

Computer Technologies as A Method to Create A Contemporary Ex-Libris

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Summary

The article is dedicated to the phenomenon of modern ex-libris created with the help of computer graphics. The process of evolution in the use of various techniques of book plate creating is analyzed, the role of computer technologies in the popularization of the modern book plate is emphasized. The debatable nature of the issue of the danger of displacement, replacement of traditional techniques of printed graphics with computer technologies is emphasized. Computer graphics are positioned as an effective way to popularize the Ukrainian ex-libris in the foreign art space. The characteristic features of the Ukrainian computer ex-libris are highlighted, a parallel with the book plate created with the help of computer graphics by masters of other countries (Belgium, China, the Netherlands, Poland, Turkey) is drawn

Keywords: *ex-libris, bookplate, CGD, CAD, computer technologies, computer graphics*

1. Introduction

The phenomenon of the bookplate in printmaking of Ukraine has several centuries of history. However, its new stage began in 1991 only, when, after the general etap of the Soviet history of bookplates, the creation of its own chronicle of bookplates of independent Ukraine began. Like any country's art form, graphic arts found itself in a situation, when her story began virtually anew. Then we immediately emphasize that our scientific interest in this study lies in the chronological period from 1991, i.e. the analysis is based on the material created during the period of independent Ukraine. The plot, the preferences of masters in the field of techniques have changed, and one of the new hobbies is computer ex-libris, i.e. created using an arsenal of computer graphics tools. This is absolutely not typical phenomenon for the previous traditions of book graphic arts, a hallmark of modern art. One of the most controversial issues related to the use of computer graphics in ex-libris is the danger of losing its originality and collectible value. Bookplate as one

of the most popular at the turn of the 20th and 21st centuries varieties of small graphic forms, since the second half of the last century has become a subject of interest for collectors. And it is the technique that is one of the pricing criteria in the art market. Therefore, today the issue of evaluating a computer bookplate is indeed one of the most relevant (Tupik, 2017): whether an art work created with the help of computer graphics tools is a unique work of graphic arts and whether it can be of collectible interest on a par with graphic sheets created using classical techniques. A bookplate is always small in size, usually created using the techniques of intaglio and xylography, the choice of technique depends primarily on the school to which the author belongs. But a computer ex-libris unifies all preferences - representatives of different schools turn to these means, which makes a computer bookplate a universal means of satisfying the interest of book lovers.

2. Literature review

Ukrainian bookplate is a field for research by few scientists, since the subject of study is very specific, the field of interest is rather narrow, and there are few specialists in this field even today. Computer ex-libris back to appear only a couple of decades ago, so there are no independent studies on this topic yet at all. Works dedicated to the bookplate as a whole are divided into more general, complex works, of both domestic (Mikhal'chuk, 2014a; Mikhal'chuk, 2014b; Nesterenko, 2016; Romanenkova& Bratus&Kuzmenko, 2021; Romanenkova& Paliychuk& Mykhal'chuk, 2021; Romanenkova, 2015; Romanenkova, 2021; Safonova, 2011; Safonova, 2016), and foreign authors, and narrow-profile, the subject of interest of which was the work of artists of one school (Romanenkova& Bratus& Mykhal'chuk.& Gunka, 2021), стиль одного мастера (Nesterenko, 2020; Romanenkova, 1999), a complex of specific plots, performance techniques (Nesterenko, 2003), etc. There are quite a few commercial studies, which are published mainly for collectors, in order to inform about the presence of new

names in the art market. Such works are not of scientific interest, but are valuable for the world of bookplates in another aspect (publications of Ukrainian philanthropist S. Brodovich, Portuguese collector A. M. da Mota Miranda, Belgian bookplate lover L. van den Briele). Over the past years, dissertations dedicated to ex-libris have begun to appear in Ukraine (V. Tupik, T. Safonova, etc.), however, this problem is still very complex and specific for theorists, so two of them only have been completed ((authors – P. Nesterenko and Y. Kamenetskaya (Kamenetska, 2021)). Bookplate researchers are often both collectors (founder and head of the Ukrainian Exlibris Club P. Nesterenko) and artists who create such works (Yu. Kamenetskay), so their works are more complete and informationally reliable.

Computer ex-libris is studied very rarely so far, there are very few scientific works about it, more often these are some scientific articles (Kamenetskaya, 2017; Kamenetskaya, 2018a; Kamenetskaya, 2018b; Tupik, 2017; Zhtnikov, 2007). Therefore, this phenomenon can be attributed to the most promising scientific topic.

3. Ex-libris as a type of small graphic forms: techniques and materials, main modern art centers

Among all types of printmaking, an ex-libris can be considered the most difficult to create, a small graphic composition traditionally created for libraries, owners of book collections, placed inside a book, most often pasted on its flyleaf. Previously, the ex-libris performed a purely applied function, since the name of the owner of the book was placed on it, it had an informational role. But over time, bookplates began to represent an independent aesthetic value. They are usually created in xylographic techniques (linocut, xylography: earlier – on wood, in recent years – on plastic, its synthetic replacement, since wood, especially boxwood, beloved by artists, has become prohibitively expensive), intaglio printing (etching, copper engraving, steel, mezzotint, aquatint, dry point, soft varnish in various variants of their synthesis). Since bookplates are most often made to order, graphic sheets are printed in the quantity required by the owner. Therefore, the main advantage of a bookplates from a utilitarian point of view is the possibility of replication. It is the circulation that largely determines the value of a bookplate in the art market. The more complex the technique in which the graphic sheet is created, the more colors in the image, the more complex the composition (the plots of bookplates is very various, it depends primarily on the preferences of the customer), the smaller the circulation, the higher the value of the work. Bookplates are exhibited, collected and exchanged – they have turned into an independent work of art of small graphic arts, no longer associated with a book. The preference in techniques usually

depends on the geographical aspect, on the school. Ukraine has experience in all techniques for creating ex-libris, but since the 1990s. historically, the Lviv school (Romanenkova & Bratus & Mykhalchuk & Gunka, 2021) became the center of popularity of intaglio techniques, the experts of which are very professional in etching in all variants of its synthesis with other techniques. Some artists prefer black-and-white or monochrome etching (O. Denisenko, S. Ivanov, S. Hrapov), occasionally resorting to color etching (R. Romanyshyn).

The Kyiv school, for example, does not have clear preferences in techniques, referring equally to different ones (Romanenkova & Paliychuk & Mykhalchuk, 2021), but here one can single out many experts with very high professional level, working mainly in xylography techniques, more often in plastic engraving, both monochrome and multicolor (R. Agirba, Yu. Galitsyn, A. and G. Pugachevsky, A. Savich, N. Stratilat, V. Taran, etc.). Passion for ex-libris swept the whole world. It would seem that it would be logical to expect its special popularity in those countries where printmaking have always been traditionally great: Japan, China, Germany, Italy, the Netherlands. Of course, in these countries the bookplate is in great demand. They have bookplate clubs, whose members are both artists and collectors, publishers: the Netherlands Bookplate Association, the German Bookplate Society (Romanenkova, 2021, p. 126), The Nippon Exlibris Association of Japan, Japan Society of Exlibris Artists and Collectors), The China Exlibris Association etc. Even FISAE (Fédération internationale des sociétés d'amateurs d'exlibris), the main international organization of bookplate admirers, was founded in Germany. There are also a number of other countries where bookplate have been very popular since the end of the 20th century, primarily Belgium. (International Ex libris Centrum Stad Sint Niklaas), Austria (Ossterreichische Exlibris-Gessellschaft). But nevertheless, the favorites, where there are many specialized organizations, and a large number of highly professional masters, and there are much more competitions, exhibitions, were the countries of Eastern Europe. Among the outposts of modern bookplate Poland (Museum Publikum a Nominae Przytkowski, Kolo Milosnikow Exlibrisu etc.) Czech Republic (Spolek Sberatelu Pratel Exlibris), Ukraine (Ukrainian ExLibris Club, Exlibris Museum). In Poland, the Czech Republic, international exhibitions and competitions are constantly held, which have already become traditional and prestigious, including regular congresses FISAE (Malbork Biennale, International Show of Xylographic and Linoleum engraved bookplate in Katowice, International Biennial of Small graphic forms and exlibris in Ostrow Wielkopolski, etc.), but Ukraine in this aspect is much more modestly represented: in 1993/4 the first two exhibitions-competitions of the bookplate were organized in the new Ukraine, and then the exhibition activity was rather spontaneous and local. At the

same time, Ukrainian artists regularly take part in international events, almost always receiving prestigious prizes and awards.

4. Computer technologies as a new tool for creating a work in contemporary bookplate

The popularization of bookplates in many countries of the world led to the fact that in each country there were preferences in the techniques of creation, which became the main distinguishing feature of any school. However, in recent years, a new way to create an ex-libris has appeared that has turned the notion of it upside down and generated a lot of discussion. Computer graphics has caused a revolution in the perception of the bookplate. Not in its laws and functioning, no, but in relation to it, to the demand for it among collectors in pricing. First of all, we note that the use of the arsenal of computer graphics has made it possible to expand the circle of authors capable of creating a bookplate. Academic printmaking techniques, in which it is traditionally created, are real to everyone, even to a professional experienced artist. Creating a printed plate for both xylography and intaglio printing, then creating of prints, especially if we are talking about multi-color engraving (woodcut, polychrome etching) are technologically complex, lengthy processes that require many years of preparation, experience, accuracy when printmaking combines color spots (xylography), knowing the basics of chemistry to correctly calculate the time of the etching process in intaglio printing techniques that use acid, etc. This makes the ex-libris, created in the traditional techniques of printmaking, elitist, accessible to a fairly small number of authors and, accordingly, increases its cost.

Computer graphics have radically changed this situation. Bookplate created using this tools can be printed in any edition, while works created using academic printmaking techniques are designed for limited editions only, after which the printing plate becomes unusable. This greatly reduces the cost of such graphic sheets, calling into question the exclusivity and artistic value. However, adherents of such bookplate creation techniques rightly put forward a counterargument: even if You are fluent in computer graphics tools, You cannot create a professional bookplate if You are not artist, without having knowledge in the field of composition, color science, fonts, etc. But still, people with such skills are much more than those who have experience in the field of copper engraving or woodcuts. Therefore, the question of the value of computer ex-libris is still debatable. To create an ex-libris, vector graphics are used, i.e. graphic suits «Adobe Illustrator» and «Corel Draw», and raster graphics, raster graphics editor «Adobe Photoshop» (Tupik, 2017, p. 289). Programs «Gimp», «Inkscape», «Livebrush» are also used (Kamenetska, 2018a). This is a tool with which it becomes possible to imitate the artistic effects of any

classical printmaking technique, i.e. the basic principle of creating a computer bookplate is the imitation of the artistic effects of academic techniques. Technologically, it is much easier, but it requires a thorough knowledge not only in the field of computer technology, but also in the techniques themselves, the artistic effects of which are imitated with their help. The tools of both raster and vector graphics are so advanced that today, with their help, the effects of various techniques are imitated so accurately that it is sometimes difficult for a non-professional to distinguish a bookplate created using computer technology from, for example, lithography or linocut. When reproduced on a monitor, this can be seen only when enlarged, and in the paper version, according to the print, in terms of depth, print relief, stroke features, paint specifics, etc., which are not available when printing a computer ex-libris. Only specialists in the field of printmaking can visually diagnose the differences, since a professionally created computer bookplate takes into account all the features of the techniques whose effects it reproduces. One of the most important features of creating a bookplate with the help of graphic editors, which distinguishes this method from traditional classical printmaking techniques, is the ability to correct a mistake. When working, for example, in woodcuts, if the artist accidentally makes a mistake, his hand breaks and the stroke goes in the wrong direction, then the printing plate is spoiled in most cases, work must be started all over again. In etching, for example, if the acid etching process is too long, the color and tone strength will not be the same as it should be, and the work also needs to be started from scratch. And in any computer graphics editor, You can return everything, undo any number of recent actions and redo it. There is nothing irreversible here. But this is precisely what sharply reduces the cost of such works – exclusivity disappears. Another feature that affects the value of bookplates in these techniques is the absence of a printing form at all. In the process of computer ex-libris creating a, there is only one visualized art product – the prints themselves, the circulation. And in bookplate created using traditional printmaking techniques, the print run is already a consequence, a derivative, and the primary is the printing plate itself, which the customer sometimes asks to destroy in order to make the process of repeating the print run impossible. This also significantly affects the price of the work. In the situation with a computer ex-libris, there is no such primary form as such, there is a file as an information carrier that is not materialized and has no value in itself.

For bookplates created with the help of computer technologies, a special system of symbols for techniques, signatures is used:

- CGD – computer generated design
- CAD – computer aided design
- CRD – computer reproduced design

It is a way to create a bookplate that unites artists from all countries, available to all schools. It unifies without

depriving local features. Computer technologies make it possible to preserve absolutely all the specific features inherent in national schools, the features of techniques, which can be seen in a large number of examples. It's probably hard to find experts who specialize in computer bookplates only. But there are many who prefer computer technologies, using it very often.

Interesting works are created by Chinese artists. Oriental specifics can be easily seen in the bookplates made by *Liu Lixin* using the CGD technique. With the help of computer technology, the artist imitates the subtlest effects of the "raw-style" watercolor painting technique, and demonstrates font combinations in the virtuosity of writing hieroglyphs (Fig. 1).



Figure 1. Ex-libris Liu Lixin. China. CGD. 2004

Many characteristic computer bookplates are created by masters of Belgium. In their creative work it is possible to emphasize sheets, the basis of which is a photo composition. Photo art tools give bookplates a special hyper-realism, which is not very typical for a ex-libris, since it is usually distinguished by convention and features of sign, stylization and graphic. Among the Belgian artists who use computer technologies to create a bookplate, one can name P. Moeremans, who works in CGD technique (ex-libris P. Verbeeck, ex-libris V. Van Gysel, ex-libris F. Dirix, ex-libris P. Moeremans, ex-libris H. Pauwels, ex-libris R. Lefevre, etc.). The works by this author demonstrate mastery not only of computer technology as a tool for creating art work, but also the skills of a photo artist, poster artist, graphic artist, who can combine realistic photography tools, work

with textures, the conventionality and decorativeness of a poster and the iconic, symbolic nature of the font.

The Belgian artist M. Baeyens creates his bookplates in CRD. His works are extremely intelligent, monochrome – he uses the power of computer technologies to simulate the effect of watercolor painting. (ex-libris G. Willemsen, ex-libris Geerth van der Zee, 2008), often uses sea motifs (ex-libris M. Maojlin, fig.2; ex-libris D. de Bruin). His experiments with the imitation of lithography technique, where we can see the same monochrome, not with watercolor effects, but with the characteristic velvety imitation of a pencil drawing, are interesting too (PF 2013 for W.& M. Meulemens).



Figure 2. Ex-libris M. Maojlin. Belgium. GRD. 2016

The Belgian master S. van Pellicom also experimented interestingly in the field of CGD, his bookplates imitate watercolor and etching in a manner that is very professional and accurate. The artist builds her compositions in such a way that her sheets are perceived as landscapes created in these techniques; only chamber size distinguishes them from typical easel compositions. This approach demonstrates the transparency and conventionality of the boundaries between the genres of fine arts due to the possibilities of computer technologies, and the use of means of artistic expression of different techniques (ex-libris E. Stradiot; ex-libris L. Deurinck; ex-libris L. van den Briele).

The Polish artist Kr. Bak is very professional in his graphics, he works in CGD. His sheets imitate the effects of lithography, the texture of a lithographic stone and pencil work, they are very graphic, concise and organic, like book graphics (ex-libris M. Bak, ex-libris A. Thys; ex-libris L.B; ex-libris Noëlla D'hoje, 2016). The same features, a

tendency to monochrome and imitation of lithographic technique are inherent in creative work of once more Polish master, G. Izdebski creating bookplates in CGD (ex-libris H. Manche, 2018, fig. 3; ex-libris H. Manche, Cathedral, 2018).

The Czech Republic, which has a rich history of the bookplate and has repeatedly become the host of competitions and congresses, was no exception in the experiments of artists in the field of computer ex-libris. J. Roubalova, for example, works in CGD. Her graphic sheets are as concise as possible, the effects are close to both the techniques of linocut and the features of lithography (ex-libris J. Janghammer, 2000; ex-libris M. Janghammer, 2000; ex-libris J. Sulk, 2000).

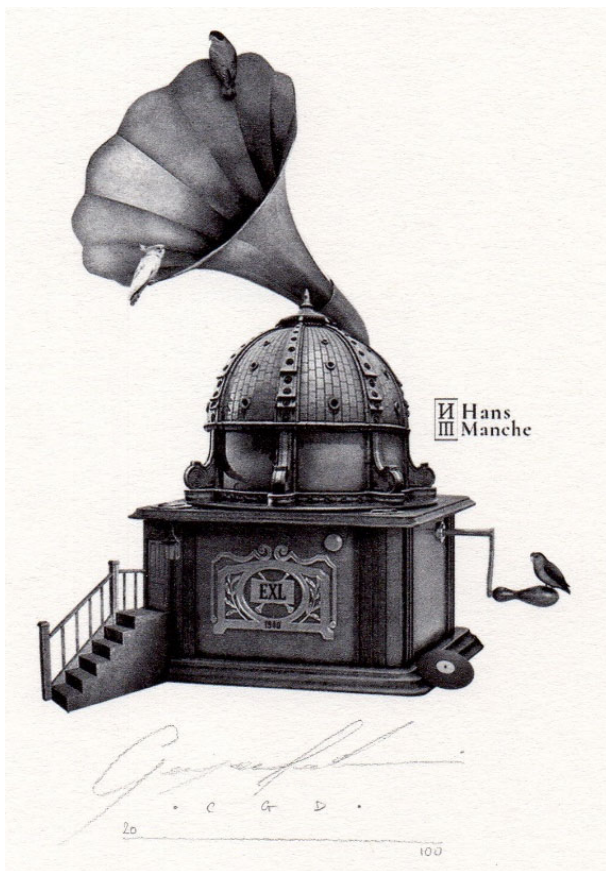


Figure 3. Izdebski G. Ex-libris H. Manche. CGD. 2018

Ukraine, which gained popularity in the ex-libris environment due to a large number of professionals working in xylography and intaglio printing techniques, has experience in the field of computer ex-libris. Ruslan Vyhovsky, Volodymyr Vyshnyak, Volodymyr Okrutny, Petro Malynka, Yelyzaveta Mazur, Petro Malyshko, Yulia Kamenetska (Kamenetskaya 2018a) became the most characteristic in this field. All these artists use different techniques for creating a bookplate, including classical, and

the range of their professional capabilities is wide. But they consciously experiment with computer technologies, turning to the arsenal of computer graphics and thus enriching their experience. R. Vygovsky, Kyiv graphic artist, works in the field of CAD. since the 1990s, he was at the origins of a new stage in the history of Ukrainian ex-libris and even then experimented in CAD, imitating the artistic effects of plastic engraving, almost always multicolored. The artist uses the technique of woodcuts, for many years creating xylographic bookplates, and therefore he created a computer ex-libris too, knowing perfectly well the main distinguishing features of artistic effects. The collection of his images also includes both realistic (ex-libris A. Bohr, 1999; ex-libris W. Bulter, 2000; ex-libris P. van der Weerdit, 2002; ex-libris P.A. Burgraaf, 2005) and abstract, which are perceived purely as exercises in the field of CAD, the study of its technical capabilities (ex-libris P. Nesterenko, 1999, fig. 4). It is interesting that the artist actively uses the main advantages of computer ex-libris, for example, he makes very large print runs, for example, P. Nesterenko's bookplate was printed in the 800 copies.



Figure 4. Vygovsky R. Ex-libris P. Nesterenko. CAD. 1997

Ternopil artist V. Okrutny represents a different trend of the Ukrainian computer bookplate – his sheets are often monochrome, decorative, laconic, i.e. close to classic book graphics. He uses a complex of linocut effects, imitating its tools in “Corel Draw” and “Adobe Photoshop”. Bookplate researchers

emphasize that V. Okrutny can be considered the leading representative of the portrait genre in modern Ukrainian computer bookplate (Kamenetska, 2021, p. 107). A characteristic feature of the artist's manner is the active use of fonts, which at the same time helps to keep the traditions of classical book graphics in ex-libris, and allows the author to use all the features of graphic editors (“Corel Draw”, “Adobe Photoshop”) with variations with fonts.

O. Kryvoruchko demonstrates interesting experiments in the field of computer ex-libris. His works can be perceived as the quintessence of innovation and traditionalism – this artist is able to synthesize computer technologies and traditional graphic techniques in the same sheet. So, he can, for example, create an ex-libris in computer graphics and add color in gouache. This is a kind of connecting bridge from the past to the future, a combination of classical graphic techniques and modern computer technologies (fig. 5).



Figure 5. Kryvoruchko O. Ex-libris P.Nesterenko. Computer graphics, gouache. 2010

The young generation of ex-librists, who specialize mainly in computer bookplate, is most clearly represented by the works of Yu. Kamenetskaya. She is also a theoretician, the author of many of articles and one of two dissertations on the ex-libris of modern Ukraine, and an artist whose main tool is computer graphics, with which the author creates posters, book illustrations, postcards, and, of course, ex-libris.

5. Conclusiones

Each of the countries of the world with traditions of bookplate creation has its own characteristics that characterize its school, national specifics (the Netherlands, Belgium, Austria, Germany, Poland, China, Italy, Slovakia, France, etc.). In some states there are several local schools, and they can also differ significantly from each other (as in Ukraine), primarily due to the peculiarities of the execution

technique. This is what determines the uniqueness of each school and allows us to keep these traditions.

But the computer ex-libris has become that unifying phenomenon that unites the capabilities of artists, different countries, schools, generations, since representatives of all artistic layers of different generations turn to it everywhere. Computer technologies is a unifying method of ex-libris creating, erasing the boundaries, making them transparent, since computer technologies make it possible to imitate the artistic effects of different artistic techniques. Until now, the assessment of this phenomenon lies in the discussion field – many connoisseurs of classical ex-libris do not recognize the right of computer ex-libris to stand on a par with classical bookplate, they believe that it should be evaluated separately, according to a different scale of criteria, and cannot be positioned as an equivalent replacement for traditional book ex-libris, that devalues it. Of course, this is fair, there can be no substitution of concepts, a computer ex-libris cannot replace a classic bookplate created using xylography or intaglio techniques. These phenomena simply coexist, each of them is valuable in itself, and the new in no way claims to supplant the former. But it is also worth emphasizing the unequivocally positive aspect of using computer graphics to create an ex-libris: it certainly contributes to the popularization of the bookplate phenomenon, making it more accessible to the public of all categories.

References:

- [1] Kamenetskaya, Yu. Komp'yuterni tekhnolohiyi v suchasnomu Ukrayins'komu ekslibrysi [Computer technologies in the modern Ukrainian exlibris]. *Ukrayins'ka akademiya mystetstv. Naukovodoslidni, naukovo-metodychni pratsi. Zbirnyk robot/The National Academy of Fine Arts and Architecture/Ukrainian Academy of Fine Art. Research and Methodology Papers*, 27, 111-116 (2018a).
- [2] Kamenetskaya, Yu. Vplyv innovatsiynkh tekhnolohiy na rozvytok hrafiky malykh form [The influence of innovative technologies on the development of graphics of small forms]. *Kul'turolohichmyy Al'manakh / Cultural Almanac*, 10, 34-36 (2018b).
- [3] Kamenetskaya, Yu. Vplyv suchasnoyi mystets'koyi tekhniki (komp'yuterna hrafika) na rozvytok ukrayins'koho ekslibrysa [The influence of modern art technology (computer graphics) on the development of Ukrainian bookplate]. *P'yati Platoniv'ski chytannya/ Fifth Platonic Readings*, 5, 56 (2017).
- [4] Kamenetska, Yu. Komp'yuterna hrafika v suchasnomu ekslibrysi [Computer graphic arts in modern exlibris]. <https://familytimes.com.ua/mystectvo/kompyuterna-grafika-v-suchasnomu-ekslibrysi> (2017).
- [5] Kamenetska, Yu. Ukrayins'kyy ekslibrys kintsya 1980-kh – 2010-kh: tradytsiyi, transformatsiya, novitni zdobutky [Ukrainian exlibris of the late 1980s - 2010: Traditions, transformation, latest achievements]. PhD Thesis. Kyiv, NAOMA (2021).
- [6] Mikhal'chuk, M. Osnovnyye tendentsii aktualizatsii ekslibrisa na sovremennom mirovom art-rynke [The main trends in the actualization of ex-libris on the modern world art market]. *Vestnik Khar'kovskoy gosudarstvennoy akademii dizayna i*

- iskusstv/ Bulletin of the Kharkov State Academy of Design and Arts*, 3, 70-75 (2014a).
- [7] Mikhal'chuk, M. Ekslibris kak ob"yekt kollektcionirovaniya: opyt sovremennoy Ukrainy [Ex-libris as an object of collecting: the experience of modern Ukraine]. *Nauchnyy aspekt / Scientific aspect*, 2, 76-83(2014b).
- [8] Nesterenko, P. Istoriya ukrayins'koho ekslibrysa [History of the Ukrainian bookplate]. Kyiv: Tempora (2016).
- [9] Nesterenko, P. Halereya ekslibryshiv Volodymyra Okrutnoho [Gallery of ex-libris by Vladimir Okrutny]. *Kultura I zhyttya / Culture and life*, 5, <https://www.pressreader.com/ukraine/kultura-i-zhyttya/20200529/281569473396591> (2020).
- [10] Nesterenko, P. Hrafichni tekhniky v ekslibryсах XX st. [Graphic techniques in bookplates of the XX century]. *Mystetstvoznavstvo Ukrainy/ Art Criticism of Ukraine*, 3, 348-355 (2003).
- [11] Romanenkova, J.& Bratus, I.& Kuzmenko, H. Ukrainian Ex Libris at the End of the 20 th Century and the Beginning of the 21 st Century as an Instrument of the Intercultural Dialogue. *Agathos*, 1, 125-136 (2021).
- [12] Romanenkova, J.& Bratus, I.& Mykhalchuk, V.& Gunka, A. Lvov ex-libris school as the traditions keeper of the intaglio printing techniques in the Ukrainian graphic arts at the turn of the XXth and XXIth centuries. *Revista Inclusiones*, 8, 221-331 (2021).
- [13] Romanenkova, J.& Paliychuk, A.& Mykhalchuk, V. Kiev ex-libris school as a xylography traditions keeper in Printmaking of modern Ukraine. *Journal of Graphic Engineering and Design*. 12(3), 39-45 (2021).
- [14] Romanenkova, J. By colour words about white ex-libris. *Encyclopaedia Bio-Bibliographical of the Art of the Contemporary Ex-Libris*, 24, 153-162 (1999).
- [15] Romanenkova, J. Ekslibris v khudozhestvennoy kul'ture Ukrainy rubezha XX i XXI vekov [Bookplate in the artistic culture of Ukraine at the turn of the XX and XXI centuries]. *Tekst. Kniga. Knigopечатaniye /Text. Book. Book publishing*, 25, 122-143 (2021).
- [16] Romanenkova, Yu. Ukrainskaya ekslibristika na mezhdunarodnoy arene sovremennoy grafiki [Ukrainian ex-libris in the international arena of modern graphic arts]. *Mystetstvoznavstvo Ukrayiny / Art Criticism of Ukraine*, 15, 111- 118 (2015).
- [17] Safonova, T. Bahatohrannist' mystetstva ekslibrysa [Versatility of exlibris art]. *Molodyy vchenyy/Young scientist*, 4(31), 678-681 (2016).
- [18] Safonova T. Informatyvnist' ekslibrysu: estetichni aspekty [Informativeness of bookplate: aesthetic aspects]. *Visnyk KhDADM/Bulletin of KhSADA*,1, 79-94 (2011).
- [19] Tupik, V. Ekslibrys, vykonany za dopomohoyu komp'yuternoyi hrafiiky, v suchasnomu mystetstvi [The role of Ukrainian ex-libris artists in shaping of the competitiveness of Ukrainian graphic arts in the international arena]. *Molodyy vchenyy/Young scientist*. 5 (45), 80-83 (2017).
- [20] Zhtnikov, V. Khudozhnik i komp'yuter [Artist and computer]. *Khronograf/Chronograph*, 13, 138 (2007).