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Investigating the Preservation and Restoration of Holbein Carpets through Restoration Design

Abstract. One of the most important ancient arts of the Turks is the art of weaving. Under the influence of nomadic life, they created textile items that were easy to carry and helpful when needed by weaving. Examples of carpets that are in the pile weaving group from these weavings are today in museums, private collections, and homes. Carpets woven using natural raw materials experience wear and tear over time due to external factors. Regular conservation and restoration methods can prevent this wear and tear. In addition to these measures, restitution studies are thought to help complete the missing parts in the weavings and determine the pattern, motif, and color information. With the restitution studies, it is possible to see the damaged carpets in their entirety. The Holbein carpet samples that are the subject of the research have been included in the paintings of the painter Hans Holbein since the 16th century. In this research, the technical, motif, and compositional features of four Holbein carpet samples registered in the inventory of the Turkish and Islamic Arts Museum were analyzed. The missing, worn parts of the carpets and the whole were drawn digitally and restitution studies were carried out, and the images of the whole carpets were included.

Keywords: Holbein, Holbein carpets, weaving art, conservation, restoration, carpet design.

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Introduction

One of the ancient arts of the Turks is weaving. In order to meet the effects and needs of the nomadic life, they made progress in the art of weaving by weaving different items. They used the weaving knowledge that started in Central Asia during the migration, their interactions with different cultures, and their wide trade routes, introduced the art of weaving to the world and it was seen as a value in many countries. The oldest known carpet example is the Pazyryk carpet. Dated back to the 3rd century BC, the main factor in the preservation of this carpet until the date it was found is that the kurgan in which it was found was located in Altay, which has a cold climate. In order to prevent the deterioration of carpet weavings, it is necessary to pay attention to some natural events [1]. Organic textile products are subject to various physical, chemical, and biological effects and deterioration due to their use in the environment they are located in. These formations are caused by humidity and temperature rates, light intensity, gases, dust, and chemicals in the air, and biological effects such as microorganisms and insects [2]. Old carpet weavings that have survived to the present day are in museums and private collections, and over time, they are preserved and renewed through processes such as conservation and restoration, ensuring their long-term durability. While there is a definition of renewal [3] for restoration, another explanation is "...completing the missing parts of the work, object or phenomenon and making it impossible to distinguish them according to some understandings, and according to some understandings, it is the process of separating the difference in various ways such as color, material, denim, etc [4]. Conservation means protection [1] and includes definitions such as slowing down the deterioration of the object by controlling its environmental conditions [4] and extending the life of the work [5]. In addition to restoration and conservation processes, restitution studies are also a method used in cultural values. Restitution, which is frequently used especially in architectural structures, means redesign [6]. With these applications, it will be possible to reproduce the cultural value one-toone, and it will also give an idea about how the whole of a rare piece will be. In this way, more reliable information can be obtained about the extent to which the protected work has been damaged [4]. For this purpose, the Holbein carpets, which are the subject of the paintings of the painter Hans Holbein, constitute an example in the prepared study. Digital restitution drawings of four carpets registered in the inventory of the Turkish and Islamic Arts Museum today were prepared for this study by drawing digitally. The missing parts of the carpets were drawn on the computer, and the visuals of the entire carpets were prepared by adhering to the integrity of color and motif. The images of the carpets with inventory number 303 were obtained from the source named "A Thousand Years of Turkish Carpet Art", and the images of the carpets with inventory numbers 312, 417, and 341 were obtained from TİEM [22] for the clear drawings of the motifs.

Materials and methods

Data collection: The study used information about the Holbein carpets in the Museum of Turkish and Islamic Art (images, measurements, inventory numbers) and literature such as books and scientific articles. Technical analysis: Information about the technical features of the carpets, in particular the density of the knot, the type of weaving and the materials used, was analyzed. Motif analysis: The patterns, ornaments and compositional structure of the carpets were studied, and their meaning and symbolic meaning were determined. Restitution study: The damaged and worn parts of the carpets were digitally traced and restored. This method made it possible to visualize the original state of the carpets.

Conceptual Framework

It is important that a value that is considered to have cultural importance is evaluated within the legal regulations required for its protection, such as its continuity, historical significance, and original structure [4]. Scientific studies on restoration and protection in our country were included in the "Protection of Ancient Artifacts" section of the Asar-1 Atika Regulation (1869) that came into force during the Ottoman period [7]. With the establishment of the United Nations Educational, Scientific and Cultural Organization (UNESCO) on 16 November 1945, taking measures for the protection of cultural assets gained importance. The idea that old works should be included in museums emerged from the 19th century onwards. Information on carpet and rug repairs since the Ottoman period can be found in

archive documents [8]. There are laboratories in Turkey that perform conservation and restoration processes on carpets, rugs, and fabrics. In Istanbul, where there are many conservation and restoration laboratories, a modern washing pool was established in 2006 for the washing of carpets and rugs. The carpets and rugs washed in the pool were taken to this workshop for conservation [5]. In the phase where a carpet or rug is investigated to be restored or not, it is considered according to these four main items, which determine where it will be used, whether the restoration is economical, whether it is aesthetically worth the restoration, and whether it has spiritual or historical value [8]. The protection and repair stages of cultural assets, including woven products, are listed as documentation, diagnosis, application, and maintenance. In the documentation stage of weavings; the determination of raw material of warp, weft, and loop yarns, determination of the number of layers and twist direction of warp, weft, and loop yarns, determination of knot density, determination of the number of wefts thrown between knot rows, determination of knot type, determination of size of weaving, determination of rug weave, determination of general condition of weaving, determination of composition features, determination of colors used, determination of origin of weaving, determination of damage status, determination of whether it has been repaired before [9]. Carpets and flat weavings differ in terms of weaving techniques. The first dust removal, washing, and drying processes of the renewed weavings and the tools to be used in repair are similar. These similarities can be listed as follows; Wire (warp) insertion, edge repair, chain (fence) repair, fringe insertion, pot repair, motif reduction, or motif addition and pulling process. The processes that differ in terms of repair techniques in carpets and flat weaving rugs are listed as pile (knot, loop) insertion, wickerwork, abraj repair, and leveling process [10]. The four carpets belonging to the "Holbein Carpet" group, which are the subject of this research, were drawn digitally in A4 size, considering their original dimensions.

Holbein Carpets in Restitution Studies

Hans Holbein was a painter born in Italy. His father was the painter, Hans Holbein. He settled in Basel and continued his education, and in 1516 he made the side decorations for Erasmus's work "In Praise of Folly". Although his work "Dead

Christ" (1521–1522) has religious content, it is a work that has realistic portrait qualities. In his paintings, the artist reflected the source of German Expressionism and the human-centered nature observation power of the Italian Renaissance and anatomical reality in his painting of Jesus. In 1526, he decorated the organ covers in Basel Cathedral with depictions of the Virgin Mary and saints, made stained glass, and between 1528 and 1540, it is noteworthy that he used an eastern element as a decorative element in many portrait paintings of European noblemen and painted Anatolian Turkish carpets. There are several types of Anatolian carpets that the artist frequently depicts in his paintings. Holbein painted small-patterned and largepatterned Holbein Carpet Types, but he did not paint one type (the Loto Carpets group) at all [11]. Before Hans Holbein, Italian painters painted carpet examples with octagonal and diamond-shaped compositions arranged on different axes in the mid-15th century [12]. Holbein Carpets are divided into four groups: Small patterned Holbein Carpets (Type I); Lotto Carpets (Type II); Large Patterned Holbein Carpets (Type III); Western Anatolian Carpets Related to Holbein, Memlinng and Crivelli paintings (Type IV).

Type I Holbein carpet compositions consist of knotted octagons with unclear

contours, and lozenge shapes consisting of rumi and palmettes arranged alternatively on shifted axes. These small sampled (Fig. 1.) "Type I Holbein Carpets with Small Samples" and "Lotto Carpets" based on the Uşak region have made great contributions to the development of the Classical Era Uşak Carpets of the 16th and 17th centuries [13].

The Small Patterned 'Holbein' Carpet in Image 6 dates to the beginning of the 16th century and measures 178 cm x 404 cm. Symmetrical knots were used in the weaving with a wool warp and weft. This carpet was exhibited in Budapest (1914), Rome (2005), Berlin (2006), Sibiu (2007), and Istanbul (2007). It is one of the oldest carpets preserved in Transylvania. This carpet example is one of the rare examples that has not



Figure 1 - Small Patterned 'Holbein' Carpet, Western Anatolia, early 16th century, 178cmx404cm [25]

undergone deformation [14]. Type III Holbein carpets include examples of two or four large squares arranged in rows. The roots of these carpets, which developed in the 15th century, are based on Anatolian animal carpets and geometric patterned carpets used in 14th-century paintings (Fig. 2) [12].

VI. Holbein carpet compositions were formed by using the features of Type III Holbein carpets with some changes. Type VI Holbein carpets have two squares and compositions with geometric motifs between these squares. It is thought that the dominant influence in type IV, which is distinguished from types I, II, and III shows an infinite axis and adopts a pattern scheme that takes the square as its center and multiplies around this square, especially the Mamluk Carpets.



Figure 2 - Eastern Anatolian Carpet with Geometric Motifs (Type III Holbein) [23]

However, when their developments were examined later, it was proven that Holbein types III and IV were the Bergama Carpets [15]. The defining feature of Type VI Holbein carpets is the presence of squares with large octagons inside and star motifs on the upper and lower parts. This composition has been seen as a new formation in Turkish carpet art (Fig. 3) [12].

Restitution is defined as "a study that includes written, drawn, and visual documents using historical research and comparative study techniques, which periodizes the interventions that an immovable cultural asset has undergone over time and is carried out to



Figure 3 - St. Giles' Mass [26]

determine its condition when it was first built or at a certain period" [16]. Using axonometric drawings or models to depict plans, sections, and exterior views of a structure or settlement is called a "restitution" [17].

Findings 1. Carpet (Holbein Type-Small Medallion)

The sample piece from the Type I Holbein Group carpets in Image 11 is thought to be large. There are four borders on the carpet, two thin and two thick. The first and fourth borders, with a red background and yellow palettes arranged side by side, are the same. In the second border, where the red background is used, shapes like Kufic scripts and four-leaf flower patterns are used in the weaving, repeated one after another. The background of the main border is navy blue and consists of hooked diamond patterns with eight-leaf flowers in the middle. The carpet's pattern scheme is in the form of a small lozenge pattern that opens from one to the other, with sliced contours, and goes on forever. In one row, an octagon with knotted contours and an eight-pointed star (Turkmen rose) in the center fills it. In the second row, the center is filled with cross-like motifs, defined by nested lozenges. The octagonal and crosslike filled lozenges continue alternately (Fig. 4) [18].

In the design of this sample carpet, the number of knots of which is unknown, the middle area is decorated with motifs symbolizing life and fertility (Fig. 5) [19].

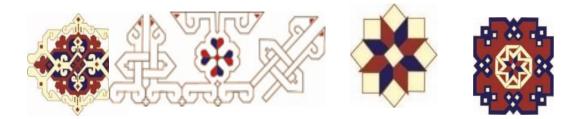


Figure 4 - Type I Holbein Carpet motifs, Octagonal interlaced star, rumi and palmette (hands on hips) motifs (Puran, 2023)

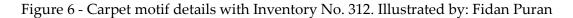


Figure 5 - Completed version and restitution of the carpet sample. Illustrated by: Fidan Puran

2. CARPET (Holbein Type-Octagonal Medallion)

The carpet sample in Image 14 is an example of a large, patterned Holbeintype carpet with differently arranged borders. The inner border of the three-bordered carpet is formed by the arrangement of red, green, and blue comb motifs on a green background, side by side. The outer border is separated from the main border by a white dotted mother-of-pearl border; It is a series of red and blue interconnected "S" motifs on a yellow background. The brown-grounded main border is surrounded by successive hexagonal cartouches filled with geometric motifs. The middle one has a green background; in the center of each of them is an octagon whose contours are enriched with ram's horns. The interior of the octagons, whose centers are determined by eight-pointed stars, is filled with nested octagons; the colored comb series in the outermost row provides integrity with the inner border. While the medallion in the upper section is depicted in dark colors, the lower section is green. On each side of the octagons, there is a small octagon, and on it; a symbolic shape in the form of a quadrangle with hooked contours and ending with a ram's horn (Fig. 6 and Fig. 7) [18].





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Figure 7 - Completed and restitution of the carpet sample. Illustrated by: Fidan Puran

3. CARPET (Holbein Type-Animal Figure)

The carpet in image 17 with inventory number 341, located in the Turkish and Islamic Arts Museum collection from the Konya Alaeddin Keykubat Tomb, is notable for its animal-style design. There are ten "niches" in different colors on the short edges of the carpet. The border on the two short edges of the carpet is one of the borders encountered in Mamluk embroidered pillows, the beginnings of which date back to the 14th century. The pattern scheme of the carpet shows the composition of the large octagonal medallions arranged on top of each other of the Bergama carpets and the characteristics of the Holbein III carpets. In this carpet composition, which is an extension of the 15th-century animal carpet tradition, the square frames around the octagons in the 16th-century Holbein (Bergama) carpets have been eliminated, in contrast, the inner octagons have been divided and stylized animal figures have been placed in the corner pieces of the sections (Fig. 8) [18].



Figure 8 - Carpet motif details with Inventory Number 341. Illustrated by: Fidan Puran

Dragon motifs were placed in four corners on the ground, transforming the carpet composition into a corner-and-center form. The gaps formed in the corners were

filled with opposing ram horns that carry the meaning of abundance. Various Asian nations have given different names to the dragon. This creature, which the Turks call «evren», is called «tannin» by the Arabs, «lung» by the Chinese, and «ejderha» by the «Mongols and Iranians» [20]. The dragon figure is seen as a symbol of health and happiness in the ancient Turks. This fairy tale animal has found a wide range of applications for the elements of the sky, earth, and water. It was accepted as a symbol of abundance, prosperity, power, and strength by the Turks, especially in the early periods, and when this legendary creature encountered the cultures of the Near East, its meanings weakened, and it became more of a symbol of evil. However, the dragon, which is a symbol of empire in Chinese mythology and is sometimes associated with the legends of the elixir of life, has also influenced the Turks in this respect. In Turkish mythology, water symbolizes abundance and rebirth. Patterns prepared by palace painters were woven in the workshops of the Safavid Palace in the 16th-17th centuries (Fig. 9) [21].





Figure 9 - Completed and restitution of the carpet sample Illustrated by: Fidan Puran

4. CARPET (Holbein Type-Large Medallion)

The Holbein-type carpets, which are believed to have been woven in the Bergama region and have been the subject of paintings by European artists since the 14th century, were exported to many European markets. The floral pattern between the geometric interlaces braided around the eight-pointed star in the center of the octagons is seen as a difference that distinguishes the carpet from other Holbein-type examples (Fig. 10 and (Fig. 11) [18].

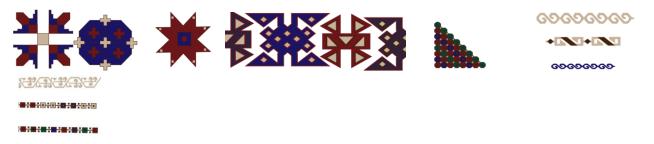


Figure 10 - Carpet motif details with Inventory Number 417. Illustrated by: Fidan Puran



Figure 11- Completed and restitutioned version of a 16th century Holbein carpet sample Illustrated by: Fidan Puran

Discussion

The article discusses the importance of carpet restoration. The authors note that this process helps to preserve cultural heritage and increases its value. However, the discussion section does not provide a comprehensive analysis of the motifs, composition, and symbolism of the carpets. For example, the meaning of animals, flowers, and geometric patterns on the carpets is not discussed in depth. A deeper analysis of these issues would have increased the scientific value of the study.

Conclusion

The restoration and conservation stages of carpet weavings in the pile weaving group, which are worn out by human and natural conditions, are explained with items. The restitution drawings of four carpet weavings, which are the subject of the works of European painters in the Turkish and Islamic Arts Museum, and which are frequently included in the Holbein carpet group, were drawn digitally and their missing parts were completed. The missing motifs of the carpet samples were completed and motif analyses were made. Thus, the deformed carpet samples were completed digitally, and colored, and an attempt was made to provide original visual integrity. It is important to protect these rare works that are of historical and visual value, shed light on our weaving history, and are known worldwide. To continue their sustainability, it is thought that these textile products should be supported with conservation and restoration, the restitution processes should be completed, and they will contribute to the weaving of colors and motifs within the same composition today. In addition, the physical and visual one-to-one transfer of these values to the next generations should be ensured with the whole of the protection and renewal processes carried out for these values. With the restitution work carried out, it has been made possible for the carpet samples subject to this study to visually recover the traces of fatigue that have been given over the years. In this way, it is thought that viewers and readers will have the chance to return to the moment when the carpets were first woven, to perceive their motifs, colors, and composition order more clearly, and to witness the survival of these works without losing them.

References

1. Sumeyye, Zehra Sarıhan (2018), Analysis of the Kirkitli Weavings Requiring Restoration in the Carpet Museum of the General Directorate of Foundations of the Republic of Turkey (Istanbul) in Terms of Motif and Design, Master's Thesis, Fatih Sultan Mehmet Vakif University: Istanbul, Turkey.

2. Ayşe Uygur (1999), Conditions Affecting the Preservation of Historical Textile Products in Museums and Precautions to be Taken, 1st National Colloquium on Conservation and Restoration of Portable Cultural Assets, 6-7 May 1999, Ankara University Printing House-2000, Ankara, Turkey.

3. Restoration, https://sozluk.gov.tr/ Access Date: 31.10.2024

4. Ayşegül Koyuncu Okca (2014), *Conservation and Repair Principles in Traditional Weavings*, Master Thesis, Pamukkale University: Denizli, Turkey.

5. Z. Şahin (2023), *Defects in Handwoven Textiles, Restoration Techniques and Tools Used in Restoration*, International Journal of Social and Humanities Sciences Research (JSHSR), 10(29 October 100th Year Special Issue), pp. 17–25 <u>https://doi.org/10.5281/zenodo.10055705</u>

6. Restitution, https://sozluk.gov.tr/ Access Date: 31.10.2024.

7. Derya Demir Doğan (2015), *The Role of Restoration and Conservation Laboratories in Conservation Policies*, Master's Thesis, Istanbul University, Istanbul, Turkey.

8. Aytaç, Ahmet (2018), On a Sample Carpet Restoration/Conservation Application in Akşehir Museums. ZfWT(Zeitschrift für die Welt) Vol 10, No. 2, pp. 83-98.

9. Gonca Karavar (2017), The Importance of Documentation and the Role of the Designer in the Conservation Practices of Carpets and Flat Weavings. Yedi: Art, Design and Science Journal, Issue 17, pp. 103-109.

10. Ayhan, Tuba (2018), *Repair, Technique, and Application Examples of Carpet and Flat Weaving in Aksaray Sultanhani*, Master's Thesis, Akdeniz University, Antalya, Turkey.

11. Özge Sıla Bulut (2018), Hans Holbein, Master's Thesis, Istanbul: Okan University.

12. Aslanapa, Oktay (1987), A Thousand Years of Turkish Carpet Art, Eren Publishing: Istanbul, Turkey.

13. Nurcan Perdahçı (2011), *Uşak Carpets in 16th -18th Century European Painting Art*, Trakya University Journal of Social Sciences, Volume 13 Issue 1 pp. 275-291.

14. <u>https://hali.com/news/transylvanias-carpet-treasures-come-to-gdansk-poland/</u>) Erişim Tarihi: 12.12.2024.

15. https://okuryazarim.com/holbein-halilari/ Access Date: 13.02.2024.

16.https://teftiş.ktb.gov.tr/TR-264597-tek-yapi-olceginde-rolove-restitusyove-restorasyon-projeler-teknik-sartnamsi.html Access Date: 27.11.2024.

17. Bahadır Öztürk (2011), Design Features and Restitution Studies of Anatolian Seljuk Period Carpets in Turkish and Islamic Arts Museum, Proficiency in Arts, Dokuz Eylül University, İzmir, Turkey.

18. Seracettin Şahin (2017), 15th-17th Century Ottoman Carpets from the Turkish and Islamic Arts Museum Collection. Republic of Turkey Ministry of Culture-Turkish Islamic Arts Mezesi Publications. <u>https://ihib.org.tr/yayinlar/tiem/</u>

19. Saliha Güllü and Ozan Çatır (2017), A Qualitative Research on the Development, Characteristics and Tourism Effects of Usak Carpet Weaving Art, *Social Sciences Studies Journeal*, Vol: 3, Issue: 10, pp. 1285-1302.

20. Hülya Kaynar ve Emine Tonus (2019), Analysis and Restitution Studies of Some Weaving Samples Found in Kuluncak Village of Divriği, *Kalemişi*, Vol: 7, Issue 15, <u>https://www.kalemisidergisi.com/makale/pdf/1577730368.pdf</u>

21. Öznur Aydın (2013), Dragon Motif in Chinese and Turkish Embroidery, *Akdeniz Art*, Turkey, Vol: 6, Issue: 12.

22. TIEM (Turkish and Islamic Art Museum). Access date: 04.03.2024.

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Гольбейн кілемдерін сақтау және қалпына келтірудің реставрациялық дизайн әдістері

Аңдатпа. Түріктердің көне өнерінің ең маңыздыларының бірі – тоқу өнері. Көшпелі өмірдің әсерінен олар тоқыма бұйымдарын жасап, тоқуға оңай, қажет болған жағдайда көмекке келеді. Осы тоқымалардан тоқыма тоқу тобына жататын кілем үлгілері бүгінде мұражайларда, жеке коллекцияларда және үйлерде бар. Табиғи шикізатпен тоқылған кілемдер сыртқы факторлардың әсерінен уақыт өте тозып, тозып кетеді. Тұрақты консервациялау және қалпына келтіру әдістері бұл тозудың алдын алады. Осы шаралардан басқа, қалпына келтіру зерттеулері тоқымадағы жетіспейтін бөліктерді толықтыруға және үлгіні, мотивті және түс туралы ақпаратты анықтауға көмектеседі деп саналады. Реституциялық зерттеулер арқылы бүлінген кілемдерді толығымен көруге болады. Зерттеу нысаны болып табылатын Гольбейн кілем үлгілері 16 ғасырдан бастап суретші Ганс Холбейннің картиналарына енгізілген. Бұл зерттеуде Түрік және Ислам өнері мұражайының тізімдемесінде тіркелген төрт Гольбейн кілем үлгісінің техникалық, мотив және композициялық ерекшеліктері талданды. Кілемдердің жетіспейтін, тозған бөліктері және түгелдігі цифрлық түрде сызылып, қалпына келтіру зерттеулері жүргізіліп, тұтас кілемдердің суреттері енгізілді.

Түйін сөздер: Гольбейн, Гольбейн кілемдері, тоқу өнері, консервация, реставрация, кілем дизайны.

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Исследование сохранения и реставрации ковров Гольбейна с помощью реставрационного дизайна

Аннотация. Одним из важнейших древних искусств турок является ткачество. Благодаря своему кочевому образу жизни они могли легко создавать и ткать текстильные изделия, что пригодилось им при необходимости. Ковры этой ткацкой группы, которые относятся к ткацкой группе, сейчас находятся в музеях, частных коллекциях и домах. Ковры, сотканные из натурального сырья, со временем изнашиваются и портятся из-за внешних факторов. Регулярные методы консервации и реставрации предотвращают это ухудшение. В дополнение к этим мерам считается, что реставрационные исследования помогают восполнить недостающие части ткачества и раскрыть информацию об узоре, мотиве и цвете. Поврежденные ковры можно увидеть целиком с помощью реституционных исследований. Узоры ковров Гольбейна, которые являются предметом исследования, включены в картины художника Ганса Гольбейна XVI века. В этом исследовании были проанализированы технические, мотивные и композиционные особенности четырех узоров ковров Гольбейна, зарегистрированных в каталоге Музея турецкого и исламского искусства. Отсутствующие, изношенные части и весь ковер были прорисованы в цифровом виде, проведены реставрационные исследования, и были включены изображения всего ковра.

Ключевые слова: Гольбейн, ковры Гольбейна, ткацкое искусство, сохранение, реставрация, дизайн ковров.

Использованная литература

1. Сумейе, Зехра Сарыхан (2018), Анализ ткацких изделий Киркитли, требующих реставрации в Музее ковров Главного управления фондов Турецкой Республики (Стамбул) с точки зрения мотива и дизайна, магистерская диссертация, Университет Фатиха Султана Мехмета Вакифа, Стамбул, Турция.

2. Айше, Уйгур (1999), Условия, влияющие на сохранение истот-ких текстильных изделий в музеях, и меры предосторожности, которые необходимо принять, 1-й наци-

ный коллоквиум по сохранению и реставрации переносных культурных ценностей, 6-7 мая 1999, Анкара, Типография Университета Анкары - 2000

3. Реставрация, https://sozluk.gov.tr/ Дата доступа: 31.10.2023 г.

4. Айшегюль, Коюнджу Окджа (2014), Принципы сохранения и ремонта в традном ткачестве, магис. диссертация, Университет Памуккале, Денизли, Турция.

5. З. Шахин, (2023), Дефекты в ручном текстиле, методы рест-ии и инструменты, используемые при реставрации, Международный журнал исследований социальных и гуманитарных наук (JSHSR), 10 (С. Вып. 29 октября 100-го года), pp. 17–25. https://doi.org/10.5281/zenodo.10055705.

6. Реституция, https://sozluk.gov.tr/ Дата доступа: 31.10.2023.

7. Дерья, Демир Доган (2015), Роль лабораторий реставрации и консервации в политике консервации, магистерская диссертация, Стамбульский университет, Стамбул: Турция.

8. Айтач, Ахмет (2018), О примере применения реставрации/консервации ковров в музеях Акшехира. ZfWT (Zeitschrift für die Welt) Том 10, № 2, pp. 83-98.

9. Гонджа, Каравар (2017), Важность докум-ии и роль дизайнера в практике конии ковров и пл. ткацких изделий. Журнал искус-ва, дизайна и науки, Вы. 17, pp. 103-109.

10. Айхан, Туба (2018), Ремонт, техника и примеры применения ковров и плоского ткачества в Аксарае Султанханы, магистерская диссертация, Университет Акдениз, Анталья, Турция.

11. Озге, Сила Булут (2018), Ганс Гольбейн, магис. дисс., Универ. Окан, Стамбул, Турция.

12. Асланапа, Октай (1987), 1000 турецкого коврового искус-ва, изд. Егеп, Стамбул. Турция.

13. Нуркан, Пердахчи (2011), Ковры Ушак в искусстве европейской живописи XVI-XVIII в., Журнал социальных наук Университета Тракии, Т. 13, Вып. 1, pp. 275-291.

14.https://hali.com/news/transylvanias-carpet-treasures-come-to-gdansk-poland/ Эришим Тарихи: 12.12.2024.

15. https://okuryazarim.com/holbein-halilari/ Дата доступа: 13.02.2024.

16.https://teftiş.ktb.gov.tr/TR-264597-tek-yapi-olceginde-rolove-restitusyove-restorasyon-projeler-teknik-sartnamsi.html Дата доступа: 27.11.2024.

17. Бахадыр, Озтюрк (2011), Особенности дизайна и исследования реституции ковров периода Анатолийских сельджуков в Музее турецкого и исламского искусства, Профичи в искусстве, Университет Докуз Эйлюль, Измир, Турция.

18. Серачеттин, Шахин (2017), Османские ковры 15-17 веков из коллекции Музея турецкого и исламского искусства. Минкультуры Турецкой Республики - Издательство турецкого исламского искусства Mezesi Publications. https://ihib.org.tr/yayinlar/tiem/.

19. Салиха Гюллю и Озан Чатыр (2017), Качественное исследование развития, характеристик и туристического воздействия искусства ковроткачества Ушака, Журнал социальных наук, Т. 3, Вып. 10, рр. 1285-1302.

20. Хуля Кайнар ве Эмине Тонус (2019), Анализ и исследования реституции некоторых образцов ткачества, найденных в деревне Кулунчак Дивриги, Калемиши, Т. 7, Вып. 15, https://www.kalemisidergisi.com/makale/pdf/1577730368.pdf.

21. Ознур, Айдын (2013), Мотив дракона в китайской и турецкой вышивке, Akdeniz Art, Турция, Т. 6, Вып. 12.

22. ТІЕМ (Музей турецкого и исламского искусства). Дата доступа: 04.03.2024.

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