

The Early Modern Book Trade Project: Premises, Objectives, Methodologies and Resources¹

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This essay proposes an overview of the digital tools designed and developed by the EMOBookTrade project team to investigate the economic and legal framework of the late Renaissance and early Baroque European book market. In particular it illustrates the structure of the two databases developed to cross-reference the evolution of book prices in conjunction with the development of the system of book privileges. The article proposes a model for users and developers interested in pursuing big-data-oriented investigations in the field of book history with a focus on the economy of the book market.

1. Premises

An encompassing study of the European book market is the result of the dramatic changes that occurred in the field of librarianship and humanities at large as a consequence of the growing availability of digital tools of research and analysis. Such an overarching scope of investigation was impossible in a time still largely dominated by analogue technology and when historical bibliography could mainly count on printed catalogues.

The shortsighted scope of twentieth-century book history and bibliometrics was mainly caused by the actual limitations of pre-digital humanities. A second constraint was the limited interest that book historians had in approaching the book world as an economic system or, even more so, the limited interest that economic historians showed towards the book as a commodity. The easiest way out of this ditch, as Febvre and Martin had shown, was a joint effort between bibliographers and economic historians². Failing in finding a way to merge the two disciplines and have them exploring the European market as an integrated economic space would have created a paradoxical relationship between early modern publishers and postmodern historians. In fact, while early modern publishers were thinking globally centuries back, book historians were still thinking locally.

¹ Andrea Ottone is the author of paragraphs 1-3; Erika Squassina is the author of paragraphs 4-5; paragraph 6 is the result of a shared effort.

² Lucien Febvre – Henri-Jean Martin, *L'apparition du livre*, Paris: Albin Michel, 1958.

Over the last thirty years the exponential growth of digital data changed the approach to humanities and, among them, to book history and bibliography. The Early Modern Book Trade project, led by Angela Nuovo, found its foundation in this paradigm shift³. Whereas the rise of bibliographic repositories provided enough information for wide-scope investigations, the European book market as an integrated environment looked like the obvious camp for experimental and big-data-oriented investigations. The early modern book market was, in fact, a transnational space where printing connected scholars, artisans, entrepreneurs and traders around the production of appealing objects. Studying the economy of the printed book means studying the effort of making books viral. Furthermore, the longstanding challenge to defeat the competitors by offering books of a better quality for competitive prices eventually transformed the book from a luxury item into a *populuxe* one.

2. Sources and Methods

Aside from few exceptions, relevant sources for the economic history of the Renaissance book industry are scarce and unable to provide a consistent picture. The Plantin-Moretus publishing house provided one of the few archives of a major publishing house that is still largely intact; for the most part similar corpora of documents are unknown or lost⁴. As a result, sale catalogues that circulated, for the most part in print, throughout the Continent are a goldmine of information⁵. Meant to advertise potential buyers (publishers, wholesalers and collectors) of the items on sale, they typically provided information on authors or titles (or both), a short material description including the format and, at times, the presence and technique of illustration. Most relevantly, sales catalogues often listed prices as well. Prices were expressed in money of account, an ideal price unaf-

³ EMO Book Trade Project – The Early Modern Book Trade: An Evidence-based Reconstruction of the Economic and Juridical Framework of the European Book Market, see <<https://emobooktrade.unimi.it>>; the project received funding from the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation programme (Grant Agreement n° 694476).

⁴ A large part of the Plantin-Moretus archive is now preserved at the Plantin-Moretus Museum in Antwerp. We can assume this record keeping to be the rule for any other Renaissance merchants. We have evidence of the existence of a similar commercial accounting for the Giunti publishing house of Florence, despite the archive is currently lost. In the attempt to prove the legitimate handling of the Family’s finances in 1560, the managers of the Florentine publishing house pointed out that «...with regard to the other issue pertaining the accounting held in the past by said Filippo and Jacopo, said accounting are to be found in the gray book signed with the letter K...» («...quanto all’altro capo delli conti tenuti per il passato per detti Filippo et Jacopo esser tenuti come per detto bilancio levato et a libro bigio segnato K...»), implying that the commercial archive of the Giunti of Florence counted at least eleven volumes to that date (see Florence, Archivio di Stato, Notarile Antecosimiano, b. 9300, f. 10v).

⁵ For an example of the wide circulation of sale catalogues in early modern Europe see Ian Maclean, *Episodes in the life of the early modern learned book*, Leiden: Brill, 2021, p. 86-92.

affected by retail dynamics such as bargaining, on single items or whole stocks. The use of money of account rather than retail price was meant to a stable assertion of the value a merchant would assign to a given item⁶. Sales catalogues offer two indicators to book historians: firstly, their bibliographic description allows the matching of entries with known surviving editions; secondly, their consistent use of money of account allows a coherent alignment of market values on a wide geographic and chronological scale.

Sixteenth and seventeenth-century sale catalogues are available for several European printing centres⁷. In the frame of the EMOBookTrade project the investigation of sales catalogues is limited to a selection of places, mainly Venice, Antwerp and Paris. This choice is not only justified by the leading role that these cities played in the continental book market, but also by the fact that, unlike Protestant lands, these printing centres were tied by a mutual exchange within the large space of Catholic countries⁸. The chronologic span of the EMOBookTrade project to investigate the economy of pre-modern books runs from the year 1500 to 1650. In order to harvest, process and analyse such a rich amount of data, an international team has been working together for five years in order to cover an array of field specific, geographic and linguistic expertise. Furthermore, the target of the project called for an interdisciplinary approach that would merge historical analysis with bibliography, palaeography and historical linguistics, economic history, statistical analysis and digital humanities⁹. Ultimately, a project invested in the analysis of a vast mass of information could not go forward without the aid of a digital database capable of managing the friction of diverse qualitative and quantitative data placed on a dynamic chronology. The description of such two databases will concern the rest of this paper.

⁶ Francesco Ammannati, *Book prices and monetary issues in Renaissance Europe*, in «JLIS», 9 (2018), p. 179–191, <<https://www.jlis.it/index.php/jlis/article/view/404>>..

⁷ A census of remaining copies of European book sale catalogues is being redacted by Christian Coppens.

⁸ The crossing of confessional spaces, one may assume, besides being limited by censorial dynamics could have also affected prices. The only trans-confessional source used in the frame of the EMOBookTrade project are catalogues pertaining to the Frankfurt Fair; the choice finds obviously its reason in the fair's role as the main crossroad of the European book market, where trans-confessional encounters and commercial dealings were largely tolerated.

⁹ The EMOBookTrade team, under the lead of Angela Nuovo (principal investigator), comprised several researchers and database editors: Francesco Ammannati, Giliola Barbero, Marco Bertagna, Diane Booton, Flavia Bruni, Saskia Limbach, Renaud Milazzo, Andrea Ottone, Joran Proot and Erika Squassina. The project also benefitted from the expertise of Andrea Bocchi (historian of the Italian language), Francesca De Battisti (expert in statistical analysis), Jasenka Gudelj (art historian), Laura Pani (palaeographer), Luigi Tassarolo (information technology expert), Lisa Barbiani and Stefania Scuderi (project managers).

3. The Early Modern Book Prices Database

The first challenge faced when approaching pre-modern sources with the methods of digital humanities is that of designing digital tools according to an appropriate model of the features of historical sources. The resulting infrastructure should also be capable of responding to current and future research questions. In both cases the need is to break historical sources into entities that a database can handle and aggregate according to queries. With these purposes in mind the EMoBookTrade project team designed a relational database with information derived from sale catalogues and other commercial sources of the Renaissance book trade¹⁰.

Structure of the EMoBookPrices Database

The editorial interface (i.e. backend) of the EMoBookPrices database comprises three main sections¹¹. A description mask is meant to facilitate the insertion of a basic description of the source that is being treated. The second section is a transcription mask meant to host the transcription of the source and break the information into quantitative and searchable data. The third section is an edition mask, conceived to include bibliographic data.

Transcription Mask

The description mask and its basic tasks will not be illustrated here in detail. The transcription mask features instead a set of key data worth mentioning. In addition to providing a digitised transcription of the entries found in sale catalogues or other commercial sources, the transcription mask enables a first transposition of the data extracted from the catalogues. Two useful examples may be the following one:

Giornate del Tasso. In legno, C. 13, L. 15¹².

¹⁰ For previous accounts on the EMoBookPrices database see Giliola Barbero - Luigi Tessarolo, *A Research Tool for the ERC-Funded EMoBookTrade Project*, «Digital Libraries and Multimedia Archives. 14th Italian Research Conference on Digital Libraries, IRCDL 2018, Udine Italy 25-26, 2018. Proceedings», ed. by G. Serra and C. Tasso, Cham: Springer, 2018, p. 201-208; and Giliola Barbero - Luigi Tessarolo - Angela Nuovo - Francesco Ammannati - Francesca De Battisti - Renaud Milazzo - Andrea Ottone - Goran Proot - Erika Squassina, *The Database of the EMoBookTrade Project. A Proposal to Encode Early Modern Book Prices and Privileges*, «JLIS», 11 (2020), p. 108-132, <<https://www.jlis.it/index.php/jlis/article/view/48/48>>.

¹¹ The EMoBookPrices database can be found at <<https://emobooktrade.unimi.it/db/public/prices>>.

¹² This entry is taken from the so-called stockbook of Bernardino Giunti, Los Angeles, University of California, Los Angeles, Charles E. Young Research Library, Department of Special Collection (YRL), Collection 170/622, f. 294r, item 12. A digital copy of the entire manuscript is available online: <<https://digital.library.ucla.edu/catalog/ark:/21198/zz002j9bpx>>; on this peculiar source see Andrea Ottone, *Market assessment and risk prediction: resources and know-how of a seventeenth-century bookseller of Venice coping with competition*, in *L'economia della conoscenza. Innovazione, produttività e crescita economica, secc. XIII-XVIII – The knowledge economy. Innovation, productivity and economic growth, 13th to 18th century*, Atti della LIII Settimana di

The first two elements *Giornate* and *Tasso* identify respectively the title and the author of the referenced work. The third element *In legno* specifies the material technique of the images appearing in the edition described. The fourth element («C. 13») details the total number of sheets needed to print each copy of the edition in question. Lastly, the fifth element («L. 15») provides an unequivocal information on the price of the edition right at the time when this was being described.

Data such as the year the price was set, the whole transcription of the listing (as it is found in the source), imprint, number of printing sheets and the set price are recorded through multiple textboxes in the backend mask. The data, excluding the transcription and the imprint, are treated by the database as numeric data. The transcription mask also includes dropdown menus and checkboxes to insert relevant information such as the presence of bibliographic features, format of the edition, illustrations, indexes, details on the quality of paper, . These features are all considered to affect the cost/price of a book, their occurrence is therefore deemed valuable for qualitative assessments of the book price. Lastly, the transcription mask hosts a dropdown menu to indicate the currency employed, and the circumstances in which the price was set (e.g. set by who and for whom). Textboxes and editable dropdown menus control also elements such as the localisation of the information within the source (i.e. folio, page and column). Lastly, a checkbox allows flagging the absence of a price for a specific item. Checking this box would automatically exclude the item to be shown in the prices section of the frontend (see below). For a visual overview of these features see Fig. 1.

Figure 1. Backend view of the transcription mask of the EMOBookPrices database

Studi (Prato, 8-11 maggio 2022), edited by G. Nigro, Florence, Firenze University Press (Datini Studies in Economic History, 3), and Andrea Ottone, *Renaissance publishers, market risks and empiric methods of assessment: a revised interpretation of Bernardo di Bernardo Giunta's 'stock-book'*, «De Gulden Passer», both forthcoming.

At the center of the transcription mask, a hyperlink connects the transcription mask and the data therein processed to the edition mask to which we shall now move on.

Edition Mask

Ideally, each entry is bound to be matched with a known edition, although failures to match a transcription record to an edition can occur. In this cases the database allows the creation of either a non-identified edition or even a non-published one¹³. The information regarding a book price reaches its highest level of elaboration when a price is matched with an edition. In this case the price can be put in relation with an existing object, whose features can be assessed and quantified.

The edition mask is designed to derive data from other bibliographic catalogues, mostly - but not only – digital ones through multiple tabs. The first one provides the space to allocate a general description of the edition, whereas further tabs allow a quali-quantitative description of each individual volumes comprising the edition. This option proves to be especially useful in the database because sale catalogues might include only part of an edition.

As far as the principal edition-tab is concerned (see Fig. 2), a number of textboxes are also used to include additional information, such as the transcription of the title page of the imprint, the year (or complete date) of print, and references to external bibliographic databases. Auto-completing textboxes are used to link the edition to authority files of printers, publishers, authors, commentators, translators or other roles involved in the edition, and finally place of printing. Authority files are linked to VIAF (Virtual International Authority File) to ensure the identification of entities. The EMOBookPrices database also uses the Dewey Decimal Classification system as a key category of the edition described to allow the investigation of the complex relationships between categories of works and resulting pricing strategies.

With regard to the volume-tabs (see Fig. 3), the relevant data processed here pertains the number of leaves, the format and the resulting number of printing sheets. Along quantitative elements, the volume tab allows the processing of mul-

¹³ Printed catalogues were somewhat dynamic tools. Most of the times they advertised existing stocks but at times they could anticipate forthcoming editions. Such is the case of a 1596 edition advertised by Lucantonio Giunti the younger in a catalogue dated 1595; not surprisingly, the corresponding entry does not carry a price (see *Index librorum omnium qui Venetijs in nobilissima luntarum typographia usque ad annum MDXCV impressi nunc etiam existent*, Venice: Lucantonio Giunti 2., 1595, f. 1ra, item 41), matching with EDIT16, CNCE 50911. However, book trade was an equally dynamic business and things could go differently from original plans and editions may also never see the light; hence the database is meant to comprise also advertised, yet unfinished editions. A known copy of of Lucantonio Giunti's 1595 catalogue is preserved at YRL, Z233.G44G 448i 1595.

EDITION
VOLUME

Editor:
Production date: 2017-10-09 17:31:04
Modification date: 2018-02-25 19:41:00

VOLUMES

LINKS

Identification Identified edition

USTC ID

Catalogue	ID	<input type="button" value="Add"/>
EDIT 16	48366	<input type="button" value="Import data from the web catalogue"/>

Description

Classification All the classes you are linking here will give access to this edition in the public search, but only the first one in the list will be exploited in statistical calculation

Place of publication

Publication date

Editio princeps

NAMES

Name	Responsibility	ID VIAF	<input type="button" value="Add"/>
Zimara, Teofilo	author	45416582	<input type="button" value="Import"/>
Aristoteles	author	7524651	<input type="button" value="Import"/>
Giunta, Lucantonio 2.	publisher	102355090	<input type="button" value="Import"/>

BIBLIOGRAPHIC REFERENCES

NOTES

For the researcher, not published

Figure 2. Backend view of the first tab of the edition mask of the EMOBookPrices database

tuple qualitative elements. Dropdown menus allow to select the language and the typeface of the edition, while the presence of printing in red and black, illustrations in different techniques and tables, all to be considered features affecting the cost of the book, is indicated through checkboxes.

Figure 3. Backend view of the volume tab of the edition mask of the EMOBookPrices database.

When the relevant fields (price, date in which it was set and number of printing sheets) in the transcription mask and in the edition mask have been filled in, the database is able to calculate and display its price per printing sheet, which is essential for statistical analysis. The total number of printing sheets comprising an edition is also calculated automatically by dividing the number of leaves by the format. Despite the several currencies in which they are expressed, all prices are converted to their contemporary value in grams of silver. This allows the alignment, or mapping, and the comparison of prices expressed in diverse currencies in several European regions over time.

Frontend and Search Functions

The frontend search was designed to allow the users of the database to approach data according to their individual research angle by selecting and combining into a single query data deconstructed and extracted from the original sources.

The mask proposes to search by 1) “Authors and editions,” 2) “Prices”, 3) “Sources”, and 4) “Full-text search in transcription” (see Fig. 4). The menu

Figure 4. Frontend view of the collapsed menu of the search mask (EMOBookPrices database).

The screenshot shows a search interface with a search bar at the top containing 'Search' and 'Reset' buttons. Below the search bar, there are two main sections: 'AUTHORS and EDITIONS' and 'PRICES'. The 'AUTHORS and EDITIONS' section is expanded, showing a list of search criteria: Authors, Title (full-text search), Place of publication, Printer / publisher / bookseller, Date of publication, Printing sheets, Format, Illustrations, Typefaces, Subject, Language, and Reference number. The 'PRICES' section is also expanded, showing: Total price (Venetian denari), Price per printing sheet, Kind of price, Date of the price, Place where the price was established, and Currency. Below these sections, there is a 'SOURCES' section with a link for 'Full-text search in TRANSCRIPTIONS'. At the bottom, there is a 'Search' button.

Figure 5. Frontend view of the expanded first two categories of the search mask (EMoBookPrices database).

The screenshot shows the same search interface as Figure 5, but with the 'SOURCES' section expanded. The 'SOURCES' section is highlighted in yellow and shows a dropdown menu with 'Venezia 1535 Manuzio' selected. Below the dropdown, there are several search filters: 'Antwerp 1555-1583 Plantin', 'Bologna 1601 Bindoni', 'Napoli 1609 Pinelli', 'Paris 1544 Estienne', and 'Venezia 1535 Manuzio'. The 'Full-text search in TRANSCRIPTIONS' section is also expanded, showing a text input field with the placeholder 'Use, if necessary, truncation symbol * (asterisk)' and a dropdown menu with 'all the words' selected. At the bottom, there is a 'Search' button.

Figure 6. Frontend view of the expanded last two categories of the search mask (EMoBookPrices database).

can be expanded by clicking on one of the first two items, which offer twelve and six further options respectively (see Fig. 5). Under the third item (“Sources”) users will find instead a drop-down menu which allows the selection of multiple options (see Fig. 6). In the last channel a textbox allows users to search for words or sentences in a full-text search. The search request will be the result of all the multiple options selected from the four general categories, and will create a table of data that can be exported to allow further elaborations. The results of the query can be filtered and refined further through the facets on the right-hand side of the screen.

Users can also explore the database starting from the digital transcription of the original sources, which is fully provided in the database. This is meant to enable users to make the most of these digitised sources even when their main interest is not focused on the economic implications of the book industry. In addition to the bare transcription of the text, the database provides a critical edition of the source, in which each entry is linked to matching editions and to metadata on prices.

As the extended enunciation of the EMoBookTrade project states

(i.e. *An Evidence-based Reconstruction of the Economic and Juridical Framework of the European Book Market*), the project’s main interest was to look at the in-

tersection between the economic infrastructure that upheld the Renaissance book world and the legal structure that secured it. The legal structure granting stability to the book industry was primarily consolidated around a system of book privileges. This was some sort of early modern proto-copyright law that protected both authors and entrepreneurs while pursuing their own publishing projects. Book privileges were in fact a cost and price effective element, inasmuch they also affected the value of a given edition on the market. For this reason, a separate database was created within the EMOBookTrade project to study the evolution of book privileges. Although EMOBookPrices and EMOBookPrivileges have been designed as two separate databases, they share a core dataset, and the results of queries launched on one or the other database will include mutual links for relevant fields. As a result, users are able to browse from one database to the other in a genuinely interconnected environment. Priority was given to Venice for its crucial role in shaping the privilege system in Europe, and for its relevance in the book market in the international framework.

4. Early Modern Book Privileges in Venice

Early Modern Book Privileges in Venice is a database created in order to register and index the Venetian book privileges identified in the archive sources and in the editions from 1469 to 1603¹⁴.

This is the result of a study that was launched with the aim of reconstructing the history of a legal instrument, applied in the printed book sector, in a territorial reality (the Republic of Venice) which over time has preserved a rich and homogeneous documentation in this matter.

The first steps for the realization of this project were taken in 2012, in the context of a doctoral dissertation¹⁵. A first database was published online at the end of my doctorate (2015), but the tool had a series of limitations because it was a product created without the professional and financial support that only a project sponsored by the ERC could guarantee. It was only in 2017, within the framework of the EMOBookTrade project, that the database went from an embryonic structure to a more complex and functional one. The pre-existing data (those contained in the first database) were imported into the new database as soon as it was tested by the whole research team. In

¹⁴ The chronological extremes of the database correspond to the year in which the first book privilege was granted in Venice (1469) and the year in which the Guild of Printers and Booksellers (instituted in 1549) became operational. Specifically, in 1603 the Venetian Senate established by law that the granting of book privileges would result from the fulfillment of certain administrative formalities which consisted in the deposit and registration of the censors' approval with the *Banca dei Librai e Stampatori*. See *Venetian Decree on Privileges for New Books and Reprints, Venice (1603)*, in *Primary Sources on Copyright (1450-1900)*, edited by L. Bently and M. Kretschmer, <www.copyrighthistory.org>.

¹⁵ See Erika Squassina, *Privilegi librari nella Repubblica di Venezia (1469-1545)*, Ph.D. dissertation, Università degli Studi di Udine (2015).

2018, the *Early Modern Book Privileges in Venice* database was published online and the project was officially presented at an international conference, called “I privilegi librari in Italia e Francia nella prima età moderna”, which was held at the University of Udine on February 7 of the same year. The online publication work involved all the members of the project, a collaboration that led to the creation of a search tool that was easily accessible and quickly available on the web¹⁶. In fact, it was decided to allow access to the contents even before the data entry and updating work was completed, so that scholars could immediately make use of the available data.

Contents and sources

The choice to focus the research on the book privileges granted by the Republic of Venice was not random. One of the reasons is that in Venice the book privileges system had an extraordinary development in the fifteenth and sixteenth centuries, and it was also supported by a legal framework that regulated its application.

The first book privilege was granted in Venice in 1469 to Johannes de Spira, the German printer who imported the new “art” of printing into the city. After the German’s early death, the (proto) printing industry developed rapidly, generating intense rivalries between sector operators. The high concentration of printing presses and the growth of competition decreed the affirmation of the book privileges system in Venice. The privileges were used by printers to protect the editions they produced, thus to ensure a protected market area where they could sell the published copies and be able to recover the start-up costs and make a profit. To a lesser extent, even if the number is still considerable, the authors also applied for privileges to the Venetian authorities with the dual objective of defending the economic interests that gravitated around the publication and distribution of their works and to protect the works themselves from any misappropriation and manumission, at a time when there were no rules to protect the author or the literary property¹⁷.

The book privileges system also played an important role for the Venetian government. The Republic, mainly through its Senate, used the book privilege to support the (proto) industry, customizing the incentives offered by this legal tool in order to adapt it to the changing needs of this productive sector, in a context where the trade balances varied continuously in Italy and in the rest of Europe¹⁸.

¹⁶ The Early Modern Book Privileges database is available at: <<http://emobooktrade.unimi.it/db/public/frontend>>. Under the scientific direction of Edwige Keller-Rahbé, a database of book privileges granted between the fifteenth and nineteenth centuries has also been published online for France. See: <<https://privileges-librairie.huma-num.fr/>>.

¹⁷ On this topic see Erika Squassina, *I privilegi librari a Venezia (1469-1545)*, in *Privilegi librari nell’Italia del Rinascimento*, edited by E. Squassina, A. Ottone, Milano: FrancoAngeli, 2019, p. 331-399, <https://www.francoangeli.it/Ricerca/scheda_libro.aspx?ISBN=9788891797254>; Id., *Die Autoren im System der venezianischen Druckprivilegien (1469-1545)*, in «Pirckheimer Jahrbuch für Renaissance und Humanismusforschung», 31 (2017), p. 43-51; Id., *Authors and the System of Publishers’ Privileges in Venice (1469-1545)*, in «Gutenberg-Jahrbuch», 91 (2016), p. 42-74.

¹⁸ See Erika Squassina, *The Protection of the Printing Industry in Venice (1560-1580)* [forthcoming].

In addition to the importance that book privileges had as an instrument of protection and promotion of Venetian publishing, which marked its wide use, there is another reason behind the choice to concentrate our studies on the *Serenissima*. Unlike other cities, Venice has managed to preserve much of the documentation on book privileges. In particular, the Venetian State Archive has preserved the records of privileges granted by the College, the Chiefs of the Council of Ten and the Senate, the main sources for the study of this phenomenon¹⁹. In some cases, the privileges texts are not trackable in the archival series (because the concession was never recorded or it has been lost), so it is also the privileged editions that constitute a source of study²⁰.

For the above reasons, on the one hand the research consists in examining the archival documents from which the listed works and recipients are identified. On the other hand, the research involves the analysis of the editions on which a privilege has been notified, and of which no trace has remained in the registers. In this way, adding together the archival and bibliographic sources, the Republic of Venice, between the fifteenth and sixteenth centuries, is the State that gives us the greatest documentation in the matter of book privileges in all of Europe. Venice has a substantial documentary corpus on book privileges, preserved in a few and easily traceable archival collections, on which systematic searches can be carried out.

Moreover, others in the past had already tried to take a census of Venetian book privileges, but they were not able to analyze all the sources and produce a unitary repertoire. Historian Rinaldo Fulin investigated the topic already in the nineteenth century. He identified 256 book privileges granted by the Venetian authorities in the years 1469-1526. It is a commendable work if we think that at the time Fulin lived the research was not supported by computer and technological tools that we can use today and that allow us to easily access a great amount of information. By his own admission, Fulin's research was far from being exhaustive and complete, nevertheless his repertoire remained the only working tool for scholars for a long time²¹. Fulin's studies were continued by historian Horatio Brown, who transcribed the privileges issued from 1527 to 1597. His work, however, remained unpublished and without links to the editions²².

¹⁹ At the moment, the study of privileges requests (petitions) has been omitted. By the way, these sources have suffered the greatest losses.

²⁰ A cross study between the registers of the College, of the Chiefs of the Council of Ten and of the Senate with the editions shows that there are privileges editions to which no granting corresponds. This happens for two reasons: the privilege was not registered, or the record has been lost (some registers are damaged with text loss due to lacerations, water spots, darkening of the sheet or faded ink).

²¹ Fulin wrote: «Inesperto, siccome sono, in queste ricerche, mi potranno essere rimproverate parecchie omissioni, parecchi equivoci, ed errori ed ignoranze parecchie» («Since I am not experienced in this kind of research, I could be reproached for many omissions, misunderstandings and mistakes»). See Rinaldo Fulin, *Documenti per servire alla storia della tipografia veneziana*, in «Archivio Veneto», 23 (1882), p. 92, fn. 1.

²² Horatio Brown's transcriptions are kept at the Biblioteca Nazionale Marciana of Venice.

After decades of fragmentary studies on the subject and considering the amount of information that it was expected to extrapolate from the examination of the privileges, in particular established the high number of editions on which a privilege is notified, it was therefore decided to return to this theme. Since the beginning it was thought that the most effective and efficient solution for processing and organizing this data was the creation of a public database, so that the contents were available to users synchronously with the data entry and updating. This would also have helped us to understand the scholars' needs and to accept reports to make any additions, corrections or improvements in both the contents and the graphical interface.

Search Modes

The database user interface allows access to data through various search levels: it is possible to browse the data or do "advanced" searches on four levels of information. In the first case, the database provides a list of book privileges that can be filtered through a series of search options according to the user's specific needs (Fig. 7).

<p>ID 10. Repubblica di Venezia - Collegio. 1469-9-18. 5 years. Venezia, Archivio di Stato, Collegio Notatorio 11, 56v, privilege resolution. Edition: Cicero, Marcus Tullius — Epistolae ad familiares.</p> <p>Description</p>	<p>Authors and editions</p> <p>Authors</p> <p>Places of publication</p> <p>Printer / publisher / bookseller</p> <p>Dates of publication</p> <p>Formats</p> <p>Languages</p> <p>Privileges</p> <p>Authorities</p> <p>Date of the privilege</p> <p>Duration</p> <p>Categories</p> <p>Beneficiaries</p> <p>Language of the source</p> <p><input type="checkbox"/> Editions only</p> <p><input type="checkbox"/> Technical innovations only</p> <p><input type="checkbox"/> Editions with more than one privilege</p> <p><input type="checkbox"/> Editions with privileges issued by more than one body</p> <p><input type="checkbox"/> Privileges stated in the edition</p>
<p>ID 11. Repubblica di Venezia - Collegio. 1469-9-18. 5 years. Venezia, Archivio di Stato, Collegio Notatorio 11, 56v, privilege resolution. Innovation: Art of printing books.</p> <p>Description</p>	
<p>ID 9. Repubblica di Venezia - Collegio. 1469-9-18. 5 years. Venezia, Archivio di Stato, Collegio Notatorio 11, 56v, privilege resolution. Edition: Plinius Secundus, Gaius — Historia naturalis.</p> <p>Description</p>	
<p>ID 12. Repubblica di Venezia - Collegio. 1486-9-1. Venezia, Archivio di Stato, Collegio Notatorio 13, 118v, privilege resolution. Edition: Sabellico, Marco Antonio — Decades rerum Venetarum.</p> <p>Description</p>	

Figure 7. Search form for book privileges list (EMOBookPrivileges database)

In the second case, it is possible to query the database through multi-channel searches that allow you to specify some parameters relating to the editions, the privileged technical innovations or the privileges, or to carry out free text searches on transcriptions. The data contained in the different research areas can be combined to refine the answers, narrowing the results and increasing their specificity.

The first type of research (on editions) allows you to select a series of values that are useful for identifying the privileged editions attributable to a specific author or publisher, published in a specific chronological period or place, in a specific language or in a certain format. Furthermore, it is possible to search by subject, selecting the Dewey class of the privileged editions that you want to search for (Fig. 8).

Figure 8. Search form for editions (EMOBookPrivileges database)

The second mode of research allows to identify through a list the inventions and technologies applied in the printing industry that are protected by Venetian privileges (Fig. 9).

Figure 9. Search form for technical innovations (EMOBookPrivileges database)

The third type of search allows you to query the database through the privileges attributes, i.e. the authority (constitutional body) that grants the privilege, the privilege date, the duration, the beneficiary's name and the privilege classification. This search modality allows to group the privileges contained in the database into three main categories: those granted to publishers and printers, those granted to authors and those for technical innovations (Fig. 10).

Figure 10. Search form for privileges (EMOBookPrivileges database)

Finally, the database provides a fourth search mode that allows you to do free searches on the archival documents transcriptions, which are rich sources of historical, biographical, economic and social information. Their importance is such that it was decided to dedicate an entire section of the database to them, where the privileges texts are listed and grouped by the archival collections to which they belong.

The heterogeneity of the information that can be obtained from the privileges makes the database an instrument of interdisciplinary relevance, which is useful not only for book historians in the strict sense, but for all those who are interested in the Renaissance period, some of its protagonists and the events connected to them.

5. Synthesis of the data

Presently, the database contains 890 transcriptions of archival documents and 940 privileged editions with no links to archival sources²³.

A single archival document can record within it a variable number of privileges, i.e. a variable number of works that obtain protection and a variable number of people to whom the privileges are granted. Taking this into consideration, the records total amounts to approximately 4,600 book privileges granted from 1469 to 1594. 840 natural and legal persons have been identified as beneficiaries of the privileges granted during this period²⁴. In the majority of cases (76%) these are printers, publishers or booksellers because usually they were the ones who invested most of the capital needed to print a work, so they were the most exposed to the risks of the competition. Nevertheless, the database also highlights a fair percentage of privileges granted to authors (24%), which demonstrates how in Venice this system was a valid tool for defending authorial interests.

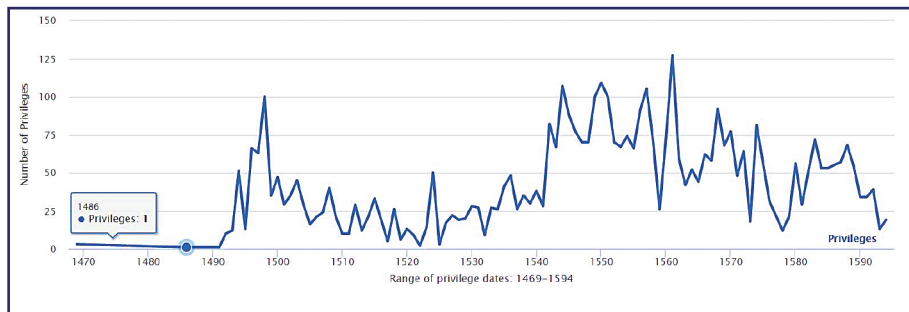


Figure 11. *Book privileges development (1469-1594)*

As the chart shows (Fig. 11), the evolution of book privileges is not linear, with frequent ascent and descent peaks. However, their number seems to grow over time, especially since the 1540s: from 1469 to 1540 there is an average of about 27 annual privileges, while from 1541 to 1594 the average rises to about 61 annual privileges. In the first phase (1469-1540) the book market was freer and printing regulation was limited. But during the 1540s, changes in European political equilibrium influenced the Republic of Venice, particularly under the pressure of

²³ The data refer to the last database consultation which took place in the first week of May 2021.

²⁴ The term “legal persons” refers to printing companies that were sometimes formed for the publication of one or more editions and that requested privileges in the name of the company itself.

the Inquisition. Therefore, the quantitative trend of the privileges can be understood by considering the succession of the various laws relating to the press, issued by the Republic in connection with periods of crisis and instability, especially linked to the censorship dynamics that influenced the printed books production and distribution. If the privileges number increases in the second phase (1540-1594) as a result of greater uncertainty in the printing sector, there are also drastic decreases in concessions precisely in proximity to the issuing of restrictive provisions, perhaps the effect of necessary post-legislative adjustment periods²⁵. Besides restrictions on printing, other factors played an important role in the decline of concessions. In this context, it is sufficient to recall the War of Cyprus (1570-1573) or the Great Plague (1575-1577) which had, for obvious reasons, negative effects on some production sectors, including the printing one. Faced with political, military and health emergencies, human and financial resources were diverted towards the resolution of more urgent problems, so the release of book privileges temporarily passed into the background.

6. Conclusions

With regard to the EMOBookPrices, the database has been purposed to provide an infrastructural model for research endeavors aimed to investigate the economy behind the Renaissance book world. The database has been optimised to absorb and process raw data extracted from commercial sources such as account books, sale books catalogues and the like. The research potential of the database has been purposely left as open as possible by a fragmentation and reaggregation of the empirical data provided by sources. The database primarily serves the purpose of investigating price variations according to parameter that may be material, regional, chronological or related to the cultural value of a given work of literature or conversely, the market value that the audience of reference represented for publishers. Commercial sources stemming from the Renaissance book industry, however, can be also of interest for historians concerned with marketing strategies

²⁵ To mention just a few of these laws, in 1544 a decree required the works to be printed to be submitted to the Commission from the University of Padua (Riformatori dello Studio di Padova) in order to obtain the necessary approval for the Heads of the Council of Ten to issue the printing license. In 1545 a decree was issued forbidding anyone to print or sell any work without having first presented documentary proof of the consent of the author or of his nearest heirs to the University Commissioners. In the two-year period 1547-1548 other laws prohibited the printing, import, sale, and possession of heretical books, requiring those who held these works to bring them to the Deputies over Heresy. In 1559, when the first Roman Index was promulgated and published, the obligation to notify the Sacred Tribunal of the Most Holy Inquisition on Heretics of the quantity and quality of the books imported into Venice. And in 1562, the obligation to submit the works to be printed for review by the Inquisitor, or one of his vicars, or some person appointed by the Tribunal of the Inquisition. For the transcriptions of the laws see Horatio Brown, *The Venetian printing press: an historical study based upon documents for the most part hitherto unpublished*, London: J. C. Nimmo, 1891, p. 211-214.

and commercial language, to name a few. In the belief that not only book historians or economic historians but also cultural and social historians may be interested in Renaissance publishers commercial sources, primary documents have been offered in a raw, yet digitized format which is believed to be more flexible to their own investigative priorities.

With regard to the EMOBookPrivileges, the database allows the analysis of complex and often unknown texts, placed at the crossroads between the history of law and copyright, the history of the book, economic history and social and cultural history.

The database offers a plurality of answers that can shed light on dynamics relating to the production and trade of printed works and their protagonists, as well as more extensive information on the context in which these privileges were granted. The study of the entire corpus allows us to retrace the genesis and evolution of a legal instrument that in Venice, more than anywhere else, was wisely used by authors and printers as a means of protecting their works and activities. In a broader perspective, using the database it will be possible to reconstruct, as exhaustively as possible, an overview of the book privileges system in Venice. All this by making available to scholars a precious documentary heritage of undeniable historical and cultural value.

The sharing of data between the two databases also allows to observe the interlock between innovative entrepreneurial strategies, the blending of different material features of the book, the application of quasi monopolistic strategies and the setting of adequate prices to grant a specific literary product a commercial success. All these elements, the EMOBookTrade project contends, contributed in two ways to shape the world of Renaissance books. On the one hand they granted the consolidation of the book industry by establishing the *modus operandi* of book entrepreneurs. On the other hand, they also consolidated the commercial infrastructure upon which literature relied, hence contributing to the formation of Renaissance literary culture or culture at large.

Il presente saggio offre una panoramica sugli strumenti digitali progettati e sviluppati dal team interno al progetto EMOBookTrade, finalizzato allo studio degli aspetti economici e giuridici del mercato librario europeo in età tardo rinascimentale e barocca. In particolare, il saggio fornisce una dettagliata analisi di due database utilizzati per studiare l'evoluzione del sistema dei prezzi congiuntamente allo sviluppo del sistema dei privilegi librari. L'articolo propone un modello per utenti e sviluppatori interessati nel perseguire ricerche ispirate all'analisi di cospicue quantità di dati nell'ambito della storia del libro, con un riferimento particolare alla storia economica del libro.

L'ultima consultazione dei siti web è avvenuta nel mese di dicembre 2022