Chintz, new in the 17th century

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Abstract:

Recently there has been a lot of research on cotton and the innovative role cotton from India has played in the Industrial Revolution in Europe in the late 18th Century. Even before the first orders for specified kinds of cottons from India -in 1683- by the VOC, the Dutch United East Indian Company, the first Dutch cotton print-works had started their activities in 1678 to printing imitations of the Indian chintzes. But this early start didn't lead to a flourishing textile industry. Dutch calico printers kept printing on plain cotton from India which wasn't half as fine as the cottons the Indian painters used for their chintzes or as the French and English printed cottons after the Industrial Revolution. There are fascinating examples in the large collection of Indian chintzes and European printed cottons in the Fries Museum in Leeuwarden NL.

Contents:

The first printed Dutch mention of chintz

> "*Because yesterday he was wearing a beautiful East Indian dress, painted with an art that I do not know. Because how it is rolled or folded, it will not crack or wear out.* [like the usual printed linens an woollens would do, GA] *Many Indian persons are artistic and skilled people*"
>
> Bredero, 1615

Bredero, a Dutch playwright from Amsterdam (1585-1618) wrote these remarkable lines in the comedy 'Moortje' (literally 'Darky'). Moortje is an adaptation of Eunuchus, a play by the Roman playwright Terence (ca. 190-159 BC) featuring a complex plot of familial misunderstanding. Bredero moved the piece to the city of Amsterdam of the beginning of the 17th century, which the spectators knew so well.

In short the story: Ritsart, son of a prosperous Amsterdam merchant, is in love with Mooy-aal, (Pretty-Allie) a madam. He wants to give her Moortje, an enslaved girl from Angola as a present. But he gets competition from Roemert, a swanky army captain. Roemert also wants to give Mooy-Aal a Dutch girl, Katryntje, who he had liberated from the hands of a slave trader. When Roemerts servant takes Katryntje to Mooy-aal, Ritsarts brother sees them walking and falls in love with her. This is the beginning of a long series of complications.

Figure 1: Claes Moeyaert , *Mooy-Aal (Pretty-Ally) and her suitors*, clad in plain wool and linen, c. 1630 - c. 1640, oil on canvas, 113cm × 126.7cm, Rijksmuseum Amsterdam

The lines were spoken by the character Ritsart and he is definitely talking about a dress of Indian chintz. Bredero must have seen the colourful cotton fabric, a very rare product in Europe at that time, although it was known. For the Greek historian Herodotus (484-424 BC) already wrote about cotton in India: "*there are trees growing wild, which produce a kind of wool better than sheep's wool in beauty and quality, which the Indians use for making their clothes*." It is a mere coincidence that in this play two enslaved girls were involved. The later connection between slavery and the world production of cotton was something Bredero could never have foreseen.

A special dress from India

From 1640 till 1854, the Dutch were the only European power permitted by the shogunate to trade with Japan. However, the officials of the VOC had to stay on an artificial fan-shaped island, called Deshima, near Nagasaki.

Every year Dutch traders received 30 silk kimono's, which they called 'japonse rocken', or Japanese gowns, during their annual audience with the shogun in Edo. And they got about a hundred 'rocken' from other dignitaries as well. The trip from Deshima to Edo or Tokyo took 3 months, but it was the only occasion to leave the tiny island. The kimono's were duly dispatched to Batavia for export to Amsterdam and they became very popular, not only in the Netherlands but also elsewhere in Europe. And here starts the real globalisation of fashion: nobleman Hendrick Adriaan van Rheede, the Commissioner-General of the VOC in India sent in 1689 six chintz gowns made after a Japanese kimono to the Board of the VOC in the Netherlands. If they should appreciate these gowns they could be ordered quickly. (Guy, 1998, 36) I suppose this was the type of gown he may have send to the Netherlands.

Figure 2: ‘Japonse rok’, night gown, ca. 1700, inspired by Japanese silk kimono, made in India for the Dutch market. Fries Museum Leeuwarden

Just over one year ago this night gown was given to the Fries Museum by a Frisian collector of Dutch traditional dress. The pattern imitates a Japanese kimono with the oriental Three Friends theme: Pine tree and plum blossom. (Peck 2013, 264) The third one is bamboo, but the leaves are made smaller and added to the prunus. They symbolize long life, perseverance, and integrity. Since they can all endure cold weather they are shown together as the "Three Friends of Winter" or "The Three Friends". Van Rheede was a botanist, he surely must have been attracted by this pattern and the symbolism. He also made a pioneering study of chintz production which he described in his letter to the Board of the VOC. (Guy, 1998, 34, 35) Whether the Board shared this knowledge with Dutch cotton printers is unknown. However, the VOC never ordered ‘Japonse rocken’, but they did ask for ‘cambayen’ and night gowns. In the Netherlands we tend to call the slender night gowns with narrow sleeves a cambay and this wide, kimono-like one a night gown.

Figure 3: Back of ‘Japonse rock’, night gown, ca. 1700, decorated with pine tree and prunus blossom, made in India for the Dutch market. Fries Museum Leeuwarden

The floral borders of the sleeves, front-opening and hemline are painted integral to the fabric. There are no shoulder seams, the fabric is painted in a pattern anticipating the intended garment. The lining is block printed Indian cotton, Which is much coarser than the painted cotton and has never been glazed. Since the lining has no shoulder seams as well, the small pattern is upside down at the back. It shows similarity to the lining of an English box in Stockholm dated 1656 (Lemire 2011, plate 7). There are several remaining japonsche rocken with the same pattern, with a red, blue or white background (Rijksmuseum Amsterdam).

Early cotton production in Europe

Before the 17th century a flourishing cotton industry had developed in southern Europe, producing fustians and other rather coarse mix-cottons that were used in place of heavier woollens and to complement lighter woollens. In the collection of the Fries Museum are two early 18th century petticoats of white twill fustian: mixed linen and cotton, with simple embroidery of stem stitch, mostly outlines. An incomplete one is embroidered with indigo dyed crewel wool, the second one is complete and has more elaborate embroidery. I presume that these were made by a seamstress in Friesland.


Figure 4: Fustian petticoat, embroidered with indigo dyed linen, stem stich, chain stitch, herringbone stitch, Friesland, 1700-1750. Fries Museum Leeuwarden

It is easy to recognise there are two materials used in the fabric; the smooth linen and the fluffy cotton. The width of this material is only about 42 centimetres. The 8 lengths of fabric were sewn together into a large piece and this was embroidered. The symmetrical pattern repeat goes from seam to seam, and is mirrored at the seams. The last seam is sewn after the embroidery was finished.


Figure 5: Detail of last seam in fustian petticoat, Friesland, 1700-1750. Fries Museum Leeuwarden

Embroidery was initially the best method to imitate the fine hand painted chintz from India. Fine examples are the colourful panels in crewelwork that were made in England. (Lemire 2011, plate 4)

How to make hand painted chintz

It is important to realise how complex and time consuming the fabrication of chintz was. Nowadays in India the technique is almost forgotten. That's why Renuka Reddy in Bangalore has started to rediscover the original way of painting chintz with mordants, natural dying with plants, and especially bleaching the background to a brilliant white.
(http://redtreetextilestudio.com/)

She has painted for the Fries Museum examples of 10 stages of the process. Especially stage one, the fabric preparation takes a lot of time. The very fine hand spun and handwoven cotton fabric is beaten against a stone and washed several times to remove starch and other impurities. Then it is boiled for a couple of hours. After that the fabric is immersed in diluted sheep dung at night and exposed to sunlight the next day, sprinkling water on the fabric periodically to keep it wet. This is repeated 7-10 days. Thereafter the cloth is soaked in myrobalan (a solution of tannin-containing fruit) overnight. It is then boiled and washed several times.

The next day, cloth is soaked in myrobalan and buffalo milk, rubbing the fabric well with this concoction. It is then wrung several times in different directions to allow the milk and myrobalan to penetrate the fabric evenly. This cloth is then exposed to sunlight so that the fat content in the buffalo milk penetrates deep in to the fabric, which allows the mordants to be painted on the fabric without spreading. The myrobalan gives the fabric a yellowish tinge. After that the cloth is rubbed thoroughly so that the fibres are flattened and the surface is smooth for the mordants to be painted. The design is pounced on the cloth with charcoal powder, which is washed away in later stages.

Then the drawing and painting can begin, at first the outlines, which are drawn with iron and alum mordant. It was also possible to printing the outlines with wooden printing blocks. The cloth is immersed in a dyebath with saya wera, a kind of madder, the outlines become black (iron mordant) and red (alum) but the background without mordant is dyed as well but not colourfast. After that the bleaching follows (stage 2).

Figure 6: Stage 2: Outlines dyed with saya wera; background without mordant is dyed as well but not colorfast; Renuka Reddy 2016. Fries Museum Leeuwarden.

During one week overnight the fabric will be soaking in a solution of buffalo or goat dung and during the day bleaching in the sun. (stage 3) In stage 4 the cotton is prepared again with myrobalan and buffalo milk, the outlines are filled with iron, alum and tin mordant, and white lines are painted with wax. In stage 5 the cloth is dyed again in bath with saya wera, white reserved lines are clearly visible and the background without mordant is dyed as well again but not colourfast. So the background is bleached again, same procedure. (stage 6)

The next bath is indigo which does not need a mordant, first drawing fine lines with wax in the surfaces which will be dyed blue. Then the whole surface will be covered with wax , except the parts that have to be dyed blues or green (stage 7, 8). After that the fabric is boiled to remove the wax (stage 9)

Figure 7: Stage 7: Drawing fine lines with wax in the surfaces which will be dyed blue with indigo; Renuka Reddy 2016. Fries Museum Leeuwarden.

Last yellow and green (yellow over blue) parts are painted by hand with curcuma. After this stage the fabric usually was glazed by applying rice starch and rubbing the surface with a smooth stone or shell.

Figure 8: Stage 10:Yellow and green (yellow over blue) parts are painted by hand with curcuma, Renuka Reddy 2016. Fries Museum Leeuwarden.

It took European printers more than a century and a half to be able to make a printed – not painted - cotton fabric as colourful and durable as the original Indian chintz.

Cotton printers in the Netherlands

The new technique for Europe with iron mordants and wooden printing blocks was called 'the Indian cotton printing method'. The earliest reference to the new form of printing dates back to 1678, when two Amsterdam merchants, Jacob ter Gou and Hendrik Popta, submitted a request to Amersfoort for the purpose of setting up a cotton print work in this town: 'for the printing and dying of all kinds of East Indian cottons, which was never done before and of which we had no idea how to do it'. The cotton printing company would be run by a 'Turk', Louis d'Celebi. With the references to Turkey and Turks, it is very often intended to be Armenia. In the 17th and 18th century there was a colony of Armenian merchants living in Amsterdam.

Amsterdam was the place where most calico printers settled. The city was very suitable for the trade because of the centuries-old knowledge of printing techniques, the supply and trade in VOC-cotton. The exotic dyes were supplied by the 'Rasphuis', where prisoners rasped the woods meant for dying. Water was abundantly available for rinsing as were the pasture fields for drying and bleaching. As a result, there were dozens of cotton print workshops and affiliated companies in Amsterdam, such as dyers, glossiers, calendar shops, dryers, etc. The cotton printing industry provided work to many workers, traders and companies. It was very labour-intensive and most of it was done by hand. The most important production tasks were with the printers, the printing staff and tailors. Women and children painted the blue by hand or touched up the printed patterns. Boys and girls took care of ironing, painting and pinning. Cotton workers often had particularly poor working conditions and worked long days at low wages.

Unfortunately we know very little of the first cotton printing mills in the Netherlands, for instance there are no early sampler books related to them. Around 1774, England and France started making their own chintzes using new industrialized techniques for cotton spinning, weaving, and dying. By that time in the Netherlands the old-fashioned production, still printing on imported cottons from India, fell sharply. (Riello,2013, 125-126) The quality of the Dutch printed cottons decreased dramatically. Unlike in France and England, the Dutch print shops remained located in urban areas where salaries were high.

Indian cotton, the industrial revolution and Dutch printed cotton

The cotton fabrics from India were a driving force behind the innovation of the textile industry and the industrialisation in Europe. The spinning jenny (James Hargreaves 1764): a multi-spindle spinning frame was one of the key developments in the industrialization of weaving during the early Industrial Revolution. The 'water frame' (Richard Arkwright, 1768) enabled to spin cotton strong enough to use as warp. For the first time it was possible to weave all cotton fabric instead of mixed fabrics from linen and cotton. Finally the Spinning Mule (Samuel Crompton, 1779), a combination of the jenny and the water frame, permitted large-scale manufacture of high-quality thread for the cotton industry. (Beckert 2015, 98) Also the search for the best dyes and mordants for the fabrication of calico's had given the chemical industry a boost.

England and France made their high quality own chintzes around 1780 using the new industrialized techniques for cotton spinning, weaving, dying and new technologies for printing. Only after 1795, during the French period, the mechanization of the Dutch cotton spinning mill started, and the flying shuttle (invented in 1733) was introduced. But the craze for chintz was over by then.

I've tried to find examples of Dutch printed fabrics in the large collection of the Fries Museum. For instance a bearing cloth, used for a for a baby, is made of an early 18th

century chintz, painted in India, which is supposed to be inspired by a drawing for a bizarre silk by the designer Daniel Marot. (Irwin 1970,cat. 123)

Figure 9: Bearing cloth for a baby, 1700-1725 painted in India, inspired by engraving of Daniel Marot, Fries Museum Leeuwarden

The lining has an interesting pattern, which has been printed in Europe and probably in the Netherlands. The pattern has the same complexity as the engraving of a pattern design made by the Frenchman Alexandre Senegat, who had been working in Amsterdam.

Figure 10 Lining of bearing cloth, 1700-1725, European printed cotton, probably Dutch. Fries Museum Leeuwarden

Though the cotton isn't as fine as Indian chintz, the printing is refined and the blue colour is painted. As stated before, we know very little about the first cotton printing mills in the Netherlands. There are no early sampler books, but this could be Dutch. There are six designs of Senegat at the Rijksmuseum in Amsterdam, all very much inspired by the swaying forms of the Indian painted chintz.

Figure 11: Alexander Senegat, *Design for printed cotton*, 1719, etching, 393mm × 266mm

Last but not least I would like to show an exceptionally printed petticoat that must have been made in the Netherlands. Petticoats with wide decorative borders near the hemline were fashionable in western Europe since about 1730, but this one has to be dated at the last quarter of the 18th Century. The cotton fabric isn't very fine and the colours are dull.

Figure 12: Petticoat with three-masters showing the flag of the ’Dutch Chartered West-Indian Company’, Dutch printed cotton, ca 1780, collection Fries Museum Leeuwarden, on loan from Ottema-Kingma Foundation

The decoration shows a seascape with three-masters adorned with the flag of the ’Dutch Chartered West-Indian Company’. Around the tropical islands with a kind of Asian buildings, black people are swimming and boating. The stern of the tall ships shows the name: Curacao, the Dutch colony which was a free port and until 1815 the centre of the Dutch slave trade. The Dutch West-Indian Company was abolished already in 1791 due to financial problems. (Dijkstra 2017, 16, 17)

I was not able to trace the original design of the pattern, which is a combination of the imitation chintz floral trails with different flowers, a Dutch print of a seascape with three-masters and the imagination of tropical islands. The designer of this print didn’t have any idea of the harsh reality of the cotton plantations in America.

I started this article with the first mention of Indian chintz in the comedy Moortje, in which two enslaved girls, a white and a black girl play a role. Unfortunately enslaved human beings have played a very important role in the cotton plantations in America, but it is special to find a reference to it on a printed cotton petticoat.

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