Preservation of objects that have social, scientific or cultural significance for the future has become one of the most challenging problems of the society. The establishment of preservation priorities is one of the most complicated tasks facing the information institutions. The whole procedure entails a lot of responsibility as decisions that are made will determine the amount of information available to future generations. The article demonstrates experience and lessons gained in the project “Red Book of Estonian Publications, 1535–1850” that was conducted in 2003–2006. Growing out from the need to make decisions for preservation strategies and to establish principles for future digitization of Estonian book heritage, the project drew attention to the importance of having distinct methodology and coherent criteria for the assessment of culturally valuable objects. The project team stressed the importance of preservation quality, especially when using reformatting technologies like microfilming and digitization. Preservation of informational integrity of a document is one of the key questions of the digital future.

*Key words:* preservation, book heritage, red book, assessment of significance, informational integrity, preservation quality.
be preserved for future generations. Preservation of different kind of objects that have social, scientific or cultural significance is one of the most challenging problems that the society has to face.

Books are in addition to buildings and coins, one of the most wide spread and the most survived material objects of the past [11, 3]. As Manfred H. Breede has said, books have achieved perfection in their thirst to “communicate, access, preserve and disseminate information using an architecture that facilitates visualization” [3, 1]. But books have paradoxical qualities: by appearance material objects, but in content immaterial works capable of living in variety of physical forms. Digital texts also need material carriers, be it DVDs, hard disks or memory sticks to carry text to the monitors’ screen, although the connection of a text to these carriers is not so important as compared to traditional books, photos or archival documents. Speaking about preservation, even in the case when most researchers are interested only in text, the importance of the connection between the text and its physical appearance and their impact to each other must not be forgotten [10, 1–15; 19]. Both components embody characteristic features of a certain cultural period and different information about it. Preservation of both characteristics of a document is of great importance.

Preservation means making choices. The establishment of priorities is obviously among the most complicated tasks facing the information institutions in regard of preservation activities. It can be considered a highly sensitive area: it is clearly impossible to preserve all resources in their original form. Yet it is a very complicated task to work out principles for deciding what should primarily be preserved. The whole procedure entails a lot of responsibility as decisions that are made will determine the amount of information available to future generations [15, 12].

New technologies give us tools to make values of the cultural past easily accessible to the wide public. The difficulties of decision making – what is significant in the past to be preserved for the future – befall to people responsible for preservation of cultural memory. According to Annemaree Lloyd the act of assigning significance is a social action; the process of identifying such significant materials has a symbolic function that creates knowledge about an object’s importance and about the repositories of knowledge which help to shape future cultural memory [16, 54].

The following article presents experience and lessons of the project “Red Book of Estonian Publications, 1535–1850”, conducted in 2003–2006. Growing out from the need to make decisions for preservation strategies as well as for formation the basis for future digitization of Estonian book heritage, the project drew attention to the importance of having distinct methodology and coherent criteria for assessment of culturally valuable objects and establishing priorities.
BACKGROUND OF THE PROJECT: STRATEGY OF DIGITAL PRESERVATION AND EXISTENT KNOWHOW

During the first decade of the 21st century the preservation of national cultural heritage has been actively discussed both on state and institutional levels. Development of information and communication technology (ICT), existence and disappearance of numerous electronic and digital documents and their fast growing quantum, digitization projects that were started in memory institutions – all these processes indicated to the urgent need for regulating this new field of activities. At the end of 2003 the special working group by the Ministry of Culture elaborated the preservation guidelines “State strategy of digital preservation of Estonian cultural heritage for 2004–2007” [5]. The document defined cultural heritage as objects of historical, scientific, cultural, social, technological or other value, which, regardless of their physical location, are valuable to be preserved for future generations and, using the most expedient technologies must be accessible for public use. The aim was to achieve collaboration of different memory institutions: to achieve common understanding of what is considered cultural heritage, to share responsibility of preserving digital born heritage, to coordinate digitization activities and to ensure that digitized information resources will be of excellent quality. The working group stressed that digitization does not diminish the need for preservation of original culturally significant objects. According to the strategy, the state institutions – Ministry of Culture, Ministry of Education and Research and State Chancellery were responsible for carrying out this strategic plan. The coordinating role was assigned to the Preservation Council of Cultural Heritage that was formed by the Ministry of Culture. The members of the council represent all types of institutions that preserve cultural memory: libraries, archives, museums, Estonian Public Broadcasting, research institutes with scientific collections. The first strategy was followed by the extension for 2007–2010 [20]; the third development plan is at present to be adopted.

Preservation policy of book heritage starts from acquiring information about the physical condition of written and printed word. This objective was fulfilled by the first stage of the project THULE: “The State of Cultural Heritage in Major Estonian Libraries (1998–2000)” which aimed at identifying the most endangered paper-based collections in four archive libraries [8; 13; 14]. The project was carried out with the financial support from UNESCO, Open Estonia Foundation and the Open Society Institute at Budapest. The project THULE was based on the principles of the Memory of the World program and underlies on the idea that national heritage is a part of world memory. The results of the project brought out the big percentage of damaged, i.e. endangered publications as well as unsteady preservation conditions in libraries [14, 95–96, 108–109]. The most important achievement of this project was the building
of cooperation network of qualified preservation specialists and collection managers in participating libraries who share responsibility for preservation of collections.

THE PROJECT “RED BOOK OF ESTONIAN PUBLICATIONS, 1535–1850”: AIMS AND RESULTS

The project, conducted in 2003–2006, was financed by the UNESCO National Committee of Estonia, the Ministry of Culture and the National Library of Estonia. The aim of the project was to create a theoretical basis for elaborating criteria which enable to determine preservation priorities of Estonian printed book heritage by assessing certain values of every single book title. The project was carried out by two book historians and library specialists (Krista Aru and Tiiu Reimo) and two preservation specialists (Kurmo Konsa and Mari Siiner). The project was administrated by Mari Siiner, the head of the preservation department of the National Library of Estonia. The team members brought in their expertise from the Estonian Literary Museum, the Academic Library of the Tallinn University, the Tartu University and the Tallinn University.

The criteria used for ‘testing’ significance of each item were based on the same principles as criteria for assessing rarity of a book: the cultural value, i.e. cultural or social context reflected in a book; availability, i.e. the number of survived copies of a book and the stage of preservation risks, i.e. physical condition of an item. Each criterion was ‘measured’ by several indicators.

The project resulted in the list of Estonian language books of high cultural significance and preservation risks. The list was made public in the form of the database created by the software company 5D Vision OÜ. The database embodies 413 book titles in Estonian language that were published during 1535–1850 and has several search options: by the place and date of publication, location, availability etc. The description of an item includes a short bibliographic description of a book, followed by its registration number in the retrospective bibliography of Estonian books. Availability of each book is characterized by the number of survived copies, the places of their location together with notes about defectiveness of a copy and the availability of preservation and surrogate copies in Estonian memory institutions. Item’s cultural or social significance and the assessment of the physical condition of one copy are shortly presented. Digitized images of the title page and of the binding of the book are added to all items that are preserved in Estonia. The database was published in the form of CD-ROM: “Eesti trükise punane raamat I: 1535–1850” (Tallinn, 2006) by the National Library of Estonia; it is also available online1.

The practical value of the project is in demonstrating the rarity of old Estonian language books and risks of gradual perishing of the Estonian book heritage. The team

1 The database is accessible through Internet <http://web3.nlib.ee/PunaneRaamat/>.
hoped that the results of the project help to activate and coordinate preservation planning: to acquire preservation copies from the books that are located outside Estonia, to coordinate producing surrogate copies, to collaborate in digitization. The results of the project have been described in several articles and will not be repeated here [2; 15; 18]. The main lessons deriving from the project might be summarised as following: Explain what you are doing and why.

WHY RED BOOK?

The *Red Book* is primarily known from nature conservation where it represents the list of endangered species. The concept is self-evident and socially well accepted. In recent years, the same principles have been used for compiling red lists or books of cultural heritage objects which record the most valuable and endangered cultural objects. The red book of national cultural heritage is an overview of objects which embody the basis and individuality of national culture and require special care in preservation and handling due to their cultural value and endangered condition. Thus, the Red Book is the tool for the staff of memory institutions for planning preservation strategies.
EXPLAINING CONCEPTS OF THE RED BOOK CONTENT

When starting the project the idea of creating such a list of high significant and endangered books did not find enthusiastic support in professional community of old book specialists and arouse several discussions.

Firstly, what kind of materials such a list must include?

Estonian book heritage consists of books in many languages issued in the territory of present day Estonia, but the planned list included books only in Estonian language. Book heritage in the national language is, of course, of great importance for the cultural memory, but the role of periodical publications is of no less, in some periods of history it might be even bigger. The decision to confine the project to books was made taking into account the availability of the solid basis – the retrospective national bibliography of books in Estonian language 1525–1850 – that could be used for choosing candidates for the list. At first stage of the project also a selection from the Estonian periodicals (5 titles), foreign language books (23 titles) and periodical publications (3 titles) printed in Estonia in the 17th and 18th centuries, was included in order to find out, if the elaborated criteria and indicators were relevant for using by assessment of publications in other languages or of other types [2, 5]. The selection of ‘red list candidates’ was made on the basis of bibliographies “Eesti raamat 1525–1850” (Estonian book 1525–1850; Tallinn 2000), “Eestikeelne perioodika 1766–1940 I–II” (Estonian-Language Press 1766–1940; Tallinn, 2002), “Eestis ilmunud saks-, vene- ja muu keelne perioodika 1675–1940” (Periodicals in German, Russian and Other Foreign Languages in Estonia 1675–1940; Tallinn, 1993) and “Tartu Ülikooli trükikoda 1632–1710” (Printing office of the University of Tartu 1632–1710; Tartu, 2000). The books from which no existing copies are known were omitted and the database was limited to the years 1535 and 1850. The assessment procedures proved the full relevance of elaborated methodology for analysis of different types of print production. The additional material existed in the working stage of the project; the preliminary results were introduced at the seminar at the National Library of Estonia in February 20, 2004. The additional materials were removed from the final product – CD-ROM publication and online database in order to avoid inadequacy between the title and the content of publication.

THE CONSTRUCT OF SIGNIFICANCE: CONCEPTS OF CRITERIA

The discussion about why to establish priorities between rare books themselves was long and high-spirited. The criteria for defining national language rare publications were elaborated by the book historian Voldemar Miller at the end of 1960ies [17]. Miller considered as main criteria the publication year of a book, the number of known survived copies and the cultural value of a book. Two of them – the number of survived copies and the cultural significance of a book – were also counted in the Red Book.
project. By determining the publication year as a criterion of rarity V. Miller applied terms of ‘general (absolute)’ and ‘local’ time limits; he connected the ‘local’ time limit to the average number of annually published books. The rapid change in publishing Estonian language books took place in the middle of the 19th century: during the decade 1840–1850 the average number of annually published books was 27.3 [6, 49], in the period 1851–1859 it was 38 and in 1860–1869 already 67 books [9, 21]. The publication year as an indicator of rarity was set on 1860, as starting from this decade the number of annually published Estonian language books was steadily growing. Together with the increasing print production the number of survived books grows and they will not be considered rarities.

Thus, all books, described in the bibliography “Eesti raamat 1525–1850” belong to rarities by their publication year. The bibliography includes descriptions of 1210 books and pamphlets and registers also their availability in memory institutions and in well known private collections [1]. The frequent question from the library specialists was: why to differentiate ‘more significant’ rarities from rare books when all libraries having these books in their holdings handle them as rare books.

This argument brought us back to the question of priorities.

In Decision Process Guidebook priority is defined as the relative importance of activities or issues involved in a project, action, or situation [4]. Priorities are relative and depend on the significance of objects that in its turn is not fixed; it can diminish or increase over time [16, 61]. Preservation priorities mean that some objects will be valued higher than the others and resources spent on them (preservation conditions, conservation or restoration; digitization) will be bigger than those spent to the others. The project team did not put up any restrictions to libraries in regard of what items or collections are taken care of as rare ones. The idea was to develop common understanding of the core of Estonian book heritage and to ensure the preservation of books that are listed in the Red Book in the first place.

Combining the criteria of cultural value and availability, the Red Book includes many books of a similar type: the list contains 65 calendars, 49 catechisms, 35 hymnals, and 34 prayer-books, 27 books of Gospels and Epistles, 18 ABC-books. These books form 55 % of the total amount of publications in the list. Many library specialists were sceptic about the need to emphasize the great significance of all of them in our cultural past; it would be enough to bring examples from every type of books and draw attention to new editions with bigger changes in content. However, it is not as easy case as it seems to be. Every one of these books is unique or rare as from many years of the 17th and 18th century they are the only survived Estonian language books: for example from the year 1685 only the hymnal and prayer-book in South-Estonian dialect have survived [6, 100–102]; from the years 1733, 1734 and
1751 only the calendars [6, 178, 200], from the year 1760 only the catechism, from 1764 the calendar and the catechism [6, 207, 209]. The number of Estonian language books in the period under discussion was so small and publication of a book or a calendar an event that had great importance for the development of education and cultural life. If we do not include such items into the Red Book, we imply as well that they are not worth of first priority preservation. These books, although of similar type, are irreplaceable and following such a reckless approach we cultivate the loss of collective societal memory.

The short duration of the project and the lack of resources to engage library staff in determining the physical condition of books, did not allow assessing all existing copies of books listed in the database. Therefore, the physical condition of only one copy of every selected title was performed. The methodology elaborated for THULE project for assessment of Estonian language paper-based books, was used. Only two experts were involved in assessment of the physical condition of books. As they both were engaged already in THULE project, they had common understanding and experience which guaranteed equal quality of the results. Good contacts to library staff achieved during the first project, ensured that this stage of the project run without holdbacks. Very important was the good cooperation with private collection owners (one unique book, three unique copies in Estonia and six unique complete books in Estonia are preserved in private collections) who agreed to give up their rarities for assessment of physical condition. Of course, giving such consent was also profitable to collectors, as they got valuable information about the condition of their unique books. If there were possibilities to assess all existing copies, we would have got more detailed division in assessment results and could have given suggestions for further preservation procedures.

THE IMPORTANCE OF PRESERVATION QUALITY

Preservation quality can be defined as the characteristic of an object to preserve information integrity and authenticity in anticipated course of time [14, 101]. Information integrity includes qualities which determine a clearly distinguished complete object. Preserving the authenticity of the book as an object is the difficult precondition of preservation, especially when using reformatting technologies.

Every book (or any other object of cultural heritage) contains inexhaustible quantum of information. The most common model to characterise this information is using dichotomy: the book is divided by the content (text) and the carrier (paper, parchment, electronic device etc). The book is treated like a reservoir containing text which can be displaced from one reservoir to another without losing information [14, 109]. The result of this model is, that the text (content) and its carrier (physical form) are treated independently and the object of preservation is said to be only one. This approach is widely spread and used as the basis for reformatting...
methods like photocopying, microfilming and digitization.

Most researches today understand books as objects comprising different levels of information: books, manuscripts and archival documents form integral part of the material and intellectual culture of a certain period of time and are bearing social contexts, which have created them. In addition to the content all documents contain information about the history of production. Peter van Mensch [21, 22] has elaborated the model, according to which three different information levels are distinguished: structural information or structural properties; functional information or functional properties; context and the object's relationship to its context. Structural information refers to the physical characteristics of the object (materials, construction, design, form). Functional information indicates the use of the artifact. Context refers to the relation between the object and its environment. A context can be described as a system, having two ‘dimensions’: a material (physical) and a conceptual one. The physical context may include the other kinds of objects to which it is related to, both in the process of manufacture and in use (convolute bindings, for example). As a conceptual system, context can be understood as a cultural and social environment to which the object is related. There are many kinds of social and cultural data linked with the role of the object, its meaning and significance. This may refer to a historical connection where the importance lays not so much in the object *per se* as in who owned it and what happened to it.

The question of preserving information integrity demonstrated how important it is to consider information structure of a book in preservation activities. Many of the bindings that include the titles selected to the Red Book, are convolutes, in which not all titles may belong to the list. What approach to use for microfilming or digitization? In general, the bindings that include Red Book titles were suggested to be completely microfilmed or digitized, thus preserving the physical context of the book. The common understanding was, that convolutes were not to be taken to pieces, but preserved as complete objects with characteristics of their past use.

Considering the information structure of a book is of essential importance also by using reformatting technologies which create new objects with specific information structure (photocopying, microfilming, digitization, etc). The copies are always interpretations that are biased by our own understanding and culture. In fact, transferring information, some quantity of information will be inevitably lost. The project team got a lot of questions concerning microfilming and digitization. Estonian libraries have very good experience from microfilming old Estonian newspapers – the microfilms were later digitized and thus formed the basis for the much used database Digitised Estonian Newspapers (DEA)\(^2\). For microfilming, the

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\(^2\) The database is accessible through Internet: [http://dea.nlib.ee/](http://dea.nlib.ee/).
most complete set for a year was put together with the help of partner libraries. As the result microfilms were created which have no analogue newspaper sets in the libraries. Such user-friendly approach provides users with the most complete information and is highly appreciated by them. But is it acceptable for creating archival/preservation copies in the case of the Red Book? The problem was discussed at different seminars and meetings and the agreement that was accepted by all major libraries was achieved only in 2010.

FIVE YEARS AFTER: ENCOURAGING PERSPECTIVES

It is hard to overestimate the value of the results of the project, although at first some irresoluteness was noted. The fact that two of the team members, the director of the Estonian Literary Museum and the head of the preservation department of the National Library of Estonia started to implement the project results in preservation policy of their institutions, the specialists of other libraries adopted the similar principles step by step in their everyday work: the physical condition of Red Book items has been checked and, if needed, discussed with conservation specialists and taken into conservation plans; preservation and surrogate copies from unique books have been made in order to diminish the use of originals.

In 2009, the microfilming and digitisation group of the Consortium of Estonian

Figure 2. Information about the books that are included in the Red Book 1 in the electronic catalogue ESTER
Research Libraries (ELNET) formed two teams to continue the work on the Red Book project. The inducing factor was that the digitization project of older Estonian book heritage presented by the Archive Library of the Estonian Literary Museum to State Information System’s Authority (RIA) passed the preliminary round of applications.

One team had the task to add the Red Book information to the union electronic catalogue ESTER.

The second team started the project “Red Book of Estonian Publications II”. It is carried out under the leadership of the Archive Library of the Estonian Literary Museum. The project team (Heino Räim, Mare Lott, Kadri Tammur, Urve Sildre, Sirje Madisson), includes specialists from four archival libraries and manages two tasks: preparing the digitization of books from the Red Book I list and preparing the next list on books published in the years 1851–1917. In 2010, the ELNET Consortium adopted guidelines for digitization of old books and the Red Book items [7]. Books are digitized from cover to cover, including added lists with marginalia and other marks of ownership. Generally the digitization will base on an analogue copy, but in exceptional cases the decision of ‘title based’ digitization can be adopted; in this case different copies of a book will be used in the scanning process. The main problems that have occurred in the digitization process are connected with absence of the complete copy of a book or with lack of special technology for scanning books which bindings do not open enough for the scanning process. The problem of
acquiring preservation copies of required quality from books that are preserved outside Estonia has also emerged.

The first results of the project were presented by Merike Kiipus, the director of the Archival Library of the Estonian Literary Museum and the coordinator of the project at the conference held on 5–6 April 2011 at the Academic Library of Tallinn University [12].

The tasks set before the team is challenging: the number of publications they have to look through is ten times bigger than in the first project – it includes 12,690 titles. The list of the Red Book 2 is planned to include about 1,530 titles. The list of books chosen for digitization will be broader – about 2,000 books.

The structure of the list is thematic encompassing fields of science (astronomy, physics, medicine, theology, agriculture, science, geography, history etc), art (theatre, singing, fine arts etc) and everyday life (sewing, society games, handicraft, cooking etc). Types of publications like music, maps, statutes, calendars and pamphlets were left out; music and maps because of their variety of formats, calendars because majority of the most important series are already available in digital format.

The new list will comprise two parts – rarities, compiled according to the number

of survived copies and books of significant cultural value, where number of survived copies has no importance. Similarly to the Red Book 1 project several indicators are considered in order to assess the significance of a book. Significance is a social construct and determination of social or intellectual values requires an understanding of these elements in time and space. The Red Book 2 project has set up the following indicators:

- Publications that have influenced the cultural development of the society (development of Estonian language, terminology, textbooks, handbooks, popular science books).
- Publications that reflect the development of Estonian science and culture: history, nature, ethnography, language and literature etc.
- Publications of outstanding book design and art of printing.
- Books of high demand and active use (on prophesy, society games and manners, cooking etc).
- The first editions of Estonian authors and the first works in different genres.
- The first editions of world literature translations into Estonian.

The digitization project has started successfully and by April 2011 about 600 books were already digitized [12]; the copies will be preserved in the digital archive DIGAR. By the end of 2012 there will be approximately 100,000 pages of Estonian old texts available to users in digital format.3

3 The calendars are collected under the names of publishers, printers and editors. The digital collection is available at the webpage of the Estonian Literary Museum: http://www2.kirjmus.ee/grafo/index.php?gid=20
CONCLUSIONS

A nation’s collective memory relies on the resources collected by libraries, archives and museums. These institutions have the responsibility to preserve documentary heritage and to provide enduring access to it.

The project “Red Book of Estonian Publications I: 1535–1850”, conducted in the years 2003 to 2006, was the first attempt to create methodology and to elaborate criteria for assessing the significance of every single item of the core of Estonian printed book heritage. The methodology proved to be applicable on publications of different types (journals and newspapers) and in different languages (German, Swedish, and Latin). The final product of the project – database with several search options included only Estonian language publications.

The project drew attention to preservation quality, especially when using reformatting technologies like microfilming and digitization. Preservation of information integrity of a document is one of the key questions of the cultural heritage’s digital future. In 2010 the continuation project “The Red Book of Estonian Publications. II” started. By the end of 2012 the volume of the digitally preserved and accessible Estonian old books will grow up to 100 000 pages.

REFERENCES


Išsaugoti ateities kartoms socialinę, mokslinę ir kultūrinię reikšmę turinčius objektus yra vienas iš svarbiausių visuomenės iššūkių. Šiandienos informacijos institucijoms iškyla vienas iš sudėtingiausių uždavinių – apibrėžti šių kultūros objektų išsaugojimo prioritetus. Ši procedūra labai tikslinga, nes padaryti sprendimai lems ateities kartoms įsisavinti informacijos kiekį. Straipsnyje nagrinėjama patirtis ir pamokos, su kuriomis buvo susidurta 2003–2006 metais vykdant projektą „Estiškų leidinių Raudonoji knyga, 1535–1850“.


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