

REALIZACIJA KNJIŽNOG UVEZA – STILIZIRAN SREDNJOVJEKOVNI BESTIJARIJ

A BOOK BINDING REALIZATION - THE STYLIZED MEDIEVAL BESTIARY

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SAŽETAK

Čuvanje informacija kao sredstvo njezina prijenosa na naraštaje, kroz povijest, doprinijela je razvoju različitih vrsta knjižnih uveza. Svesci pisanih i/ili tiskanih listova papira, spojenih u jednu cjelinu koju nazivamo knjiga, pridonijeli su širenju informacija i edukacije općenito. Bestijarij, knjižna zbirka ilustracija legendi o fantastičnim životinjama, primjer je jednog takvog knjižnog uveza. Projektiranje takve knjige bazira se na stvaralačkom pristupu. Autor Bestijarija vrlo vješto tintom ilustrira životinje iz mašte. Ilustrirana nadnaravna bića odlično dočaravaju atmosferu trenutnih autorovih misli, ideja i raspoloženja, a široka čitateljska publika je pokazala veliki interes za ovakvu vrstu umjetničkog djela. Štoviše, cilj projekta je ilustrirane sveske listova papira preoblikovati u knjižni blok te ga zaštititi tvrdom koricom. Autor se istovremeno služi suvremenim računalnim programima ali i uobičajenim, dobro poznatim knjigoveškim materijalima i alatima.

Ključne riječi: *Bestijarij, ilustracija, knjižni uvez, ručni uvez*

ABSTRACT

Information keeping as a tool for its transfer across generations, through history, has greatly contributed to the development of different types of book binding. Volumes of handwritten and/or printed pages, combined into one whole known as a book, have contributed to the spread of information and overall education. A bestiary, a

book collection of illustrations of animals from fantasy, is an example of one such bound book. Designing such a book is based on a creative approach. The author of the Bestiary very skilfully illustrates those animals from imagination using ink. Illustrated supernatural creatures greatly portray the atmosphere of the author's mindset, ideas and mood, and a wide readership has shown a great interest in this type of artwork. Moreover, the goal of the project was to combine the volumes of illustrated pages into a book block and to then protect it with hard covers. At the same time the author makes use of modern computer programs as well as the usual, well-known book-binding materials and tools.

Keywords: *Bestiary, illustration, book binding, manual binding*

1. UVOD

1. INTRODUCTION

Books have historically adapted to societal changes and technological innovation. They have evolved continuously from the use of pictograms to today's digital formats. Moreover, the book is a key tool for the transfer of information, education, and cultural heritage. Books have a significant impact on social change and the shaping of civilisation. Their cultural significance began five thousand years ago and remains compelling through digital media. Books help preserve language, tradition, cultural and social heritage, and social norms across generations. They drive the democratisation of knowledge, art, and

culture, and promote political and social ideas in shaping modern societies. Books come in various forms and sizes, with written and/or illustrated sheets of paper always bound together into the so-called book block (codex) protected by covers. Printed, digital, and audio books have retained their importance and continue to have a global social impact.

Throughout history, humanity has continuously recorded stories and events. Creators of bestiaries during the Middle Ages documented not necessarily real-world information, and writers' texts were accompanied by rich illustrations of the fantastic creatures of that time. Archiving large quantities of individual manuscript pages was done to avoid disorder and maintain the correct order of text and illustrations. Storytellers of that era devised the idea of linking (binding) their written and illustrated sheets together at a specific place. Binding procedures vary, as different materials are used to connect individual sheets. Bookbinding involves forming the book block (connecting individual sheets) and creating the covers. A positive reading experience arises from the attractiveness and quality of the book's construction and binding. The cover protects the book block from damage and makes the book attractive. The book block ensures the readability and organisation of the content on its pages during use over time. A positive reading experience results from the functionality of the layout and the readability of typography and/or illustrations, the structuring of information, the choice of paper type, binding type (softcover, hardcover, mechanical), and form of binding (seamless, sewn, mechanical), as well as the selection of various bookbinding materials. Each bookbinding form has specific characteristics, and its application should meet users' needs.

The aim of this paper is to present the graphic, technical, and technological production of the Bestiary book, with its own name and identity. Out of love for illustration, all illustrations are handmade, as medieval authors of bestiaries once did. The artistic Bestiary book is made using a hand-binding technique, starting with folding paper into binding units—book gatherings—followed by sewing the gatherings with thread into a book block and then making multi-part

hardcovers that are hand-illustrated. The practical part concludes by connecting the book block with the hardcover. The author's intention for the Bestiary is to inspire readers to preserve the medieval historical value of this type of publication [1].

2. KRONOLOŠKI RAZVOJ KNJIGE BESTIJARIJ

2. *BESTIARY BOOK CHRONOLOGICAL DEVELOPMENT*



Slika 1 Srednjovjekovni spisi fiktivnih i stvarnih životinja

Figure 1 Medieval writings about fictional and real animals

Bestiaries are popular documents (Figure 1), serving as moral and religious texts that have evolved from medieval books of the 12th–14th centuries to contemporary interpretations [2]. Medieval bestiaries are deeply rooted in Christian mythology, where animals carry allegorical meaning. They present richly illustrated symbolic stories of dangerous real and mythical animals. Contemporary bestiaries inspire designers, with artists exploring new themes using medieval symbols and iconography. Today, contemporary bestiaries are combined with original manuscripts and modern technologies. Illustrators often reinterpret medieval motifs in new contexts, but these remain enduring symbols of human imagination's fascination with the animal world (lions, elephants, bears) and allegorical mythical creatures (unicorn, phoenix, griffin). Bestiaries are also known for their beautiful animal illustrations and symbolic stories, conveying moral or religious messages to readers. Although

their popularity declined with the advent of the Renaissance and the Enlightenment, due to the dominance of scientific research and rationalism, they have remained an important source for the study of medieval civilisation [3–9].

3. KONCEPTUALIZACIJA KNJIGE BESTIJARIJ

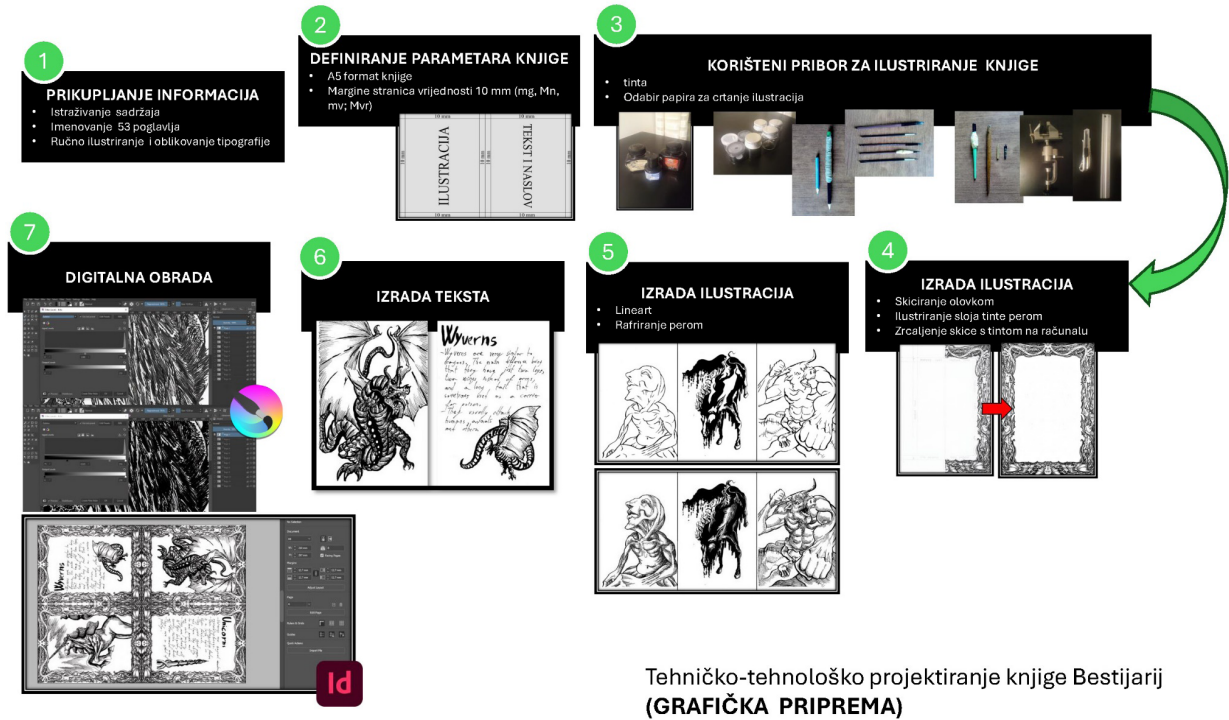
3. *BESTIARY BOOK* *CONCEPTUALIZATION*

The definition of its purpose begins with creating content and visual style, illustrating animals and mythical creatures. The designer independently determines the technical requirements of the project for illustrating animals and mythical beings. They also independently identify the necessary resources, both material and technical, for the realisation of the book project. The visual realisation of the bestiary starts with the graphic design of the book's pages, using software tools for digital drawing (Procreate, Clip Studio Paint, Illustrator, Photoshop, InDesign, Corel Draw). By prototyping the printed edition of the book, the purpose of the bestiary can only be fulfilled if its functionality is achieved through the visual and tactile interpretation of medieval stories. Therefore, the technical-technological design of the bestiary book requires an interdisciplinary approach based on creativity, technical-technological competencies, practical skills, and careful planning of activities [10]. The creation of the hand-sewn hard binding of the Bestiary book requires precision, patience, and the use of specific graphic materials (paper, cardboard, flat board, thread, gauze, cold glue, artificial leather) and tools (knife, guillotine, needles, awl, press, brushes, ruler, pencil) (Figure 2). The hand-binding of the Bestiary book is a complex process that demands thoughtfulness and precision in manual work. Only through a combination of traditional binding techniques and high-quality graphic materials can a long-lasting and aesthetically appealing bookbinding product be achieved. Moreover, each step of the handcrafting process of the Bestiary book requires patience and attention to detail so that the final product fulfils its purpose— functionality, and visual and tactile attractiveness [11–17].

3.1. TEHNIČKO-TEHNOLOŠKO PROJEKTIRANJE KNJIGE BESTIJARIJ

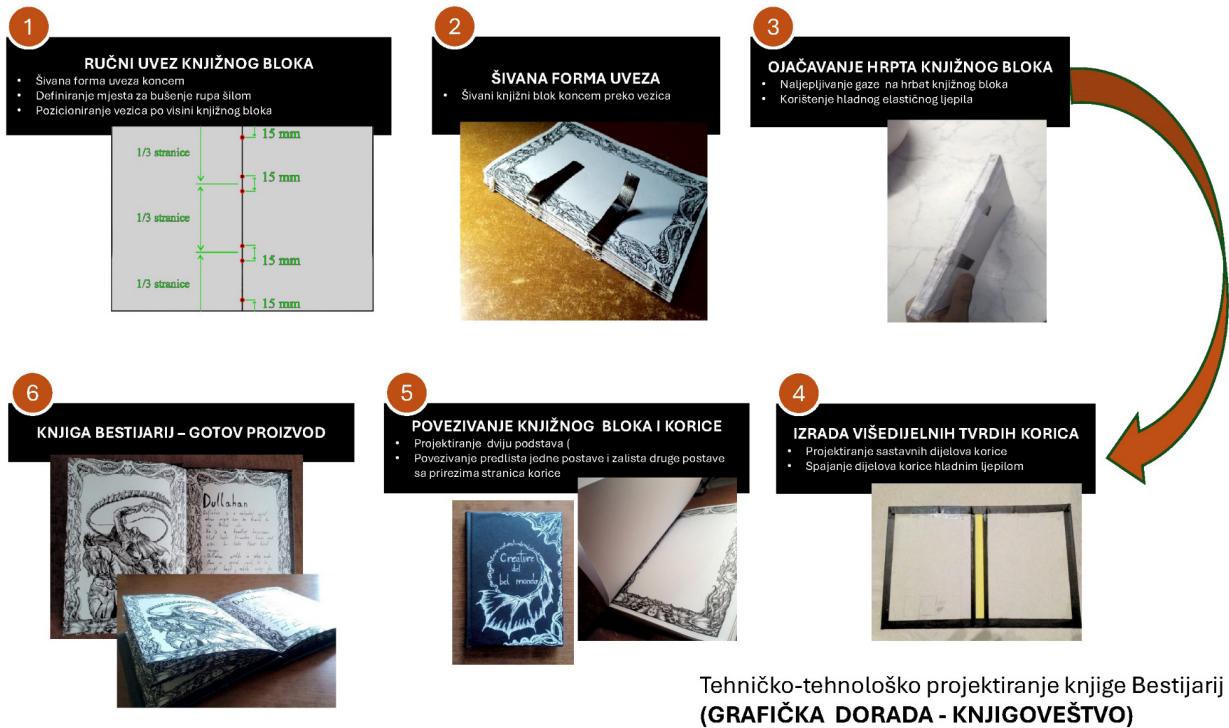
3.1. *GRAPHIC DESIGNING OF BESTIARY BOOK*

Certain parameters of the Bestiary book must be determined immediately before the creation of illustrations and text (Figure 2). Defining the number of chapters establishes the total number of pages in the book block. The extent of a quire, that is, its number within the book block, always correlates with the choice of paper weight (grammage) and type. A smaller quire extent results from a higher paper weight, and vice versa. Furthermore, the digital layout of illustrations and typography is created only after the illustrations have been sketched in pencil and ink. The layout of the total number of pages in the book block must correspond to the defined parameters of the book block and the hard covers. Content for the individual chapters should reflect mythologies and folklore from various places, deliberately avoiding film and serial characters. Each chapter in the book is in A5 format, with dimensions of 148 mm in width and 210 mm in height. Illustrations are always positioned on the left (even) pages, while typography is placed on the right (odd) pages of the book block. Considering the two-page composition, the number of thematic units listed alphabetically in the book is multiplied by two, and the total number of chapters must be optimised to achieve an appropriate spine thickness for the book block, with a total extent of 112 pages and a spine thickness of 10–12 mm. Care was also taken to ensure that the illustrations are not too similar, to avoid monotonous repetition. The designed book block, sewn with thread through the folds (spine) of the quires, reflects the character of the medieval codex. The hardbound Bestiary book was constructed using an indirect connection across two supports (Figure 3). The book sheets were printed digitally on 80 g/m² paper. Preparation of bookbinding tools and materials for the hand-binding process began with shaping two cloth tapes to serve as supports, onto which the binding was sewn with thread. Points were marked along the spine of the quires (148 mm in dimension), after which perforations were made with an awl as a prerequisite for sewing with thread over the



Slika 2 Prikaz tehničko-tehnološke realizacije knjige Bestijarij u digital graphic preparation

Figure 2 Technical and technological implementation of the book Bestiary within Digital Graphic Arts Preparation



Slika 3 Prikaz tehničko-tehnološke realizacije knjige Bestijarij u ručnom uvez

Figure 3 Presentation of the technical and technological realization of the book Bestiary in Craftbookbinding

two cloth supports. Later, these same supports provided a firmer mechanical connection between the cover boards and the pastedown of the first fly leaf and the single-folded endpaper of the second fly leaf, the so-called indirect connection in the hard binding of the book. The process continued with mechanical reinforcement of the spine of the book block by applying cotton gauze with cold, elastic PVAc glue. Thanks to the formation of a hard surface layer, it is possible to withstand both tensile and compressive forces on the spine of the book block simultaneously. For the design of the multi-part hard covers, flat, voluminous board (thickness 2.75 mm) was used. Shaping the fore-edge flaps (2x), the spine insert (1x), the template (1x), and the covering case (1x) requires knowledge of specific techniques for performing work operations, which are carried out according to strictly defined guidelines. To connect the individual parts of the hard cover, only cold elastic glue is used. The cover material should enhance the visual and tactile appeal of the entire book, so an imitation of black leather was chosen. Unfortunately, in the hand-binding of the Bestiary book, minor mistakes occurred due to insufficiently mastered practical skills during the sewing and gluing processes. Certainly, this project would be worth repeating [1].

4. ZAKLJUČAK

4. CONCLUSION

At first glance, the concept of the Bestiary may seem like an ordinary record of the flora and fauna of the Middle Ages. In reality, it depicts the beliefs of the authors of that time, reflecting the animal, plant, and human nature they aspired to. Furthermore, each depiction of a fantastic creature in the Bestiary carries a deeper meaning that is not immediately apparent, but is revealed through multiple readings. Bestiaries are not books to be read in one sitting like a novel; rather, they are works to be explored gradually, day by day. Illustrating a Bestiary is challenging, and drawing in ink is demanding, with mistakes inevitable given the volume of work. Each illustration is unique and gives a distinctive character to every chapter. The choice of paper, along with the use of ink, is crucial in the realisation of the bookbinding project. The main challenge begins with the hand-

binding, which follows the graphic preparation and printing of the book block's pages. Sewing with thread enhances the quality of the binding and is further complemented by the multi-part hard cover. Although the Bestiary belongs to the realms of literature and art, this approach stimulates the reader's imagination about fantastic characters from the past.

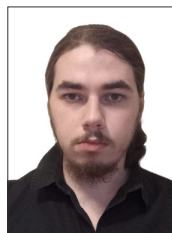
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