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Velvet and Patronage: The Origin and Historical Background of Ottoman and Italian Velvets

Dr. Sumiyo Okumura

Velvets are one of the most luxurious textile materials and were frequently used in furnishings and costumes in the Middle East, Europe and Asia in the fifteenth to sixteenth centuries. Owing to many valuable studies on Ottoman and Italian velvets as well as Chinese and Byzantine velvets, we have learned the techniques and designs of velvet weaves, and how they were consumed. However, it is not well-known where and when velvets were started to be woven. The study will shed light on this question and focus on the origin, the historical background and development of velvet weaving, examining historical sources together with material evidence.

1. The terms of Velvet and Velvet Weaving

Velvet is a compound weave and there are two types of velvet: weft-looped pile velvets and warp-looped pile velvets. Weft-looped pile velvet, mainly made of linen or silk, was woven in the Mediterranean, especially Egypt in the third to eighth centuries. On the other hand, warp-looped pile velvets were mainly made of silk and can be produced on the drawloom only with the use of specialized equipment operated by highly skilled artisans. The process of warp pile velvets includes using a secondary or supplementary warp to produce a pile on a plain weave ground cloth. Pile length is determined by inserting rods in the loops. The loops can be cut to make cut velvet. Velvet could be woven where large quantities of silk were accessible. It is known that sericulture was transferred to Byzantium from the most southerly region of the east Caspian Sea coast in the sixth century. In order to trace the origin of velvet weaving, we will first examine velvet production in China, where silk was first produced. Second, we look where and when velvets were produced in the Middle East, Italy and Anatolia under the Byzantines and the Ottomans, following the way silk spread.

2. Velvet Production in China

We will not repeat the history of silk in the limited space of this paper, suffice to say that the Silk Road and its relevant factors were deeply associated with the formation of velvet weaving. It is known that the earliest Chinese "uncut" warp-looped velvet (of compound weave structure) is dated to the second century BCE. In Chinese archives, the term "velvet" includes the words "絨" or "絲絨," means general pile weavings. Velvet weaving (rong: 絨) produced in China was first reported in the West in 1592, but it is supposed to have appeared much earlier in China. 絨 (rong) is a word which variously refers to fine animal fur, new shoots or grass, and silk floss for embroidery or long-haired fabrics. Yoshida researched Chinese archives and asserted that a type

¹ Dieter Kuhn, ed., *Chinese Silks* (New Haven and London: Yale University and Foreign Languages Press, 2012), 526.

² Masako Yoshida, "中国におけるベルベットの形成 (Formation of Velvet in China)," *Hata*, vol. 5 (1998), 36.

³ Harald B. Burnham, *Chinese Velvets, A Technical Study* (Toronto: the University of Toronto Press, 1959), 9; Amelia Peck, ed. *Interwoven Globe, The Worldwide Textile Trade, 1500-1800* (New York: Themes & Hudson, 2013), 179.

⁴ Burnham, ibid.; James C. Y. Watt and Anne E. Wardwell, When Silk Was Gold, Central Asian and Chinese Textiles

of velvet was already known in the Yuan period (1271–1368). From her study, the term for pile weaving "絨" (rong) started to be used in the Ming period (1368–1644). This word was actually derived from the word "絨背錦" (rong beijin), which was referred to as "pile fabrics" in the South Song period (1127-1279). Unfortunately there is no velvet material evidence left from the Yuan period, but there is a description about "cut" velvet (jianrong) in the History of the Yuan Dynasty (Yuanshi). Yoshida says that the words "怯錦里" (qiemianli / qiejinli) and "言內克実" (nekeshi), written in Yuanshi, are most probably "velvety" textiles; she suggests that these words must be foreign words, which were re-written into Chinese notation, because Nekeshi is a cloth woven with gold threads and piles.

Under the Mongol period in the second half of the thirteenth century, political stability brought prosperity in Central Asia; and worldwide global development can be seen in terms of economy and culture. Craftsmen, who lived in the cities in northern China and eastern Iran, which had been captured by the Mongols, were resettled in distant cities of Mongolia and Central Asia, particularly Khorasan. Weavers brought their weaving techniques and decorative repertories with them from their homelands. The number of luxury goods, including high quality textiles, were produced by those craftsmen in imperial workshops in various local cities in the Middle East, and sent as diplomatic gifts or traded by Asian and European merchants. We learn from historical sources that many European goods were brought to China, while Chinese goods were sent to South Asia, Egypt and Europe. Velvety textiles were among these, brought to China as diplomatic gifts for the court or as luxury product by merchants from the Middle East and India via the Silk Road. Chinese craftsmen, who already applied sophisticated weaving techniques and skills, copied these beautiful and luxurious velvety fabrics and began weaving their own velvets for their rulers in the fourteenth to fifteenth centuries. Velvets were very popular among the wealthy Ming elites¹⁰ and exported to many places in Southeast Asia. Ibn Battuta, who visited Java in Sumatra in 1345-1346, mentioned velvets when he was received by the sultan Melik Zahir at his court: "... the building was furnished with soft and napped cotton velvet named "muhmalât." This is an important source to indicate that there was velvet weaving made of cotton. Most probably, this was a kind of "mukhmal" and implies weft-looped velvety textile, made of cotton. Chinese velvet production for the European market had matured by the second half of the sixteenth century. 12

3. Velvet Production in the Middle East

According to historical sources and scholarly works conducted up to today, beautiful and high-quality textiles, especially compound twills, had been woven in the Middle East since the Sasanian period (224–651).¹³ We need to remark that patterned shuttle-weaving developed in

(New York: The Metropolitan Museum of Art, 1997), 138.

⁵ Yoshida, "ベルベットの形成," 39.

⁶ Ibid., 40.

⁷ When Silk was Gold, 138.

⁸ Yoshida, ibid., 40.

⁹ 中西交通通史料前編第一冊,608-609.

¹⁰ Khun, Chinese silks, 401-402.

¹¹ A. Sait Aykut, ed. and trans., İbn Battûta Seyahatnâmesi, II (Istanbul: Yapı Kredi Yayınları, 2004), 908.

¹² See: Kuhn, *Chinese Silks*, 399-402 and 456-460.

¹³ Hans E. Wulff, The Traditional Crafts of Persia, 174. Patricia Baker, Islamic Textiles (London: British Museum

western Persia after 1,000 BCE in the form of double weft weave. ¹⁴ After the first century CE, a different type of weaving, the "warp-patterned" compound cloth, appeared and developed in China. This weaving spread to the Middle East via the Silk Road. Weavers adapted this warp-patterned weaving on their looms, but continued the weft-pattern weaving too, and combined them according to pattern and design. ¹⁵ It is known that this method and technique passed on to Byzantium, Sicily, Italy, Spain and northern Europe, along with the drawloom. Weaving techniques and patterns were inherited as traditions from weavers to weavers, even though the times and reigns changed.

In Arabic historical sources, the term of velvets are described as "mukhmal أَخُهُ" (a garment, or a المجابية المعناقية المعن

One could notice that "Dabiki of velvet pile (*mukhmal*)" are frequently mentioned in various historical sources. For example, Yakubi (278 H/891 AD) said that Tinnis was an ancient city in which valuable garments of Dabiki and linen (kasab) as well as stuffs of velvety texture (*mukhmal*) are made.²⁴ Velvet (*mukhammal*) and linen voile (dabiqi) were counted in list of gifts which were sent from Fatimid sultan al-Zāhir li-Iʿzāz Dīn Allāh to the Zirid ruler of North Aftica, Al-Mu"izz b. Badis in the year 422 H./ 1031 CE: "... its splendid curtains were of velvet (*mukhammal*) and linen voile (dabiqi)".²⁵

Press, 1995), 24.

¹⁴ Wulff, ibid., 173.

¹⁵ Ibid

¹⁶ Edward William Lane, *Arabic-English Lexicon*, vol. I, part 2 (London: Williams and Norgate 1863-93), 813; N. A. Doniach ed., *The Oxford English-Arabic Dictionary of Current Usage* (Oxford: the Clarendon Press, 1972), 1331.

Edward William Lane, *Arabic-English Lexicon*, vol. I, part 8 (London: Williams and Norgate 1863-93), 2991; Doniach, ibid.

¹⁸ A. de Biberstein Kazimirski, *Dictionnaire Arabe-français*, vol. 2 (Paris, 1860), 773.

¹⁹ R. B. Serjeant, Islamic Textiles: Meterial for a History up to the Mongol Conquest (Beirut, 1972), 14.

²⁰ Ghadah al-Hijjawi al-Qaddumi. trans. *Book of Gifts and Rarities* (Cambridge: Harvard University Press, 1996), 207.

²¹ Ibid., 99-101.

²² Ketubba, also spelled ketubah or kethubah, is a formal Jewish marriage contract written in Aramaic and guaranteeing a bride certain future rights before her marriage.

²³ The Taylor Schooler Council
The Taylor-Schechter Cairo Genizah Collection at Cambridge University Library: https://cudl.lib.cam.ac.uk/view/MS-TS-NS-J-00283/1.

²⁴ Serjeant, *Islamic Textiles*, 140.

²⁵ Ghadah al-Hijjawi al-Qaddumi, *Book of Gifts and Rarities*, 105.

At the end of the tenth century under the Fatimid period (909–1171), linen, cotton and silk were woven in variety of locations in Egypt. Tinnis, Damietta, and Alexandria were the main ports of entry to Egypt. All the geographers mention that the European ships came to Damietta to trade with Egypt. Alexandria was home to an imperial workshop for textile production after the fifth century, and became a trading center from that time onwards. Merchants came to Alexandria from Europe and the Middle East and brought spices and weaving textiles back to their countries. Tinnis and Damietta, two islands between the salt and the sweet water, were not only ports but also important weaving centers. Various kinds of precious linen garments and linen stuffs, made at workshops there became sought after around the world. Alexandria was home to an imperial workshops there became sought after around the world.

Cut linen or wool textiles so-called "Coptic textiles" were woven in Egypt, especially in the Dabiki region. Dabiki (Dabiqi or Dabka) was an island near Tinnis, which had a port for ships coming from Syria and the Maghreb. Coptic textiles are thought to have been produced by Copts (Christian Egyptians) and other weavers throughout the Byzantine Empire. Coptic textiles were plain weave with the "S-twist" warp and loop-pile, in which the main or supplementary weft has been pulled up to form loops. After the Arabic conquest, the Copts continued to produce the same types of textiles. The Arabs placed the Copts under harsher regulations which denied the Copts certain privileges and forced them to wear yellow or orange-colored clothing to distinguish them. Despite the hardship, business evidently flourished by the eleventh century. There were 50,000 weavers in Tinnis alone.

The tapestry loom, used since pre-Islamic time for weaving wool, was adapted to weaving silk with tiraz inscriptions in the Fatimid and the Ayyubid periods. To weave silk velvets, the pile warp is much longer than the primary warp, and an extra warp beam is necessary. The drawloom was introduced into Egypt in the middle of the thirteenth century by weavers fleeing the Mongol advance from Iraq and Iran, or even Spain, where the technology already existed.³¹ However. there was no sericulture in Egypt, which predominantly produced linen and imported silk from the East. Considered from various sources, the Arabic word "mukhmal" in the historical contexts means most probably "weft-looped / cut linen velvety cloths." As written in Hikayat abi 'l-Kasim, it is mentioned that "Dabiki of a velvety texture (*mukhmal*)" is light and embroidered with a tiraz border of Egyptian manufacture, with two ornamented borders (,alam) and two bands (zunnar) and two patterns of fine thread (dakik al-silk) of perfect length and lovely width short of pile).³² In addition, there is a description that some of the Dabiki textiles had gold threads.³³ In those times, high skills and techniques to adapt gold threads to silk velvets did not exist. The book Hudud al-'Alam tells that velvety textiles were woven in several cities in India. 34 Ibn Khuradadbih says "From India were derived the garments made of grass (hashish) and cotton garments with a velvety pile (*mukhmal*). From this sentence, we understand velvety piles were

²⁶ Ibid., 142.

²⁷ Ibid., 147.

²⁸ Serjeant, ibid., 140.

²⁹ Baker, *Islamic Textiles*, 37.

³⁰ Ibid., 38

³¹ Bethany J. Walker, "Rethinkinh Mamluk Textiles," *Mamluk Studies Review IV* (2000), 177 and 179.

³² Serjeant, *Islamic Texiles*, 139.

³³ Ibid.

³⁴ R.B.Serjeant, "Material for a History of Islamic Textiles up to the Mongol Conquest," *Art Islamica*. vols. XV-XVI. (1951), 81.

³⁵ Ibid.

used in a cotton garment. These sentences could support the hypothesis that the Arabic word "mukhmal" in the historical contexts dated in the tenth to twelfth centuries, most probably means "weft-looped / cut linen velvety cloths."

Dabiki prospered until the Crusades" attack, in which Tinnis was destroyed in 588 H/ 1192 CE during the Frankish invasion. The town of Tinnis was abandoned by the order of the sultan al Malik al-Kamil Muhammad ibn Abi Bakir ibn Ayyub in Shawwal of the year 624 H/ 1227 CE out of fear that the Franks might get possession of the textile industry.³⁶ Makrizi gives us important information about the eradication of the textile industry of Tinnis and Dabiki. The vizier of al-Aziz (365-86 H / 975-96 CE), Abu "Faradi Ya"kub Ibn Killis³⁷ destroyed the textile industry in Tinnis and Dabiki by forcing vexatious impositions and exactions on the textile workers. He even put a tax on those entering and leaving Tinnis. These practices eradicated the textile industry of Tinnis and Dabiki.³⁸ Makrizi refers to the textile production of Tinnis and Damietta along with those of neighboring islands such as Shata, Difu, Dumaira and Tuna, being exported to Iraq every year until 360 H (970-71 CE).³⁹ Serjeant examines how weavers might have migrated from Egypt to Bagdad to be freed of the official restrictions placed on the industry and set up textile manufacturing quarters in Bagdad after this date. 40 Yakut refers to the cloth manufacturing centers in Dabikiya, on the Isa canal, as one of those quarters in Baghdad. Most probably, the name of Dabikiya in Baghdad was derived from the city of Dabiki in Egypt due to the migration of weavers from Dabiki.⁴¹

Hudud mentions that "katīfa-textiles" are produced in Mukan, north of Gilan. 42 Serjeant suggests that this "katifa" cloth were probably introduced there in the tenth century. 43 It is noteworthy that sericulture was carried out in northern Iran, close to the Caspian Sea, such as the provinces of Gilan, Dailaman, Tabaristan, Diurdian and Kumis in the tenth century. In those places, colorful silk textiles as well as great quantities of linen clothes were produced.44 The province of Diurdiān was famous for manufacturing excellent silks (ibrisim silks), especially black silk textiles. 45 Serjeant claims that silk worms were brought from Mery to Djurdiān and Tabaristan in the Sasanian period, as silk stuffs were sent from Tabaristan to Iraq before the Muslim conquest. 46 In Djurdian, there was a sea port named Abskun and from there many items were traded to the Khazars and in Derbent, Djil and Dailam by merchants.⁴⁷ From this context, we could surmise that "katīfa" was probably the "silk" textile and introduced into the Middle East,

³⁶ Serjeant, *Islamic Texiles*, 147.

³⁷ Ibid.,151: The house of the vizier Ibn Killis was known as "Dar al-Dibadj (dar al-tiraz)" in Fatimid time. Ali Bahgat Bey, drawing from Makrizi, said that the palace of the vizier Ya'kub ibn Killis at Cairo was transformed by the vizier al-Afdal into workshops where stuffs of brocade (dibadj) and silk were manufactured. The direction of these workshops was always entrusted to persons of rank in the kingdom.

³⁸ Ibid., 141, 146.

³⁹ Ibid., 146.

⁴⁰ Ibid., 30; Abdulhalik Bakır, "Ortaçağ İslam Dünyasında Dokuma Sanayi," *Belleten C.LXIV*, S. 241 (Aralık 2000),

⁴¹ Serjeant *Islamic Texiles*, 30.

⁴² Ibid., 72.

⁴³ Ibid.

⁴⁴ Ibid.

Ibid., 80.

⁴⁶ Ibid., 89.

⁴⁷ Ibid., 81.

particularly the Iraq region after the tenth century. Under the strong patronage of the Abbasid Caliph, skilled weavers had developed their weaving techniques and over the course of many processes created the new weave: warp-looped silk velvets. Until it reaches the final stage, they made velvety textiles which had linen weft and silk warp. In this process, weavers from Dabiki, who developed techniques for weft-loop textiles, greatly influenced local weavers in Baghdad. In the tenth century, Baghdad was the largest city in the Middle East and received various kinds of cultural influence from the Islamic world. Through the thirteenth century, the Mongols continued their advance to the Central Asia. During the Mongol conquest, Merv was also completely destroyed and all the inhabitants were murdered except four hundred artisans.⁴⁸ Studies reveal that the Mongol conquest of Central Asia completely changed local conditions and products. Large numbers of Chinese craftsmen migrated into Central Asia, particularly Khurasan. Cloth workers migrated to the southeast of the Kirghiz region and there wove fine silks, gauze, brocade, and damask. 49 Marco Polo says that "Damasko" textiles with silk gold threads and velvets embroidered with animal patterns were woven in Baghdad in the thirteenth century.⁵⁰ He also mentions that very thin, veil-like embroidered velvets were woven in Shiraz.⁵¹ "Sawad velvet" was used in houses of Isfahan as a typical furnishing material in the tenth century.⁵² Abu 'l-Kasım also mentions the velvets of the Sawad (kutuf Sawadiya) as a typical furnishing of the houses of Isfahan.⁵³ Serjeant argues that Sawad might have been a district in the vicinity of Baghdad.⁵⁴ From these contexts, we could assert that silk velvet weaves "katīfa" were produced in Baghdad and its vicinity as well as other cities in northern Iran, where sericulture was carried out at the earliest after the eleventh to the twelfth centuries.

By the thirteenth century, warp-looped silk velvet "katīfa" was no longer a rare fabric. Weaving techniques were improved and many kinds of beautiful and precious velvet with gold threads were produced in different cities in the Middle East. In 756 H / 1335 CE, Ibn Battuta provides valuable information: "At Nishapur were made silken garments (*harir*) of embroidery (*nakhkh* / *nakış*) and velvet (*kemkha*), which were taken to India. These stuffs were also made in Baghdad and Tabriz." Although "kemkha" is a different fabric from velvets, we can surmise that silk weavings, most probably including velvet, had been introduced from Nishapur in northeastern Iran to India in the fourteenth century. Due to the Mongol advance, master weavers fled and settled in India where they trained local weavers and continued weaving velvet with techniques and skills they had brought from their home country. Se

Political and economical stabilization in Central Asia after the middle of the thirteenth century under the Ilkhanates brought cultural prosperity: craftsmen produced local items and developed their skills and techniques. In the Mamluk period, the sultan wore the clothes of a high amir during the royal processions. Archives tell us that the sultan occasionally wore a red velvet coat (*Kamiliyya*-coat).⁵⁷ Mayer says that sultans of the Circassian Burji dynasty were more given to

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⁴⁸ Ibid., 90.

⁴⁹ Ibid., 102.

⁵⁰ Bakır, "Dokuma Sanayı," 760.

⁵¹ Ibid.," 775.

⁵² Serjeant, *Islamic Texiles*, 33.

⁵³ Ibid.

⁵⁴ Ibid., 32.

⁵⁵ Bakır, "Dokuma Sanayi," 92.

⁵⁶ Louise W. Mackie, *Symbols of Power, Luxury Textiles from Islamic Lands, 7th-21st century* (Cleveland: The Cleveland Museum of Art, 2015), 416.

⁵⁷ L. A. Mayer, *Mamluk Costume* (Geneve: Albert Kundig, 1952), 16.

luxury, and gives us Ibn Iyas's quotes: "Khushwadam (Sayf-ad-Din Khushuqadam, r. 1461-1467) used black sable for fur, had a resplendant shining *qaba*⁵⁸ of wool, lined with red velvet from Caffa, he rode with spurs and stirrups of gold." Caffa was not only the important textile trading center but also had a silk weaving industry. 60

There is the group of silk velvet / lampas fragments with gold discs, which were most probably made in the Middle East before the fifteenth century. (Fig. 1) It is known that this type of velvet was woven in Tabriz or another city in the Middle East and could date to the thirteenth century or earlier. I asked Dr. Gülsu Şimsek to analyze a gilded thread sample which was taken from a silk velvet fragment with gold discs, kept in a private collection in Italy, at the Surface Science and Technology Center (KUYTAM) of Koç University. (Fig. 2) The result shows that the metal thread is too much deteriorated; the fiber is yellow / tan colored silk with Z-twist, and wrapped with pure gold gilded thread in the Z direction, as seen in other similar examples. The thickness of the fiber is 6 microns, and of the metal thread is less than 1 micron. The width of the metal thread strip is 490 microns.



Fig. 1, Detail from the front and back side of a silk velvet fragment with gold discs. Private collection, Italy.

⁶⁰ Yücel Öztürk, Osmanlı Hakimiyetinde Kefe 1475-1600 (Ankara: Kültür Bakanlığı, 2000), 480.

The *qaba* (see was made of wool, satin, silk or Ba'labakki-cotton, either white or with red and blue stripes with narrow sleeves. See: Mayer, *Mamluk Costume*, 22.

⁵⁹ Mayer, 19, note 6.

Comprehensive research on this group was done by Milton Sonday: see Milton Sonday, "A Group of Possibly Thirteenth Century Velvets with Gold Disks in Offset Rows," *The Textile Museum Journal 1999-2000*, Vol. 38 and 39 (2001): 101-151. In addition to the velvet textiles described in the article of Sonday (ibid.: 104), Sophie Desrosiers (see: Sophie Desrosiers, "Sur l'origine d'un tissu qui a partecipé a la fortune de Venise: le velours de soie," *La seta in Italia dal Medioevo al Seicento*, Venezia: Marsilio Editori, 2000, annex II, 60-61), and of Michael Peter (see: Michael Peter, "A Head Start Through Technology: Early Oriental Velvets and the West," in *Oriental Silks in Medieval Europe* (Abegg-Stiftung 2016), 301-315), similar type of velvets can be seen in the collection of Museo del Tessuto in Prato "Scarsella" (see: See: *Il Museo del Tessuto di Prato*, cat. No. 10), and a private collection in Florence. For similar type of supplementary gold strips, see: *When Silk Was Gold*, 132-133.

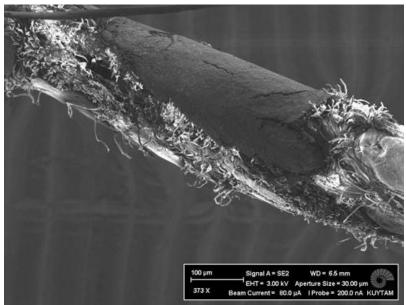


Fig. 2, Detail from a metallic thread. Photographed at Koç University, Surface Science and Technology Center (KUYTAM)

4. Velvet production in Byzantium

In the early medieval period, Byzantium was a renowned silk weaving center, especially known for its weft compound twill weaves. Those silk fabrics were woven on a drawloom operated by two people. Constantinople, the capital of the Byzantine Empire, was an important center of the Silk Road that connected the East and the West. Textiles, especially silks, were a very powerful political tool and their trade was one of the most important economic factors for the Byzantines. Crowfoot refers in her study to its importance being diminished even before the fall of Constantinople in 1204 to Crusaders, giving way to the products of Islamic Spain.

Considerable research has been conducted on Byzantine textiles. Scholars discussed the royal silk industry in Byzantium, though there is little evidence that silk velvets were actually woven under the Byzantine Empire. No material evidence of silk velvets identified as Byzantine have survived to our day. Landry noted that several fragments, which were found in excavations in Egypt, have a warp velvet structure, woven with linen. As mentioned above, this must be a variation of Coptic textiles and most probably a transformation from weft-looped velvet structure to warp-looped velvet structure. These early linen velvets must have been woven on warp weighted horizontal looms. When Ruy González de Clavijo (?-1412) traveled to Samarkand in the

⁶³ Anna Muthesius, Studies in Byzantine and Islamic Silk Weaving (London: The Pindar Press, 1995), 22.

⁶⁴ Elizabeth Crowfoot, Frances Pritchard and Kay Staniland, *Texstiles and Clothing 1150-1450* (London: Boydell Press, 2011), 86.

Landry examines in her study that the detailed list of elaborate textiles sent from the Byzantine emperors to the Abbasid court in 938 CE is the most compelling evidence for the existence of silk velvets in the heart of Byzantium, possibly as a special, restricted product of the imperial workshops. See: Wendy S. Landry, "On the Possibility of Byzantine Velvets," (https://veloutiere.files.wordpress.com/2011/10/byz-velvet-full.pdf, 2003), 24.

⁶⁶ Landry "On the Possibility of Byzantine Velvets," 12; she suggests that the velvet technique might be a predecessor to the weft-faced compound fabrics, which were originally developed in linen and wool, before they were adapted to silk, quite possibly in Syria or Egypt. See: ibid, 19.

Timurid period, he visited Constantinople under the Byzantine Emperor Manuel II Palaiologos (r. 1391-1425). Clavijo who was received by the Emperor Manuel on 28 October, 1403, reported that the emperor was seated on a high sofa (divan) and a pillow, made of black velvet with gold embroidery, was seen behind him. This black velvet must be a product of the Middle East or Italy. This study is my ongoing project and further studies on Byzantine silk velvets will be pursued.

5. Velvets in Medieval Europe

In medieval Europe, eastern silk products including velvets were in demand as a luxurious item among European courts and nobles. These beautiful textiles were brought to Europe through the silk trade by the Genoese and the Venetians in the Mediterranean; as souvenirs from pilgrims and Crusaders from the East; and as diplomatic or ecclesiastical gifts between courts. It is noteworthy to look at the consumption of velvets in medieval Europe. Desrosier's research tells us that the earliest reference to velvet is in 1268, described in the book of trades of Etienne Boileau. Crowfoot mentions that Adineettus, King Edward I's tailor, purchased in Paris a velvet covering for the head of the king's bed at a cost of 100 sterling in 1278. Velvets were used for furniture rather than clothing in thirteenth century Europe. Vestments then started being made from velvet and they were written about in many sources. The earliest record on vestments is the inventory dated 1295 of vestments in St. Paul's Cathedral, including a chasuble of blue velvet. Some descriptions on velvets are written in the Pipe Rolls, a collection of financial records maintained by the English Treasury and the successors. One of the earliest description is dated 1306, and velvet was included in the Great Wardrobe account along with samite and cloth of gold.

As Monnas and Desrosier remarked, I also assert that Europeans, especially Italians, might have copied oriental velvet weavings to meet the demand.⁷³ Monnas mentions that "Tartaryn," a silk in plain weave was used at the English court as a support for embroidery from the reign of Richard II (r. 1377-99) into the sixteenth century, and was probably a European imitation of an oriental fabric.⁷⁴ As is known, the history of silk weaving in Italy can go back to a textile industry, established by the Muslim rulers of Sicily in Palermo in the eleventh century. After the conquest of Constantinople by the Latin Kingdom in 1204, many artisans and craftsmen left the city, and moved to safe and prosperous cities such as Venice. Those weavers were not only Greek, but also Jewish and Sicilian, joining many other immigrants from neighboring cities in Southern Italy. Thus Italian cities including Lucca, Florence, Genoa and Venice became the center of the

⁶⁷ Ömer Rıza Doğrul, trans. *Gonzalez de Clavijo, Timur devrinde Semerkand'a seyahat* (Istanbul: Nakışlar Yayınevi, 1975), 36.

Desrosier, "Sur l'origine d'un tissue," 44; Lisa Monnas, "The Impact of Oriental Silks on Italian Silk Weaving in the Fourteenth Century," in *The Power of Things and the Flow of Cultural Transformations, Art and Culture between Europe and Asia*, ed. Lieselotte E. Saurma –Jeltsch and Anja Eisenbeiß (Berlin; München: Deutscher Kunstverlag GmbH, 2010), 71.

⁶⁹ Crowfoot, Textiles and Clothing, 127.

⁷⁰ Ibid.

⁷¹ The National Archives, C47/3/30, C131/27/13, C131/184/47, C131/40/5, C131/14/4, C131/207/35, C131/40/18, Berkeley Castle Muniments, BCM/D/5/101/14, and Northumberland Archives, ZRI.

The National Archives, Chancery, the Wardrobe, Royal Household Exchequer and various commissions, C47/3/30. See: Goitein, "A Mediterranean Society," 103; Desrosiers, "Sur l'origine d'un tissue," 50-51; Monnas, "The Impact of Oriental Silks," 71-72.

⁷⁴ Lisa Monnas, "the Making of Medieval Embroidery," in *Opus Angulicanum* (London: Victoria & Albert Museum, 2016), 8; ibid, "The Impact of Oriental Silks," 67-70.

silk industry and exported silk products all across Europe.⁷⁵ From twelve century the archives, one learns that various kinds of silk textiles such as brocade (*kemha*), velvet, satin (*atlas*) and taffeta were woven in Lucca.⁷⁶ Ashtor examines that the export of European textiles became possible because the Near Eastern textile industries had begun to decline from the end of the twelve century onward.⁷⁷ Most of the textile production in Western Europe at the end of the twelfth century was still accomplished by rural or urban family-based craftsmen for domestic or local consumption. By the late thirteenth century, several Italian merchant bankers had grown large enough to manage and finance this flow of commerce. In addition, horizontal broad looms were brought and spread in Europe in the thirteenth century. Half-silk solid cut velvets, dated to the late fourteenth century, were unearthed at Baynard's Castle during the excavations undertaken in sites along the Thames River in the 1970s and early 1980s.⁷⁸ Though it is not known whether these half-silk velvets were of Eastern or European origin, they have a tabby ground, and the main warp is Z-twisted silk, the pile warp silk is without twist; the weft is Z-twisted linen or hemp.⁷⁹ We could surmise that those early velvets must have been woven in Italy using easily found materials under a period of transition to silk velvet weaving.

The Black Death took one-third of Europe"s population in the middle of the fourteenth century and lasted through the Hundred Years' War (1337-1453) between England and France. When one considers the textile industry under these circumstances, it is possible to say that this caused the return to royal monopolies over textile production in Europe. After the fourteenth to the fifteenth century, velvet weavings began not only in Italian cities such as Venice, Lucca, Florence, Genoa and Bologna, but also in eastern and southern Spanish cities like Valencia. The development and details of Italian velvets will not be mentioned, as it is not the scope of this paper. Between the state of the scope of the sc

By the beginning of the fourteenth century, Lucca had already been established as the silk weaving center of Western Europe. The raw silk, used in the silk industry, was partly imported from Sicily and Calabria but much came from further afield, for example that brought by the Genoese from Asia Minor, although very small quantities of raw silk were provided locally for the Lucca from the Lunigiana, which was the first area to produce silk in Tuscany. By the early fourteenth century, velvet was no longer a rare commodity, although it remained expensive. The silk fabrics woven in Lucca were carried to all parts of Europe by Lucca and other Tuscan merchants, who sold them along with fine silk stuffs made in the Levant and even finer ones that

⁸⁰ Monnas, "Developments in Figured Velvet Weaving," 64.

83 Crowfoot, Textiles and Clothing, 127.

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⁷⁵ Jennifer Harris, ed. *5000 years of Textiles* (London: British Museum Press, 1993, 2010), 167-168; Lisa Monnas *Merchants, princes and painters: silk fabrics in Italian and northern paintings, 1300-1500* (New Haven; London: Yale University Press, 2008), 4-13.

⁷⁶ Halil İnalcık, *Türkiye Tekstil Tarihi üzerine araştırmalar* (Istanbul: Türkiye İş Bankası, 2008), 209-210; a velvet of Lucca is mentioned in a document dated in 1311. See: Lisa Monnas, "Developments in Figured Velvet Weaving in Italy during the Fourteenth Century," *Bulletin de liaison du Centre internationald'etude des textiles anciens*, vol.63-64 (1986): 64.

⁷⁷ Eliyahu Ashtor, Levant Trade in the Later Middle Ages (New Jersey: Princeton University Press, 1983), 6.

⁷⁸ Crowfoot, *Textiles and Clothing*, 9.

⁷⁹ Ibid., 127.

About the development of Italian velvets, see: Monnas, ibid.; Monnas, *Merchants, princes and painters*; Desrosiers, "le velours de soie;" and Peter, "A Head Start Through Technology."

Peter Spufford, *Power and Profit, the Merchant in Medieval Europe* (London: Thames & Hudson, 2002), 248; Monnas, *Merchants, princes and painters*, 7.

had been carried all the way from China.⁸⁴ From Paxi's *Tariffa* as well as the gift lists presented in 1489-90 by the Venetian ambassador to Mamluk officials, we learn that velvet (*veludi*) was sent to the Alexandria market along with damask, cloth of gold (*panni d'oro*) and of silver (*panni d'arzento*).⁸⁵ Makrizi says that "Rumi" silk cloths were worn by Mamluk amirs.⁸⁶

In the Palace Armoury in Malta, there is a part of brigandine⁸⁷ which is covered with velvet, dated to the fourteenth century. (Fig. 3) Similar type of brigandines can be seen in many manuscripts.⁸⁸ Another type of brigandine, covered with velvets and dated to the fifteenth century (1400-1450), is kept in the Metropolitan Museum of Art.⁸⁹ Italian velvets were also used to prepare *Opus Angelicanum* (English works) in England.⁹⁰ *Opus Anglicanum* is the very luxurious embroidery work of Medieval England and was usually embroidered on linen or velvet with couching stitches with silk and gold or silver-gilt thread. Written evidence indicates that cloth woven in Venice were available in London by the middle of the thirteenth century, while by the early fourteenth century English reference to Lucca cloths becomes increasingly commonplace.⁹¹ However silk ground including velvets of the thirteenth to early fourteenth century embroideries were from the Middle East and China.⁹² From these contexts, one could say that velvet weaving techniques would have been introduced to Europe from the East and Italians started to weave them with the development of the guild system under the strong patronage after the thirteenth century.



Fig. 3 Detail from a Bringandine Armour, 14th century, The Palace Armoury, Malta

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⁸⁴ Spufford, ibid.

Benjamin Arbel, "The Last Decades of Venice's Trade with the Mamluks: Importations into Egypt and Syria," *Mamluk Studies Review* 8 (2004): 54; also see: *Venice and the Islamic World* 828-1797, 79.

⁸⁶ Arbel, ibid.," 53-54.

⁸⁷ The brigandine was a very flexible body defense constructed from small overlapping steel plates riveted between an outer cloth covering, normally velvet, and a tough inner lining.

⁸⁸ See the manuscript: Bibliotheque Nationale, Nouv. Acg. Lat. 2290.

⁸⁹ inv.no. 29.154.3

⁹⁰ See the exhibition catalogue: *English Medieval Embroidery Opus Anglicanum* (New Haven and London: Yale University Press in Association with the Victoria & Albert Museum, 2016).

⁹¹ Crowfoot, Textiles and Clothing, 88-89.

⁹² Monnas, "Medieval Embroidery," 7.

6. The formation of Velvet Production in the Early Ottoman Period

It is known that silkworms were bred and raw silk was produced in Anatolia during Byzantine times. From Kasgarlı Mahmud's *Divan-I Lugat-it Turk*, we understand that silk and silk products were familiar to Turks in the eleventh century. 93 From historical sources, we learn that velvet had been woven in Anatolia before the fifteenth century. According to Rashiduddin (1249-1318), the author of Jami'ut tawarikh, under the Rum Seljuk, beautiful velvets were manufactured in Erzincan and sent to Tabriz every year at the cost of 10000 zira along with other cities" textiles. 94 Erzincan was one of the commercial centers in Anatolia and a way station for the caravans arriving from the east. Erzincan was taken under the control of the Ottomans in 1401. After the Crusades of Nicopolis in 1396, Johann Schiltberger, who was captured by the Ottomans, mentioned that in Bursa, beautiful silk fabrics were woven and sent to Venice and Lucca, 95 and fibrous velvets were also woven in Bursa. 96 One can surmise that this "filbrous velvets" means velvet-type fabrics woven with linen before being adapted to silks. As we discussed above, velvet weaving techniques would have been introduced to Anatolia together with drawlooms by Iranian weavers before the Ottomans in the Byzantine and Seljuk periods. The Arabic word katifa / kadife (فطف , means "pile, floss fabric," must have been brought to Anatolia together with velvet fabrics from the Middle East.

Under these circumstances, the Ahilik and lonca system (Islamic guild system) must have taken an important role in developing velvet weaving in Anatolia. The word "Ahi," which is of Arabic origin, literally means "brotherhood." It is known that the first guilds of the Islamic world emerged as early as in the thirteenth century. The craftsmen's guild under the early Ottoman period was the continuation of the *ahi* community in the Seljuk period, which originated from the institutions and principles of Futuwwah and religious fraternities. Ibn Battuta reported the existence of fraternal craft organizations that maintained funds to support their needy brothers (ahi) and entertain visitors. ⁹⁷ After the Ottoman conquest of Istanbul in 1453, the Turkish "lonca" system was organized with religious characteristics in place of the Byzantine guild system. After the fifteenth century, textiles played an important role in the social and economic life of the Ottoman classical period. The textile industry began to be controlled by the *Ehl-i Hiref* organization under the centralization of the Ottoman government. Under the Ehl-i Hiref organization, luxury textiles for palace clothing and furnishing were woven according to designs produced by the imperial artists (hassa nakkaslari) not only at the court workshops, but also at other workshops in Istanbul and Bursa to meet the needs of the palace.

⁹³ Nurhan Atasoy, "Bursa Silk Fabrics in Ottoman Art." in *The Turkish Japanese Factory* (Istanbul: Ege Yayıncılık, 2015), 168-169. ⁹⁴ İnalcık, *Türkiye Tekstil Tarihi*, 245, footnote 5; Bakır, "Dokuma Sanayi," 767, footnote 133.

⁹⁵ Nurhan Atasoy et al. *İpek Osmanlı Dokuma Sanatı* (Istanbul: TEB İletişim ve Yayıncılık A.Ş., 2001), 160, footnote 68; İnalcık, Türkiye Tekstil Tarihi, 210.

⁹⁶ Inalcık, ibid., 209-210.

⁹⁷ Timur Kuran, "Islamic Influence on the Ottoman Guilds," in *The Great Ottoman Turkish Civilisation*, vol. II (Ankara: Yeni Türkiye, 2000), 44-45: Kuran states the character of the Islamic guild system quoting the remark of Bernard Lewis; "Whereas the European guilds exclude even heretical Christians, those of the Islamic world were open to Jew, Christian and Muslim alike, some guilds,being even predominantly non-muslim.; Ahmet Tavakoğlu, "Outlines of the Ottoman Economic System" in The Great Ottoman Turkish Civilisation, vol. II (Ankara: Yeni Türkiye, 2000), 7-40: 20-21.

The Ottomans absorbed Seljuk influences from Anatolia and mixed Western influences from Italy, assimilating them within its body to produce more luxurious and highly sophisticated textiles and developing diverse bold and delicate designs. In the reign of Sultan Mehmed II (r. 1444-1446) 1451-1481), silk velvets were woven by *Kadife-i bâfâns*, who belonged to the *Ehl-i hiref*, or under their control in Bursa. The conquest of Caffa in 1475 by the Ottomans made it difficult for the Genoese to control trade on the Black Sea and Caffa, and it caused Bursa to become the center of silk trading. One can learn from the Bursa Kadı Sicil that kadife velvets with metallic threads were woven by slaves for mükâtebe (being freed from slavery) in the late fifteenth century. 98 From another archive, we learn that two kaftans, made of the finest Bursa gold-brocaded velvet with the lining being made of kemha from Yezd in Iran, were prepared for Gelibolu Bey Sinan Pasha's two sons for their circumcision in 1494. 99 An inventory of the Inner Treasury (Endern) of the Topkapı Palace dated April 28, 1496 (13 Şaban 901) lists a cushion cover (balin) and 19 garments, made of Bursa velvet (kadife), and divides them into seven categories according to their colors and patterns. 100 From accounts dating from the end of the fifteenth century to the beginning of the sixteenth century, the *hil'ats* kaftan, given to Idrisi Bitlisi by Sultan Bayezid II, were mostly made of Ottoman velvets, not of "Frengi" (European) ones. 101 There were different kinds of Ottoman velvets including voided velvet (catma) and riste kadife, silk velvet with long fringe. 102 The Ottomans produced velvet cushions and pillows with voided velvets (*catma*), which were similar to Genoese velvets, ¹⁰³ flat in shape for leaning back when sitting on sofa (divan) at palaces and houses, according to the prevalent living traditions. 104

It is interesting to note that velvets with dot (*benek*) motifs were very popular among the early Ottomans, too. In the gift list, which was presented to an ambassador of Venice in 1483, there were three kinds of Bursa silk: velvet with gold thread (*çatma*), velvet patterned with dots (*benekli kadife*) and brocade silk (*kemha*). This pattern might be the similar to the velvets which were seen in the Middle East as well as in Europe, though the Ottoman favored three-dot motifs and used them frequently with varieties or patterns after the fifteenth century. (Fig. 4) We see in the archives that many of kaftans, made of Ottoman textiles with dot motifs, were given to *nakkaş* artisans during the period of Bayezid II (r. 1481-1512). Historical records also show us that this type of kaftan was given to Nakkaş Hasan between 1504 and 1512. Fabrics, including velvets, with dot motifs were in demand among the Ottomans and in fashion as an international pattern in the fourteenth - sixteenth centuries throughout the Mediterranean.

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⁹⁸ Halil Sahillioğlu, "On Beşinci Yüzyıl Sonunda Bursa"da Dokumacı Köleler," *Atatürk Yıllık Konferanslar* VIII (1975-1976), (Ankara: TTK, 1983): 224-225: Bursa Kadı Sicil 4a vrk 173b and 3A, 389b.

⁹⁹ Atasoy, *Ípek*, 161, footnote 77: TSMA D. 10212.

¹⁰⁰ Ibid,, 161, footnote 79: TSMA D. 4, fol. 5b.

Hilal Kazan, XVI. Asırda Sarayın Sanatı Himayesi (Istanbul: ISAR, 2010), 90. For other various kinds of fabrics, see: Kazan, ibid., 61.

¹⁰² European called this type of velvet as "Amazon": see Kazan, *Sanati Himayesi*, 372.

Atasoy, *İpek*, 157, footnote 30.

In the Ottoman period, the size of *çatma* cushion cover (*yastık yüzü*) was more than the same, mostly length 102 cm-120 cm and width 60-70 cm. see: Hülya Bilgi, Osmalı İpekli Dokumaları Çatma ve Kemha. (Istanbul: Vehbi Koç Vakfı Sadberk Hanım Müzesi, 2007), 90-127; Hülya Tezcan, "Osmanlı Konağında bir baş odanın tefrişi," *Ev Tekstili*, Yıl:1, Sayı:2 (Aralık 1993), 18; Amanda Phillips examines the shape of the Ottoman cushion covers could be a precedent for the formation of Indian cotton cushion covers and of Egyptian linen pillow covers, dated to the fifteenth century. See: Amanda Phillips, *Weaving as Livelihood, Style as Status Ottoman Velvet in a Social and Economic Context, 1600-1750* (Oxford: Oxford University, 2011). (unpublished doctoral dissertation), 34-42.

¹⁰⁶ Kazan, Sanati Himayesi, 60.



Fig. 4 Detail from lining of the ceremonial wicker shield. Circa 1500 Topkapı Palace Museum inv. no. 1/2454

Conclusion:

All historical evidences and material sources bring us to the conclusion that silk velvet probably began to be woven in the Middle East, where the weaving techniques had been cultivated with Chinese influence since the Sasanid period. At the end of the tenth century, Egyptian weavers migrated from Dabiki in Egypt to the district of Dabikiya in Baghdad, Iraq with their linen weaving skills and techniques. At that time, Baghdad was the largest city in the Middle East and at the crossroads of various cultural influences from elsewhere in the Islamic world. Local craftsmen of Baghdad combined their skills with the techniques of weft-loop textiles, which were brought by the weavers from Dabiki and developed the techniques to produce luxurious velvets with metallic threads. Though the drawloom was introduced into Egypt in the middle of the 13th century by weavers fleeing the Mongol advance from Iraq, Iran, or even Spain, there was no sericulture in Egypt, where linen was predominantly made. In terms of terminology, the Arabic word "mukhmal" in the historical contexts dated in the 10th to 12th centuries, describes Egyptian manufacture with weft-looped / cut linen velvety cloths, and "kadife /katifa" means warp-looped cut velvet of silk.

After the thirteenth century, silk velvets were introduced to China in the period of Yunan Dynasty in the East, as well as to the West, especially Italy, by the Crusaders and trades with Italian merchants via the Silk Road on the land as well as sea routes in the Mediterranean. The silk industry, developed in Sicily and Byzantium, transferred to Venice, Lucca, Florence, and Genoa in Italy where velvet weaves were further developed with the development of the guild system under the great patronage. Silk velvets became the most luxurious textiles of the late medieval period and were worn by courtiers and clergymen throughout Europe.

Silk velvets were brought to Anatolia as diplomatic gifts as well as commercial products from Iran and other cities in the Middle East and began to be woven in Anatolia after the thirteenth

century. It is possible to argue that silk production infrastructure had not been prepared for the mass production of luxurious and expensive velvet weaves due to political upheaval in Anatolia before the Ottomans. Through the progress made under the guild system in Anatolia, silk velvet started to be woven under the *Ehl-i Hiref* in Bursa and Istanbul under the royal monopolies over textile production and became the fabric to represent Ottoman textiles. The Ottomans absorbed Seljuk influences from Anatolia and mixed Western influences from Italy, creating a symbiosis to produce more luxurious and highly sophisticated textiles and develop the diversity of bold and delicate designs. The subject of how velvet weaving had been developed in the Middle East in the eleventh century and the possibility of whether velvet had been woven in the Byzantine Empire is a promising area of future research.

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Selected bibliography:

al-Qaddumi, Ghadah al-Hijjawi, trans. *Book of Gifts and Rarities (Kitab al-Hadaya wa al-Tuhaf)*. Cambridge: Harvard University Press, 1996.

Arbel, Benjamin. "The Last Decades of Venice's Trade with the Mamluks: Importations into Egypt and Syria," *Mamluk Studies Review* 8 (2004): 37-86.

Ashtor, Eliyahu. *Levent Trade in the Later Middle Ages*. New Jersey: Princeton University Press, 1983.

Atasoy, Nurhan et al. *İpek, Osmanlı Dokuma Sanatı*. Istanbul: TEB İletişim ve Yayıncılık A.Ş., 2001.

Aykut, A. Sait, ed. and trans. *Ebû Abdullah Muhammed İbn Battûta Tancî, İbn Battûta Seyahatnâmesi*. I, II. Istanbul: Yapı Kredi Yayınları, 2004.

Baker, Patricia L. Islamic Textiles. London: British Museum Press, 1995.

Bakır, Abdulhalik Bakır. "Ortaçağ İslam Dünyasında Dokuma Sanayi." *Belleten*. C.LXIV, S. 241 (Aralık 2000): 749-826.

Burnham, Harald B. *Chinese Velvets, A Technical Study*. Toronto: the University of Toronto Press, 1959.

Carboni, Stefano, ed. *Venice and the Islamic World 828-1797*. (exhibition catalog) Paris: Editions Gallimard, 2007 (English edition).

Crowfoot, Elizabeth, Frances Pritchard and Kay Staniland. *Texstiles and Clothing 1150-1450*. London: Boydell Press, 2011.

Desrosiers, Sophie, "Sur L'Origine d'un Tissue qui a Participe a la fortune de Venise: le velours de soie." *La seta in Italia dal Medioevo al Seicento*. Venezia: Marsilio Editori, 2000: 35-61.

Doğrul, Ömer Rıza, trans. *Gonzalez de Clavijo, Timur devrinde Semerkand'a seyahat*. Istanbul: Nakışlar Yayınevi, 1975.

Fleet, Kate. *Erken Osmanlı Döneminde Türk-Ceneviz Ticareti*. Istanbul: Türkiye İş Bankası, 1999.

Hunt, Edwin S. and James M. Murray. *A History of Business in Medieval Europe, 1200-1550*. Cambridge University Press, 1999.

İnalcık, Halil. *Türkiye Tekstil Tarihi üzerine araştırmalar*. Istanbul: Türkiye İş Bankası, 2008. Kuhn, Dieter, ed. *Chinese Silks*. Chinese edition by Zhao Feng. New Haven and London: Yale University and Foreign Languages Press, 2012.

Goitein, S. D. A Mediterranean Society I. Berkeley: University of California Press, 1967.

Kazan, Hilal. XVI. Asırda Sarayın Sanatı Himayesi. Istanbul: ISAR, 2010.

Kuran, Timur. "Islamic Influence on the Ottoman Guilds." In *The Great Ottoman Turkish Civilisation* vol. II. Economy and Society. 43-59. Ankara: Yeni Turkiye, 2000.

Landry, Wendy S. "On the Possibility of Byzantine Velvets."

https://veloutiere.files.wordpress.com/2011/10/byz-velvet-full.pdf, 2003.

Lane, Edward William. *Arabic-English Lexicon*. vol. I, part 2 and 8, London: Williams and Norgate, 1863-93.

Lopez, R.S. "Silk industry in the Byzantine Empire." *Speculum XX* (1945): 1-42.

Mackie, Louise W. Symbols of Power, Luxury Textiles from Islamic Lands, 7th-21st century.

Cleveland: The Cleveland Museum of Art, 2015.

Mayer, L. A. *Mamluk Costume*. Geneve: Albert Kundig, 1952.

Monnas, Lisa. "Developments in Figured Velvet Weaving in Italy during the Fourteenth Century," *Bulletin de liaison du Centre internationald'etude des textiles anciens.* vol.63-64 (1986): 63-100.

Monnas, Lisa. *Merchants, prices and painters: silk fabrics in Italian and northern paintings, 1300-1500*. New Haven; London: Yale University Press, 2008.

Monnas, Lisa. "The Impact of Oriental Silks on Italian Silk Weaving in the Fourteenth Century." In *The Power of Things and the Flow of Cultural Transformations, Art and Culture between Europe and Asia.* edited by Lieselotte E. Saurma –Jeltsch and Anja Eisenbeiß, 65-89. Berlin; München: Deutscher Kunstverlag GmbH, 2010.

Monnas, Lisa. "The Making of Medieval Embroidery." In *English Medieval Embroidery Opus Anglicanum*, 7-23. New Haven and London: Yale University Press in Association with the Victoria and Albert Museum, 2016.

Muthesius, Anna. *Studies in Byzantine and Islamic Silk Weaving*. London: The Pindar Press, 1995.

Öztürk, Yücel. Osmanlı Hakimiyetinde Kefe 1475-1600. Ankara: T.C. Kültür Bakanlığı, 2000.

Peter, Michael. "A Head Start Through Technology: Early Oriental Velvets and the West." In *Oriental Silks in Medieval Europe*, 301-315. Abegg-Stiftung, 2016.

Phillips, Amanda. "The historiography of Ottoman velvets, 2011-1572: scholars, craftsmen, consumers." *Journal of Art Historiography*. Number 6 (June 2012): 1-26.

Sahillioğlu, Halil. "On Beşinci Yüzyıl Sonunda Bursa"da Dokumacı Köleler," In *Atatürk Yıllık Konferanslar* VIII (1975-1976), 217-229. Ankara: TTK, 1983.

Serjeant, R. B. "Material for a History of Islamic Textiles up to the Mongol Conquest," *Art Islamica*. vols. XV-XVI. (1951): 29-85.

Serjeant, R. B. *Islamic Textiles: Meterial for a History up to the Mongol Conquest*. Beirut, 1972. Sonday, Milton. "A Group of Possibly Thirteenth-Century Velvets with Gold Disks in Offset Rows." *The Textile Museum Journal 1999-2000*. Volumes 38 and 39 (2001): 101-151.

Spufford, Peter. *Power and Profit, The Merchant in Medieval Europe*. London: Thames & Hudson, 2002.

董必武署檢. 中西交通通史料前編第一冊. 1974.

Walker, Bethany J. "Rethinking Mamluk Textiles," *Mamluk Studies Review* IV (2000): 167-207. Watt, James C. Y. and Anne E. Wardwell, *When Silk Was Gold Central Asian and Chinese Textiles*. New York: The Metropolitan Museum of Art, 1997.

Wulff, Hans E. The Traditional Crafts of Persia: Their development, technology and influence on Eastern and Western Civilizations. Cambridge M.A.: M.I.T press, 1966.

Yoshida, Masako. "中国におけるベルベットの形成 (Formation of Velvet in China)." *Hata*. vol. 5 (1998): 35-47.