In the framework of the AthenaPlus project, some of the partners provided 100 high quality metadata records per collection for experimenting with an enriched, LIDO-based description of objects and for presenting them in MOVIO as parts of a “superexhibition”. The experiment led by Regine Stein from the Philipps-Universitaet Marburg Deutsches Dokumentationszentrum für Kunstgeschichte - Bildarchiv Foto Marburg (UNIMAR) and Nikolaus Simou from the National Technical University of Athens (NTUA) offered some new viewpoints and made museum experts rethink the depth of object description and the necessity of the standard use of controlled vocabularies such as those developed by the Getty Research Institute in everyday collection practice.

The Schola Graphidis Art Collection (Hungarian University of Fine Arts – High School of Visual Arts, Budapest) made an additional effort to make richer this experiment, by selecting museum objects from its collections that represent border cases and compound problems from the side of cataloguing and describing objects. For the experiment, three types of objects were chosen to examine and to describe: the group of drawings from the 18th-19th centuries as unique handmade objects; the group of ornamental prints from the 19th century made by printmaking processes; and the group of historical photographs made by photographic processes from the first half of the 20th century.

Among the three object types, the group of the 19th-century ornamental prints is the most complex one regarding this experiment; therefore the article focuses on this particular object type and presents the instructive experiences that occurred during the work. This information can be useful for all of those museum or library collections that manage pattern books and ornamental prints of this era. At the same time, this article reflects on the latest approaches and directions of art historical research on ornamental art in 19th-century Europe in view of the pattern book collection.

Below, some questions connected to the experiment of “Visualization and Indexing of Museum Content” will be highlighted, through the examination of the pattern books and ornamental prints that appeared between the 1850s and the 1920s all over Europe. These objects form a special segment of not only the history of ornamental prints and decorative art in general, but the history of art education, and can be regarded as a coherent corpus produced by the era of historicism and Art Nouveau. The survey and study of these collections need to have three different approaches: the skill of the librarian, the viewpoint of the museum collection manager, and the background of the art historian. The Schola Graphidis Art Collection – as the collection that conserves, collects, studies, and presents all the fine artworks, applied artworks, and technical objects which can be connected to Hungary’s oldest national art education institution, the Schola Graphidis Budensis (Buda Drawing School, founded in 1778) and their successors – conserves a special remarkable selection of pattern books and ornamental prints from the mentioned period. Its study is an ongoing process; therefore new viewpoints and principles can be applied for their description.

During the work, the following controlled vocabularies, integrated into MINT, were prescribed to use: the structured vocabularies developed by the Getty Research Institute (www.getty.edu/research/tools/vocabularies/)
The survey and study of these collections need to have three different approaches: the skill of the librarian, the viewpoint of the museum collection manager, and the background of the art historian.


including the Art and Architecture Thesaurus (www.getty.edu/research/tools/vocabularies/aat/index.html), the Union List of Artist Names (www.getty.edu/research/tools/vocabularies/ulan/index.html), the Thesaurus of Geographic Names (www.getty.edu
Below, some wider issues are outlined: the question of object type, the general thematic concept, and the circle of actors.

Object / work type and cultural heritage type
The examined object type, defined as the group of ornamental prints from the 19th-20th centuries, differs from the ones of the previous centuries, not only in the print-making techniques but also in their role played in the social and cultural context of the period and their linkages to the library items. These prints are usually parts of books, periodicals, and portfolios; therefore they are considered as library contents and not specifically as unique museum contents. Nevertheless, in the last couple of years, the New York Public Library has started to digitize them as single prints and to consider these items as visual works and not only supplementary illustrations of the textual contents in books – since these are in themselves the visual contents of the books (see the prints and chromolithographs of the Miriam and Ira D. Wallach Division of Art, Prints and Photographs: Art & Architecture Collection in the New York Public Library: http://digitalcollections.nypl.org/search/index?filters%5Bgenre%5D=Chromolithographs&filters%5Btopic_mtxt_s%5D%5B%5D=Decoration+and+ornament&keywords=).

Thematic context
According to the logic of the Universal Decimal Classification (http://udcdata.info/), the ornamental prints can be classified in several ways because of the wide variety of their use, their function, and mostly of their targets. They can be described with the subclass of “Drawing. Design. Applied arts and crafts” (http://udcdata.info/065213) and one level below with the subclass of “Industrial and domestic arts and crafts. Applied arts” (http://udcdata.info/065240) because of the applied arts use, and because of the special emphasis on the ornamentation. Considering the technique parameter of the ornamental prints, they belong to the catego-
Photolithographs, lithographs and heliotypes from the pattern book of M. Meurer (Pflanzenformen. Vorbildliche Beispiele zur Einführung in das ornamentale Studium der Pflanze; zum Gebrauche für Kunstgewerbe- und Bauschulen, Technische Hochschulen und höhere Unterrichtsanstalten sowie für Architekten und Kunsthandwerker. Dresden: Verlag von Gerhard Kuhthmann, 1895)
https://scholagraphidis.omeka.net/items/browse?collection=25

At the same time, these prints had a special target not only in the field of applied arts and design, but in the field of architecture, so they can be classified to the subclass of “Architecture” (http://udcdata.info/065060), where the special emphasis on ornamentation can be found under the subclass of “Special auxiliary subdivision for architecture” (http://udcdata.info/077052) as “Architectural details and finishes. Decoration. Ornament” (http://udcdata.info/065078). Furthermore, the particular, very important theoretical “mission” of these prints can be formulated also under the main class of “Architecture”, in the subclass of the “Theory and philosophy of architecture. Principles of design, proportion, optical effect” (http://udcdata.info/065061), since the creation of the ornamental prints in the 19th century had an explicit theoretical purpose: their function was not only to offer examples to copy mechanically, but also to establish the proper principles of design to create the new style of the period.

Therefore, if the intent is to classify and index more precisely the thematic context of an object, besides the classification of the object by type and by technique, it is necessary to consider the aim of the creation. What is the object made for? What was the specific and the general mission of its creation?

**Event actor and subject actor**
The circle of actors involved in the process of making these prints raises new questions. Let us illustrate it through one specific example. The Schola Graphidis Art Collection conserves a copy of a representative chromolithographic pattern book, presenting the ornamental motifs of the Hungarian domestic arts from the second half of the 19th century, entitled “A magyar házi ipar diszítményei, 1879. - Ornamente der Hausindustrie Ungarns, 1879.”. The object is a bound copy; therefore it is described as a library item. The author of the book is a museum director, art historian Károly Pulszky (1853-1899), who selected and compiled the objects and motifs depicted in the book, and who is also the author of the preface. His associate author is the inventor-creator of single chromolithographic prints, the German textile designer and draughtsman Friedrich Fischbach (1839-1908). Regarding these chromolithographs as separated, unique visual works, and within that prints, or more specifically ornamental prints, their creator is not Károly Pulszky, the conceptual author of the whole compilation, but rather the artist Friedrich Fischbach, who executed the original drawings for the chromolithographs. Therefore, the order of the actors’ names is reversed when the object is recorded as not a library item, but a museum one. Additionally, it is very important to list the printing houses of the plates, which can be different from the printing house of the text part of the pattern books, and of course they are not identical with the publishing house of the publication. So, in this case it is correct to mention the name of a lithographic printing firm in Frankfurt, led by Bernhard Dorndorf, one of the most important printing houses of playing cards in Europe at that time.

Regarding the process of printing, the actors can be multiplied, since in some cases, not only one, but two or more printing houses were involved in the printing of plates. For instance, the collection of stylized plant forms designed and drawn by the German painter and reformer of the art education, Moritz Meurer (1839-1916) and his students, consists of three kinds of plates executed with different printmaking techniques of the period: photolithographs, lithographs, and heliotypes. Ac-
According to the diverse techniques, three printers / printing houses were involved in the process of printing: Friedrich Gröber from Leipzig, who printed the photolithographs, the photographer Albert Frisch (c. 1840-1918) from Berlin, known as the German pioneer of

anthropological photography, who executed the heliotypes, and Friedrich Schwabe, also from Berlin, who made the lithographs. Nevertheless, these entities together appear only when the description is about the library item and not about the museum item.

Also important to name the commissioner of these prints, since it plays an important role in the birth of the object: the legal body of the Royal Hungarian Ministry of Religion and Public Instruction.

Nonetheless, one question remains open: what to do with those persons or legal body names who are not involved directly in the process of creation and are not depicted in the object itself, but who play an important conceptual role in the creation of the object. It is necessary to mention them in the case of an enriched description, where the historical context can receive more emphasis. These persons or legal bodies are both outside the direct circle of event actors and of the subject actors, and so their classification is problematic.

An example: the above-mentioned Hungarian pattern book served as a representative documentation of the collection made of common art objects (objects of “Hausindustrie”), which represented Hungary in the Vienna World Exhibition in 1873. The conceptual inventors of the collection, Flóris Rómer and János Xántus, keepers of the Hungarian National Museum, played a very important role in the origin of the series of chromolithographic prints; therefore indexing their names has an added value for revealing the historical context of these objects. A another example: the provenance of the book is also important to describe the historical context of the object, from the viewpoints of the donator and of the type of the collection. This also generates the question of where to index his name in the hierarchy of the LIDO, since the previous owner of the object is not the actor of its origin, but an important person who catalysed the processes of publishing this kind of books. The owner was a remarkable personality of the late 19th century, Count Jenő Zichy (1837-1906), who played an active role in organizing industrial education in Hungary. Therefore, the fact that he donated this rare book to the Library of the Metropolitan Municipal Technical Drawing School is important information to record. And finally, back to the question of the object type: although the seal of the Count's Library can be seen only on the title-page of the book and recording this information is obvious in the library record, it is at least as important to show this data in the museum record of the print.

From object-based description toward context-based description

During our work, we have interpreted the 19th-century pattern books as museum objects, and have considered them not only objects to define, but as special products of the era of historicism and Art Nouveau, as the results of the contemporary social and art movements. It is worthwhile to shift the emphasis from the object to the context of the object's origin and to reveal its original historical context by linking with the prominent actors and legal bodies. In the case of the compilation entitled “A magyar házi ipar diszítményei, 1879. - Ornamente der Hausindustrie Ungarns, 1879. - Ornements de l'industrie domestique de la Hongrie, 1879.”, altogether six persons and one legal body can be connected to the prints, all of them representing the different aspects of the contemporary movements in industrial arts / the applied arts (Count Jenő Zichy, Ministry of Religion and Public Instruction), in museum-
1. MOVIO is a virtual exhibition tool developed in the framework of AthenaPlus’ WP5 (Creative applications for the re-use of cultural resources) and tested by WP6 (Pilots for testing the creative use of cultural contents), which is an ongoing process now. One can read a complete description and the manual of MOVIO here: (accessed 11 September 2015).


3. MINT is a content aggregation tool developed for the Athena project (access 11 September 2015), but it is currently used for EUScreen, CARARE, Judaica, ECLAP, DCA, Linked Heritage, EuropeanaPhotography, and AthenaPlus projects.


7. HOMM is a digital storytelling application developed by Officina Emilia (University of Modena and Reggio Emilia, Italy) in collaboration with Crafts Museum (New Delhi, India).

8. The deeper and more detailed description of the ornamental prints from the collection side led us to integrate some new approaches in the everyday collection work. The first one is to realize that the enriched description of collection objects cannot be separated from scientific and historical research; above all, it must be based on it. The second one is to recognize that, paradoxically, this way of thinking does not relegate the objects to the territory of scientific research, but rather opens new perspectives for the creative reuse of museum contents. Linking more persons and roles (who are involved in a broader sense in the process of creation) to the objects in the records can lead us to draw the network of persons and activities from the time of the objects, which is the basis of story-telling applications like MOVIO and HOMM. Therefore the enriched, research-based description of museum objects made by museum professionals could serve as well as an informative basis for the creative reuse of digital contents.