

## 1: Cotton - Wikipedia

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Additional Information In lieu of an abstract, here is a brief excerpt of the content: It would perhaps not be an exaggeration to speak of a collapse. Whatever the magnitude of the decrease of industrial production in the Levant may have been, it had far-reaching consequences for commercial exchanges with the European countries. It entailed a considerable increase in the import of industrial products into the Moslem Levant and the returns on this import trade made it possible for the European merchants to acquire great quantities of costly Oriental articles, practically by barter. Otherwise, they would certainly have encountered great difficulties in buying them, especially in periods in which the prices were high. The crisis of the Oriental industries was not an unexpected phenomenon; it was in fact the end of a long evolution and was brought about by several factors. A very important reason for the decline of Oriental industries was the rise in the price of labor, itself a consequence of the shortage of working hands after the Black Death and the epidemics subsequent to it. There was such a great increase in wages that a steep rise in the prices of all industrial products followed. Some dyes had to be imported from Europe, so that this too caused a substantial rise in production costs. As far as the use of bulky raw materials was concerned, the Near Eastern manufactures had to use those which they had worked with before. The most important of these was cotton. It seems that the cotton plantations in Egypt and Syria were again increased at the end of the fourteenth century and the beginning of the fifteenth century. But an Arabic author, who apparently wrote in the seventh decade of the fourteenth century, dwells on the importance of cotton planting in the district of Acre. The cadasters that the Ottoman Turks made after the conquest of Palestine in certainly show the great role of cotton-growing in the districts of Acre, Nazareth, Safed, and Jaffa. From the work of an Arabic author, who wrote at the end of the fifteenth century, one learns that Jerusalem then had a cotton market. In the days of the Abbasid and Fatimid caliphs, there were royal factories in all Near Eastern countries, which apparently were often rented by industrialists and run as capitalistic enterprises. They employed mostly free, but also some compulsory, labor and produced for export. These factories, the so-called *tiraz*, are referred to in various Arabic sources. But, in the later Middle Ages, the private manufactures suffered so much from tax pressure that many were closed. The management of the royal factories, on the other hand, was corrupt and finally many of them were You are not currently authenticated. View freely available titles:

*cotton textiles from southern Iran, their conservation, and study invites the opportunity to reassess past views and offer new ones regarding the origins of cotton and its introduction into the Near East.*

Cotton in the Ancient World By H. Wescher From the earliest times down to the present day cotton has been a factor of undiminishing importance in India. Early Sanskrit writings contain references to the use of cotton; the ancient laws supposed to have been recorded by Manu refer to the sacred cord worn by the Brahmins, stating that it should be threefold and of cotton. This reference is in keeping with another one according to which cotton served as material for the robes of the priests of ancient eastern religions; it was only at a later date that its use was extended by the caliphs to the manufacture of secular clothing. In these early records cotton is referred to as "karpasa", a name which passed from Indian into the Hebrew and Latin literature. It is assumed to be connected with the town of Carpasia in Cyprus which for a long time was an important centre of the cotton trade. One of the oldest reports on the processing of cotton comes from Herodotus approximately a. The Indians make their clothing of this material. They plant these shrubs in rows in flat ground; when seen from a distance they have the appearance of vines. The Indians wrapped themselves from head to foot in this material. Nearchos states that they wore a shirt of cotton, reaching half way down the leg, a cloak wrapped round the shoulders, a turban wound round their heads. The advantage which they took of this opportunity is revealed in geographical writings such as the "Circumnavigation of the Red Sea" Periplus Maris Erythraei, the author of which is believed to be Arrianus about A. It contains a considerable amount of information on the Indian textile arts, mentions Ariaca and Barygaza on the west coast as the most important export centres and Masulipatan and Palarimunda on the east coast as the principal centres of manufacture. Arrianus also states that the finest muslins came from the district of the Ganges delta, and that they were described by the Greeks as "Gangetiki". That work of superior quality was done on the east coast was confirmed by Marco Polo as late as the thirteenth century; he reported that he had seen on the Coromandel coast the finest and most beautiful cotton cloth to be found in all the world. The Ancients tell astonishing stories of the value of these Indian fabrics. There can be no doubt that they were known to Rome, and were numbered among the most coveted articles in the elegant and luxurious capital. Quintus Curtius Rufus first half of the first century A. According to Lucan A. The texture of the material was so delicate that the poets described them as "woven wind". Many centuries later one of the Portuguese navigators wrote: It was not until the time of the Portuguese seamen that painted fabrics were mentioned, the designs sometimes being executed on a white and sometimes on a striped ground. It is believed that the processing of cotton gradually spread westward to the shores of the Mediterranean. Authentic reports of cotton growing on the Island of Tylos were given by Theophrastus. He described the cotton plant as a shrub with leaves similar to those of the vine and with capsules about the size of a quince. When the capsules were ripe, they burst open; they contained seeds surrounded by a kind of wool which was woven into fabrics of both fine and inferior quality. Though this obviously well informed report does not state expressly that the processing of the fibre was carried on at the same place, it may be inferred that workshops existed on the island. Opinions differ considerably with regard to the time when cotton spinning first began to be practised among the Semitic peoples. Strabo stated that the cotton shrub with which he was familiar also occurred in Arabia, and later evidence shows that the methods of processing the fibre were known there. Late in the twelfth century Chao Jon Koua, the inspector of Chinese foreign trade, reported that Arab caravans brought fine cotton goods to the ports of the Persian Gulf, where they were loaded on ships together with the madder plant used for scarlet dyeing. The herbal of Prosper Alpinus, which dates from the sixteenth century, mentions the extremely fine texture of the cotton cloths woven by the Arabs; they were known as "sessa", and their beauty was universally praised. The assertion that such fabrics had been manufactured for more than a thousand years before that time and that they had been objects of trade between the Arabs and the Phoenicians has yet to be proved. In his history of the Phoenicians Movers states that the wealthy Arab tribes supplied large quantities of cotton fabrics which were traded by the Phoenicians both in the Orient and in the West together with rare silks, purple fabrics, and fine linen. The same author suggests

that the mention of cotton weavers in the Bible warrants the assumption that this trade existed in pre-Hebraic times. The family of Byssos workmen belonging to the tribe of Juda which is mentioned in the First Book of Chronicles bore a Canaanite name, which Movers interpreted as indicating a tradition of cotton weaving among the original inhabitants of that country. If the word Byssos really did mean the cotton shrub, which appears highly probable in view of later descriptions such as that of Pausanius, the assumption of Jewish cotton trade may be justified, particularly as the Talmud not only refers to the occurrence of the plant, but also to Byssos merchants in Judaea. Nevertheless, it must remain an open question whether the materials described in the Bible as "shech"--these are frequently mentioned in the Books of Moses--were of native origin or whether they formed part of the Indian goods which doubtless found their way to the countries of the Near East. The robe presented to Joseph by the King of Egypt when he was given the ring and gold necklace and made ruler of Egypt, is described as something very costly indeed; Aaron, the high priest, and his sons wore robes and head-coverings of shech, and the curtain before the cherubim in the Holy of Holies of the Temple was described as being of purple, scarlet, crimson, and white shech. This description has led several scholars to believe that the material of this curtain must surely have been cotton, as cotton only, and not linen, assumes such wonderful, brilliant colours when dyed. Oddly enough, the most violent controversies have arisen over the question of cotton growing in Ancient Egypt, though Roman sources at least contain most unequivocal evidence. The dispute probably originated in the fact that the terms in use for linen and cotton were not always clearly distinguished; very often the word "Byssos" was used for any kind of woven fabric of finer texture. Furthermore, the examination of mummy wrappings did much to increase the uncertainty caused by written records. On examination of the fabrics in which the Egyptians were in the habit of wrapping their dead, some experts described them as being of linen, whilst others believed them to be of cotton. As regards the latter opinion, it has been almost universally abandoned. Finally, the opponents of the cotton theory stressed the fact that Egypt had always been the country of flaxgrowing and of the linen industry, so that tradition must have been very strongly opposed to the introduction of new textiles which were more expensive than linen. When we consult classical records in this matter, it would be unwise to lay too much stress on the statement of Herodotus, who says that the coat of mail which Amasis presented to the Lacedaemonians was decorated with many woven figures of animals, and was "ornamented with gold and the wool of trees". Though it is not entirely impossible that cotton threads may have been used in weaving these figures, the explanation given by Yates, the author of the "Textrinum Antiquorum" appears more probable. Yates is of the opinion that the gold ornaments were underlaid with a kind of cotton still used in India for filling cushions etc. The information given by Pliny is more valuable. Though he obviously based his report on the cotton plant on Theophrastus, the following passage may be regarded as the result of direct observation: Its fruit resembles a bearded nut, the inner fibre of which is spun like wool; it is a wool second to none in whiteness and softness of texture. It supplies the priests of Egypt with their favourite kind of dress. The same differences are stressed by Pollux, a writer who lived at the end of the second century of the Christian era. He compared the fruit of the cotton tree with a walnut divided into three sections. When the shell bursts open, the wool-like substance is taken out and used for spinning the weft-threads of a fabric, the warp of which consisted of linen threads. This was the first time that a mixed fabric of cotton and linen was described, a fabric which at a later date was to be the most important product of the early cotton industry in Europe. The fact that Pollux described a new fabric which differed materially from the muslins of India is confirmed by a statement made elsewhere, according to which Egyptian cotton cloths were thicker than linen, and were used in making coats and capes. The Romans must have been familiar with these fabrics; a contemporary report has been interpreted as stating that the army of Mark Anthony in Egypt first century B. We also hear of the use of cotton cloth for a similar purpose in Italy, where Verres, the pro-praetor of Sicily to 71 B. The fact that a duty on cotton is mentioned in Roman laws indicates that certain quantities must have been imported; these imports were probably from Asia Minor and Greece; there is no record of cotton having been spun or woven on Roman soil, with the exception of the unconfirmed report concerning Malta see Ciba Review No. The high price of this foreign product made it difficult for the cotton spinning and weaving trade to develop to any great extent, for cotton as compared with wool and linen had the character of a luxury article. Greece produced a cotton product which the Romans paid

for with its weight in gold. Pausanias second century A. Pausanias distinguished these fibres so plainly from hemp and flax that there can be very little doubt that the term "Byssos" as used in this connection refers to cotton. He compared the fibre with that of the Syrian plant, saying that it was in no way inferior in fineness of texture, the only difference being that it had not the yellowish shade of Syrian cotton. From this latter remark we may infer that he meant the weed-like cotton plant which still grows in the swampy lowlands of Greece. The Corpus iuris mentions in addition to carbasum and carbasca cotton fabrics and cotton thread a third variety, opus byssium, a heading under which various articles made of cotton were classed, among them the hair-nets of Patrae. In medieval records cotton of Macedonia and Thessalia and cotton-growing on the shores of the Black Sea are frequently mentioned; in spite of this we have no detailed knowledge of the cotton industry in Eastern Europe at that time; on the contrary it appears that the industry gradually spread across Europe from the West. Wescher As far as we know today cotton growing and spinning spread from Spain to the rest of Europe. In his history of Spain De Marles stated that the Moors brought the cotton plant with them across the Mediterranean together with the sugar cane and the mulberry. The climate was favourable to cotton growing, and Oliva and Candea soon became famous as flourishing centres of cotton planting. The author based his observations on the experience of other countries, particularly of Arabia, Egypt, and Syria, giving a number of useful hints as to the observation of seasons and weather when sowing and tending the plant, and also for the harvest. According to Ibn al Awam the picking and opening of the pods should take place in the shade, whilst the fibre was to be dried in the sun. Great attention was devoted to the problem of irrigation, on which crops were very much dependent when grown in the sandy soil of Spain or in Sicily. As a result of such detailed study, cotton growing in Spain soon began to flourish, and maintained its position for many centuries. As late as the eighteenth century the English traveller Richard Twiss described the cotton fields on either side of the road from Cordova to Ecija with the yellow and red blossoms of the plants, and he wrote with admiration of the rich crop yielded every year by the plantations. These cotton plantations contributed at an early date to the fame of the workshops of Granada. When Abderrahman III began to restore the prosperity of the country after the ravages of war, and to revive industries which had declined ever since the period of Roman occupation, Arabs and Moors were commissioned to instruct the natives in the various trades. One craft in which they excelled was leather working, another was weaving, which they practised with equal skill in silk, flax, hemp, and cotton. In the fourteenth century cotton cloth was made in Granada which was used as a dress material, and which in the opinion of Ibn Alchabid, who wrote a history of Granada, at that time was superior in softness, purity of material, and in beauty to the fabrics of Syria. The dye used in dyeing this material was madder. In Christian Catalonia, too, cotton weaving must have been established at an early date. Already in the thirteenth century the "fustaneros", the weavers of fustian, were organized in a guild, and old street names show to this day where they carried on their trade. In some towns the weavers were obliged to transfer their activities to the outskirts of the town, as the neighbours complained to the municipal authorities of the annoyance caused to them by the proximity of the workshops. Fourteenth century laws not only inform us that the sale of fustian was under official supervision, we also learn something of the regulations which the dyers of these fabrics had to observe. Records of the activities of the fustaneros take us down to the fifteenth century; for the most part these records are regulations for the sale of pure cotton or mixed fabrics and also penalties for bad work. It would appear that this branch of the Spanish textile crafts did not survive the fifteenth century; it seems to have been replaced by the silk industry which began to prosper greatly about that time. In Italy both raw cotton and fustian are mentioned in the trade registers of Genoa from the twelfth century on. In already the lists of the public weights mention "bombacium di Sicilia" in addition to cotton from Alexandria and Antiochia. In a contract of cotton takes first place among a list of goods to be sent from Genoa to Lodi; a year prior to that date the Customs lists mentioned raw cotton and also cotton fabrics under the unmistakable name of "somma fustaniorum". Genoese trade records of the year also mention cotton bales. It may, therefore, be assumed with a certain probability that these entries refer to products of the Italian industries. From Romagna, where cotton cloths are said to have been woven ever since the earliest times, the industry spread to Tuscany. It existed at Cortona from on, and attained considerable importance at Arezzo during the thirteenth century. Nevertheless cotton, which was imported from Sicily by the firm of Peruzzi

before , was used by the textile industry; borders of a certain kind were made of a mixture of animal and vegetable fibres. In addition waste cotton and old cotton materials were imported into Florence to be used for stuffing bed-quilts and for lining winter clothing. To the north of Tuscany cotton weaving soon assumed considerable magnitude. Tradition has it that imported raw cotton was woven in Bologna as early as the end of the twelfth century. Like their Venetian colleagues, the fustian weavers had their own guild in the thirteenth century.

## 3: Project MUSE - Levant Trade in the Middle Ages

*The great majority are attributable to the late Meroitic period, ca. ca. AD, at which time cotton appears to have been the most commonly available fabric. The following period, from ca. to ca. AD, sees a swift and remarkable change in the predominant textile fibre in the region.*

Orit Shamir and Alisa Baginski Silk, natural protein fibers produced by insect larvae, is first known from archaeology in China by the fourth millennium BCE. Valued for its drape, sheen, and ability to be dyed and woven into intricate patterns, silk spread widely across the Old World. The Hebrew word for silk, meshi, is mentioned in the Bible only once Ezekiel. Although Jewish historical sources of the Roman and Byzantine periods mention silk many times, there are few archaeological finds besides imported textiles from the Byzantine period. A turning point in the history of the Negev occurred around CE, a period of prosperity related to the advent of Christianity and pilgrimage, which enabled the purchase of imported silk textiles. These were probably produced in Egypt where linen textiles were decorated with wool or in more rare cases " in silk. At Nessana, four small silk fragments in compound weave were found in the ruins of a Byzantine house. One has an upper part of a roundel with a pearl border, a pair of reversed birds of prey with spread wings and pearl collar standing on half palmettos among ivy leaves. The main field of the fragment is divided by light-colored double stripes into panels which contain cartouches with floral devices. Nessana, linen textile decorated with silk tapestry. Silk textile in compound weave, Nessana. Two hundred fifty one textiles were found at the site made of cotton, linen, wool, hair and silk. The caravans carried a variety of trade goods as well as spices, which were a major commodity during the Roman, Byzantine, and Early Islamic periods. One example, a white cotton textile, was decorated with red cotton bands alternating with shiny silk threads wound with silver strips that have disintegrated. It appears that precious metals may have been used in combination with fibers in order to produce luxury fabrics for political and religious elites. The most important silk textiles assemblage in the Southern Levant to date was found near Jericho at Qarantal Cave 38 and dates to the Medieval period 9thth centuries CE. Qarantal Cave 38 Among the textiles the most significant are the silk fragments. The textile remains are torn, cut, and patched, and many have been reused, sometimes more than once. It can be assumed that most of these fragments were parts of clothing such as tunics, trousers, and coifs although no complete garments were found. Others could be recognized as bags, wrappers, and strips for tying. Textiles in antiquity were too costly to throw away. When a garment reached a state where patching was no longer feasible, it was cut into pieces and remade into another garment or used as patches or in decorations as a majority of the reused ones in Cave 38 were. Many such textiles originating in Egypt have been dated to the tenth and eleventh centuries CE. These were all luxury fabrics woven on sophisticated looms such as the drawloom, a technical apparatus for mechanical patterning. During the Byzantine period and after the Islamic conquest, centers in Syria already produced compound textiles; some have even been preserved as relic covers in the treasuries of European churches. A few were found in excavations near Rayy Iran together with other compound silk fragments attributed to Byzantium, Egypt, Mesopotamia, and Iran. The craftsmanship is very fine, indicating that they were expensive luxury items affordable only by the upper classes. However, none of these assemblages is as rich and diverse as the one in Cave 38 and none of them have silk textiles. Cave 38, Linen decorated with silk tapestry, swimming birds ducks? Cave 38, printed silk. Cave 38, Silk, weft-faced compound tabby, octagon with stylized plant and geometric motifs. Why was such a large quantity of used and reused textiles stored in the cave? It can be assumed that the people who stored them were rag collectors or merchants who collected them for the paper-making industry. It became popular in the Middle East using mainly textiles as its raw material, along with date-palm leaves and fibers from basketry and cordage. The paper was made by breaking down different organic materials into fibers, which were then soaked in water and separated using a fine netted sieve. The principles for manufacturing paper were known in China but for a long period the secret of its discovery stayed within the borders of the Chinese Empire. It was only the wake of the Islamic conquests that the paper industry expanded, first to the Near East, and later Europe. Though this industry is likely to have consumed most textiles in antiquity, we are fortunate that samples have been

preserved in sites like Cave Alisa Baginski is retired senior lecturer of textile history and retired curator of the textile study collection, Shenkar College of Textile Technology and Fashion, Israel. The American Schools of Oriental Research ASOR makes no representations as to the accuracy or completeness of any information on this blog or found by following any link on this blog. ASOR will not be liable for any errors or omissions in this information. ASOR will not be liable for any losses, injuries, or damages from the display or use of this information. The opinions expressed by Bloggers and those providing comments are theirs alone, and do not reflect the opinions of ASOR or any employee thereof.

## 4: Textile Production and Consumption in the Ancient Near East

*Textiles were made for many purposes, of many different kinds of fibers, and in an amazing array of techniques in the Near and Middle East. Linen and wool are native to the whole region, cotton was grown in Arabia and the Levant, while silk was first imported from the Far East, then produced locally.*

Very fine linen made at Rennes. Fine, woolen cloth, usually tawny colour. Usually grey or brown. Sometimes "shot" sarciatus medieval coarse woolen cloth worn by the lower classes. Most prestigious was the Lincoln scarlet. Later used to describe a colour. Used for banners, tents, clothes. Loosly woven worsted twill of varying qualities. Strong and expensive fabric. T taffeta 14th century onwards. Made of twisted flax. Fine, woolen cloth, usually scarlet in colour. U valence 14th century. A thin fabric, possibly similar to say. Silk fabric with a short, dense pile. Knotted, plaited or looped and woven in bright and dull gold to make a rich pattern. W wadmol medieval coarse woolen cloth, used by the lower classes for clothing- jerkins, doublets etc. A kind of blue cloth. A cloth made of long-stapled wool combed straight and smooth before spinning. Much improved to the point where the best was silk-like. Worn by kings and the nobility, the most highly valued. White winter fur of the stoat. F feathers from 15th century onwards, especially ostrich filches see fitches fitchet fur of the polecat or fitch, the under fur being yellow-buff and the upper fur, a rich glossy brown to black fitchews see fitchet foin fur of the marten, also known as stone or beech martin fox fur medieval fur of the native fox foynes the fur of the polecat fychoux 15th century fur of the foumart, polecat or fichtet G genet fur of civit cat, grey or black godelming 14th century calfskin leather grey thought to be the fur of the grey squirrel imported from Germany gris grey fur from the squirrel or martin. The fur of the hind legs of the hare, the most prized being that of the white winter fur of the Irish hare. I ionetis the genet, the fur resembling the marten J jennet fur of civit cat, grey or black K lambskin 14th century onwards. Red squirrel fur changing to pure white in winter. Oxen hide used for footwear. O otter fur medieval. Later, a species of felt. Q rabbit 14th century rabbit fur worn by nobles.

## 5: Textiles and Textile Production in Europe

*This panel, probably from a wooden door, is deeply carved with two symmetrical horse heads in relief. Attention to detail is evident in the beaded bands and bridles amid arabesques. The piece was carved to different depths in order to produce a pleasing chiaroscuro effect, a technique mastered by.*

Economic history of India A woman in Dhaka clad in fine Bengali muslin , 18th century. Under the Mughal Empire , which ruled in the Indian subcontinent from the early 16th century to the early 18th century, Indian cotton production increased, in terms of both raw cotton and cotton textiles. The Mughals introduced agrarian reforms such as a new revenue system that was biased in favour of higher value cash crops such as cotton and indigo , providing state incentives to grow cash crops, in addition to rising market demand. The diffusion of the spinning wheel, and the incorporation of the worm gear and crank handle into the roller cotton gin, led to greatly expanded Indian cotton textile production during the Mughal era. With a modified Forbes version, one man and a boy could produce pounds per day. Jumel proposed to the great ruler of Egypt , Mohamed Ali Pasha , that he could earn a substantial income by growing an extra-long staple Maho Gossypium barbadense cotton, in Lower Egypt , for the French market. Mohamed Ali Pasha accepted the proposition and granted himself the monopoly on the sale and export of cotton in Egypt; and later dictated cotton should be grown in preference to other crops. Egypt under Muhammad Ali in the early 19th century had the fifth most productive cotton industry in the world, in terms of the number of spindles per capita. Exports continued to grow even after the reintroduction of US cotton, produced now by a paid workforce, and Egyptian exports reached 1.

Calico Acts and Textile manufacture during the Industrial Revolution The English East India Company introduced the Britain to cheap calico and chintz cloth on the restoration of the monarchy in the s. The EIC embraced the demand, particularly for calico , by expanding its factories in Asia and producing and importing cloth in bulk, creating competition for domestic woollen and linen textile producers. The impacted weavers, spinners, dyers, shepherds and farmers objected and the calico question became one of the major issues of National politics between the s and the s. Parliament began to see a decline in domestic textile sales, and an increase in imported textiles from places like China and India. Seeing the East India Company and their textile importation as a threat to domestic textile businesses, Parliament passed the Calico Act, blocking the importation of cotton cloth. As there was no punishment for continuing to sell cotton cloth, smuggling of the popular material became commonplace. In , dissatisfied with the results of the first act, Parliament passed a stricter addition, this time prohibiting the sale of most cottons, imported and domestic exempting only thread Fustian and raw cotton. The exemption of raw cotton from the prohibition initially saw 2 thousand bales of cotton imported annually, to become the basis of a new indigenous industry, initially producing Fustian for the domestic market, though more importantly triggering the development of a series of mechanised spinning and weaving technologies, to process the material. This mechanised production was concentrated in new cotton mills , which slowly expanded till by the beginning of the s seven thousand bales of cotton were imported annually, and pressure was put on Parliament, by the new mill owners, to remove the prohibition on the production and sale of pure cotton cloth, as they could easily compete with anything the EIC could import. The acts were repealed in , triggering a wave of investment in mill based cotton spinning and production, doubling the demand for raw cotton within a couple of years, and doubling it again every decade, into the s [33] Indian cotton textiles, particularly those from Bengal , continued to maintain a competitive advantage up until the 19th century. In order to compete with India, Britain invested in labour-saving technical progress, while implementing protectionist policies such as bans and tariffs to restrict Indian imports. From focusing on supplying the British market to supplying East Asia with raw cotton. As the Artisan produced textiles were no longer competitive with those produced Industrially, and Europe preferring the cheaper slave produced, long staple American, and Egyptian cottons, for its own materials. In , Lewis Paul and John Wyatt , of Birmingham , England, patented the roller spinning machine, as well as the flyer-and-bobbin system for drawing cotton to a more even thickness using two sets of rollers that traveled at different speeds. Production capacity in Britain and the United States was improved by the invention of the modern cotton gin by the American Eli Whitney in

Before the development of cotton gins, the cotton fibers had to be pulled from the seeds tediously by hand. By the late 1700s, a number of crude ginning machines had been developed. However, to produce a bale of cotton required over 100 hours of human labor, [41] making large-scale production uneconomical in the United States, even with the use of humans as slave labor. The gin that Whitney manufactured the Holmes design reduced the hours down to just a dozen or so per bale. Although Whitney patented his own design for a cotton gin, he manufactured a prior design from Henry Odgen Holmes, for which Holmes filed a patent in 1794. By the 1850s, India was no longer capable of supplying the vast quantities of cotton fibers needed by mechanized British factories, while shipping bulky, low-price cotton from India to Britain was time-consuming and expensive. This, coupled with the emergence of American cotton as a superior type due to the longer, stronger fibers of the two domesticated Native American species, *Gossypium hirsutum* and *Gossypium barbadense*, encouraged British traders to purchase cotton from plantations in the United States and plantations in the Caribbean. By the mid-19th century, "King Cotton" had become the backbone of the southern American economy. In the United States, cultivating and harvesting cotton became the leading occupation of slaves. During the American Civil War, American cotton exports slumped due to a Union blockade on Southern ports, and also because of a strategic decision by the Confederate government to cut exports, hoping to force Britain to recognize the Confederacy or enter the war. This prompted the main purchasers of cotton, Britain and France, to turn to Egyptian cotton. British and French traders invested heavily in cotton plantations. During this time, cotton cultivation in the British Empire, especially Australia and India, greatly increased to replace the lost production of the American South. Through tariffs and other restrictions, the British government discouraged the production of cotton cloth in India; rather, the raw fiber was sent to England for processing. The Indian Mahatma Gandhi described the process: English people buy Indian cotton in the field, picked by Indian labor at seven cents a day, through an optional monopoly. One hundred per cent profit on this freight is regarded as small. The cotton is turned into cloth in Lancashire. You pay shilling wages instead of Indian pennies to your workers. The English worker not only has the advantage of better wages, but the steel companies of England get the profit of building the factories and machines. Wages; profits; all these are spent in England. The finished product is sent back to India at European shipping rates, once again on British ships. The captains, officers, sailors of these ships, whose wages must be paid, are English. The only Indians who profit are a few lascars who do the dirty work on the boats for a few cents a day. The cloth is finally sold back to the kings and landlords of India who got the money to buy this expensive cloth out of the poor peasants of India who worked at seven cents a day. The cotton was largely produced through the labor of enslaved African Americans. It enriched both the Southern landowners and the Northern merchants. Much of the Southern cotton was trans-shipped through northern ports. In this era the slogan "Cotton is king" characterized the attitude of the South toward this monocrop. Cotton remained a key crop in the Southern economy after emancipation and the end of the Civil War in 1865. Across the South, sharecropping evolved, in which landless black and white farmers worked land owned by others in return for a share of the profits. Some farmers rented the land and bore the production costs themselves. Until mechanical cotton pickers were developed, cotton farmers needed additional labor to hand-pick cotton. Picking cotton was a source of income for families across the South. Rural and small town school systems had split vacations so children could work in the fields during "cotton-picking."

## 6: INDIAN TEXTILE HISTORY

*Medieval clothing Medieval Art MEDIEVAL WORLD Medieval dress Textile patterns Textile Design Textile art Weaving textiles National Museum Forward Silk Damask c. Medallion of Henry the Saint Reference: "This fabric is a reproduction of a byzantine textile from the second half of the century that was part of a dalmatic in Bamberg, Germany, in.*

Queen Nefertari in a sheer, pleated linen garment, Egypt, c. Cultivation of domesticated wild flax , probably an import from the Levant , is documented as early as c. Other bast fibers including rush , reed , palm , and papyrus were used alone or with linen to make rope and other textiles. Evidence for wool production in Egypt is scanty at this period. Linen bandages were used in the burial custom of mummification , and art depicts Egyptian men wearing linen kilts and women in narrow dresses with various forms of shirts and jackets, often of sheer pleated fabric. History of silk and Hanfu The earliest evidence of silk production in China was found at the sites of Yangshao culture in Xia, Shanxi , where a cocoon of *bombyx mori* , the domesticated silkworm, cut in half by a sharp knife is dated to between 2600 and 1900 BC. Fragments of primitive looms are also seen from the sites of Hemudu culture in Yuyao, Zhejiang , dated to about 5000 BC. Clothing of the elite was made of silk in vivid primary colours. Ancient Thailand[ edit ] The earliest evidence of spinning in Thailand can be found at the archaeological site of Tha Kae located in Central Thailand. Here, archaeologists discovered 90 fragments of spindle whorl dated from 3rd century BC to 3rd century AD. And the shape of these finds indicate the connections with south China and India. This culture is defined by pottery decorated with cord patterns. In a shell mound in the Miyagi Prefecture, dating back about 5000 years, some cloth fragments were discovered made from bark fibers. Some pottery pattern imprints depict also fine mat designs, proving their weaving techniques. The depictions also show clothing with patterns that are embroidered or painted arched designs, though it is not apparent whether this indicates what the clothes look like or whether that simply happens to be the style of representation used. The pottery also shows no distinction between male and female garments. This may have been true because during that time period clothing was more for decoration than social distinction, but it might also just be because of the representation on the pottery rather than how people actually dressed at the time. Since bone needles were also found, it is assumed that they wore dresses that were sewn together. This led to a shift from hunter-gatherer communities to agrarian societies which had a large impact on clothing. According to Chinese literature from that time period, clothing more appropriate to agriculture began to be worn. For example, unsewn fabric wrapper around the body and poncho-type garments with head-holes cut into them. This same literature also indicates that pink or scarlet makeup was worn but also that mannerisms between people of all ages and genders were not very different. However, this is debatable as there were probably cultural prejudices in the Chinese document. There is a common Japanese belief that the Yayoi time period was quite utopian before Chinese influence began to promote the use of clothing to indicate age and gender. From 250 to 538 AD was the Yamato period, and here much of the clothing style can be derived from the artifacts of the time. The tomb statues *haniwa* especially tell us that the clothing style changed from the ones according to the Chinese accounts from the previous age. The statues are usually wearing a two piece outfit that has an upper piece with a front opening and close-cut sleeves with loose trousers for men and a pleated skirt for women. The following periods were the Asuka to 710 AD and Nara to 794 AD when Japan developed a more unified government and began to use Chinese laws and social rankings. These new laws required people to wear different styles and colors to indicate social status. Clothing became longer and wider in general and sewing methods were more advanced. The classical Filipino clothing varied according to cost and current fashions and so indicated social standing. The basic garments were the *Bahag* and the *tube skirt*—what the Maranao call *malong*—or a light blanket wrapped around instead. But more prestigious clothes, *lihin-lihin*, were added for public appearances and especially on formal occasions—blouses and tunics , loose smocks with sleeves , capes, or ankle-length robes. The textiles of which they were made were similarly varied. In ascending order of value, they were abaca , abaca decorated with colored cotton thread , cotton , cotton decorated with silk thread, silk, imported printstuff, and an elegant abaca woven of selected fibers almost as thin as silk. In addition, Pigafetta mentioned both G-strings and skirts of bark cloth. Untailored clothes, however had no

particular names. In Panay , the word kurong, meaning curly hair, was applied to any short skirt or blouse; and some better ones made of imported chintz or calico were simply called by the name of the cloth itself, tabas. So, too, the wraparound skirt the Tagalogs called tapis was hardly considered a skirt at all: Visayans just called it habul woven stuff or halong abaca or even hulun sash. The usual male headdress was the pudong, a turban, though in Panay both men and women also wore a head cloth or bandana called saplung. Commoners wore pudong of rough abaca cloth wrapped around only a few turns so that it was more of a headband than a turban and was therefore called pudong-pudong as the crowns and diadems on Christian images were later called. A red pudong was called magalong, and was the insignia of braves who had killed an enemy. The most prestigious kind of pudong, limited to the most valiant, was, like their G-strings, made of pinayusan, a gauze-thin abaca of fibers selected for their whiteness, tie-dyed a deep scarlet in patterns as fine as embroidery, and burnished to a silky sheen. Such pudong were lengthened with each additional feat of valor: Women generally wore a kerchief, called tubatub if it was pulled tight over the whole head; but they also had a broad-brimmed hat called sayap or tarindak, woven of sago-palm leaves. Some were evidently signs of rank: A headdress from Cebu with a deep crown, used by both sexes for travel on foot or by boat, was called sarok, which actually meant to go for water. Silk Road The exchange of luxury textiles was predominant on the Silk Road , a series of ancient trade and cultural transmission routes that were central to cultural interaction through regions of the Asian continent connecting East and West by linking traders, merchants, pilgrims , monks , soldiers, nomads and urban dwellers from China to the Mediterranean Sea during various periods of time. The trade route was initiated around BC by the Han Dynasty , [21] although earlier trade across the continents had already existed. Trade on the Silk Road was a significant factor in the development of the great civilizations of China, Egypt, Mesopotamia , Persia , the Indian subcontinent, and Rome , and helped to lay the foundations for the modern world. Clothing in the ancient world , Clothing in ancient Greece , and Clothing in ancient Rome Greek chiton left and chiton worn under himation Fabric in Ancient Greece was woven on a warp-weighted loom. The first extant image of weaving in western art is from a terracotta lekythos in the Metropolitan Museum of Art, NY. The warp threads, which run vertically to a bar at the top, are tied together with weights at the bottom, which hold them taut. The woman on the right runs the shuttle containing the weaving thread across the middle of the warp. The woman on the left uses a beater to consolidate the already-woven threads. Ancient Greek clothing consisted of lengths of wool or linen, generally rectangular and secured at the shoulders with ornamented pins called fibulae and belted with a sash. Typical garments were the peplos , a loose robe worn by women; the chlamys , a cloak worn by men; and the chiton , a tunic worn by both men and women. A long cloak called a himation was worn over the peplos or chlamys. The toga of ancient Rome was also an unsewn length of wool cloth, worn by male citizens draped around the body in various fashions, over a simple tunic. Early tunics were two simple rectangles joined at the shoulders and sides; later tunics had sewn sleeves. Women wore the draped stola or an ankle-length tunic, with a shawl -like palla as an outer garment. Wool was the preferred fabric, although linen, hemp , and small amounts of expensive imported silk and cotton were also worn. Bodies and clothing have been found from this period, preserved by the anaerobic and acidic conditions of peat bogs in northwestern Europe. A Danish recreation of clothing found with such bodies indicates woven wool dresses, tunics and skirts. Garments were not always plain, but incorporated decoration with contrasting colours, particularly at the ends and edges of the garment. Men wore breeches , possibly with lower legs wrapped for protection, although Boucher states that long trousers have also been found. Caps were worn, also made from skins, and there was an emphasis on hair arrangements, from braids to elaborate Suebian knots. Medieval clothing and textiles[ edit ] The history of Medieval European clothing and textiles has inspired a good deal of scholarly interest in the 21st century. Medieval Finds from Excavations in London, c. Byzantine dress and Byzantine silk The Byzantines made and exported very richly patterned cloth, woven and embroidered for the upper classes, and resist-dyed and printed for the lower. Leggings and hose were often worn, but are not prominent in depictions of the wealthy; they were associated with barbarians, whether European or Persian. Early medieval European dress , Anglo-Saxon dress , and English Medieval fashion European dress changed gradually in the years to People in many countries dressed differently depending on whether they identified with the old Romanised population, or the

new invading populations such as Franks , Anglo-Saxons , and Visigoths. Men of the invading peoples generally wore short tunics , with belts, and visible trousers, hose or leggings. The Romanised populations, and the Church, remained faithful to the longer tunics of Roman formal costume. They also could afford bleached linen and dyed and simply patterned wool woven in Europe itself. But embroidered decoration was probably very widespread, though not usually detectable in art. Lower classes wore local or homespun wool, often undyed, trimmed with bands of decoration, variously embroidery , tablet-woven bands, or colorful borders woven into the fabric in the loom. The traditional combination of short tunic with hose for working-class men and long tunic with overgown for women and upper class men remained the norm. Most clothing, especially outside the wealthier classes, remained little changed from three or four centuries earlier. Linen was increasingly used for clothing that was directly in contact with the skin. Unlike wool, linen could be laundered and bleached in the sun. Cotton, imported raw from Egypt and elsewhere, was used for padding and quilting, and cloths such as buckram and fustian. Crusaders returning from the Levant brought knowledge of its fine textiles, including light silks, to Western Europe. In Northern Europe, silk was an imported and very expensive luxury. Fashionable Italian silks of this period featured repeating patterns of roundels and animals, deriving from Ottoman silk-weaving centres in Bursa , and ultimately from Yuan Dynasty China via the Silk Road. Sometimes just the hose would have different colours on each leg. Renaissance and early modern period[ edit ].

### 7: Ciba Review Cotton and Cotton Trade in the Middle Ages

*The most important silk textiles assemblage in the Southern Levant to date was found near Jericho at Qarantal Cave 38 and dates to the Medieval period (9thth centuries CE). Textiles were found only in one of the cave's connected spaces.*

### 8: War Imagery in Womenâ€™s Textiles â€™ McFarland

*Kjellberg, Anne. "Knitting and the Use of Knitted Goods in Norway before ," in Opera Textilia Variorum Temporum, edited by Inger Estham and Margareta Nockert, Stockholm: Statens Historiska Museum, Lamm, Carl Johan. Cotton in Mediaeval Textiles of the Near East. Paris: Librairie Orientaliste Paul Geuthner,*

### 9: History of clothing and textiles - Wikipedia

*The first known textile of South America was discovered in Guitarrero Cave in Peru, it was woven out of vegetable fibers and dates back to 8, B.C.E. From pre-history through the early Middle Ages, for most of Europe, the Near East and North Africa, two main types of loom dominate textile production.*

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