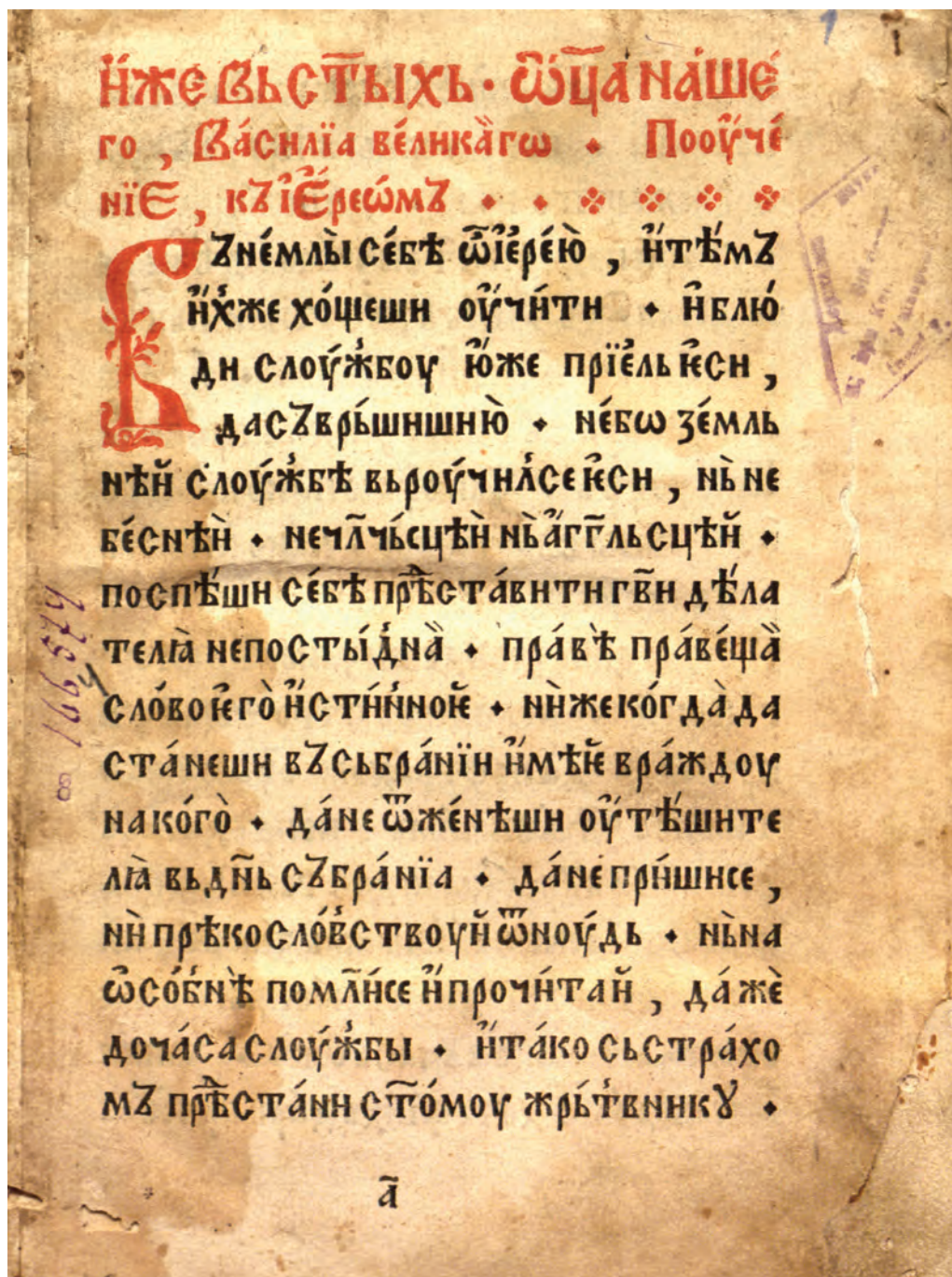# Electronic collection of rare books

in the Maksimovich
scientific library of the Taras
Shevchenko Kyiv National University

Nadia
Kirichenko,
Dmytro
Lukin,
Olexiy
Mykytenko,
Ukraine

Sluzhebnik (1519)

The subjects of these books are varied
and cover practically all fields of
European science, culture, and public life
in the XVI-XVIII centuries, including
religion, philosophy, mathematics,
literature, astronomy, medicine, and others

Macrobii Ambrosii
Aurelii Theodosii,
viri consularis,
et ilustris.
In somnium
Scipionis (1550)

A joint project of the Taras Shevchenko Kyiv National University and the United Nations in automation and computerization of the Maksimovich scientific library was began in 1998. The project had passed through several phases, including creation of the full-text electronic library of scientific and educational topics. The final phase of the project was to preserve cultural heritage for future generations by creating a digital repository of old printed books having unique historical and cultural value. The work has been going on since 2005.

Among the holdings of the Maksymovych scientific library there are more than 7000 old printed books which were published in the

XVI-XVIII centuries in different European countries (Germany, France, Italy, Switzerland, Netherlands, and others). Most of these books were printed in Latin, German, French, Italian, Old Slavonic, and Hebrew. The subjects of these books are varied and cover practically all fields of European science, culture, and public life in the XVI-XVIII centuries, including religion, philosophy, mathematics, literature, astronomy, medicine, and others.

It was this collection that became the primary object of creating a digital repository of the Maksimovich scientific library.

To create digital copies of old documents, effective technology of scanning, storage and representation of such documents was designed and implemented. In designing the scanning technology for ancient documents, many features of such documents were taken into account.

For the digitization of ancient documents the specialized book scanner **BookEye Color A2** was used. This scanner makes it possible to scan documents without full deployment and pressing onto the flat surface; in addition its lights have no ultraviolet and infrared parts of the spectrum that have a negative impact on the paper of ancient documents. High quality scanning is achieved due to usage of the graphic format **TIFF** for saving the scanning results. All these results are saved only **in graphic form**. Electronic copies of old printed books are displaying page by page.

Full-sized pages are stored on a server as TIFF files, mostly in gray tones and - only when necessary - in full colour. But even when the ZIP archiving format is provided, they are so

Petr Mohyla's
Breviary (1646)

large that it makes book viewing uncomfortable for the site visitor. For this reason, a page is opened in the browser as a JPEG preview whose size is roughly 0.1 MB. A ZIP archive containing a full-size digital copy of the page may be downloaded later if necessary.

Public access to digital copies of older monographic publications is provided through the old printed books web page (www.rare.univ.kiev.ua), and also through the official website of the Maksymovych Scientific Library
(www.library.univ.kiev.ua/eng)

On the home page the latest information on the quantitative indicators of electronic holdings is displayed. Currently it consists of 3138 digitized copies and 4154 digitized title pages, for a total of 7292 items.

An alphabetical catalogue of electronic copies of old printed books is also provided. It includes an option for sorting records by publication date. The reader may also use the quick or advanced search within collection by the author's name or words from the title.

For easier navigation through the pages of an older monographic publication (its volume often exceeds 1000 pages) an electronic contents is created, whereby the reader may retrieve fragments of digitized pages from the title records, headlines, certain sections, etc. by pointing to them.

Unfortunately, the software used for the Maksimovich scientific library electronic catalogue makes it impossible to form a fully correct record in terms of both international and national standard formats. As a consequence, creating records in an electronic catalogue for rare and old monographic publications has caused some problems.

To capture all the bibliographic data of a rare edition, we had to record the data in the field for general notes and, mainly, in the field for bibliographic reference notes - this in spite of efforts by standards to find a compromise between the rules and the features of software.

The Maksimovich scientific library electronic catalogue has 2642 entries for old printed books that were created by the operators. But these records have very low quality, lacking the large amount of bibliographic data specific to the old printed books. For example:
a) Operators' record:
L'art militaire pour les troupes de ligne et nationales de la Republique Francaise, conformment aux dernieres ordonances. - P., 1794. - 180c.
b) Corrected and expanded description (publication described de visu):
L'art militaire pour les troupes de ligne et nationales de la Republique Francaise : conformment aux dernieres ordonances ; Aveñ les instructions necessaires pour les Officiers de tout grade de l'Infanterie, Cavalerie, Artilerie et pour le Tambour-Major.- 3me ed. ; corrig. et augment. de nouvel. manoeuvres de Campagne. - A Paris (Paris): Chez Louis, 1794. - 180 p. Рік видання вказании за республіканским литочисленням: "L'an second de la Republique Francaise".
On the reverse side of cover 2 ex libris:
1) Bibliotheque du Prince E. Lwoff; 2) Библиоитека Императорского университета Св. Владимира. Библиоитека Ген. - Адьютанта Дмитрия Гавриловича Бибикова, пожертвания Университету его дочиерью, графинею Кассини в 1898 г.

On page. before title page is a round seal with Latin text and monograms.

The *altar gospel*,
published by
Petr Mstislavets
in Vilnius (1575)

As seen from the example, in the operators' record information is missing on title, information about the publication, and year of publication presented by general chronology, even though on the copy it is presented by the Republican calendar. Initially it was decided not to present incorrect entries on the site, but now we have found that a bad record is still better than an absent record that hinders the searching process.

We try to present information about incunabula as fully as possible, capturing not only bibliographic information about the publication described but also the publication history, biographical notes about authors, their full names and dates of life etc. Copies may differ in physical condition, marginalia, proprietary inscriptions, and so forth, so an individual description is created for each copy of a publication. For each component part of an "artificial" collection an analytical description is formed that is included in a general search. When creating a record the presence of exlibris is necessarily taken into consideration.

In the records a number of tags are prescribed, such as classification within the full-text resources (heading "old printed books"), URL, etc. Work in this direction is being carried out systematically, but (unfortunately) slowly. Now, with the rare book holdings completely scanned, our task is to connect the ready-made records with electronic copies as soon as possible. This is essential for easy navigation through the website, for sorting and sampling, for enabling the user to see and easily find any copy, and, if a scanned copy is a full-text, to work with it (and if the only the title page was scanned, to order a full-text copy).

To date only 1135 bibliographic records for old and rare editions and their electronic copies have been constructed, covering merely one-tenth of the total number.

The oldest printed book kept in the Maximovich Scientific Library - incunabula, edition of 1497, printed in Venice by Manfred de Monferrato - is *Life of twelve Caesars* by Gaius Suetonius Tranquillus with comments by Philippo Beroaldo and Marco Antonio Sabellico.
www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0564001

Poluustaw
(1622)

Since the colophon of the copy is slightly damaged, this book can also serve as an example of partial restoration of imprint data by Internet search.

Of extraordinary value is the oldest printed Cyrillic book in the collection, *Sluzhebnik* (1519) www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0166574 , which was also printed in Venice. It is believed that this edition belongs to Bozidar Vukovic's printing house but at the same time, online help yields another possible option: the printing house of Bozidar of Goradzhe. Information regarding the attribution of the exact publisher name was placed in the field for bibliographical reference notes and is accessible to the user.

Moreover, this Cyrilic paleotype holding of rare books also includes several Latin editions published during the period 1500-1550, such as *Privilegia fratrum eremitarum Sancti Augustini* (Pisauri, 1515) www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0167813 Privilegia fratrum eremitarum); the first printed publication of *Historia Hugonis Falcandi Siculi De rebus gestis in Siciliae regno, iam primum typis excusa, studio et beneficio reuerendi D. Do-mini Matthaei Longogaei ...* (Parisii, 1550) www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0164924 Hugo Falcandus), *Macrobii Ambrosii Aurelii Theodosii, viri consularis, et ilustris*. In somnium Scipionis, Lib. 2. Saturnaliorum, Lib. 7 ex variis ac vetustissimis codicibus recogniti & aucti (Lugduni,1550) www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0167358 and others.

Of particular importance are also monuments of the Ukrainian (and more generally, East Slavic) Cyrillic Printing of the XVI-XVII centuries. The curious user can now read electronic copies of *The altar gospel*, published by Petr Mstislavets in Vilnius in 1575 www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0166459 *Petr Mohyla's Breviary* (www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0166344, *Lexicon slavenoroskiy* by Pamva Berynda www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0168466, *Arithmetic Mah-nytskoho*, *Lexicon treyazychniy* www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0166582 and other publications that have unique historical and cultural value for the Ukrainian people.

The description of the Cyrillic monuments is particularly complicated and has to be fitted into the framework defined by the software. To this are added the difficulties connected with the restoration of output data lost due to physical defects of copies. Thus, for example, a full description of the "pocket" edition of the *Orthodox Catechism* of the Petr Mohyla, probably issued at the beginning of the XVIII century in Chernigov, is impossible because the first few pages are missing. Exact identification of bibliographical data still requires further investigation.

The identification of another edition *Poluustav* www.rare.univ.kiev.ua/eng/showbook/showbook.php3?0164837 , published in Vilnius in 1622, was more successful, despite the natural tendency to trust the inscription made with pencil on the flyleaf that identifies the book as *Psalm 1625*. Reading the last lines of the foreword to the publication makes it clear that the unknown author of the inscription was wrong: the correct attribution of title and "genre" was made possible by studying the text and through Internet search.

Of particular scientific value are handwritten marginalia that are especially rich in Cyrillic incunabula, but which may also be found on copies printed in Latin such as, for example, the publication of the English Revolution era *An ordinance of Parliament concerning the subsidie of tonnage, and poundage* (London, 1642), with a handwritten inscription that belonged to the renowned scientist Alexei Musin-Pushkin.

This work on "electronic book capture" will continue, and an interested future reader might obtain free access to many monuments of Cyrillic printing in the XVI-XVIII centuries, to the many volumes of printed Latin monuments, and to such fundamental materials as the historical and legal sources and classical works in the sciences. Mention should also be made of future plans to digitize Ukrainian books from the XIX-XX centuries, including many valuable books contained in the rare book collections of the Maksymovych scientific library.

This year our library has been invited to take part in the EUROPEANA project. The most unique old printed books were chosen to join the collection of cultural rarities at Europeana.eu. We also intend to continue our cooperation with the project in order to expand our participation in the future.

Privilegia fratrum eremitarum Sancti Augustini.
- Pisauri:
Per Hieronymo Soncino, 1515