EX-LIBRIST International Journal of Ex-libris / Vol.**4** / Part **7**
Uluslararası Ekslibris Dergisi / Cilt **4** / Bölüm **7**

İSTANBUL EX-LİBRIS SOCIETY İSTANBUL EKSLİBRİS DERNEĞİ

Use Of Diagrid Structures In Ex-libris Design

Asst. Assoc. Yaşar Uslu
Dumlupınar University Faculty of Fine Arts
Department of Visual Communication Design
ressam43@hotmail.com

Abstract

The world we live in is full of images. Images are everywhere, objects expose themselves wildly to us. This physical image affects attitude, designers and artists and is added to design products. Background is used in the majority of artistic and design applications. In Ex-libris designs, the use of tissue has increased, especially with the development of computer technology. Within the digital design concept, the use of texture, especially in the CGD technique, creates awareness in design. The textures also manifest themselves in mechanical structures as well as organic in nature. This is the inspiration for artists and designers. It's like being in architecture and construction. In addition to diagonal intersections with cross beams, geometric forms and structures in building systems are called diagrid. In this study, the use of diagrid structure as tissue in ex-libris designs was examined and evaluated.

155 —

EX-L!BRIST International Journal of Ex-libris / Vol.**4** / Part **7**
Uluslararası Ekslibris Dergisi / Cilt **4** / Bölüm **7**

ISTANBUL İSTANBUL
EX-LIBRIS EKSLİBRİS
SOCIETY DERNEĞİ

Introduction

It is the designer's responsibility to reinterpret the images, set up a layout with different objects, and apply it with different techniques. The creative human being wants all the ideas in his mind to be permanent. Because visual creation is the greatest means of expression in the effectiveness of knowledge. The images are actually the biggest elements that provide a kind of communication. In this visual journey, ex-libris determines a book's ownership as well as being a disciplinary design object.

Ex-libris is a small-sized graphic work that includes pictures on various topics, stuck on the inner cover of books to indicate the owner of the books. Ex-libris, also known as "Exlibris" in Latin, introduces the book owner, glorifies him and warns the borrower to bring back the the book. It can be said that besides being an indication of ownership, an indication of ownership, it also serves to protect the book against theft (Pektaş, 2014: 426). Ex-libris is an artistic work which consists of symbols and signs, has small dimensions and reproduced by different techniques taking into consideration art and design principles and artistic elements (Okur, 2013: 41).

All graphical techniques that allow for the production of high quality multiple images of a scene can be used and used by artists for centuries. The first printed ex-libris, which Gutenberg's mobile press led to the creation of first-time printed books, took place in 1470. Traditional techniques include embossing (wood cutting, linoleum, etc.), hollow printing (engraving, etching, aquatint, etc.) And desktop printing techniques such as silk screen or lithography. Typically, industrial techniques such as line block, photo engraving, offset litho have been used to produce ex-libris, especially when a large number of prints are needed . Today's artists and designers are using computer technology increasingly and more frequently for the design of the booklet.(http://www.fisae.org/home/basic-information).

An ex-libris artist, along with the name of the person, draws attention to the design. In this small-sized artistic design, the quality of writing and visuals is generally aesthetically important. Ex-libris tends to reflect both the designer's and ex-libris's owner's of artistic pleasures. The subject that the designer represents in the ex-libris usually allows the customer to create a memorable and beautiful image by suggesting a theme.
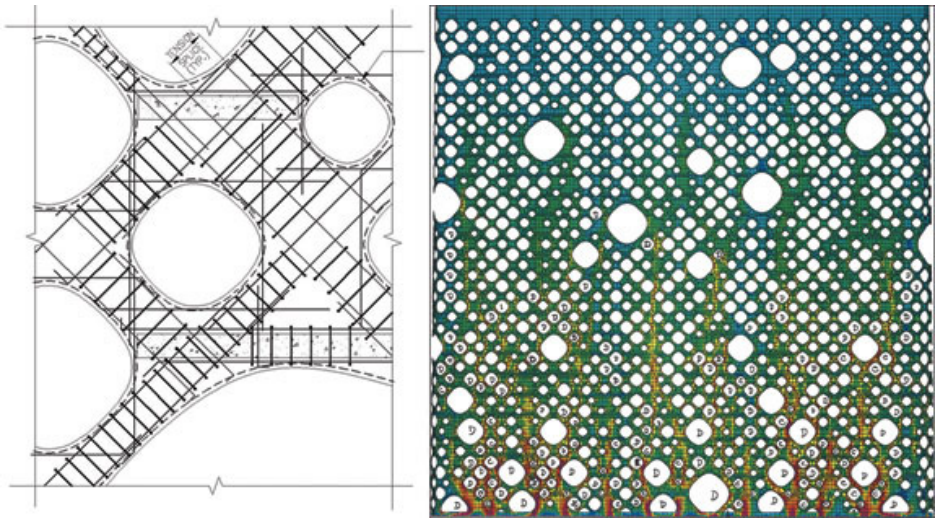
Ex-libris, another product in terms of representation of visual communication, has created a new visual living space with formal differences and changes with the help of pictorial writing and nail writing

EX-LIBRIST International Journal of Ex-libris / Vol.**4** / Part **7**
Uluslararası Ekslibris Dergisi / Cilt **4** / Bölüm **7**

ISTANBUL İSTANBUL
EX-LIBRIS EKSLİBRİS
SOCIETY DERNEĞİ

Visual 1: The Shukhov Radio Tower, also known as the Shabolovka tower, Moscow-Russia, Source: https://commons.wikimedia.org/wiki/File:Shukhov_Tower_030709e_photo_by_ Arssenev. jpg 19.11.2017

in the process starting with the cave paintings. And it continues to create. Ex-libris artists who are making a design presentation with minor changes in appearance and rearrangement are rapidly increasing. These changes helped to reinterpret the natural look from the designer's eye. They remind us once again of the universality of images and concepts, art and design, which are interested in different disciplines.

With the development of technology and the change of needs, there are new developments both in the field of construction and architecture, new systems, technologies have started to be used. One of them is "Diagrid Structural Systems" (See Fig. Visual 1-2). (http://www.insaatdunyasi.com.tr/arsiv/yazi/63-diagrid-sistemler 19.11.2017)

Visual 2: Typical reinforcement scheme in architecture - Shell stress diagram. Source: http://www.ctbuh.org/TallBuildings/FeaturedTallBuildings/ArchiveJournal/O14/ tabid / 1818 / language / en-US / Default.aspx 19.11.2017

Diagrid systems are the most commonly used formal constructions in architecture and construction. This is because the traditional systems at the junctions of diagrid systems are more complex. For this reason designed diagrids and these complex structures are being made with the support of computer software that does not accept lines (Burry and Murray, 1997). After its implementation especially at the 30 St. Mary Axe in London and Headquarters building in New York., these systems have started to be popular all around the globe.As popular examples;The Guangzhou International Financial Center (China) of 437 meters, Lotte Super Tower (Seoul) of 555 meters height, Bank of China Tower (Hong Kong), Capital Gate Tower (Abu Dhabi), CCTV Headquarters (Beijing), Cybertecture), Macquarie Bank (Sydney), Technosphere (Dubai) etc. can be increased. The performance analysis of complex shaped places can be realized in such a
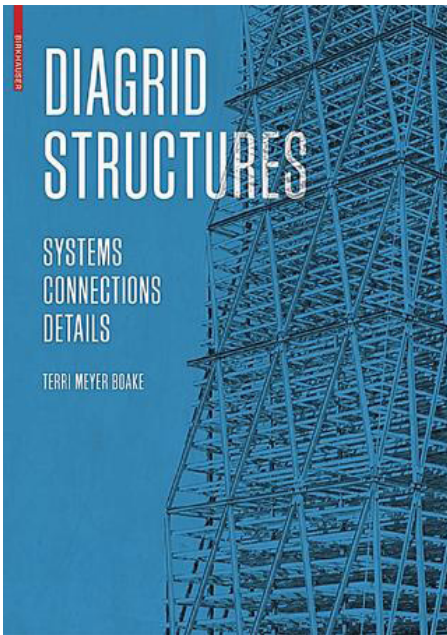
Visual 3: Cover of Diagrid Structures Book, Source: https://issuu.com/birkhauser.ch/docs/diagrid_structures. 11/19/2017

Visual 4: Cybertecture egg building combines iconic architecture, design, intelligent control systems and evolutionary engineering to create the most innovative building in the Bandra Kurla Complex in Mumbai. Source: https://in.finance.yahoo.com/photos/egg-shaped-building-coming-up-in-mumbai-1362648018-slideshow/ 19.11.2017

way in computer environment and the developments in computer graphics facilitate the use of these techniques. (Kolarevic, 2003)

Today, the widespread use of these systems is due to their aesthetic appeal as well as their structural activities. This is why these textures are used in ex-libriss and in the backgrounds of other two-dimensional designs (cf. Visual 3).

With these geometric formal images in higher constructions, the texture effect in the designs becomes the focal point of the image. At the same time, this design is considered as an analytical rigidity (cf. Visual 4).

In other words, the visual forms are supportive, protecting the subject and visual integrity without being exposed to any influence. With the words of John Berger, today's systems are no longer a necessity. The only thing is observation, the act of locating shapes and fixing their position in the vast universe. Thus, an image is a reproduced and reproduced visual (Berger, 1999: 27). It is a matter of selling images and appearances. In design, new quests and breath are in fact an endeavor to find and disappear permanently. Ex-libriss are an art that has been lost until today, meeting new encounters, welcoming you to hospitality. (cf. Visual 5-6).

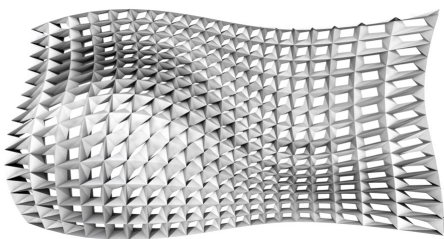Textural researches done in ex-libriss are a style that contains many
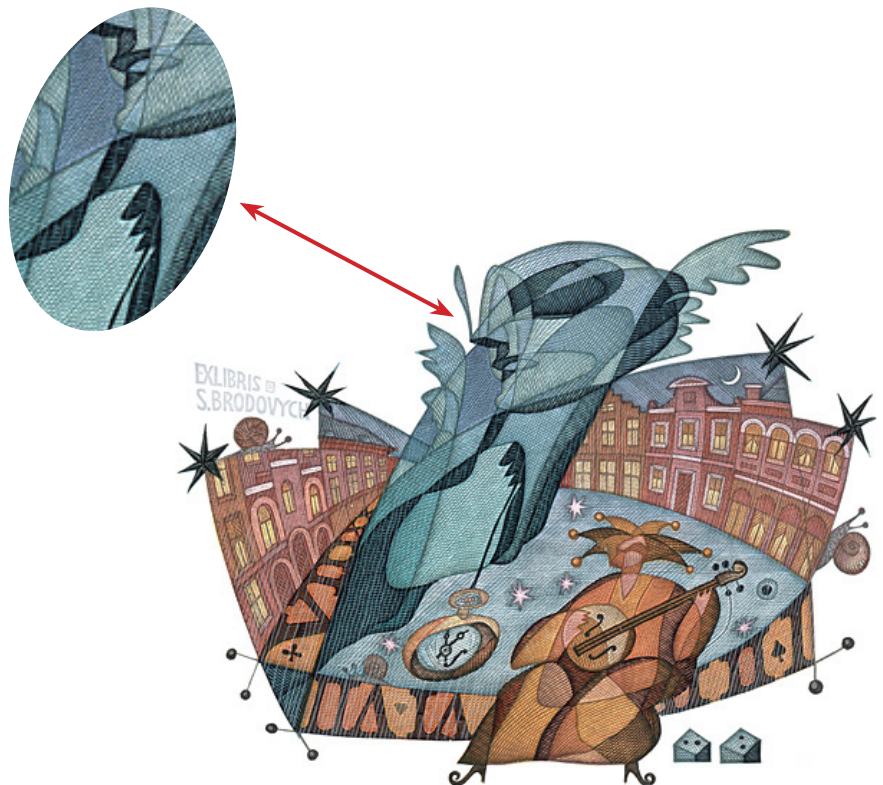
Visual 5: Detailed example of the Ex-libris Diagrid Texture System, Source: Gennady Pugachevsky, Ukraine, X6, (97x122mm) 2009 http://pugachevsky.name/gennady/collection-exlibris/2807-Melody_of_Stars_Silent.html / 19.11.2017

© 2017 **EX-LIBRIST** Issue 7 - June 2017, **Uslu, "Use Of Diagrid Structures In Ex-libris Design"**
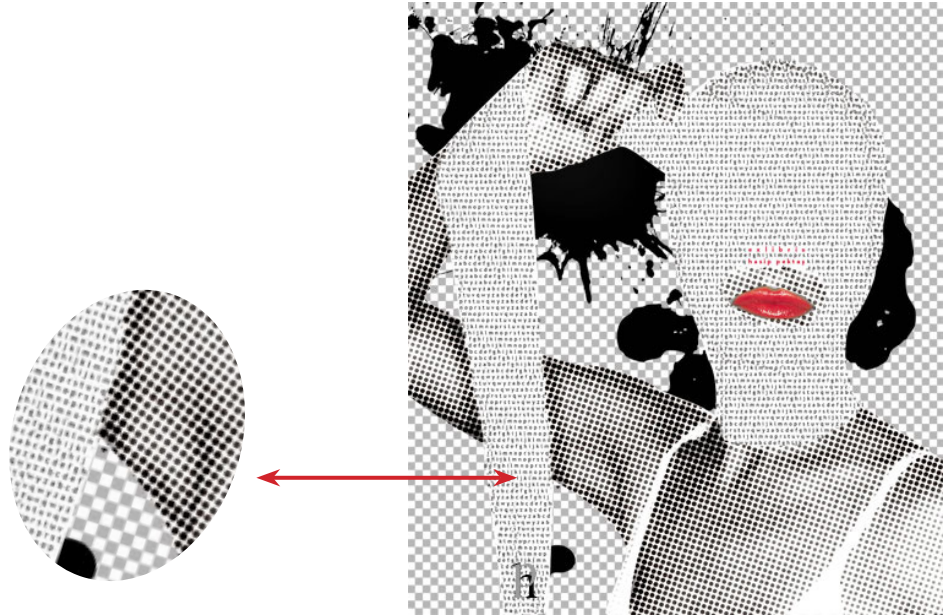
Visual 6: Ex-libris made by İhsan Çanakcı for Hasip Pektaş, Source: İhsan Çanakcı, Turkey, CGD + CRD, 2010 http://www.ihsancanakci.com/hasippektas/ 11/19/2017

Visual 7: Albert Einstein's abundant scanning ex-libris, Source: Erich Büttner, Berlin, P1 (77x84mm), 1917 http://nerdreactor.com/wp-content/uploads/2014/02/Albert-Einstein.jpg 19.11.2017

techniques and creates awareness. It is an artistic design garden that looks tiny but reflects the width of the mind universe so differently. As it is said in the Wild, the transformation of the emotions, thoughts and wishes of the creative human being into the most effective way of expressing visual material is through different experiences and design indicators. These scan studies, in the texture background, are manual views of diagrid shapes (cf. Visual 7).

Ex-libris can also be examined in the category of Fiske's tools. Representative tools use cultural and aesthetic compromises to create a text. These tools are representative and creative. Feasibility is a crucial issue in diagrid structures because the joints of diagrid structures are more complex (cf. Visual 8).

As the building form become irregular, creating better design modules and exhaust the designer and the artist. Although computer technology is used, producing complex shaped structures is a solution offering mechanism for the ex-libris artist. While making structural modules relatively regular and designing universal connections to avoid any irregularity may be an approach, deriving a regular structure from a form and adjusting this designed structure may also be an approach.

The advantages of Diagrid structure systems are also reflected in design applications. They are structured with clear, free, static, balanced, aesthetic and spacious forms. As expressed by Berger, it is the physical affirmation of formal existence that surrounds us, affects us, disappears and appears. Companionship, representing the visual, is the result of the physical

Visual 8: Architectural project Diagrid Facade System, Source: http://www.grasshopper3d.com/forum/topics/facade-inspired-by-durian 19.11.2017

EX-LIBRIST International Journal of Ex-libris / Vol.**4** / Part **7**
Uluslararası Ekslibris Dergisi / Cilt **4** / Bölüm **7**

İSTANBUL EX-LIBRIS SOCIETY İSTANBUL EKSLİBRİS DERNEĞİ

permanence of image. Cooperation of many models in the nature with the imaginary talents of the artist is the emergence of style games of a new creation. The designer will always use these experiences in the aesthetical worry and change labyrinths, and in the process of performing art itself.

Conclusion

Ex-libris is a work of art in the sense of being a graphic design product, exhibiting and making collections by printing and reproduction. Ex-libriss with aesthetic concerns have existed since the voyage of image. It continues to develop its presence in the creation and reproduction of image. It is a disciplined design concept that incorporates its technique and interaction with many different application areas. Rescuing increasingly visible forms evolves as new design insights come into play .The greatest help here is nature and the environment. New ways of life, different styles of practice in the environment have also affected other art disciplines. As Shitao said, "These are for saving the objects from chaos." Here, the designer or artist is turning to different techniques, styles and modes of production in order to visualize their ideas develop different methods, create new appearances and images. One of these is the use of diagrid structure, which is destroyed by the constraint of the production limits in the design. This is the common result of the re-tissue making professional ideas and hand combination. This is the emergence of new tissue formation as a surprisingly thought-out, designed and mathematically calculated work rather than a distorted, shifted or fragmented image. It is also an effort to create a graphic way of exploiting the cooperation of nature, environment and designers. This principled combination or unity, stylistic existence of the design work brought a new understanding and breath. That is the visual result of building dialogues of two strangers. The objects have now co-operated with these two strangers and far exceeded being witnesses. The designer has always tried and will try the differences. This stylistic awareness will take the primary role in identifying and establishing the identity of the designer. And it will make your art discipline stronger. These aesthetic concerns in ex-libris compositions will always strengthen the semantic and articulate expression of the work.

References

Berger John, 2011. *Görme Biçimleri* (Çev.Yurdanur Salman), Metis Yayınları: İstanbul
Berger John, 1999. *Görünüre Dair Küçük bir Teoriye Doğru Adımlar* (Çev. Bülent Somay), Metis Yayınları: İstanbul
Burry, M. ve Murray Z. (1997). *Computer aided architectural design using*

parametric variation and associative geometry. 15th ECAADE-Conference Proceedings, 1997, Vienna

Fıske John (1996). *İletişim Çalışmalarına Giriş* (Çev. Süleyman İrvan), Bilim Sanat Yayınları: Ankara.

Kolarevic, B. ve Malkawi, A. (2004). *Performative architecture: Beyond instrumentality.* Taylor ve Francis e-Library.

Okur, G.(2013). "İletişim Açısından Ekslibris". *Anadolu Üniversitesi Sanat ve Tasarım Dergisi*, s. 41, Eskişehir

Pektaş H. (2014). "Türkiyede Exlibris". *Journal Academic Marketing Mysticism Online* (JAMMO). Vol 8. Part 28. 426-438. Ocak-Haziran 2014

Yaban N.T. (2012), Sanat ve Görsel İletişimin Buluşma Noktası: Ekslibris, *Batman University International participated Science and Culture Symposium*, 18-20 April 2012 Batman