It poses further questions about effectiveness of research project – if the programme doesn't start at an adequate number of libraries, there will be no possibility to conduct questionnaires and interviews. Therefore some other forms of acquire respondents are taken into consideration right now.

Possible bias of research methods is what must be kept in mind as well. There's an endangerment that participants of the trainings would feel obligated to declare any improvements in their competences. Other possible problem is that librarians, trying to show the best side of their work, would choose or encourage to interview people, who did the best and represent 'success stories'.

Conclusions

The main conclusion that might be drawn, even after only pilot edition of project, is that if the impact of libraries appears, it is identified by users and interrelated with library activities. Areas of social impact might depend on the manner and intensity of using libraries. Regarding the impact of the initiative – it depends largely on the current and long-term needs of the participants.

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- [2] It is important to mention that participants did not remember their first answers when they took the second survey. Actually they did not remember they took any survey at all. Although some bias understood as desire to show the researcher positive results must be taken into consideration. Questionnaire in pilot edition of study is slightly different than in main edition, because of the improvements introduced based on respondents comments during filling it and some changes in curriculum.
- [3] Polish National Library has both academic and public library status.

UNDERSTANDING DISASTER RELATED INFORMATION SEEKING BEHAVIOR USING ORAL DOCUMENTS

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Abstract

The 2011 Great East Japan Earthquake was one of the largest earthquakes ever recorded in Japan's history. People experiences information disruption within their community, as well as between the outside world. Such situation can result in significantly different information seeking behaviour from work-related or everyday life behaviour. Therefore, understanding how individuals sought for information during such a disaster situation is an important topic. This paper analyses people's recollection of their experience during the Earthquake. Using a grounded theory approach, 376 information seeking incidents were identified from 143 people's oral documents. Our findings show that informal, trusted social sources such as family, friends, and neighbourhoods are more critical as the first sources of warning information that are relevant to the location and circumstances of the resident. Therefore, residents act as information sources as well as information seekers. Our study provided a detailed set of concepts that are important to understanding earthquake and tsunami-related disaster information seeking behaviour.

Background

Earthquakes and related natural disasters are always a possibility for anyone who lives or works in areas along the Pacific Rim, so called, “Ring of Fire” (Weisenfeld, 2012). Major disasters such as 2004 Indian Ocean Earthquake and Tsunami (Cummins, et. al., 2009) and the 2011 Great East Japan Earthquake and Tsunami constitute a ripe domain for information-seeking behaviour concerns, as they involve collaboration among individuals, organisations and society as a whole. Disaster situations, throughout history, have demonstrated that people rise to difficult challenges to help others, often through remarkable innovations and adaptations of their abilities and resources to meet needs (Tierney, Lindell and Perry, 2001; Kendra, Wachtendorf and Quarantelli, 2003).

The lives of many people are altered forever when they are caught up in an unexpected disaster in their physical environment. Formally, we can define such disaster event as a temporally acute, unanticipated natural or manmade disaster (Imran et. al., 2013). In some settings, citizens and governments can seek to prepare for the occurrence of crisis events, for example, planning for earthquake response in geologically active areas. Such planning can involve response preparation for individual citizens and emergency services. Unfortunately, however detailed such schemes are, the exact response required will be unknown and each event involves unique circumstances. Two things that are certain though are the response and timely collection of relevant information. The response needs to be prompt, often very prompt. Thus, timely collection, collation and distribution of relevant information to all those caught up in a disaster event is also important. Those are key to limiting immediate distress, suffering and loss of life, and potentially the long-term effects on individuals and their environment.

Taking the case from the 2011 Great East Japan Earthquake and Tsunami, it triggered powerful tsunami waves that reached heights of up to 40.5 meters (133 ft) in Miyako in Tohoku’s Iwate Prefecture, on March 11, 2011 at 14:46:24 JST (UTC +09:00). It reached a magnitude of 9.0 on the Richter scale and lasted for 6 minutes; it is considered the fourth most powerful earthquake in the world since modern record-keeping began in 1900. Nearly 16,000 people were reported dead and 2,500 people missing after the disaster and more than 6,200 million people were affected in some way. The Great East Japan Earthquake on 2011 was one of the largest disaster ever recorded in Japan’s history and destroy many critical infrastructures. Immediately after disaster happened, people experiences information disruption within their community, as well as between the outside world. This inability to access information caused by physical or virtual barriers instigates instant isolation (Arai, 2013).

A small number of studies have been undertaken around the world on how people seek for information in a disaster. Most of the research have focused on what media sources people use (Greenberg, Hofschire and Lachlan,

2002; Piotrowski and Armstrong, 1998; Roeser and Schaefer, 2002; Seeger et. al., 2002; Stempel and Hargrove, 2002). This type of study on information-seeking provides data on which better communication plans can be built by emergency agencies.

First study that we found on Information Seeking Behavior (ISB) in a disaster was conducted by Barbara Ryan (2013) based on a flood in Queensland, Australia from 2010 to 2012. This study informed agencies to look at how individuals sought for information, the channels they use to get information and the type of information they’re looking for. To analyse it, she compared her findings with the framework of the information-seeking model by Savolainen 1995; 2008). Unfortunately, this research did not include other types of natural disaster such as earthquake and tsunami.

Apart from the concept of information-seeking behavior, we need to know what data sources that we will use. With increasingly pervasive information and communications technology (ICT), the people’s attention to disaster situation is high. People generally need the disaster information to overcome with the problem that might be happen. Therefore, people often get this information through on-line activities. A large number of research have investigated information-seeking behavior across social networking service or on-line activities (Tapia, A., et. al., 2011). Unfortunately, however, many people did not have any access to face to face communication. Furthermore, researcher tend to analyze disaster information propagated through Twitter network with the purpose of assessing the reliability of Twitter as an information source. Their analysis shows that the propagation of tweets that correspond to rumors from tweets tend to be questioned (Mendoza et. al., 2010). It leads us to say that social media data can also be problematic. For example, a United Nations study of the potential of social media, “While they (social media and microblogging) make available information that would not have emerged otherwise, they pose a serious challenge in terms of authentication. Validation is a fundamental issue in the further use of social media in situations of conflict and disaster” (Coyle, et. al., 2009).

In this study, we use different data resources. There is another resources than online or social networking sites data which we known as oral documents. Turner (2010) defined oral documents as an evidence or information about both specific content and characteristics embedded in action(s) essential to furnishing that content via word of mouth spoken in the presence of another. Given that, we specifically consider about the ways in which oral documents mediate our vision and understanding of disaster rather than using online arenas. This new sources offered fascinating echoes of the earlier earthquake and insight of the previous earthquake.

In addition, having just completed less than two years of research on the devastating 9.0 magnitude earthquake, tsunami and hundreds of strong aftershocks that flat-

tened East Japan and surrounding areas on 2011, perhaps we can gain more understanding on this topic compared to other large-scale disasters. We specifically consider the challenge of studying disaster related information-seeking behavior using oral documents during The 2011 Great East Japan Earthquake and Tsunami.

Method

To investigate the information-seeking behavior patterns in disaster particularly, three reports (oral documents) used as a primary data collection. We will verify data by open coding to develop a grounded theory model of their consistent pattern of information seeking behavior. Creswell (1998) explains that “The centerpiece of grounded theory research is the development or generation of a theory closely related to the context of the phenomenon being studied”. Furthermore, Charmaz (2014) clearly describe how documents can be used as data, “Grounded theories of documents can address form as well as content, audiences as well as authors, production of the text as well as presentation of it.”

This study focuses on the information-seeking behavior patterns which include information needs, sources channels and information seeking pathways during the warning and threat dislocation periods of the 2011 Great East Japan Earthquake and Tsunami. As we point out in literature review, one concept that we use for primary data collection is oral documents. We verified data by open coding to build up a grounded theory model of information-seeking behavior pattern in disaster.

As a start, deductive research begins with a pre-existing theory from which testable hypotheses are derived, but grounded theory starts with observations from which generalizations can be made (McKnight, 2007). Barney Glaser and Anselm Strauss first described grounded theory research as sociologists in the 1960s and explained its further development in several books (Glaser, 1978, 1992; Glaser and Strauss, 1999, Strauss, 1987; and Strauss and Corbin, 1998). We summarize the structure of current grounded theory research practice into stages of using Dey’s theory (1999): (a) initiating research, (b) selecting data, (c) collecting data, (d) analyzing data, and (e) concluding research. Inherent to the grounded theory method is the practice of concurrent activities (b), (c) and especially (d). Research concludes (e) when the categories developed in (b), (c), and (d) become saturated and no new patterns emerge.

Documents provide a major form of data. Most qualitative research entails analyzing texts. Documents comprise one type of text whose form, content, purpose, accessibility, visibility, utility, legitimacy, and consequences, can raise intriguing questions. Grounded theories of documents can address form as well as content, audiences as well as authors, and production of the text as well as presentation of it. (Charmaz, 2014). We collect and analyze written texts of (i) publications of local government,

power companies and news media organization to produce timeline datasets (ii) what people write and report about themselves during disaster after which we call it as behavior datasets. These documents enter research in multiple ways that reflect everyday life (Charmaz, 2014; Plummer, 2001). Such potential documents may be viewed as relevant for addressing our research questions. In the first step, we will present our documents collection and entire procedures in the matter of how to code our datasets.

Collection of Documents

Our work began with gathering publications of local governments, power companies and news media (broadcasting) organization to arrange timeline and to portray temporal phases of disaster. We prospect three documents published after the 2011 Great East Japan Earthquake and Tsunami strikes. This paper focuses on behavior datasets that obtain of three documents that contains of 376 annotations from a total of three reports. Behavior datasets focus is to grasp information seeking pathways, such as information needs, channels and sources. We gathered three oral documents (in Japanese) that consists of 143 people stories with 376 annotations during post-disaster event. We gathered diverse samples on very unique limited publication in a major affected area such as Iwaki City, Fukushima Prefecture and North Ibaraki, Ibaraki Prefecture. The following list provides a profile of the documents included in the study:

- a) Article “Kita Ibaraki Shinsaiki” (North Ibaraki’s Record)
 - b) Article “2011-nen 3-gatsu 11-nichi Iwaki: Tsutae tsugitai Higashinohon Daishinsai no Kiroku” (2011/3/11 – Iwaki City: The Great East Japan Earthquake Record)
 - c) Article “2011-3-11 Iwaki-shi, Higashinohon daishinsai no Shougen to Kiroku” (2011/3/11 – Iwaki City: Record of Testimony on The Great East Japan Earthquake)
- First, we manage our behavior datasets that consists of the activities to organize information so it can be analyzed. It starts with the analysis plan and ends when the data analysis itself begins. Data management activities include (i) drafting analysis plan, (ii) creating codebook, (iii) establishing reliable coding, (iv) reviewing surveys for incomplete or missing data, (v), entering data and validating the accuracy of the entry, and (vi) cleaning the data (Fink, 2003).

Before we create a codebook, we define a code. Codes usually are the unit or symbols that computer programs use to identify variables. However, we manually input each codes from author judgement. Suppose from oral documents, we want to know information needs from people stories. One question of concern to us is what information needs people report on disaster situation in oral documents. To find out what we want to know on this topic, we make classification to make a reliability checklist which variables to look for (in this case, for example, needs about tsunami warning, disaster information or evacuation instruction). Our codebooks contain

descriptions of the questions, codes, and variables associated with the oral documents for which the codebook were created.

堤防を津波は越えて来た。油断は禁物。

平海町在住 鈴木 長一 (81歳) 2

私は三月十一日の地震の日、数さんと午後二時二十分頃「マツモ」(コブのり)を採りに出かけ自宅の下のテトッポットの所で採り始めたのですが、海水の上下の動きがひどいので私は採らずに数さんが採るのをテトラポットの上から見えていました。海の状況がいつもと違うので早く上るよう(言い)数さんは上ってすぐトラックで家に帰ったので私も自宅に入りテレビをつけました。五分位みた時に突然画面の左上に大きく地震強震という文字が出ると同時に地震が来て、テレビは消えてしまいました。揺れがひどくなり、家内と一緒に机の下に入り、揺れがなくなるまでいました。家の中は食器やいろいろなものが部屋に散乱し、廊下

Figure 1. Behaviour datasets sample on North Ibaraki Disaster Diary Page 12-13. A typical structure has a title, address, name (omitted), age, and main text.

On the first step, we establish a reliable coding, for example Figure 1 as a behavior dataset. It displays a person story during the event. From this, we extract several information:

- “Strange status of sea condition that he got from friends.” This information considered as input or passive information needs. We categorize it to passive information needs and information source.
- “As soon as he came back home, he turn-on his television and got information about earthquake warnings. About 5 minutes after earthquake warning, the big earthquake strikes and television automatically turn-off.” We select this information as passive information needs that Mr. Suzuki got from television (considered as information channel).

As the behavior datasets generated during a disaster are extremely varied, we need to start by filtering out each code into categories that do contribute to valuable information. We define each person stories into several code categories such as information needs (include passive and active), information channels, and information source. Specifically, we start by separating code into three main categories:

1. Information Needs: if a message conveys/report a recognition that people’s knowledge is inadequate to satisfy a goal that they have. Also, we divide into two categories, passive information needs and active information needs.
 - a) Passive Information Needs: is the behavior which receiving or subjected to an action without responding or initiating an action in return. Several kind of information that people search passively during the disaster are below.

- “Disaster Information” category includes disaster information, damage and loss information, disaster preparedness information, earthquake information, and tsunami information; “Warning” category includes earthquake early warning (EEW) and tsunami warning; “Electricity Information”; “Evacuation Instruction” category includes evacuation instruction, finding shelter; “Hospital condition” category includes hospital condition, patient safety, dispatch information for health workers, health care exam place; “Current status” category includes regional damage condition, Tohoku condition, Iwaki city; and, Nuclear accident.

b) Active Information Needs: is the act of actively seeking information in order to answer a specific query. Several kind of information that people search actively during the disaster are below.

- “Disaster Information” category includes damage and loss information, disaster preparedness information, earthquake information; “Warning” category includes earthquake early warning, tsunami warning; “Evacuation Instruction” category includes evacuation instruction, finding shelter; “Post-tsunami Supplies and Equipment” category includes water outage and saving water, gasoline and diesel supply, support material and water, food, clothes distribution; “Education” category includes school postponement, entrance exam result; “Status” category includes Family status, fishing vessel “Transportation” category includes road closure and public transportation information, train condition
- 2. Information Channels: if a message reports about how people keep in touch with information. The summaries are below.
 - “Speakers” category includes ambulance and fire brigade truck’s sounds alarm warning, city’s public relation car, helicopter, office speakers, police car, resident speaker, school’s broadcasting; “Face to Face” category includes people shouting, student’s shouting, teacher’s instruction; “Phone” category includes mobile phone, public telephone “Mail” category includes email/text message (phone), news (phone) “Radio” category includes radio, cell phone radio, car radio, wireless radio, radio station “Television” category includes inside (television, news, Kobe television, NHK television), Outside (in-car television) “Internet” category includes government or agency website, SNS “Others” category includes movie screen, helicopter
- 3. Information Sources: if a message points to information sources that providing extensive coverage.
 - “Local Government” category includes city hall staff, district officer, Fukushima prefecture, government, ministry, prefecture leader, company’s resident, public relations, staff member, support center “Foreign Government: category includes Australian government “Education” category includes parent/guardian, kindergarten president, head of parent-teacher association, school student, teacher “Health and

Safety” category includes ambulance, fire brigade, local fire volunteer department, nuclear safety commission, person from health center, police “Transportation” category includes train company; “Family/Neighborhood” category includes family, friend, neighborhood, someone

Once a code has been classified into one of the above category, code category-relevant information can be extracted for further analysis. For example, we want to know the correlation between information needs and information channels can be identified in the result section. From 143 people in oral documents, we extract about 376 annotations of behavior datasets. Hence, we can visualize inter-relationship between each code categories with d3.js. We will present our results in the next section.

Results

This section presents our findings of relations between actors, information sources, channels, and needs.

Basic Demographic Characteristics

Although the size of the data samples prevents any analysis of gender, age or occupation and possible links to information source preferences, this basic demographic characteristic given in the oral documents and in order to lay the groundwork for further research. The following table presents information on the people appeared in our oral documents whose had been involved at the time of the disaster in Japan. From the total of 143 people in oral documents, a total of 92 males, 50 females, and 1 did not mentioned in oral documents.

Table 1. Gender distribution on the oral documents’ transcript

| | |
|---------------|----|
| Female | 50 |
| Male | 92 |
| Not Available | 1 |

Table 2. Age distribution on the oral documents’ transcript

| | |
|---------------|----|
| < 25 | 2 |
| 25 - 39 | 11 |
| 40 - 55 | 19 |
| 56 - 70 | 35 |
| 71 > | 4 |
| Not Available | 71 |

Another thing to mention is the age distribution. A total of 143 people in oral documents, we found that 2 people is below 25 years old; 11 people is between 25-39 years old; 19 people is between 40-55 years old; 35 people is between 56-70 years old; 4 people is above 71 years old; and 71 persons did not reveal their ages in oral documents.

Channels vs. Passive Needs and Active Needs

In this sub-section, we present the connection visualization between information channels and passive information needs as well as information channels and active information needs. With this view, we will know which channels that people mostly used during disaster with or without responding or initiating an action in return (actively or passively).

In passive information needs, the most used channel during the disaster was mainly Television (n= 55). From here, people then considered other channels such as Radio (n= 29), Phone (n= 27), Face to face (n= 20), Speakers (n= 20), Mail (n= 10) and Internet (n= 6). Television is used mostly to disseminate Disaster Information (n= 24), Warning (n= 10), Current Status (n= 7), Nuclear Accident (n= 5), Electricity Information (n= 4), Evacuation Instruction (n= 3), and Transportation (n= 2). The following table presented what kind of passive information needs that most people want to know through different channels.

In active information needs, the most used channel during the disaster was mainly Phone (n= 29), followed by Mail (n= 16), Television (n= 11), Face to face (n= 7), Radio (n= 7), Speakers (n= 5) and Internet (n= 1). Phone is used mostly for people to seek information actively in order to answer a specific query, for example contacting family or relatives (n= 21). Other active information needs that using phone was Post-tsunami supplies (n=5), Education (n=2), and Evacuation Instruction (n=1). The following table presented what kind of active information needs that most people seek actively through different channels.

To sum up, our findings show the various channels of passive needs and active needs. In passive information needs, the most used channel during the disaster was mainly television. While in active information needs, phone is used mostly for people to seek information actively in order to answer a specific query, for example contacting family or relatives.



Figure 2. Sources vs. Passive and Active Needs



Figure 3. Channels vs. Passive and Active Needs

Sources vs. Passive Needs and Active Needs

In passive information needs, the most used sources during the disaster was mainly from Family/Neighborhood ($n=69$). From here, people then looked for information across a range of sources, Local Government ($n=29$), Health and Safety ($n=27$), Education ($n=5$), Transportation ($n=2$) and Foreign Government ($n=1$). Most people in oral document get information from their family/neighborhood about Evacuation Instruction ($n=25$), Warning ($n=17$), Current Status ($n=12$), Disaster Information ($n=10$), Electricity Information ($n=3$), Post-tsunami supplies ($n=2$). This following table showed what kind of passive information needs that most people want to know through different sources.

In active information needs, the most used sources during the disaster was mainly from Family/Neighborhood ($n=34$), followed by Education ($n=8$), Local Government ($n=8$) and Health and Safety ($n=7$). Most people in oral document seek information actively from their family/neighborhood about Evacuation Instruction ($n=8$), Warning ($n=3$), Current Status ($n=19$), Disaster Information ($n=2$), Electricity Information ($n=3$), Post-tsunami supplies ($n=2$). This following table showed what kind of passive information needs that most people want to know through different sources. In conclusion, our findings show the same sources, family/neighborhood, that people use to fulfill their passive information needs and active information needs.

Passive/Active Channels vs. Sources

In this visualization, some annotations mentioned both channels and sources in the same activity. From this findings, we found or provide two definitions that channels used in passive information needs called passive channels and sources that used in passive information needs called passive sources. In passive information needs, most used channel is Face to face ($n=16$), followed by Mail ($n=7$), Phone ($n=6$), Speakers ($n=3$), Radio ($n=1$) and Television ($n=1$). The sources mostly they got form Family/Neighborhood ($n=19$), Health and Safety ($n=5$), Local Government ($n=5$), Education ($n=4$) and Transportation ($n=1$). In active information needs, most used channel is Phone ($n=13$), followed by Mail ($n=7$), Face to face ($n=4$), and Speakers ($n=2$). Most people used sources from Family/Neighborhood ($n=16$), Education ($n=5$) and Local Government ($n=5$).

As we can summarize from our findings, in passive information needs, most used channel is face to face and most used sources is family/neighborhood. While in active information needs, most used channel is phone and most used sources is family/neighborhood.



Figure 4. Passive/Active Channels vs. Sources

Conclusion

As demonstrated in this research, we confirm that through oral documents, we know people can choose which channels and sources (passive or active) they want to use. In disaster situation where panic circumstances happened and trust has deteriorated, the ability to make this choice can prove valuable. Additionally, we found that people mentioned in oral documents used to support the warning phase as they maintained practices, but also modified practices, which led to structural changes in their society.

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VIRTUALLY TOGETHER: BUILDING AN ONLINE INFORMATION LITERACY COMMUNITY

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Keywords: information literacy, library instruction, OER, teaching resources, assignment design, community of practice

Abstract

This paper describes the evolution of CORA (Community of Online Research Assignments), an open educational resource (OER) developed for librarians and faculty in higher education. Two librarians at Loyola Marymount University (LMU) in the United States received a Statewide California Electronic Library Consortium (SCELC) Project Initiatives Fund grant. The grant proposed to expand upon an internal information literacy assignment collection at LMU by using the “recipe” metaphor to envision the assignments as recipes that could be tweaked or easily adapted to fit into any information literacy curriculum. Input from two faculty focus groups was incorporated into the original prototype design.

The site was built using Drupal, an open source content management platform. Several small assessment studies were done to improve the CORA interface, including task-based usability testing, digital fly-on-the-wall observations, librarian interviews, card sorting, and a survey. The goal of the assessment was to improve CORA’s search functionality and ease of use and increase CORA’s relevance to instruction librarians both in the United States and in other countries. Key findings included a reluctance to log in or create a user account; a perception of the site as a marketplace rather than a community; a need to shorten the forms on the site and tweak unclear terminology; a need for more practical “Teaching Resources” such as research guides; and support for expanding the scope of the information literacy concepts beyond the United States. Please visit www.projectcora.org to see this new virtual community of practice.

Introduction

In 2014, Susan Archambault (the author) and Lindsey McLean, both librarians at Loyola Marymount University (LMU) in the United States, received a \$5000 Statewide California Electronic Library Consortium (SCELC) Project Initiatives Fund grant (SCELC, 2016). The grant proposed to expand upon an internal information literacy assignment collection at LMU by using the “recipe” metaphor to envision the assignments as recipes that could be tweaked or easily adapted to fit into any information literacy curriculum. All assignments contributed to the collection would be released under an intellectual property license that permits their free use and re-purposing by other educators, allowing the assignments to be enhanced by user feedback in order to build a rich corpus of best practices. This paper documents the development of CORA, an acronym for the Community of Online Research Assignments (CORA, 2016a). CORA is now an online space for the worldwide sharing and discussion of information literacy assignments and teaching resources.

Developing a Prototype

Susan and Lindsey conducted two faculty focus groups to gather input on the characteristics of effective research assignments and the desired features in a searchable, open access repository. They developed a draft assignment template for the focus groups to give feedback on (see Figure 1). Several recurring themes emerged from the focus groups that could be incorporated into the original prototype of CORA. One theme was the importance of modeling, or showing examples of the desired characteristics of a successful assignment and providing relevant resources to complete the assignment. Another theme was the importance of scaffolding, or allowing for successive levels of progress towards the end goal of an assignment or learning outcome. Examples of scaffolding included breaking up assignments into smaller steps that would build on each other, giving feedback early on by approving a research topic, or giving feedback on a rough draft. Several new fields were added to the Assignment template in CORA to give more opportunities for modeling and scaffolding, including a “Course Context” field, a field for “Additional Instructor Resources” such as in-class activities or worksheets, and a “Criteria for Success” field. Since the importance of peer learning was another theme that emerged, a filter for “individual” versus “group” assignments was added. Finally, faculty in the focus groups reacted negatively to the idea of letting users rate the assignments. This idea was scrapped and replaced with the idea of a feature called “I adapted this.” We observed some generational differences in faculty members’ reaction to “open access”- older faculty members viewed assignments as their “intellectual property” and were more reluctant to share than younger faculty members.

Once a draft prototype of the CORA website was finalized, The Cherry Hill Company (Cherry Hill Company, 2016) was contracted to build and host a live proto-

type of CORA. They used Drupal, an open source content management platform. CORA was further tweaked through biweekly online check-in meetings and an online ticketing system. Editorial standards for the CORA site were created in order to insure a standardized approach to writing style and workflow.

CORA was launched in January of 2016 (see Figure 2). The site contained assignments searchable by discipline, information literacy concept, ability level, or keyword. Assignments could be filtered by individual vs. group and ability level. Along with assignments, there was a collection of teaching resources searchable by discipline, resource type, and keyword. A blog was included for site updates, and a Help Center was included for FAQs. Anyone could browse or search CORA, but only by signing up for a user account could you add an assignment, comment on someone else’s assignment, use the “I adapted this” feature, and suggest a teaching resource.

[DRAFT ASSIGNMENT] ASSIGNMENT TITLE: LITERATURE REVIEW

Description: The primary purpose of a literature review is to provide a rationale for your proposed research question(s). A review of literature should present a synthesis of existing theory and research literature that argues for the usefulness of the research question. The process of constructing a literature review acquaints the researcher with the studies already done in a particular area and allows the researcher to build/extend existing knowledge. Grading is based on source quality and source relationship to the research topic, organization, ability to synthesize, quality of the research question, and adherence to the proper citation style.

LEARNING OUTCOMES:

- Construct a well-supported research-based question
- Find and use scholarly and discipline-specific professional information
- Select an appropriate documentation style and use it consistently to cite sources
- Evaluate scholarly articles and understand the research method used

DISCIPLINE: MULTIDISCIPLINARY

INFORMATION LITERACY CONCEPTS: needs, finds, evaluates, uses, ethics, scholarship as conversation

SUPPLEMENTAL INSTRUCTIONAL MATERIALS: The library’s subject LibGuides (research guides) available at <http://libguides.lmu.edu> and the ARC’s Writing LibGuide available at <http://libguides.lmu.edu/writing>

ASSESSMENT: See attached rubric

POTENTIAL PITFALLS: Students lean towards summarizing rather than synthesizing

RATING: 4.5 (out of 5 based on 5 users)

USER COMMENTS: I liked to assign this without making them test out their research question (Callie)

Figure 1: Draft assignment template from the faculty focus groups

The image shows the original CORA homepage in January 2016. At the top, there is a header with the CORA logo and the text "Community of Online Research Assignments" and "an open access resource for faculty and librarians". To the right of the header is a search bar and a "SITE" button. Below the header is a navigation menu with links for "About", "Assignments", "Blog", "Contributors", "Teaching Resources", and "Help Center". The main content area is divided into three sections: a "USER LOGIN" form on the left, a featured assignment titled "CLEOPATRA" in the center, and a "Historical Film Critique and Comparison" section on the right. The featured assignment includes a large image of Cleopatra and the text "Alexander Justice" and "This assignment asks students to compare the dramatization of a historical event to the historical writing about the same event." There is a "READ MORE" button next to the featured assignment.

Figure 2: Original CORA homepage in January 2016

Methodology

A “CORA Development Group” was formed with fourteen librarians from different institutions to provide additional feedback on CORA (CORA, 2016b). Development Group members and other librarian volunteers participated in several small assessment studies run by the author, including task-based usability testing, digital fly-on-the-wall observations, interviews, and card sorting. Also, a convenience sample of attendees from the 2016

European Conference on Information Literacy participated in a survey. The research questions the assessment studies were designed to answer are as follows:

1. How well are users able to find the results they need when searching for materials on the CORA site? How can their success be improved?
2. What is the information-seeking behavior of instruction librarians as they design research assignments? Which online resources do they use?
3. How can the ease of use be improved for CORA contributors?
4. How can CORA be useful for an international audience beyond the United States?

Task-Based Usability Testing

Three librarians and one faculty member were assigned tasks in random order from a list of 10 task scenarios (see Table 1). They were asked to “think aloud” as they were completing each task. The three in-person sessions were recorded using Camtasia (www.techsmith.com/camtasia.html), and both the screen and audio were captured. One of the sessions was a remote session; WebEx (www.webex.com/) was used to share the screen and Camtasia was used to record the session. At a later date, three more librarians were assigned the same tasks in random order to test a new version of the CORA homepage.

Table 1: Task-based usability scenarios

| | Scenario | Successful Completion |
|---------|---|--|
| Task 1 | Sign up for an account on the CORA site (www.projectcora.org) | Fills out the New Contributor form and saves it. |
| Task 2 | Starting on the CORA homepage, search for and find one assignment that interests you. What is the name of the assignment? | Locates an assignment in CORA that is of interest using a search strategy (e.g. browse, search, related link, etc.) |
| Task 3 | Add a public comment about one assignment in CORA that interests you. | Adds and saves text in the Comment box or “I Adapted This” section. |
| Task 4 | You want to get in touch with the author of one assignment in CORA that interests you. Show us how you could reach him or her? | Finds contact information of contributor. |
| Task 5 | You decide to use one assignment from the CORA site in your own class. How can you give credit to the original author(s) of the assignment? | Locates the information from the Help Center page “Citing an Assignment in Cora” explaining how to cite a source in CORA in various style formats. |
| Task 6 | You have created the assignment in Appendix A that you want to share with others. Add your assignment to the CORA site. | Uploads the assignment file into CORA and/or fills out some of the descriptive or classification fields. |
| Task 7 | Starting on the CORA homepage, search for and find one teaching resource that interests you. What is the name of the resource? | Locates a Teaching Resource in CORA that is of interest using a search strategy (e.g. browse, search, related link, etc.) |
| Task 8 | Suggest a teaching resource for the CORA site. | Fills out the “Suggestion Form” for teaching resources or emails the administrators a suggestion. |
| Task 9 | You want to help publicize CORA by talking about it on social media. Show us how you would do this. | Communicates with CORA’s Facebook account or twitter account, or mentions CORA on a social media channel. |
| Task 10 | CORA is thinking about changing its homepage layout to the sketch in Appendix B. Circle what you find useful and x through what you don’t find useful. If you think something should be added to the page, add it with a sticky note. If there is something you don’t understand, add a ? next to it. | Discusses what they find useful vs. not useful and anything that is missing or that they don’t understand |

Digital Fly-on-the-Wall Observations

Two librarians were given two prompts and recorded for 20 minutes using Camtasia (both the screen and audio were recorded). The first prompt stated “You are searching online for resources to help you with some upcoming library instruction sessions. Show me what resources you use to help you plan for your library instruction and how you use them.” Participants were told to work on this prompt for the first ten minutes and switch to a sec-

ond prompt for the last ten minutes. The second prompt stated “Go to the CORA (Community of Online Research Assignments) website: www.projectcora.org and explore it as a potential resource to help you with your library instruction.”

Interviews

Two librarians were interviewed and asked the following questions:

1. Tell me about a time when you found something useful online that helped you prepare for library instruction. Why was it useful? What do you like least about it?
2. Are there other online tools that you use frequently to prepare for library instruction?
3. How do you discover these resources?
4. Have you ever used the CORA site before?
5. When did you last log into an account on any site (e.g. Facebook) and why did you sign into your account?
6. What other ways might this site (CORA) fit into your work?

Card Sort

Ten librarians and faculty members participated in an online closed card sort activity through Optimal Workshop (www.optimalworkshop.com). The activity tested pre-defined “teaching resource” categories by asking participants to sort a list of 27 teaching resources into one of ten categories that made sense to them. Examples of the teaching resources included “PRIMO database,” “VALUE rubric,” and “teaching strategies column.” The ten pre-defined category options for each item were pedagogy/theory, research study, assessment, activity, citation tool, technology tip, opinion, digital learning object, subject guide, and don’t know.

Survey

Thirty-eight attendees at the 2016 European Conference on Information Literacy from twenty-four different countries participated in a brief survey. The author researched overlap between higher education information literacy standards in the United States, United Kingdom, and Australia/New Zealand (see Table 2). The *SCONUL Seven Pillars* (SCONUL Working Group on Information Literacy, 2011) and *ANZIL* (Australian and New Zealand Institute for Information Literacy New Zealand, 2004) information literacy standards were merged with the *ACRL Information Literacy Competency Standards for Higher Education* (ACRL, 2000) on the CORA Assignments search page. ACRL’s new *Framework for Information Literacy for Higher Education* (ACRL, 2016) was included separately. The survey contained a screenshot of the newly integrated “information literacy concepts” and asked for the level of agreement with the statements “The Information Literacy Concepts are clear to me” and “The Information Literacy Concepts are relevant to the

standards or framework I use in my own country.” The survey also contained a screenshot of the Ability Level drop-down on CORA’s Assignments search page and asked about satisfaction, and it contained a screenshot of the Resource type drop-down on the *Teaching Resources* section of CORA and asked how clear, relevant, and significant they were.

Table 2: Overlap of information literacy standards in US, UK, & AU/ NZ

| | Identify Info Need | Find Info | Evaluate Info | Use Info | Ethics |
|-------------------------------------|--|---|--|---|--|
| ACRL Standards (US 2001) | ACRL 1 (Defines info need) | ACRL 2 (Accesses info) | ACRL 3 (Evaluates info critically) | ACRL 4 (Uses info effectively) | ACRL 5 (Uses info ethically and legally) |
| ACRL Framework (US 2015) | Research as inquiry | Searching as strategic exploration | Authority is constructed and contextual; Scholarship as conversation | Information creation as a process | Information has value |
| ANCIL (UK 2011) | x | Strand 5 (Resource discovery in discipline) | Strand 4 (Mapping and evaluating the info landscape) | Strand 8 (Presenting and communicating knowledge) + Strand 9 (Synthesizing) | Strand 7 (Ethical dimension of info) |
| ANZIL (Australia/New Zealand, 2004) | ANZIL 1 (Recognizes) | ANZIL 2 (Finds) + ANZIL 4 (Manages) | ANZIL 3 (Critically evaluates) | ANZIL 5 (Applies) | ANZIL 6 (Uses) |
| SCONUL (UK, 2011) | SCONUL 1 (Identify) + SCONUL 2 (Scope) | SCONUL 3 (Plan) + SCONUL 4 (Gather) | SCONUL 5 (Evaluate) | SCONUL 7 (Present) | SCONUL 6 (Manage) |

Key Findings and Implications

Findings Related to Search Functionality

Subject tag search problems emerged due to the inconsistent tagging of some assignments. Multiple librarians from different institutions are allowed to create their own metadata “tags” for submitted assignments, but there needs to be more standardization. Problems of incompleteness with the main search box results emerged as well. Results need to include all subject tags and contributor names and label where each result comes from (e.g. Assignment, FAQ, Teaching Resource). Users had trouble figuring out how to cite an assignment in CORA, so a citation for each assignment needs to be automatically generated and appended to each assignment. The site was perceived as too cluttered, which was addressed by moving some links to the upper right corner to free up space (see Figure 3). Unclear terminology was discovered and fixed (“request new password” was changed to “reset password,” and “apply” was changed to “search” as the command to run a search from within the *Assignments*, *Blog*, or *Teaching Toolkit* sections). Several broken links were also fixed.

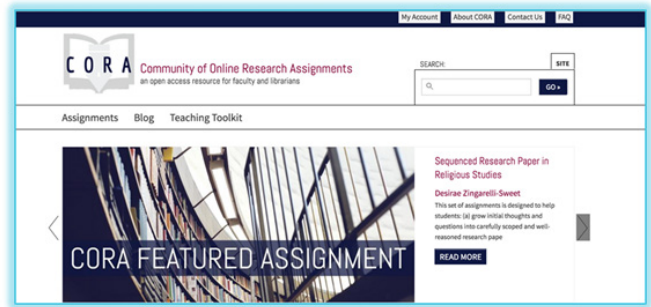


Figure 3: Revised design of CORA homepage

Findings Related to Information-Seeking Behavior of Instruction Librarians

Librarians prepared for library instruction by looking at library resources and applying search techniques for a specific research topic or subject area. They did not search for pedagogical learning theories or active learning ideas. When using CORA, they gravitated towards the Assignments section rather than the Teaching Resources section. More practical resources were added to the Teaching Resources section of CORA, including citation tools and research guides. Assignments should be searchable by full text to pick up specific research topic searches. The “Teaching Resources by Subject” results could be integrated into the “Assignments by Subject” results so users don’t miss them. The Teaching Resources link was renamed Teaching Toolkit to be less generic, and the teaching resource types describing only formats of research output without describing the content were eliminated (e.g. “textbook,” “presentation”).

Findings Related to Ease of Use for Contributors

Both the “User Account” form and the “Assignment” form were too long. The forms will be shortened so that optional information is on the next page. Also, the long wait time for account approval was eliminated by implementing automatic approval of all users who sign up with a .edu email account. Users generally viewed the CORA site as a marketplace for exchanging assignments rather than a community. To combat this, the “I adapted this” box was moved from the bottom of an assignment to the top left side for greater visibility. Users were reluctant to sign into CORA and preferred to search and browse without an account. With this in mind, Twitter and Facebook login options will be added for easier sign-in. Also, the “I adapted this” box is now visible without logging in, and anonymous comments will soon be allowed. An internal messaging system can be created to better facilitate a community. It will allow users to contact the author of an assignment, and it will notify authors if their assignment was adapted.

Findings Related to International Audience

Survey participants found the newly integrated information literacy standards from the United Kingdom and Australia/New Zealand clear and relevant. This encour-

ages more integration of international standards in the future. Participants found the assignment “Ability Level” terminology confusing, however; they didn’t understand the difference between “upper division” and “lower division.” Also, the distinction between “high school,” “undergraduate,” and “graduate” was confusing. The terminology was revised to give international equivalents for each category (e.g. secondary, bachelors, Masters) and eliminate the “upper division” vs. “lower division” distinction (see Figure 4).



Figure 4: Revised assignment search filters

Conclusion

This paper describes the evolution of CORA, an open educational resource (OER) for librarians and faculty in higher education. Several assessment studies resulted in improved search functionality and ease of use, as well as increased relevance to international users. The current collection of assignments and teaching resources will be enriched over time through additional user feedback, leading to a reliable and reproducible collection.

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WHAT DO PEOPLE THINK ABOUT PUBLIC LIBRARIES IN BARCELONA? AN OBTRUSIVE EVALUATION OF CITIZENS' VIEWS

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Abstract

Public services are provided by governments to people living within its jurisdiction, either directly or by financing provision of services. One of these services are public libraries, that are accessible to the general public and are generally funded from public sources, such as taxes. Since these public services are for the public, it is very important to offer services based on their needs. Traditionally, participative methods such as questionnaire surveys and interviews have been used to understand users' needs, preferences, perceptions and opinions.

This paper aims to investigate the possibility of analysing comments about public library services left in public networks, such as Google Maps, to improve our knowledge of citizens' views. Google Maps is a desktop web mapping service developed by Google very useful to retrieve primary information such as addresses, phones, opening hours and reviews about the place that has been searched.

This study analyses 284 reviews available in Google Maps about the 28 public libraries in the city of Barcelona. The reviews were analysed using a qualitative content analysis method to identify major themes in citizens' reviews. Comments were read repeatedly to capture key thoughts, allowing 10 categories (collection, equipments & facilities, staff, atmosphere, etc.) to emerge inductively. The reviews were organized and grouped into meaningful clusters. Exemplars for each category are reported in the methods & also Results. Results shown that 73.23% of reviews shown satisfaction, on the other hand 26.76% of them shown dissatisfaction of users. clusters General, Location & Staff were allocated rating first to fourth in positive reviews. In the negative reviews, the first three places are, Schedule, Layout, Atmosphere . Biblioteca Sagrada Família - Josep M. Ainaud de Lasarte" , as far, had received more reviews & "Biblioteca La Sagrera - Marina Clotet" had received less attention among the other 28 public libraries in the city of Barcelona.

Introduction

Public services are provided by governments to people living within its jurisdiction, either directly or by financing provision of services. One of these services are public libraries, that are accessible to the general public and are generally funded from public sources, such as taxes. Since these public services are for the public, it is very important to offer services based on their needs.

Today the right of people who live in the community is having access to the social services. Public library is one of this services which play an important role in the development of a community. But first of all it is necessary to know there are some preliminary conditions to setting up different kinds of libraries. The equipment in each library differs according to library users. To consider the needs of users in public libraries is more difficult than other libraries, because large group of people with different attitudes and needs are potential users of this type of library. For example favorite field of study in a middle-aged person with a teenager and an older person are completely different. Or a library furniture such as table and chairs can be adjusted according to different physics of people which can reflect positive or negative comments about that library or many others disagreements that have been mentioned as a list at the end of this article. To reduce these differences, it is necessary to define minimum standards for all types of libraries although, as we mentioned, at the end different attitudes and needs causes different reviews. In order to decrease users differences and possibilities & conditions used in a library, survey plays a very important role. Traditionally, participative methods such as questionnaire surveys and interviews have been used to understand users' needs, preferences, perceptions and opinions.

Nowadays, with the advancement of technologies, new and easier ways has been opened to communicate with users and notified of their reviews.

One of them is Google Maps which is a desktop web mapping service developed by Google very useful to retrieve primary information such as addresses, phones, opening hours and reviews about the place that has been searched. This paper aims to investigate the possibility of analysing comments about public library services left in public networks, such as Google Maps, to improve our knowledge of citizens' views. Google Maps is a desktop web mapping service developed by Google very useful to retrieve primary information such as addresses, phones, opening hours and reviews about the place that has been searched.

Even before some authors had already worked of public computing facilities in libraries that provide computers and free broadband internet access, regardless of the individual's ability to pay. Public access computers in libraries are frequently used by patrons who rely on them most to search for jobs and to access government services online. Public libraries act as a conduit in strengthening

the community by meeting the information needs of their residents such as connecting under-privileged residents to online applications, learning opportunities and potential employment (Demaagd et al., 2013).

Sung Jae Park in his study recommend To improve the accessibility of public libraries, this study recommends librarians define service areas for libraries, develop library programs and services for susceptible user groups, and evaluate user groups' needs. (Park, 2012)

Sei-Ching Joanna Sin believed the new millennium sees public libraries facing several challenges, his findings indicate that school information environment, frequency of school library use, race/ethnicity, and home computer availability were among the top three factors affecting public library usage for schoolwork, leisure, and Internet access (Sin & Kim, 2008). More recently, a survey among a public libraries in America believes that 65% of all those ages 16 and older say that closing their local public library would have a major impact on their community; another 24% say it would have a minor impact. In addition, 32% say that closing their local public library would have a major impact on them or their family; another 33% say it would have a minor impact & also 73% of all those ages 16 and over say libraries contribute to people finding the health information they need. 42% of those who have gone online at a library using its computers, internet connections or Wi-Fi have done so for health-related searches. (Horrigan, Researcher, Rainie, Page, & Manager, 2015). He shows in the other research that an emerging library "service" is its Wi-Fi connection, which can be used separately from the hours library buildings are open: 7% of those 16 and older say they have connected to a library's Wi-Fi system when the library building itself was closed. (Horrigan, Researcher, Rainie, Page, & Manager, 2016)

The aim of the current study is to investigate the possibility of analysing comments about public library services left in public networks, such as Google Maps, to improve our knowledge of citizens' views. Specifically, the study aims are to measure satisfaction or dissatisfaction of the users of public libraries about

- Location
- Schedule
- Staff
- Atmosphere
- Layout
- Collection
- Equipment & Facilities
- Architecture
- Activities
- General

Methods

This study analyses 284 reviews available in Google Maps about the 28 public libraries in the city of Barcelona. The

reviews were analysed using a qualitative content analysis method to identify major themes in citizens' reviews. Comments were read repeatedly to capture key thoughts, allowing 9 categories (Location, Schedule, Staff, Atmosphere, Layout, Collection, Equipment & Facilities, Architecture, General) Activities) to emerge inductively. The reviews were organized and grouped into meaningful clusters. Descriptions for each category are reported below.

- Location: Access to public transport, Distance to the Park, School, Super Market, Public Parking, Major or minor street
- Schedule: Hours and days of work which includes Morning, Evening, Night, Weekend, Holidays
- Staff: Behavior, Management, The importance of user needs
- Atmosphere: Silence, The temperature inside the library
- Layout: The size of study hall & How to divide tables and chairs in the hall
- Collection: Updated & completeness of books, videos & audios even in foreign languages
- Equipment & Facilities: Chair, Table, Luz, Wifi, Plug, Elevator, Bathroom, Special tables & chairs for children
- Architecture : Beautiful, Modern amenities, Design and comfort for people with disabilities
- Activities: Cultural, Scientific, Social & Sport Events
- General: Just have a word referring to the consent of the Library

It is important to explain that we wanted to consider one category as technology, but in the reviews just few people wrote about the speed of Wifi, so we could not find any other technology to check it out. For this reason we just put wifi in the category of equipment.

Results

As you can see in Table.1, 566 points were retrieved from 284 reviews. 408 review (73.23%) were positive & 158(26.76%) of them were negative.

Table1. Division Reviews based on Positive & Negative

| Reviews | No. | % |
|----------|-----|-------|
| Positive | 416 | 73,23 |
| Negative | 152 | 26,76 |
| Total | 568 | 100% |

More frequently categories in Barcelona's Public Libraries

As shown in table2. based on the number of positive reviews between 10 categories, 103 of the reviews are about Equipment & Facilities. The second is General with 64 & third category is Atmosphere & also we can say collection because there is just with one different (62&61). If we want to compare each positive & negative categories just inside each group, we can say Activities, General, Location & Staff by 100%, 84.9%, 82.8% & 81.8% were allocated rating first to fourth in positive reviews. But on the other hand in the negative reviews, the first three places are, Schedule, Layout, Atmosphere by 65.4%, 42.37%, 37.1% .

Table2. Review's Categories of Public Libraries

| Category | Location | | Schedule | | Staff | | Atmosphere | | Layout | | Collection | | Equipment & Facilities | | Architecture | | Activities | | General | | | | | | | | | | | | | | | |
|-----------------|----------|------|----------|------|-------|------|------------|------|--------|------|------------|-------|------------------------|-------|--------------|-------|------------|-------|---------|-------|----|-------|----|-------|----|-----|---|---|----|------|----|----|--|--|
| | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N | | | | | | | | | | | | | | |
| Positive/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Negative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| % Of Percentage | 84.9 | 15.1 | 35 | 65.4 | 17 | 81.8 | 39 | 62.9 | 23 | 37.1 | 34 | 57.63 | 42.37 | 75.41 | 15 | 24.59 | 68 | 66.01 | 35 | 33.98 | 38 | 70.37 | 16 | 29.63 | 40 | 100 | 0 | 0 | 53 | 82.8 | 11 | 17 | | |
| No. of Reviews | 45 | 8 | 9 | 17 | 36 | 8 | 39 | 23 | 34 | 25 | 46 | 15 | 68 | 35 | 38 | 16 | 40 | 0 | 53 | 11 | | | | | | | | | | | | | | |
| Total | 53 | | 26 | | 44 | | 62 | | 59 | | 61 | | 103 | | 54 | | 40 | | 64 | | | | | | | | | | | | | | | |

More frequently reviews in Barcelona's Public Libraries In Table3 you can see number & percentage of reviews in each public library. As shown in this table "Biblioteca Sagrada Família - Josep M. Ainaud de Lasarte" , as far, by 87 reviews had received more reviews & "Biblioteca La Sagrera - Marina Clotet" by 3 reviews had received less attention. You can see the rest of libraries separately, below, in the table 3.

Table3. Number & Percentage of reviews in Public Library

| Library | No. of Positive Reviews | No. of Negative Reviews | % of Positive Reviews | % of Negative Reviews |
|--|-------------------------|-------------------------|-----------------------|-----------------------|
| 1 Biblioteca Camp de l'Arpa- Caterina Albert | 20 | 3 | 3,52 | 0,53 |
| 2 Biblioteca Can Rosés | 4 | 3 | 0,7 | 0,53 |
| 3 Biblioteca Clara | 5 | 1 | 0,88 | 0,18 |
| 4 Biblioteca El Carmel - Juan Marsé | 13 | 0 | 2,29 | - |
| 5 Biblioteca El Clot - Josep Benet | 2 | 5 | 0,35 | 0,88 |
| 6 Biblioteca Esquerra de l'Example - Agustí Centelles | 24 | 5 | 4,23 | 0,88 |
| 7 Biblioteca Francesc Candel | 15 | 2 | 2,64 | 0,35 |
| 8 Biblioteca Francesca Bonnemaison | 15 | 0 | 2,64 | - |
| 9 Biblioteca Gòtic Andreu Nin | 6 | 0 | 1,06 | - |
| 10 Biblioteca Guimardó - Mercè Rodoreda | 8 | 1 | 1,41 | 0,18 |
| 11 Biblioteca Horta - Can Mariner | 5 | 7 | 0,88 | 1,23 |
| 12 Biblioteca Ignasi Iglésias - Can Fabra | 27 | 6 | 4,75 | 1,06 |
| 13 Biblioteca Jaume Fuster | 35 | 11 | 6,16 | 1,94 |
| 14 Biblioteca Joan Maragall | 10 | 27 | 1,76 | 4,75 |
| 15 Biblioteca Joan Miró | 8 | 8 | 1,41 | 1,41 |
| 16 Biblioteca La Sagrera - Marina Clotet | 2 | 1 | 0,35 | 0,18 |
| 17 Biblioteca les Corts- Miquel Llongueras | 17 | 0 | 2,99 | - |
| 18 Biblioteca Nou Barris | 16 | 2 | 2,82 | 0,35 |
| 19 Biblioteca Poblenou - Manuel Arranz | 11 | 5 | 1,94 | 0,88 |
| 20 Biblioteca Sagrada Família - Josep M. Ainaud de Lasarte | 65 | 22 | 11,44 | 3,87 |
| 21 Biblioteca Sant Antoni - Joan Oliver | 10 | 1 | 1,76 | 0,18 |
| 22 Biblioteca Sant Antoni - Joan Oliver | 12 | 0 | 2,11 | - |
| 23 Biblioteca Sant Pau-Santa Creu | 4 | 5 | 0,7 | 0,88 |
| 24 Biblioteca Sofia Barat | 1 | 11 | 0,18 | 1,94 |
| 25 Biblioteca Vapor Vell | 19 | 5 | 3,35 | 0,88 |
| 26 Biblioteca Vila de Gràcia | 19 | 15 | 3,35 | 2,64 |
| 27 Biblioteca Vilapicina i la Torre Llobeta | 18 | 5 | 3,17 | 0,88 |
| 28 Biblioteca Xavier Benguerel | 11 | 1 | 1,94 | 0,18 |
| Total | 416 | 152 | 73,23 | 26,76 |

As stated below, you can have an overview to the status of each library separately, positive & negative reviews, based on 10 categories.

Table4. Number of Positive & Negative Reviews in each categories of Public Library

| Library | Location | | Schedule | | Staff | | Atmosphere | | Layout | | Collection | | Equipment & Facilities | | Architecture | | Activities | | General | |
|---------|----------|---|----------|----|-------|---|------------|----|--------|----|------------|----|------------------------|----|--------------|----|------------|---|---------|----|
| | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N | P | N |
| 1 | 2 | 1 | 1 | 1 | 1 | 1 | | | | 1 | | | | | | | | | | |
| 2 | 2 | 2 | | | 1 | 1 | | | | | | | 1 | | | 2 | 2 | | | |
| 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | | | | 3 | 1 | 1 | 1 | 2 | | | | | 5 |
| 4 | 5 | | | | 2 | | | | | | 2 | 1 | | | | 2 | | | | |
| 5 | | 1 | 3 | 2 | 1 | | 1 | | | 6 | | | | 6 | 1 | 3 | 1 | 2 | | 2 |
| 6 | 2 | | | | | 1 | 3 | | | | | | 3 | | 2 | | | | | 1 |
| 7 | 2 | | | | | 2 | | | | 4 | | 3 | | | | 4 | | 2 | | |
| 8 | 3 | 1 | 1 | 1 | | 2 | | 6 | 1 | 4 | 2 | 3 | | 7 | 4 | 4 | 1 | 1 | | 5 |
| 9 | 12 | 3 | 2 | 4 | | 5 | 2 | 7 | 5 | 11 | | | 7 | 8 | 2 | 5 | 4 | | | 10 |
| 10 | | | 1 | 1 | | 1 | | 5 | | 3 | | | | 1 | | | | | | 1 |
| 11 | | | | | 2 | | 2 | | 1 | | 2 | | 3 | | 1 | | 1 | | | 3 |
| 12 | 1 | 1 | 5 | 3 | | 2 | 2 | 1 | 3 | | | | 4 | 1 | 3 | 1 | 1 | 1 | | 4 |
| 13 | | | | | | | | | | | | 1 | 2 | | | | 1 | | | |
| 14 | | 1 | | 5 | 1 | 2 | 1 | 5 | 2 | 5 | | | 7 | | | | | 1 | | 2 |
| 15 | 1 | | | | | | | | 1 | 1 | 2 | | 2 | | 2 | | | 2 | | 1 |
| 16 | | | | 1 | 3 | | | | 1 | 1 | 1 | | 4 | | 1 | | 2 | | | 3 |
| 17 | 2 | | | 3 | | | 2 | | 1 | 3 | 1 | 4 | 1 | 2 | 1 | | | | | 4 |
| 18 | 1 | | | | | 1 | 1 | | 1 | | | 1 | 1 | 1 | | | | | | |
| 19 | 1 | | | | | | 1 | | 1 | 2 | 2 | 3 | 1 | 1 | | 19 | | | | 3 |
| 20 | | | | | 1 | 1 | | | | | 1 | 2 | 2 | | | | | | | 1 |
| 21 | | | | | | 1 | | | | 3 | | 1 | 1 | 2 | | 1 | | | | 2 |
| 22 | 2 | 1 | | | 1 | 3 | | | | | 4 | 1 | 3 | 1 | 3 | 1 | 1 | | | 3 |
| 23 | | | | | | 2 | | | 1 | | 1 | 1 | 2 | 1 | 1 | | | | | 1 |
| 24 | | | | 2 | | | | 3 | | | | | | | | | | | | 2 |
| 25 | 2 | 1 | | | 3 | 1 | | | 1 | | 3 | | | | | 4 | | | | 2 |
| 26 | 2 | | | | | 4 | | | | | | | 2 | | 3 | | | | | 2 |
| 27 | 2 | | | | 1 | | | | | 1 | | | 1 | | | | | | | 1 |
| 28 | 2 | | 1 | 1 | 3 | 2 | 4 | | | | | 1 | 10 | 3 | | | | | | 2 |
| Total | 45 | 8 | 9 | 17 | 36 | 8 | 39 | 23 | 34 | 25 | 46 | 15 | 68 | 35 | 38 | 16 | 40 | 0 | 53 | 11 |

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Conclusions

Public library is one of the services that provided by governments to people that are accessible to the general public and are generally funded from public sources. Since these public services are for the public, it is very important to offer services based on their needs.

As the aim of this study was to measure satisfaction and dissatisfaction of public libraries users in Barcelona, our results shown that around quarter of users are satisfied about public libraries services in Barcelona.

Finally, it is interesting to note that by have a look to the reviwis in general, that there are some suggestions which users have requested that librarians paid special attention to them which can be helpful to improve the services. we explained them below as a list:

1. Make rules not to reserve chairs & tables for friends
2. Limiting hours of schools visiting
3. Open Libraries at Weekend & Holidays
4. Open all Reading rooms when libraries are crowded
5. Note librarians to those people who speak to gether & make noise
6. Built air freshener system for libraries that are close to supermarkets and restaurants
7. Revise the layout of shelves, tables & chairs to make more space for study

WHEN TASK COMPLETION IS NOT ENOUGH: EXPERIENTIAL ASPECTS OF UNIVERSITY E-SERVICES

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Keywords: user experience, usability, sentence completion, university website

Abstract

During the last two decades, the focus of human-computer interaction research has shifted from basic usability to more subjective, situated and fun aspects of interaction, and the term ‘user experience’ (UX) has been increasingly used to describe them. UX plays vital role in acceptance, use and diffusion of digital products, but is also known as being complex and difficult to evaluate. There are two primary aims of this study: to investigate UX of university electronic services and to assess the suitability of sentence completion as a method for gaining better insights into UX. For this study the well-established semantic differential UX questionnaire was employed. Prior to data collection participants were asked to find and apply for two electronic services available through the website of University of Latvia www.lu.lv. In addition, sentence completion was chosen to obtain further understanding of users’ opinions and preferences. Sentence completion can be used to assess various constructs, including motivations and attitudes. For this study eight sentence stems were developed targeting the relevant facets of UX – users’ emotions, anticipated UX and perceived system qualities. The results of the study show that despite high task completion rates the website received low UX evaluation, especially for non-task related quality aspects. Further, sentence completion results support previous research which showed it to be a useful supplemental technique, especially well-suited for gathering negative feelings and the reasons behind them.

Background and purpose

Ever since the term ‘user experience’ (UX) was first used by Norman, Miller & Henderson (1995) two decades ago, there has been a debate about the scope, definition and evaluation of UX. According to Hassenzahl and Tractinsky (2006), UX is influenced by “the user’s internal state (predispositions, expectations, needs, motivation, mood, etc.), the characteristics of the designed system (e.g. complexity, purpose, usability, functionality, etc.) and the context (or the environment) within which the interaction occurs (e.g. organisational/social setting, meaningfulness of the activity, voluntariness of use, etc.)” (p. 95). Although a substantial amount of research has been published about UX, knowledge and concepts related to UX are scattered. Much uncertainty still exists about the relationship of various UX factors and their relative importance.

Approaches to experience in human-technology interaction are very diverse. In attempting to understand UX, several frameworks have been developed focusing on different aspects – emotions and affect, non-instrumental needs, aesthetics etc. In differentiating UX from usability it should be obvious that usability is an objectively measurable product attribute, quality of use in relation to a specific user and context. UX in contrast is a personal, subjective feeling about the product, a consequence, which is linked to the human emotions and attitudes that result from the interaction. Holistic approach of UX is aiming for balance between pragmatic aspects and other non-task related (hedonic) aspects of product possession and use. UX is explicitly interested in the way people experience and judge products they use, assuming that it will guide their future behaviour and will be communicated to others (Hassenzahl & Tractinsky, 2006). UX and its subfield Library UX is an emerging area of interest within the field of library and information science as it encompasses all aspects of patron interaction with the library, its services and its products.

The study is loosely based on the hedonic/pragmatic model of UX. The model assumes that people perceive interactive products along two different dimensions. Hedonic quality is understood as being related to the users’ self, in contrast to pragmatic quality which is related to the users’ need to achieve goals. Hedonic quality comprises quality dimensions that have no obvious relation to the task the user wants to accomplish with the system. Instead of assuming a fixed hierarchy of needs the hedonic/pragmatic model rather thinks of it as a situation-dependent ranking of users’ goals (Hassenzahl, 2007).

This paper reports on a study which was conducted in autumn 2016 prior to the redesign of the official website of University of Latvia. The study aims to investigate UX of university electronic services and the relative importance of pragmatic and hedonic aspects of UX. Additional purpose is to assess the suitability of sentence completion as a method for gaining better insights into UX.

Methodology

To date, various UX evaluation methods have been developed, but most researchers agree that quantitative methods might not be sufficient for evaluating all dimensions of something as private and personal as UX (Vermeeren, Law, Roto, Obrist, & Väänänen-Vainio-Mattila, 2010). For this study the well-established semantic differential UX questionnaire (UXQ) was employed. It consists of 26 items categorized in six scales and allows to quickly assess the UX of interactive systems. Each scale describes a distinct quality aspect: *attractiveness* is a pure valence dimension; *perspicuity*, *efficiency* and *dependability* are pragmatic quality aspects (goal-directed), while *stimulation* and *novelty* are hedonic quality aspects (not goal-directed). Each item is represented by two terms with opposite meanings. Half of the items of a scale start with the positive term and the other half of the items start with the negative term in a randomized order. The items are scaled from -3 to +3. Thus, -3 represents the most negative answer, 0 a neutral answer, and +3 the most positive answer. The questionnaire also allows to compare the measured UX to a benchmark data set (Laugwitz, Held, & Schrepp, 2008). Prior to data collection participants were asked to find and apply for two electronic services available through the website of University of Latvia www.lu.lv.

In addition, as the predefined attributes of the UXQ may not reveal all important aspects of UX, sentence completion was chosen to obtain further understanding of users’ opinions and preferences. Sentence completion is relatively unknown in UX research and involves providing participants with beginnings of sentences that they are asked to complete in a way that is meaningful to them. Sentence completion is originally a projective psychological technique, but later it was adapted for consumer psychology. It can be used to assess various constructs, including motivations and attitudes (Kujala, Walsh, Nurkka, & Crisan, 2014; Soley & Smith, 2008). For this study eight sentence stems were developed based on previous research (Kujala & Nurkka, 2012; Kujala et al., 2014) and targeting the relevant facets of UX – users’ emotions, anticipated UX and perceived system qualities. The sample was comprised of 42 Library and Information Studies students of Bachelor’s and Master’s program from the University of Latvia. Their ages ranged from 19 to 55 years, with a mean age of 27.7. Five of them were male. All students with the exception of one were familiar with the website, 31 of them use the website at least once a month. Participants were asked to find and apply for two e-services on the main public website of University of Latvia: further education courses and diploma translation in English. Both tasks were mostly search tasks. The second stage included filling in the UX questionnaire (translated in Latvian) and some demographic questions. The third part was completing eight sentence stems to elicit partially structured responses.

Findings

Completion rate of both tasks was high – 37 fully and 4 partially for Task 1, 35 fully and 4 partially for Task 2. Only one participant did not complete either task, two others were unsuccessful in Task 2. The UXQ does not produce one overall score, since such value cannot be interpreted properly. The highest results were observed for scales *Dependability* (0.643) and *Efficiency* (0.583). At the lowest end are scales *Novelty* and *Perspicuity* with scores of -0.655 and 0.000 respectively. *Attractiveness* scored 0.258 and *Stimulation* scored 0.095. The results of all six scales are presented in Figure 1.

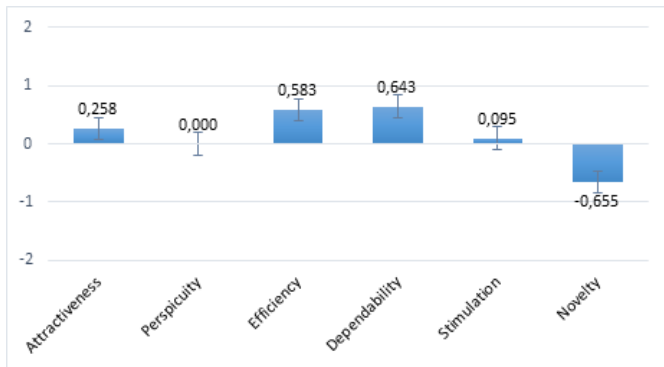


Figure 1. The UXQ results by scale

It should be noted that values between - 0.8 and 0.8 represent neutral evaluation. Even though the range of the scales is between -3 and 3, due to the calculation of means and the avoidance of extreme answer categories, it is extremely rare to observe values above 2 or below -2 (Schrepp, 2015).

The scales of the UEQ grouped into pragmatic quality (*Perspicuity*, *Efficiency*, *Dependability*) scored 0.41, and the hedonic quality (*Stimulation*, *Originality*) score was 0.41. In Figure 2 the mean of all three pragmatic and hedonic quality aspects is calculated.

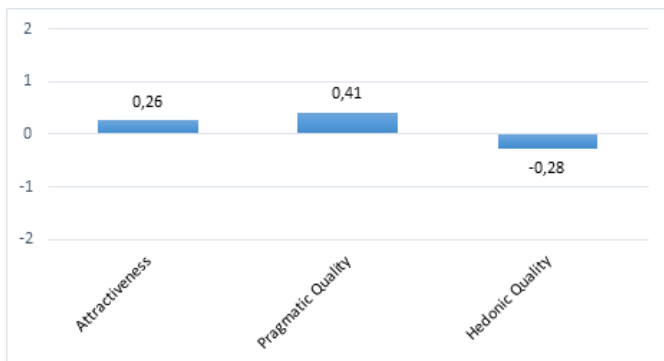


Figure 2. The UXQ results grouped by category

The obtained results were compared against benchmark data set values that contain data from 246 studies concerning several different kinds of digital products (Schrepp, 2015). All scales except *Efficiency* were rated as ‘Bad’ – in the range of the 25 % worst results. *Efficiency* was in range of ‘Below Average’, meaning that 50 % of re-

sults are better, 25 % of results are worse. Figure 3 shows the results of all scales against benchmark.

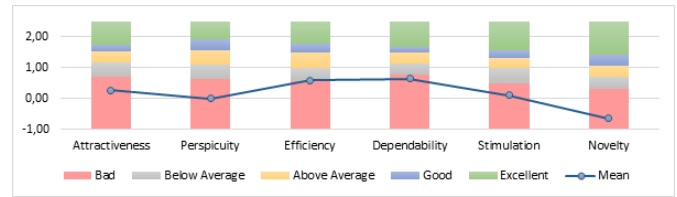


Figure 3. UXQ results against benchmark data set by scale

For the second stage of the study eight sentence stems were developed targeting different dimensions of UX and participants were required to complete them. The overview of the stems and examples of completion are shown in Table 1.

Table 1. Sentence stems and response examples

| | Sentence stems | Response examples |
|----|---|--|
| 1. | Using this website, I felt... | ...quite confused. ...confident. Everything is presented in clear categories. |
| 2. | This website is... | ...sad. ...a bit complicated for a beginner. |
| 3. | This website looks... | ...very conservative ...attractive. There is nothing that annoys me. |
| 4. | Using this website is... | ...easy if you have previous experience. ...difficult, but it depends on task. |
| 5. | Completing the tasks was... | ...too time consuming to call the website successful. ...possible if you have time to think and search. |
| 6. | This website makes me... | ...focus on the necessary because there is too much information and text. ...want to avoid using it. |
| 7. | I expected (that)... | ...it would be easier to find the necessary information. ...something else. |
| 8. | I wish that while performing these tasks... | ...the website was easier to use. ...the sun was shining and the mood was better. |

When asked to complete the first sentence stem ‘Using this website, I felt’ almost half of respondents listed negative emotions, nearly a third of responses were positive and 20 % were neutral (Table 2). It should be mentioned that 12 of the negative responses were coded as ‘confused’.

Table 2. Responses to sentence stem ‘Using this website, I felt...’

| Grouping of responses | Number of responses | Percent |
|--|---------------------|---------|
| Positive emotions | 13 | 32 % |
| <ul style="list-style-type: none"> • good • confident • comfortable | | |
| Negative emotions | 20 | 49 % |
| <ul style="list-style-type: none"> • confused • lost • uncertain | | |
| Neutral | 8 | 20 % |

The second sentence stem ‘This website is’ assessed the subjective perception of the website. Similar codes were used for coding positive, negative and neutral statements. Neutral responses include combinations of positive and

negative statements and comprise 31 % percent of responses, with positive statements making up 21 % and negative perceptions in the lead with 48 % of responses. See Table 3 for more detailed grouping of responses.

Table 3. Responses to sentence stem ‘This website is ...’

| Grouping of responses | Number of responses | Percent |
|--|---------------------|---------|
| Positive <ul style="list-style-type: none"> • good • necessary • informative | 9 | 21 % |
| Negative <ul style="list-style-type: none"> • complicated • mediocre • incomprehensible | 20 | 48 % |
| Neutral/mixture | 13 | 31 % |

The third sentence stem ‘This website looks’ was designed to evaluate the visual design of the website. Again, the responses were coded similarly into positive (24 %), negative (52 %) and neutral (24 %) (see Table 4). Positive responses were very general; therefore they could not be categorized into more specific groups.

Table 4. Responses to sentence stem ‘This website looks ...’

| Grouping of responses | Number of responses | Percent |
|--|---------------------|---------|
| Positive | 10 | 24 % |
| Negative <ul style="list-style-type: none"> • ordinary • old-fashioned • cluttered • bleak | 22 | 52 % |
| Neutral/mixture | 10 | 24 % |

The sentence stem ‘Using this website is’ was intended to assess the overall experience of interaction. In this case, considering that many statements were weak, containing modifiers such as ‘rather’, ‘quite’ and similar, they were coded as positive, fairly positive, neutral, fairly negative and negative. The fairly positive statements in nine cases contained conditions – ‘if one has done it before’, ‘if you know where to look’, ‘if one has time’ etc. See Table 5 for full results.

Table 5. Responses to sentence stem ‘Using this website is ...’

| Grouping of responses | Number of responses | Percent |
|--|---------------------|---------|
| Positive | 1 | 2 % |
| Fairly positive <ul style="list-style-type: none"> • relatively easy, if... | 14 | 34 % |
| Negative <ul style="list-style-type: none"> • complicated • time-consuming | 5 | 12 % |
| Fairly negative <ul style="list-style-type: none"> • quite annoying • relatively difficult | 16 | 39 % |
| Neutral/mixture | 5 | 12 % |

Sentence stem ‘Completing the tasks was’ was designed to assess respondents’ subjective perception of the performance, considering that the objective task completion rate was very high. Similarly to the previous case, additional codes for fairly positive and fairly negative values were added. Four fairly positive responses again contained conditions. Unsurprisingly, positively inclined statements comprise more than half of all responses, and negative and fairly negative responses are in the minority (Table 6).

Table 6. Responses to sentence stem ‘Completing the tasks was ...’

| Grouping of responses | Number of responses | Percent |
|---|---------------------|---------|
| Positive <ul style="list-style-type: none"> • fast • easy | 15 | 37 % |
| Fairly positive <ul style="list-style-type: none"> • relatively fast/easy, if... • relatively fast/easy | 9 | 22 % |
| Negative <ul style="list-style-type: none"> • complicated • time-consuming • difficult | 7 | 17 % |
| Fairly negative <ul style="list-style-type: none"> • quite slow • relatively difficult | 5 | 12 % |
| Neutral/mixture | 5 | 12 % |

The sentence stem ‘This website makes me’ is similar to the first one but focuses on emotions and actions resulting from interaction episode. Ten of the responses were coded as emotion-related (i. e. ‘This website makes me *feel* something’), and 30 were action-related (i. e. ‘This website makes me *do* something’). Most statements – 59 % – were negative, only 4 % could be considered positive (see Table 7 for full breakdown of responses).

Table 7. Responses to sentence stem ‘This website makes me ...’

| Emotion-related responses 25 % | | | Action-related responses 75 % | | |
|---|---|--|--|--|--|
| Positive | Negative | Neutral | Positive | Negative | Neutral |
| <ul style="list-style-type: none"> confident | <ul style="list-style-type: none"> angry stressed want to avoid it | <ul style="list-style-type: none"> like I was at work | <ul style="list-style-type: none"> learn more | <ul style="list-style-type: none"> think too much make too many steps to make an effort | <ul style="list-style-type: none"> think search focus |
| 1 (3 %) | 8 (20 %) | 1 (3 %) | 3 (8 %) | 16 (40 %) | 11 (28 %) |

The sentence stem ‘I expected (that)’ evaluated respondents’ expectations of the website. They were grouped in two categories – expectations (25 %) and expectations versus the actual experience (29 or 75 %). For redesign purposes the former are less relevant, therefore they were disregarded (they contained statements like ‘something else’, ‘the tasks would be simple’ etc.). Of the relevant responses two thirds were negative, but 28 % – positive (see Table 8).

Table 8. Responses to sentence stem ‘I expected (that)... [than the actual experience]’

| Grouping of responses | Number of responses | Percent |
|---|---------------------|---------|
| Positive <ul style="list-style-type: none"> slower more difficult | 8 | 28 % |
| Negative <ul style="list-style-type: none"> faster easier simpler | 19 | 66 % |
| Neutral | 2 | 7 % |

The sentence stem ‘I wish that while performing these tasks’ was interpreted by respondents mostly as an opportunity to suggest areas of improvement. They were the statements that referred to the system. Two smaller groups of statements were categorized as task-related comprised of two instances (i. e. ‘the tasks were more challenging’) and self-related – five instances (i. e. ‘I was in a better mood’, ‘I could learn something new’). These two categories were not analysed further. Five of the system-related responses were a general positive evaluation. The remaining 25 statements were categorized by areas of suggested improvement (see Table 9).

Table 9. Responses to sentence stem ‘I wish that while performing these tasks...’ by category

| Task-related | Self-related | System-related | | | | |
|--------------|--------------|----------------|--------------------------|-------------------|---------------|----------|
| | | Evaluation | Information architecture | General usability | Visual design | Feedback |
| 2 (5 %) | 5 (13 %) | 5 (13 %) | 19 (50 %) | 4 (11 %) | 2 (5 %) | 1 (3 %) |

To further analyse the responses by participant they were compared between their actual performance and perceived performance expressed in completing sentence stem ‘Completing the tasks was’. For this purpose, all values were projected onto scale from -3 to 3. In the 24 cases where both values are not consistent the grey line indicates the difference between values. There are only

three cases (8, 19, 31) where the perceived performance is rated higher than the actual task performance. Five respondents managed to complete both tasks but evaluated their performance in negative terms (12, 16, 23, 26, 29). About half of all participants rated their performance lower than the actual performance indicators show (see Figure 4).



Figure 4. Comparison between the actual and perceived task performance

Conclusions

The evaluation of UX of the website of University of Latvia shows quite low results on all scales, the lowest attributed to *Novelty*. Both highest scores go to *Efficiency* and *Dependability*. However, when compared to the benchmark data set, they are still below average and bad respectively. Compared to the actual performance (effectiveness), which was very high, the subjective, experiential aspects in sentence completion stage were evaluated as being overwhelmingly negative, with almost half of participants reporting negative emotions during interaction. Similarly, almost half expressed their perception of the website in negative terms. The highest evaluation was given to task completion. However, in many cases it still differed significantly from the actual effectiveness rate, which shows that respondents’ subjective perception is of their performance is quite low, which in turn impacts their UX negatively. The obtained results could be further analysed across different dimensions.

UXQ and sentence completion provided different feedback about UX. As expected, sentence completion was better for likes, dislikes and preferences. The quantitative results of UXQ were easy to analyse, but sentence completion results took more effort. Sentence stems were designed as very open, such as ‘This website is...’ allowing the respondents to express their experiences in whatever way they wish. The sentence completion results were valuable in the respect that they helped to specify users’ emotions during interaction and their perception of the website (for example, UXQ alone does not tell that users are ‘confused’, ‘annoyed’, and interface looks ‘old-fashioned’). Sentence completion results provide more input on how to improve UX; respondents indicated that the dimension of the website in the most need of improvement was its information architecture (including categorisation, navigation and search). Also, the visual perception of the website was characterized as ‘bleak’,

'boring', old-fashioned', 'cluttered' – these aspects can certainly be improved.

The sample of this study was too small to analyse the results by age group and gender. In future, it could be worth investigating preferences by age groups so that different parts of the website targeted at different audiences could be designed accordingly. Sentence completion proved to be a promising tool for eliciting additional feedback, but sentence stems should be developed very carefully. It would be useful to be able to map specific sentence stems to a scale of UXQ. One serious drawback of this study is that the results were coded by one person. Even though Kujala et al. questions the extent to which validity and reliability criteria are applicable to sentence completion, they admit that a certain degree of interrater reliability is desirable so that the results do not depend solely upon the person interpreting them (Kujala et al., 2014). However, as a practical evaluation tool and combined with UXQ, the sentence completion results proved to be helpful and applicable.

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WIDENING THE LIMITS OF COGNITIVE RECEPTION WITH ONLINE GRAPH DATABASES ON THE SEMANTIC WEB

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Keywords: semantic web, online library catalogue, semantic HTML tagging, cognitive reception

Abstract

The main aim of this paper is to provide examples about the possibilities to widen the limits of cognitive reception via online graph databases related to different semantic web projects in public collection environment. Followed by a short general introduction by the relations of semantic web and public cultural collections, some current implementation projects and tools are being reviewed with a focus on public collection (library or library-related) interfaces using semantic web tools. Furthermore the paper is focusing on some benefits and challenges of these semantic web based solutions due to the reception of these new kind of interfaces by online users.

Introduction

The main aim of this paper to provide examples the possibilities to widen the limits of cognitive reception via online graph databases related to different semantic web projects in public collection environment.

The implementation of semantic web paradigms to public collection environment (archives, libraries, museums) lead to a paradigm-shift in the fields of information search and retrieval and digital document management. Any kind of data regardless it comes from the people's mind; digital or offline documents can be linked. Linked data appear as an approach and set of technical tools rather than a properly defined technical standard (Meehan, 2014). The benefits of the web focusing on data not just on documents. RDF gives the basic shape to linked data. It is a standard model of data interchange on the world wide web. RDF has features that facilitate data merging even if the underlying schemas differ, and it specifically supports the evolution of schemas over time without requiring all the data consumers to be changed. RDF extends the linking structure of the Web to use URIs to name the relationship between things as well as the two ends of the link (it is referred to as a "triple"). Using this simple model, it allows structured and semi-structured data to be mixed, exposed, and shared across different applications. ("Resource Description Framework (RDF)," 2014)

The conversion of different collections from archives libraries and museums into semantic web compatible datasets means that these collections are appearing in an online graph database environment. Public collections have to build up semantic ontologies. A semantic ontology is an explicit specification of a conceptualization. RDF/OWL language is appearing as a representation ways of ontologies. Datasets have an RDF/XML description format and organized according to standard namespace schemas. Namespaces can identify various types of data inputs in semantic environment (like thesauri, authority data, dataset of personal name collections etc.). Different datasets must be published as linked open data in order to build-up standard connections with other standard RDF/XML based datasets. The connection can be maintained by standard SPARQL endpoints. SPARQL is a document retrieval language. It is optimized to machine-to machine communication. It is possible to make queries with that language to online graph databases that store linked open data from public collections. From a cognitive point of view an interesting point can be that the end-users can get information via semantic web compatible cataloguing tools via machine-to machine communication but the associations links that machines can retrieve from the graph have built up by people.(Powell et al., 2011) The new information retrieval forms can raise the effectiveness of the research process. I would like to offer examples about the combination and effective representation ways of complex information from different datasets. With semantic tools in some way we can bypass language barriers. We can manage also challenges by the

usage of different terminologies in certain research context. It is possible to combine results from different collections from all over the world to get a more detailed overview about a chosen segment of our cultural heritage. On the technical background of these services the online graph databases are appearing. These databases have some unique functions that can help to broaden the limit of cognitive reception of cultural heritage information. We would like to describe shortly these basic database functions through concrete implementation examples, as these are the major prerequisite of the new ways of accessing information.

Current implementation projects

The data.bnf.fr project endeavours to make the data produced by Bibliothèque Nationale de France (French National Library) more useful on the Web.(National Library of France, 2014). It retrieves and connects various BnF resources and external resources on pages devoted to an author, a work, or a subject. These pages organize the Web contents, links, and services provided by BnF. Available online since July 2011, data.bnf.fr is still evolving and expanding.

With data.bnf.fr, it is possible to:

- reach BnF resources directly from a Web page, without any previous knowledge of the services provided by the library;
- get oriented in the BnF resources and possibly find external resources.

The objective is to put forward the BnF's collections and to provide a hub between different resources. Data.bnf.fr is meant to support the BnF's other applications. The project belongs to the BnF's policy of becoming part of the Web of data and adopting Semantic Web standards.

The model can be really relevant in our point of view because it can help to retrieve new ways of connections among different information resources devoted to a certain subject. A concrete example is one of the semantic representation of a famous novel of Victor Hugo, *The Miserables* ("Victor Hugo Les Miserables- semantic dataset," 2016). Starting from this web page 361 different editions of the novel can be described and compared, including digital documents. The different kind of representations of the work (music recordings, theatre performance recordings) can be retrieved as well. You can find a bibliography of corresponding literary articles and other documents. Other sources and references are also appearing about a certain work or author including library catalogue links, pictures, diagrams, maps. You can discover the data of 121 contributors related to the different editions and representations of this novel (literary people like illustrators, editors, translators, but also poets, theatre play writers, musicians, directors, filmmakers

to a user. The web of documents is linking documents links are not qualified. Otherwise on the semantic web we are linking datasets with qualified links. Schema.org simply provides a collection of shared vocabularies that can be used to mark up the public collection homepages (and any other homepages of course) in ways that can be understood by the major search engines: Google, Microsoft, Yandex and Yahoo! You can use the schema.org vocabulary along with the Microdata, RDFa, or JSON-LD formats to add information to your Web content (“Getting started with schema.org using Microdata,” 2016) In case of RDFa, the RDF statements are properties of HTML tags and can be generated as a collection of HTML-based homepage texts.

Why microdata and microformats are useful? The web pages have an underlying meaning that people understand when they read them. But search engines have a limited understanding of what is being discussed on those pages. By adding additional semantic tags (for example with RDFa format) to the HTML of your web pages—tags that say, “Hey search engine, this information describes this specific movie, or place, or person, or video”—you can help search engines and other applications better understand your content and display it in a useful, relevant way. Microdata is a set of tags, introduced with HTML5, that allows you to do this (Horváth, 2016).

In digital libraries with the help of Schema.org you can use the Library class and define FRBR-like attributes on the homepages (exampleOfWork, workExample). It is possible to define also connections (hasPart, isPartOf). Currently microformats (schema.org and RDFa) are being used in OPAC (WorldCat, Koha), and in discovery systems (like VuFind), and repositories (like DSpace).

In Hungary the first implementation of microformat tags can be found in the university library of the most traditional university in Budapest, Eötvös Loránd University (ELTE). The pages of the Dspace-based institutional repository: ELTE Digital Institutional Repository (EDIT) have tagged with RDFa and Schema.org tags. Microformats will be used soon also in the open source VuFind based new integrated portal of the Hungarian National Library (support of microformats is a built-in function of VuFind). (Horváth 2016). Implementing microformats into online full-text databases in libraries can be a major step forward also in order to offer more semantic web-compatible data by these institutions with a relatively low level of efforts.

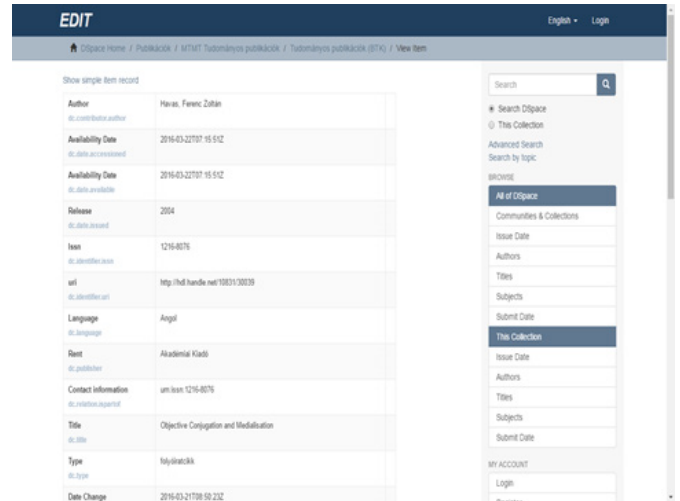


Figure 3 A sample record with semantic microformat tags in EDIT repository from ELTE University Library, Budapest (Horváth, 2016)

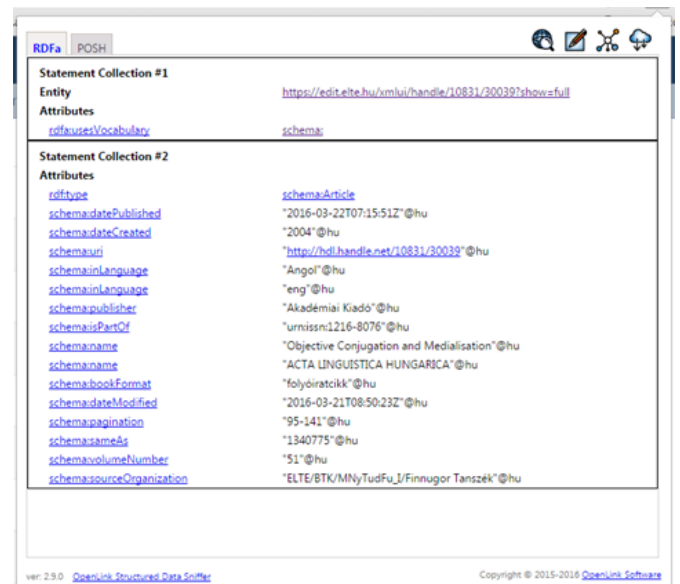


Figure .4 Sample of semantic statements in schema.org and RDFa (Horváth, 2016)

Findings and Conclusion

In general, the major challenge of the semantic applications in digital library environments is the way of representation of results to the end-users. The French semantic catalogue offers a really good example to get new perspectives to information representation and cognitive reception. All the information about a certain person, subject or work can be found with corresponding links in a simple interface. You can discover the different editions and other cultural manifestations (theatre, music) of a work, author or person. Moreover, the whole intellectual environment can appear with the power of cultural inspiration with related people from theatre, music and other major cultural genres. You can start to browse a catalogue by looking for a certain piece of information and you can easily get lost just to discover the overwhelming richness of corresponding data. From a cognitive point of

view these new semantic catalogues are offering a rather different perspective of information reception. The user meets with a complete information environment related to a certain subject with traditional and multimedia documents as well.

The German example is quite practical because it describes how you can store and make retrievable a set of information about an emperor that could not easily be available otherwise with the help of traditional web search engines or library catalogues. In a traditional library catalogue you can only search for a certain edition of a certain work of a certain author. In most cases the different editions of a certain work can be retrievable. However, all the other corresponding sets of data described above remain in a hiding position in the catalogue. The main power of the semantic cataloguing that it connects the different datasets that being described in standard format. In this sense a new way of information retrieval is appearing that can be also relevant from cognitive perspective.

The Europeana example offers us a really good insight to the comprehensive efforts in order to aggregate resources from different semantic vocabularies and highlights the essential need of collaboration in order to create high quality datasets that can be imported accurately by external partners.

By using semantic mark-up tags based on the HTML5 standard it has become possible to put semantic elements to virtually any homepage. The retrieval of web-based information can be more comprehensive and complex in this way.

The search attitudes of people can be rather different in a linked data environment that could be described before related to traditional resources. The design and functional representation of semantic catalogue interfaces can be rather important: Users have to be supported to make proper search terms. Representing and curating the corresponding datasets in a way that you could not get lost among the different information resources and you can easily decide where to go forward in the searching process is a real challenge. The www search engines (like google) started to use the information datasets added by semantic markup tags, in an intensive way.

The last major point of findings is focusing on the quality assurance of new type of semantic catalogues. New indicators, benchmarking elements have to be implemented in order the quality criteria of these systems. The user-centred benchmarking focus, the use of cognitive analytical components related to user experience factors seems to be really relevant in this context.

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POSTERS

BIBLIOBUSES IN PECS'

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KEYWORDS: bibliobus, small settlements, undevelopment, depopulation, cultural knowledge, equal opportunity

Baranya is a wonderful, South Transdanubian county in Hungary, which thanks to its geographical conditions consists of small villages. In itself it wouldn't be problem, but these settlements are typically undeveloped, in a lot of villages there are no schools, cultural institutions; for example library or community house, neither shops and pubs. In 2004 library provision existed in only 85 settlements, so television was the only way for civilization in a lot of family's life.

These settlements are not just undeveloped, but depopulated too. It is proved by the 70 % of settlements which have less than 500 inhabitants. I don't have to mention that these villages haven't got enough money to maintain a library, and their inhabitants have to deal with more important problems day by day, just like living. For inhabitants of these villages it's much harder to participate in adult education, events, to get information about the world and to have access to books, newspapers and internet than someone who lives in a town. Solving this social inequality, the first bibliobus in Baranya started its provision in 2010.

In 2016 Baranya has got 2 modern bibliobuses, which are able to substitute deposit libraries thanks to their collection, modern services, equipments and educated, socially responsible librarians. In these days bibliobuses visit and ensure library service at 59 settlements.

With my poster I'm determined to prove the necessity of bibliobuses and demonstrate what can these give for the society; „such as” equal opportunities, chance to break out, chance to catching up, cultural knowledge and last but not least, connections, friendships.

BUILDING RESOURCE GUIDES ON DISABILITIES, DISABILITY THEORY, AND ASSISTIVE TECHNOLOGIES

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KEYWORDS: disability, assistive technology, health information, disability theory

The Americans with Disabilities Act celebrated its 25th anniversary in 2015 and while many libraries are proud of being ADA compliant, there still is a deficit in resources for and about individuals with disabilities. With funding from an American Library Association Carnegie-Whitney Grant, we have created a collection of twenty resource guides on various disabilities, disability theory, and assistive technologies in an effort to highlight resources in these areas. These guides are unique because they provide a centralized location for materials on common disabilities. This poster falls under the BOBCATSSS sub-theme “Libraries as a place of education.” The resource guides are a free collection of resources that are available to anyone in the world, whether they have a scholarly or personal interest in the resource guides. Our resource collection gives users a private and accessible way to inform themselves about their own health or learn about disabilities. Our poster will focus on the process of creating these resource guides, how creating guides on underrepresented topics can help uncover gaps in library collections, and our future steps in maintaining our collection of resource guides. Outreach to underrepresented communities, such as individuals who have a disability, is essential in maintaining a resource that is human centered and ethical. We have created a feedback survey, which will allow us to hear voices that have important input or feedback that we would not otherwise be able to hear.

FINNISH OPEN DATA GUIDE

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KEYWORDS: open data, public sector information, best practices, data opening process

The information resources that the public sector manage contain great potential. Nowadays the potential can be perceived even greater as the ways to utilize data have advanced. The good use of these resources not only serve the inner workings of the administration but at best, the whole society.

To support the process of opening the public sector information recourses in Finland and putting the potential in practice Finnish Ministry of Finance and the Finnish Government ICT Center Valtori in co-operation with different open data advocates have produced the Finnish Open Data Guide (<https://www.avoindata.fi/fi/opas>). The online guidance which has been built by regarding the latest practices in the field of open data works as a supportive tool for those willing to learn about data opening process.

The poster presents the basics concerning the Finnish Open Data Guide including the aims behind its release and the development history so far. Special attention is paid to illustrate the four-phase process model for data opening which serves as the basis for the guidance. The poster demonstrates each section of the process and introduces the open data practices relating to them.

FOOD FOR THOUGHT: SUMMER LUNCH PROGRAMS IN THE PUBLIC LIBRARY

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KEYWORDS: summer lunch programs, public library, food insecurity, summer learning loss

In the summertime, many low-income children have inadequate access to proper nutrition. Food insecurity occurs when children or adults are deprived of food and nutrition. 13.1 million children in the United States live in food-insecure households.¹ During summer break, these 13.1 million children need to be able to access adequate sources of nutrition. When parents are at work, and there are limited food sources at home, children have less options for healthy, balanced meals. Many public libraries offer summer meal programs to keep children and young adults fed throughout the day. Coupled with programming or interactive activities, summer meal programs are providing youth patrons with healthy lunches and opportunities for learning. This poster explains the universal link between food and information access by citing summer meal programs offered in public libraries and studies focused on the effectiveness of library or library-related learning and nutrition for children's learning outcomes.

GAMIFICATION IN CITIZEN SCIENCE: A CASE STUDY FROM GALAXY ZOO

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KEYWORDS: citizen science, gamification, Galaxy Zoo, storytelling, user participation

Citizen science denotes an information transfer and collaboration process between scientists and the general public. In a citizen science project, scientists ask for the public's help to accomplish a research task under their supervision, and there is no need for the public to have solid background in the scientific domain to participate in the research. Currently, citizen science is widely seen in diverse disciplines and it is a method that a number of scientists rely on to efficiently conduct research. One of the prominent examples is an astronomy project named Galaxy Zoo. While Galaxy Zoo has created significant results since it was first launched in 2007, its task design remains tedious, boring, and has no attraction to engage users to stay longer in the project. To address this issue, we use gamification as an approach to redesign the task in Galaxy Zoo. Regarding the power of storytelling and fantasy, in this research we investigate the feasibility of implementing narratives in the design of citizen science games. There are two prototypes of redesigned Galaxy Zoo systems: one is to incorporate a story adapted from *The Little Prince*, and the other is to incorporate an original story. The goal of this research is to examine whether the integration of a familiar story is able to enhance users' motivation more when compared to a newly developed narrative.

HOW TECHNOLOGY SHAPES THE FUTURE OF LIBRARIES: OPINIONS FROM LIBRARIES AND RELATED ORGANISATIONS WORLDWIDE

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KEYWORDS: technologies, future libraries, worldwide opinions, mobile applications

For this poster we have conducted an exploratory research to identify how libraries around the world experience and think about the changes technologies bring. We asked national libraries, public libraries, university libraries and related organisations the following five questions:

1. Which recently introduced digital applications have helped with or replaced the tasks of librarians?
2. In your opinion, which digital applications, not yet existent or not yet in use, would be able to replace or help
3. with the tasks of librarians?
4. Which new tasks would be created when intensively using digital applications?
5. Which tasks would not be able to be replaced by digital applications?
6. If the digital application will largely suffice in meeting the information requirements of the visitors, libraries will be able to focus on other tasks. What is your vision on this? In what tasks would you invest?

On the poster you will find a selection of varying answers on these questions. The general view is that libraries have started creating innovating applications, yet that a personal approach will always remain a top priority. Moreover, the majority of the surveyed libraries are of the opinion that digital applications will not be able to replace librarians, but rather provide new and more accessible services.

INACCESSIBLE INFORMATION: THE INFORMATION SILOS OF MEDIA

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KEYWORDS: libraries, archives, media, information, user access

One area of increasing interest in library and information science is access to information, especially with the advent of new technologies to transmit information, and the hope that these technologies will result in increased access to information for more people. At least in the area of media, this is not the case. The proliferation of new information in media formats such as VHS, CDs and DVDs do not necessarily result in increased access to this information. In reality many media resources held in libraries or archives are inaccessible to the general public. There are multiple factors that combine to create these inaccessible media silos. The first is the diversity of formats and the continuous difficulty in transferring and maintaining media in a format that the general public can access, either in their own home with their own resources, or in the library via its resources. The second factor is an issue that is not unique to media, but one that is also an issue for information formats in many archives: the issue of time and funding to process and catalog these information resources. Both of these issues must be overcome before the information contained in media can be accessed by patrons. However, due to the technological format, access to the media requires not only access to the media, but also technology, and knowledge of media technology. The numerous technological requirements to access media perpetuate the current social order in which characteristics such as class and ethnicity can limit or increase one's access to knowledge. The technological requirements therefore only selectively enforce these barriers to information. These selective barriers function similarly to other restrictions to information access, such as access to the internet or to a library. These restrictions are at play from the micro level of individuals to the macro level of nations, and are evidence that advances in media technology have not resulted in a utopia of access to information; they have only re-inscribed the old restrictions.

INFOBESITY AND QUALITY OF LIFE

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KEYWORDS: information, public transport, infobesity, quality of life, users

Nowadays, information is at the very heart of our everyday life, and more precisely in public transportation. Indeed, it is often chosen to be the location of various dissemination of information such as practical information, network news, advertising, weather forecast, news-flashes, kidnapping alerts, safety recommendations in a general post-attack environment...

Being informed could be a necessity to insure citizens a certain quality of life, but there is also a risk of being too informed. Does the large amount of information have an impact on our sense of well-being? In order to question the effect of information, we performed a survey in Lyon's tramways. Our study was conducted in two different stages:

1. Observation of information broadcasts within the public transportation, which enabled us to develop a typology of the kinds of information displayed.
2. Interviews with public transportation users, based on a questionnaire that examines the attention given to broadcast information by users, especially in terms of emotions and sense of well-being.

Our survey was conducted in one day, between 11:00 am and 2:00pm, on one of the tramway line that deserves several universities and the train station. We also asked the questions on the platform, which is the favourite place for calls for vigilance. In terms of statistics, we questioned almost half men (51%) and half women (49%). We also paid attention to the frequency with which people were using public transportation, considering that the impact of a big amount of information is important, when people are often confronted to it.

INFORMATION POLICY IN THE REPUBLIC OF GEORGIA AND THE RUSSIAN FEDERATION IN THE POST-SOVIET CONTEXT

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This paper will explore information policy in the Republic of Georgia, particularly examining the government's program regarding access to information. As it pertains to this paper, information is defined as any material, digital or print. The paper will also compare how the formation and implementation of information policy in the Republic of Georgia compares to information policy and access in the Russian Federation. These two countries are under consideration due to a shared history of strict and rigid censorship during the Soviet period, and also because of the complex political situation between the two countries and its effect on information policy agreements. The comparison will involve the following criteria: how information is accessed, what the conduits of communication are as part of that accessibility, and the role of each government in determining information policy and access to its populace. It will be necessary to look directly at the sources of policy on government websites as well as major information institutions, such as national libraries, major publishing houses and news outlets. In this case, major publishing houses and news outlets are considered to be the top five that maintain the highest production of information. For the purposes of this paper, production will include publishing houses, the press, telecommunication and government communication outlets. Additionally, the timeline of the paper will be looking at information policy as it has developed in both countries since the fall of the Soviet Union to the present day. The paper will also examine the relationship between the government, society and the interplay between production and consumption of information that contributes to information policy formation in both countries. The main objective of this paper will be to provide a substantive and comparative overview of the situations in both the Republic of Georgia and the Russian Federation regarding information policy and their similarities and differences, respectively.

INSTITUTIONAL ROLE IN JOURNAL ACCESS INITIATIVES WITHIN DEVELOPING COUNTRIES

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KEYWORDS: Journal Access Initiatives, institutional role, equal access, UN initiatives

While the benefits of electronic resources are vast, not all countries, institutions, or researchers, especially in developing countries, have access to the full plethora of digital information, resulting in the need for journal access initiatives. Namely, my research focuses on initiatives that strive to provide high-impact, paid-for literature, such as the UN initiatives AGORA and HINARI, along with public-private initiatives such as Cornell University's TEEAL initiative. These initiatives offer access to electronic resources relevant and vital to specific areas of research and innovation, aimed at researchers unable to gain access due to financial, locational, or technological barriers. However, despite the availability of digital resources, particularly those provided by journal access initiative programs, inter-library research shows that the majority of researchers in developing countries under-utilize their resources, bringing into question the role of the institutions in the effectiveness of a journal access initiative through their training, outreach, and promotion of the program. This poster inspects the institutional role in implementing journal access initiatives, while suggesting actions to increase visibility, accessibility, and usability of the journal access initiatives.

INTERLIBRARY LOAN IN THE EVER-CHANGING ACADEMIC LIBRARY

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KEYWORDS: interlibrary loan, resource sharing, access

Interlibrary Loan and resource sharing departments reflect and embody many pillars central to librarianship, access being at the forefront. By allowing library users to transcend the limits of their libraries' physical and electronic collections and by supporting researchers by bringing them essential materials and resources from states, countries or even continents away, interlibrary loan has a tremendous effect on the furtherment of. This paper discusses the changing role and growing importance of Interlibrary Loan in academic libraries. How have Interlibrary Loan departments been impacted and how have they adapted in a time when physical collections are shrinking, options like demand-driven acquisition are increasingly viable, and requests for digital materials continue to grow?

Some of the trends identified include: more collaboration with other departments, resource sharing consortiums, increased marketing of ILL and e-book lending through interlibrary loan and its viability. Based on these trends this paper reached the following conclusions/recommendations:

an increased focus on marketing and promotional activities in interlibrary loan department in order to reach potentially underserved parts of the academic population.

an increased collaboration with other departments in order to streamline services and allow the work going on in individual departments to align more cohesively with the library's missions and vision.

an effort and commitment should be made to collaborate and work towards a viable, librarian-patron-publisher pleasing platform for lending eBooks and other electronic material between libraries.

collaboration across institutions in order to leverage shared collections.

These recommendations can help to redefine interlibrary loan's place in the academic library and raise the library's profile as the heart of the academic community.

LIBRARY TALE FROM THE LIBRARY

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KEYWORDS: meeting place, third place, social groups

In Hungary most of the people think the library is an old fashioned place which is boring and you can not find anything else just books and old odious librarians who wear glasses. In contrast, there are those library users who know they have wide opportunities to use the library.

I worked in a little village, in a town and in a county town library. I was not just a librarian because these libraries have their own user community. (In a village, sometimes the library is the only public space because the village has no pub.) One day you are the manager of the little library (~ 650 inhabitant) and the next day you are just a user in the national library.

Always the library was the third place everywhere for a different reason.

Of course, authentic information is the first why the people visit the library but what else?

The easily accessible space where they can read the news, do the homework, learn to the exam, meet with friends, learn something new, teach something, spare their free time and do some hobby in there, watch the exhibition, see a movie, play a game... Such a different activity and I didn't mention that services which are normally now in the libraries.

Libraries are a multicultural meeting place where we can be noisy, eat and drink, use for our research tablets when we try to find some important fact on of the 500 years old book, live our social life.

MORE THAN A BULLETIN BOARD: USING TUMBLR FOR ONLINE REFERENCE AND USER SERVICES IN ACADEMIC LIBRARIES

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KEYWORDS: social media, Tumblr, online reference services, library anxiety, and academic libraries

Libraries use social media as a marketing and outreach tool to inform patrons and peer institutions about their activities. Tumblr, a social micro-blogging website, is a promising platform for libraries to use as a reference tool because it encourages twoway interaction with patrons, enriching their experience of the library online. Through a series of built-in tools that develop community and encourage conversation, Tumblr can help academic libraries to reach patrons and decrease library anxiety. To explore how Tumblr could be used as a Web 2.0 reference tool, we started our own Tumblr account: howdoifind.tumblr.com, or “HDIF” for short.

Tumblr consists of user-generated communities created by its tagging system, several of which are dedicated to academics and studying. With HDIF, we are able to interact with an already-extant group of online learners, many of whom are university students or academics. These communities are both audience and resource, presenting avenues of communication and exploration that academic libraries would do well to explore.

Performing reference services using Tumblr presents challenges, including abiding by the Reference and User Services Association’s guidelines on user privacy during reference interactions. Since Tumblr is public, reference librarians must interact with patrons without compromising their identity. Tumblr users use aliases, and also may ask questions anonymously through Tumblr’s “Ask” function. Another challenge is that a university reference service must be tied to a library in order to function. HDIF is not run by the University of Illinois, so we provide resources that are freely available, or explain to users how to access materials through their own library.

WORKSHOPS

ACADEMIC LIBRARIES AS CENTERS OF EQUITY ON CAMPUS

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KEYWORDS: EQUITY, SOCIAL JUSTICE, THIRD SPACE

Universities in the United States have recently placed emphasis on civic engagement and issues related to equity and social justice. Academic libraries have received a mandate to engage their campus in these issues, which has been accelerated by the position of the library as both an interdisciplinary partner and a cross-cultural facilitator. James Elmborg proposes in his work, *Libraries as the Spaces Between Us: Recognizing and Valuing the Third Space*, the idea of third space as a space that reinvents the library from the premise that libraries and librarians can develop ways of working with increasingly diverse populations in increasingly dynamic contexts. The presenters will approach the workshop by providing evidence by which the library serves as a “third space” where students from all backgrounds can be open about their needs and their knowledge (or lack thereof), and in which negotiations take place so that new understandings can emerge.

Participants will identify specific needs for greater social equity on their campuses. They will discuss and begin to create plans for learning and action that include using the library as a catalyst for working with highly diverse populations, and demonstrate how through the library we get students talking in highly productive ways, sharing viewpoints from many cultures that call for calculated and reflective measures in negotiating challenging times in their own lives. Interested participants will be invited to communicate with each other over the following months regarding progress and questions.

THE CONFLICT BETWEEN DATA MINING AND ONLINE PRIVACY - CREATING AWARENESS ABOUT DATA MINING

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KEYWORDS: data mining, online behavioral advertising, online privacy, profiling

One of the latest trends is Big Data. Big Data is the art of collecting as much data possible and for instance use this for marketing purposes. Digging for useful data in these millions of gigabytes collected by companies is called Data Mining. With help of data mining it is possible for companies to create very precise profiles of you as an internet user.

What if we tell you companies know everything about you? They know who you are, where you live and what your interests are. What if we tell you this is allowed according to European law?

Creating profiles and base your marketing on these profiles is called online behavioral targeting. In our workshop we are going to show you how companies use online behavioral targeting to reach out to you as an internet user by ads and how the internet looks to you changes because of this.

There is a conflict going on between data mining's endless possibilities and the users privacy that's at stake. How far can companies go with collecting data about you? What's allowed according to European law and why aren't companies listening to this? Find out in our workshop and learn all about the ugly truth of data mining.

DO YOU TRUST YOUR SOCIAL MEDIA FEED?

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KEYWORDS: misinformation, verification tools, fact-checking, trust of content, social media

Misinformation is one of the top ten threats our society faces at the moment, it leads to severe economic and societal consequences. With the arrival of social media and the echo chambers on social media misinformation is much more likely to spread. Most users don't have the intention to spread false information but are doing this to warn others.

Facebook and Google recently launched a method to stop the spread of false news articles. But according to the experts fact-checking is still necessary and that fact-checking will become more important in the future.

There are several tools, techniques and methods to check the reliability of a social media post. With these tools you can verify images, identities and places. There is no technology which can ensure the social media post is totally reliable. The best way to verify information is to combine tools with the old-fashioned journalism techniques, using people's knowledge

In this workshop we let you get in touch with several fact-checking tools.

GET READY FOR SMART CITIES!

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KEYWORDS: Internet of Things, smart cities, challenges - social, challenges - data

This interactive workshop is for all information professionals who want to be informed about what smart cities are, what they consist of, and what kinds of social and technical challenges they can face with the initiation or maintenance of a smart city. A variety of experts have been interviewed to share their knowledge on these topics, and this will also be used to give an idea of how these challenges can be addressed.

This one-hour workshop will be a mix of theoretical information and active groupwork to let the participants think about the overall concept and let them discuss the topic. During the workshop the participants will use creative methods to keep track of their thoughts.

After the workshop the participants know:

- What smart cities are
- What smart cities consist of
- What smart innovation can do for cities
- What kinds of related challenges they can face
- How to solve those challenges

HOW CAN OPEN GOVERNMENT DATA IMPROVE OUR QUALITY OF LIFE - THE POWER OF OPEN GOVERNMENT DATA

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KEYWORDS: open government data, open government, privacy

Open Government Data is a powerful information resource that is yet largely untapped. Due to this fact it is relevant to create awareness of Open Government Data and ensure that everyone has knowledge of what kind of data already exists, how to use it best, and what kind of difference it can make in our lives. The open data market is growing and its infrastructure is developing alongside as well. Open Data, also called “the new gold” in modern society, is there for everyone free to use and carries a lot of potential for different fields. Open Government Data is data funded by public money or during a public event and is made available by government for companies, organizations, institutes of the public sector, and individuals to access, use, and share. (Algemene Rekenkamer, 2014; Open Data, 2016) The opening of data is essential for decision-making in institutions and organizations. It enables massive participation and collaboration for outside stakeholder groups. The opening of infrastructure and production data also empowers new stakeholder groups to become independent providers of new services. The massive publication of relevant data will enable institutes, organizations, and citizens to distribute ideas and solutions to social issues and therefore improve our life quality.

Only the openness of data can create the transparency that will strengthen the trust in governments, institutions, and companies and restore democracy, too. Open data promotes an open government in order to create a modern cooperation between politics, industry, and citizens. (Summary, 2016; Benefits of Open Data, 2016)

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QUANTIFIED MIND: IMPROVING MENTAL HEALTH WITH QUANTIFIED SELF

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KEYWORDS: quantified self, mental health, personal health data, privacy

Quantified self is tracking data about yourself to improve your quality of life. Many people use apps or wearable technologies to track physical activities in order to learn more about their health and become healthier. More and more Quantified Self is used to improve not only physical health, but also mental health.

There are many benefits and risks of quantified self in relation to mental health. The risks are related to privacy and reliability of data. Privacy risks are such as controversies about data ownership, data storage and the potential abuse of digital footprints. There's an issue about the reliability of data which can lead to misinterpretation and abuse of personal health data. The benefits of quantified self in relation to mental health are 'Patient empowerment', 'Time Sensitive Interventions' and a reduction in total healthcare costs.

During our workshop we will introduce the subject and present our research results, based on (international) expert interviews, and we will let the participants experience the use of Quantified Self. We will discuss how it can improve the quality of life, but also address the risks and disadvantages of tracking personal health data. We're also going to introduce some examples of useful apps for the audience. The audience will be involved in many different ways.

VIRTUAL REALITY: POSSIBILITIES AND CHALLENGES – FROM A MENTAL HEALTH CARE PERSPECTIVE

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KEYWORDS: virtual reality, mental health

During the last years, virtual reality, gained in importance. Every field of application like entertainment, education, media, data visualization and mental health care will be affected by the progress in virtual reality in various ways. For more than twenty years, virtual reality has been used in the treatment of mental health issues such as Post Traumatic Stress Disorder (PTSD) and phobias. New technological developments can further improve the use of virtual reality in mental health care. Not only with treatment and therapy, but also with training of medical professionals and creating awareness for mental disorders.

While virtual reality is welcomed with open arms, this new technology comes with several ethical, medical and economical challenges. Scientist currently have no insight in the effects of long term immersion, privacy of patients is still an issue and implementation cost are very high. There is also the issue of 'risky content'. Recreating traumatic events in virtual reality to assist PTSD therapy has major ethical ramifications. Should recreating violence and sexual assault be allowed? Who will own the content?

In the workshop 'Virtual reality in mental health treatment: Possibilities and challenges' participants can experience in virtual reality what people with mental disorders go through. After that they will discuss the possibilities (treatment, training and awareness) and challenges (privacy, long term effects and risky content) associated with virtual reality use and what a information professional should be aware of. The workshop is meant for information professionals interested in virtual reality and health care.

WHAT CAN BE TRACKED WILL BE TRACKED

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KEYWORDS: personalised web, data tracking, searching for information, privacy

As information professionals, we are aware of data tracking and its significance and implications to our current society nowadays. Each day, more and more data is generated and companies have taken notice. Their interest in this type of user information grows, as it can yield profits and benefits to companies and industries. Information is not only tracked online, but also offline. Combining offline and online data tracking allows companies to create detailed personal profiles.

One consequence of this data tracking is personalised search. This affects the way we search online. We receive search results based on our interests and habits, which can be beneficial when we use the web for entertainment. However, it can be problematic when searching for reliable, impartial information and new, different points of view. Because only a specific perspective is presented to the user, he might not be well-informed. This is the basic concept of the 'filter bubble'. It is not a new concept, but it is making a reappearance again.

A significant result of these concepts is the erosion of online personal privacy. Online users generally want to consume content and don't pay much heed to their own privacy. Companies know and exploit this. "I have nothing to hide, nothing to fear" has become a fairly common saying. However, this can be addressed on a user level. There are a myriad of tools and options available online which allows the user to reduce personalisation and data tracking, which in effect improves personal privacy. Be that as it may, not everyone knows of the existence of these options. During our workshop, we wish to inform the audience of ways to safeguard their privacy and stimulate them to share these methods by creating and using an online platform.

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