



# Life and cult of Cnut the Holy

The first royal saint of Denmark

*Edited by:*

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# Oriental and Byzantine silks in St Cnut's reliquary shrine

*By Anne Hedeager Krag*



Fig. 1: St Cnut's reliquary, with the yellow pillow, in the Cathedral of Odense. Photo: Lars Skaaning.

The Danish king Cnut IV was murdered in Odense on the 10<sup>th</sup> of July 1086 in front of the altar in St Alban's Church. The king was killed by Danish rebels together with his brother Benedikt and seventeen of his knights. On the 19<sup>th</sup> of April 1100, the shrine containing the body of St Cnut was placed at the high altar of Odense Cathedral (Danmarks Kirker IX, 1: 426). St Cnut's remains were wrapped in a silk cloth with an eagle motif and put into a shrine. This textile is known as the Eagle Silk. Today the shrine is in the crypt of the cathedral, where a skeleton believed to be that of the murdered King Cnut lies on a patterned yellow silk pillow with bird motif. The Eagle Silk is displayed in an adjacent glass case.

The shrine's walls are lined on the inside with

thin purple-like silk material, probably of the type known in the Middle Ages as cendal or sandal. On the floor of the casket a large, flat quilt of yellow silk was laid, as well as the smaller yellow pillow with a pattern of birds in a now pale blue colour (fig. 1).

The English monk Aelnoth of Canterbury wrote of St Cnut and his silks about fifteen years after the canonization of St Cnut:

a magnificent shrine for the sacred bones, shining like silver and in the reddish flame of gold ornamented with lovely blue and yellowish stones, in it the sacred bones of the saint shall rest. Silk, saffron-yellow, precious stones, all in the most splendid trappings (Albrechtsen 1986: 21ff).

St Cnut's shrine is unique due to the fairly well-preserved state of the remains of the king and the precious silks found in it. Thus, the shrine of St Cnut's earthly remains is among the most important medieval artefacts of Denmark (Fledelius 2010: 9). Based on comparative research, the silks found in Odense are believed to be of Byzantine and Central Asian origin (Hedeager Krag 2010: 16ff). The remains believed to be those of St Cnut's brother, Benedikt, are in



Fig. 2: The Eagle Silk. Photo: The National Museum of Denmark.



the casket next to that of St Cnut. Benedikt was never canonized, however, and in his casket there were no precious patterned silks. This article will present an interpretation of the silk motifs, style and use against a wider European background, informed by the latest research as well as new colour analyses of the Eagle Silk and the pillow with the birds (Hedeager Krag 2010). The symbolic meaning of the silks will also be discussed, as they have inspired royal houses in the later centuries, as seen in the case of King Frederik VII of Denmark (1848-1863).

The largest of the silks from Odense, dated AD 1050-1100, is the so-called Eagle Silk, 110 x 133 cm, red with a pattern of dark blue eagles (fig. 2). The cloth has been trimmed, and, judging from the symmetry of the pattern, the width must originally have been at least 195 cm, perhaps as much as 230 cm – that is, a very large textile. The silk is woven as samite, the weave is tight, and the Z-spun warp is relatively coarse, alternating in reddish-brown and undyed silk, while the weft is of unspun red and bluish-black silk in various thickness (Hedeager Krag 2010: 18, Hedeager Krag 2018: 49) (fig. 3).



Fig. 3: Detail of the Eagle Silk.  
Photo: Annemette Bruselius Scharff.

The pattern of the Eagle Silk appears almost black against a dark-red ground. The two shades of silk threads in the warp – uncoloured and brownish red – give the red ground a changeable nature. The pattern consists of large oval patterned medallions, interconnected in both height and width, a feature also known from Byzantine and Sassanid silk weaves. The so-called recesses, where the frames meet one another in fours, contain small pattern-filled medallions. Inside each large oval medallion is an eagle with spread, patterned wings, spread tail feathers, and



Fig. 4: Inscription from the Eagle Silk.  
Photo: Annemette Bruselius Scharff.

with its head in profile. In its beak the eagle carries a jewel in the shape of a crescent ring with a pendant. The large medallions with the recurrent eagle motif are 82 cm in height and 65 cm in width.

On the base on which the eagle stands, there is an inscription of which there have been various interpretations (fig. 4). Some scholars think it consists of Islamic characters, others that they are Greek. Only a few of the letters are legible, but the Danish classical philologist Carsten Høeg considered them to be based on Greek letterform (Geijer 1935: 104ff; Muthesius 1997: 195; Riis & Riis 2004: 259ff)

## Symbols

The eagle motif is ancient (fig. 5). The legions of the Roman Empire fought under the Eagle Standard. This was the sign of imperium, and the power of the military commanders of the Roman Republic was later



Fig. 5: The Eagle silk from the reverse, where the motif is red and the background blue.  
Photo: Annemette Bruselius Scharff.

adopted by the Roman emperors as one of their main insignia. Known as the *aquila*, the standard itself became an emblem of Imperial power (O'Connell & Airey 2018: 19). The eagle motif continued as an imperial symbol in the Byzantine Empire (AD 330-1453). An association between eagles and emperors can be traced in Byzantine sources, where figures of emperors and their families are offered protection in the shadow of the wings of an eagle (Muthesius 2004: 227ff). In the "Book of Ceremonies" edited by Constantine VII (913-959), examples of eagle motifs on textiles used at the Byzantine court are mentioned (Muthesius 2004:235). In the iconography of Christian art, the eagle with spread wings is a symbol of the power of the world and is associated with John the evangelist. The motif has been used in connection with the representation of the Passion, where the lamb, the lion and the eagle symbolize Christ's Death, Resurrection and Ascension (Schiller 1972: 136).

There is a recognized group of surviving eagle silks which have been identified with *panni imperialis de Romania ad aquilas magnas*, a designation which appears in Latin church inventories from 1295 in Rome (Vellev 1996: 114). Otto von Falke labelled them a "Imperial silks", and saw them as evidence of the imperial workshops, the *gynnaecea*, in Constantinople (Beckwith 1989: 38; Falke 1913).

Imperial eagle silks are known from Auxerre and Brixen. Both places were important ecclesiastical centres. From the grave of St Germain at Auxerre, France, there is an eagle silk – now in the Church of St Eusèbe, Auxerre – which is one of the finest

Byzantine silks in existence. The eagles are freestanding in horizontal rows across the silk in a yellow and dark-green colour on blue-purple ground. It is said to be a chasuble that belonged to bishop Albuin (975-1006) (Flury-Lemberg 2004: 298ff).

Another silk, now in the Cathedral Treasury at Bressanone (Brixen) in the southern Tyrol, Italy, can plausibly be identified with a documented *casula purpura* decorated all over with a large-scale eagle motif, presumably presented as a gift to Bishop Albuin (Muthesius 1997: 49). It is patterned with large dark-green eagles, with the details picked out in yellow, on red-purple ground, and with large dark-green rosettes in the intervening spaces.

## The pillow with the bird motif

The yellow pillow-case with the bird motif consists of several pieces sewn together, perhaps re-used, of which one piece, measuring 30 x 40 cm, covers the front of the pillow and about a third of the back, while the rest consists of strips about 5 cm wide (fig. 6). They have been cut off without regard to the pattern and cover roughly the other two thirds of the back, possibly reusing a chasuble. The material is very loose in structure. The weave is of the samite type and has a closer density than the Eagle Silk. The silk with the bird motif probably dates to about AD 900. The pattern has been compared to a group of Sassanid Persian silks that go back to the 700s-900s (Falke 1913: 989).

The pattern consists of cross-like figures that have a round termination at the top, two short transverse



Fig. 6: The pillow in the shrine (close-up).  
Photo: Peter Helles.



Fig. 7: Magnus Petersen's drawing from 1886. (Burman Becker 1886: Table 6).



lines and a base piece. It resembles an anchor (fig. 7). The cross-like figure is between pairs of opposed birds with long, patterned tails (Burman Becker 1886: 53; Geijer 1935: 58). Between each group at the height of the birds' heads, a heart has been woven. All figures are light blue with faint golden contours against the yellow ground. The size of the repeated pattern varies from 5.5 to 6.5 cm in height and 7 to 9 cm in width.

The birds on the yellow pillow case are probably peacocks. Perhaps the design showed peacocks placed on each side of a cross or the Tree of Life. In the iconography of Christian art, peacocks are a symbol of immortality and resurrection (Schiller 1971: 172). In early Christian art, especially from Ravenna, one finds peacocks grouped symmetrically in pairs around a vase, a cross, or a monogram (Bovini 1991: 61). The peacock comes from India, where it still lives in the wild today. The opposing pairs of peacocks with a cross symbol or the Tree of Life between them are considered to have been an Iranian motif with its origin in the Sassanid period (AD 226-661) (Reimbold 1983: 17, 40). Motifs with birds were very common in contemporary silk patterns from Central Asia, and the actual bird motifs are thought to come from Sogdiana, the northeastern province of the Central Asian area in northern Iran, Turkmenistan and Kurdistan. The most important city of the province, Samarkand, developed from the 700s onwards as a centre of Islamic culture, and at the same time it was

an important station on the Silk Road.

In 2008, the shrines in Odense were opened, both for new analyses of the skeletons and for colour analyses. On this occasion, ten small thread specimens were taken for dye analysis, which was conducted at the Netherlands Institute for Cultural Heritage (ICN) in Amsterdam. The samples were examined under a digital microscope with a magnification of 10X prior to analysis, in order to observe colours and determine if the threads contained fibres with a colour different from the overall impression. If that were the case, attempts were made to divide the threads and analyse them separately. This process is not destructive and therefore has no influence on dye analyses.

From the report it is evident that dyes of nine of the ten threads have been identified (Bommel 2008: 9). Results of the dyestuff identification of the Eagle Silk shows that the red colour was made from two colours, indigo or woad and madder species, which, combined, produced the red-brown colour (indigo-tin, alizarin). The blue colour in the Eagle Silk was achieved with three dyestuffs, weld (luteolin), madder species (alizarin), and indigo or woad (indigo-tin). It is known that small amounts of madder roots are added to the dye bath to help the fermentation process of indigo. This could be an explanation for the presence of trace amounts of alizarin in the dark blue coloured textile samples from the Eagle Silk (Bommel 2008:9).

**THE EAGLE SILK**

	Result dyestuff analysis	Conclusion
<b>Red colour</b>	Alizarin	Madder
	Indigotin	Indigo
<b>Blue colour</b>	Luteolin	Weld
	Alizarin	Madder
	Indigotin	Indigo or woad

**THE PILLOW WITH THE BIRD MOTIF**

	Result dyestuff analysis	Conclusion
<b>Yellow colour</b>	Type C, Component	Sappanwood/r edwood
	Quercetin, Rhamnetin and kampheol	Persian berries
	Indigotin	Indigo or woad
<b>Dark Blue Colour</b>	Indigotin	Indigo or woad
<b>Light Blue Colour</b>	Indigotin	Indigo or woad

Fig. 8: Results of dyestuff identification (analysed with high performance liquid chromatography (HPLC). (Hedeager Krag 2010:39-41)

The colour analyses of the yellow bird-patterned silk pillow distinguished three or four vegetable dyes: a red, sappanwood/redwood, a yellow, Persian Berry; and one or two blue, extracted respectively from the woad or indigo plants. The red colour sappanwood/redwood and the yellow Persian Berry (fig. 5), both used in the yellow silk from the pillow, are remarkable, as the origin of both colours is Central and Eastern Asia. The roots of sappanwood/redwood give a red dye which was imported to Europe from the Far East. The earliest known textiles identified as having been dyed with sappanwood/redwood are a group of multicoloured and patterned silk fabrics from Loulan in eastern Turkestan, excavated by Aurel Stein in 1913-16. The silks have been dated to the period from the second century BC to the third century AD (Hofenk de Graf 2004: 142).

Recently, it has been stated that the Odense yellow pillow has a pattern that is very similar to patterns originating from the Tashkent commercial city of Uzbekistan in Central Asia. The city was known to be an important trading station on the Silk Road.

The yellow dye, which was determined by analysis in 2008 to be coloured by both sappanwood/redwood and Persian berries, which gave both red and yellow colours, might originally have a colour resembling that of saffron, which interestingly corroborates the account by Aelnoth's assertion that St Cnut's shrine was adorned with saffron-yellow silk (Albrechtsen 1986: 21ff).

## Silk and the Silk Road

On the basis of the various interpretations of the Odense Eagle Silk, it can be concluded that it could well have been made in an area under Byzantine influence outside Constantinople between 1050 and 1100, perhaps in southern Italy. There was a dissemination of Byzantine silk to Western Europe, especially in the tenth to the twelfth centuries, both as merchandise and as diplomatic gifts, and it had a great effect on the use of silk in religious contexts. This was also true in Denmark.

The yellow pillow case has a pattern showing more an Oriental than a Byzantine pattern, and colour-analyses support the suggestion that it was probably woven in Central Asia, perhaps near Tashkent.

Silk production in Byzantium is known from the reign Emperor Justinian (527-65) (fig. 9). The silk styles were characterized by both Byzantine culture as well as the influential Sassanid culture in what is present-day Iran (226-661). The Odense silks are woven in the technique samitum, which is a technique that utilizes the qualities of silk in the very best way. Samitum technique became widespread throughout the Mediterranean, including Byzantium, and also further north. A samitum-woven silk piece reached Denmark in the early Viking Age, where a



Fig. 9: Emperor Justinian. Detail of a 6th century mosaic in the Basilica of San Vitale, Ravenna. Photo: Basilica of San Vitale, Ravenna.



small piece of 2.5 cm x 1.2 cm is known from a grave in Fløjstrup at Randers (Hedeager Krag 2010: 64).

From the beginning of the ninth century, the Vikings in Rus' had contact with both the life of the steppes and the caliphate in Baghdad. Settlements were built along the rivers Oder, Neva, Volga and Dnepr, and new hubs established themselves as trading stations for merchants who brought goods to and from the south. Staraja Ladoga and Novgorod were new trading centres that expanded the major Euro-Asian trade routes all the way to the furthest parts of northern Europe. This is evidenced by the many fine silk weavings textiles made in Byzantium and Central Asia which have been found in burial places in Denmark, Sweden and Norway (Hedeager Krag 2018: 56).

However, it is the silver coins that clearly show the extent of the long-distance trade. The Vikings were well aware of eastern contacts. For example, a coin hoard found in 1932 in the remains of a vessel at Randlev in East Jutland consisted of 237 silver coins (Skov & Varberg 2011: 87). 235 of the coins were Arabic or imitations of these; only two were of European origin. The coin hoard was buried in the early 900s. Some of the Randlev Arabic coins are imitations—produced in the Volga-Bulgarian area of Russia, where Nordic and Arab merchants met on the important trade route along the Volga River. The Randlev coins are characteristic of Caucasus, Iraq, Iran, Afghanistan and Uzbekistan; the same areas where there was also a great deal of silk.

Precious textiles and clothing as salary and gifts are mentioned in the Icelandic Sagas. *Egil's Saga*, chapter 55, describes how Egil spends the winter at the court of the Christian King of England, Athelstan: "Then gave Athelstan further to Egil as poet's friend two gold rings, each weighing a mark, and there with a costly cloak that the king himself had formerly worn". Norse literature employs the word *heidinnstykke*, which means "heiðneskr", the same as oriental silk.

Another written source, which mentions silk transmitted from the East to the Vikings, is Ibn Fadlan, who was sent in 921 on a mission from the Caliph in Baghdad to the king of the Volga Bulgars. He describes how a Viking chief was buried in Bulghar, dressed in precious cloth, in the form of a brocaded silk caftan (Frye 2005).

## Summary

The two patterned silks from St Cnut's shrine in Odense, discussed in this paper, thus suggest, through

new colour analyses, that there were both Byzantine and Oriental silks in Denmark in the early Middle Ages, which may have arrived variously as gifts, through diplomatic connections and the silk-trade via the Silk Road through Byzantium. The new dyestuff analyses of the silks identify a red dyestuff, sappanwood/brazilwood (*Caesalpinia sappan*), and a yellow dye, which has been determined to be Persian Berries (*Ramnus* family). Both dyestuffs are known from silks traded along the Silk Road from Central Asia. Of particular interest here is the yellow dyes, since the description "Saffron-yellow" was given to silk placed in the reliquary of St Cnut in Aelnoth's description of Cnut's second translation. The written source from c.1110-17 thus agrees with the scientific pigment analyses done today.

Precious textiles, especially silk and gold-embroidered silk, were needed in Danish churches in the establishment phases of the eleventh and twelfth centuries. Silk that came from Constantinople was of great prestige in Western Europe in the Early Middle Ages (c. 550-1100). There was thus a connection between silk, politics and religion. Both the Eagle Silk and the pillow with the bird motif are symbols that can be associated with imperial power and Christianity. In the iconography of Christian art, peacocks symbolize immortality, and the eagle symbolizes power, and one can hardly conceive of clearer symbols in connection with the murdered king who was later canonized. This symbolic language is likely to have been known to the donor. Possibly the silks were gifts from Cnut's widow Adèle, later married to the South Italian Duke Roger of Apulia, when the items were deposited in the royal shrine in Odense.

## Postscript: Frederik VII (1848-1863)

Another Danish King is connected with the yellow pillow is Frederik VII. The antiquarian George Stephens claimed that the silk had been cut by Frederik VII himself, when Cnut's shrine was opened in Odense in 1833. The Danish King used the silk as a gift in 1863 to the Danish Princess Alexandra (1844-1925) for her wedding with the Prince of Wales, later King Edward VII (1844-1925) (Hedeager Krag 2010: 33). A splinter of wood from the True Cross was wrapped in a piece of this silk for Alexandra's gift. King Cnut was the first Dane to be canonized and he participated in Asbjørn's raid c. 1069 to England, but his own raid was cancelled. With all its valuable and symbolic elements, the purpose of the jewellery was to document Princess Alexandra's



background, the king's lineage and its long and venerable past with good connections to the world and the Almighty (Mørch 2018). Those symbols were well-known to Frederik VII, and it was common for kings to cut silk from relics, as they were thought to have a magical significance (Hedeager Krag 2010: 33).

Both Frederik VII and the French Emperor Napoleon III were enthusiasts of history and archaeology. About 1862 Frederik VII presented Napoleon III with a number of archaeological objects from Denmark. In the archaeological exhibition of the Musée d'Archéologie Nationale in the Château de Saint-Germain-en-Laye in Paris there is a showcase containing Frederik VII's gifts to Napoleon III. Among these gifts are a bronze horn, a bronze cell and flint axes from Denmark's past. In return Frederik VII received the French Honorary Legion's official cross, star and great cross. A source indicates that Frederik VII, on this occasion, also presented Napoleon III with a fragment of the Eagle Silk, but the silk does presumably not exist today.

## Bibliography

- Albrechtsen, E. 1986: Kong Svend Magnus' og hans Sønners Bedrifter og Kong Knud den Helliges Lidseshistorie. In: T. Nyberg, H. Bekker-Nielsen & N. Oxenvad (eds.): *Knuds-bogen. Studier over Knud den Hellige*. Odense, p. 21-52.
- Beckwith, J. 1989: *Studies in Byzantine and Medieval Western Art*. London.
- Bommel, Maarten van, 2008: *Dyestuff Identification of Silk coverings of the 12<sup>th</sup> century shrine of King Knud*. Report from Netherlands Institute for Cultural Heritage, p. 3-10.
- Bovini, G. 1991: *Ravenna Art and History*. Ravenna.
- Burman Becker, J.G. 1886: *Helgenskrinene i Sankt Knuds Kirke i Odense*. Udgivne til Ottehundredears-Dagen efter Kong Knud den Helliges Død af Ministeriet for Kirke- og Undervisningsvæsenet. Copenhagen.
- Danmarks Kirker* 1933-. National Museum of Denmark. Copenhagen.
- Falke, O. von 1913: *Kunstgeschichte der Seidenweberei*. Berlin.
- Fledelius, K., 2010: Introduktion/Introduction. In: A. Hedeager Krag: Ørnetæppet og andre silkefund fra Knud den Helliges helgenskrin i Odense Domkirke/The Eagle Silk and other silks in the shrine of St. Canute in Odense Cathedral. Herning.
- Flury-Lemberg, M. 2004: Die Adlerkasel in Brixen, ein bedeutendes Zeugnis frühchristlicher Paramentik. In: L. Andergassen (ed.): *Am Anfang war das Auge: Kunsthistorische Tagung anlässlich es 100 jährigen Bestehens des Diözesanmuseums Hofburg Brixen*. Brixen, p. 297-309.
- Frye, R. 2005: *Ibn Fadlan's journey to Russia. A Tenth Century Traveler from Baghdad to The Volga River*. Translated with commentary. Princeton.
- Geijer, A. 1935: Sidenvävnaderna i Helige Knuts Helgonskrin i Odense Domkyrka. *Aarbøger for Nordisk Oldkyndighed og Historie*, p. 155-68.
- Hedeager Krag, A. 2010: Ørnetæppet og andre silkefund fra Knud den Helliges helgenskrin i Odense Domkirke/The Eagle Silk and other silks in the shrine of St. Canute in Odense Cathedral. Herning.
- Hedeager Krag, A. 2018: Byzantine and Oriental silks in Denmark, 800-1200 AD. *Medieval Clothing and Textiles* 14. Woodbridge, p. 37-60.
- Hofenk de Graaf, J. H. 2004: *The Colourful Past. Origins, Chemistry and Identification of Natural Dyestuffs*. Riggisberg.
- Muthesius, A. 1997: *Byzantine Silk Weaving*. Vienna.
- Muthesius, A. 2004: *Studies in silk in Byzantium*. London.
- Mørch, A.N. 2018: *Magtens smykker, Koldinghus 750 år – 1268-2018. The Splendour of Power*. T.C Thulstrup & M. Nobel Jackbsen (eds.). Kolding.
- O'Connell, M. & R. Raje Airey 2018: *The Complete Encyclopedia of Signs and Symbols*. London.
- Reimbold, T. E. 1983: *Der Pfau: Mythologie und Symbolik*. Munich.
- Riis P.J. & Th. Riis 2004: Knud den Helliges Ørnetæppe i Odense Domkirke: Et forsøg på nytolkning. *KUML* 2004: Årbog for Jysk Arkæologisk Selskab, p. 250-273.
- Schiller, G. 1971: *Iconography of Christian Art*, vol. 1, *Christ's Incarnation, Childhood, Baptism, Temptation, Transfiguration, Works and Miracles*, trans. Janet Seligman. London.
- Schiller, G. 1972: *Iconography of Christian Art*, vol. 2, *The Passion of Jesus Christ*, trans. Janet Seligman. Greenwich.
- Skov, H. & J. Varberg (eds.) 2011: *Aros og vikerger-nes verden. Syv vikerger fortællinger og rejsebetretninger fra Aros*. Højbjerg.
- Vellev, J. 1996: Ørnetæppet, Sankt Knuds ligklæde. In: J. Fleischer, Ø. Hjort, & M. B. Rasmussen (eds.): *BYZANS. Senantik og byzantinsk kunst i nordiske samlinger*. Copenhagen, p. 113-114.
- Vellev, J. 2014: Knud 2. den Hellige og Edel (Adela). In: K. Kryger (ed.): *Danske Kongegrave*. Copenhagen, p. 195-205.

## Notes

<sup>1</sup> [https://da.wikipedia.org/wiki/Frederik\\_7](https://da.wikipedia.org/wiki/Frederik_7).

<sup>2</sup> The following description of the silks was previously published in Hedeager Krag 2018 and appears here by permission of the editors and publisher.

<sup>3</sup> Dr. Zvezdana Dode, professor at Stavropol State University, Russia, has found an unpublished piece of fabric at the Stavropol Museum that is similar to the Odense bird-silk. Email correspondence, 4th of February, 2012.

<sup>4</sup> See [http://sagadb.org/egils\\_saga.en](http://sagadb.org/egils_saga.en).

<sup>5</sup> Sarracian: People from the east, oriental. Information given by email from Anette Lassen, Associate Professor, Department of Nordic Studies and Linguistics, 7th of January, 2019.

<sup>6</sup> Odense Stadsarkiv received an e-mail in the beginning of 2017, where it became apparent that the missing piece of the Eagle Silk was today in a museum in Paris.



