A Framework for a New Understanding of Pre-industrial European Textiles

Izumi Takeda

1) Textile names as labels

In the pre-industrial era, a mixed fabric of cotton and flax, called ‘fustian’, was produced in Britain. Because cotton fibre was used as a raw material, economic history studies have considered the manufacture of fustian as the precursor of the British cotton industry.

A question is whether this categorisation is still effective once the perspective changes, that is, when the demand side is analysed. The success of the domestic production of a pure cotton cloth called ‘calico’ through the advent of the water frame, was a crucial factor in the establishment of the British cotton industry. Calico, having gained great popularity after importation from India, was not only consumed domestically, but also exported to West Africa and the Americas in order to be used for the gifts to native African rulers, for the clothing and furnishing needs of the Europeans who had crossed the Atlantic, as well as for slave clothes in colonial America. Especially after the prohibition of its domestic use in the 1720s\(^1\), its re-export to those areas played an

---

1) 9 Geo. II, c. 4: An Act to amend an act passed in the seventh year of the reign of his late majesty King George the First, intituled, An act to preserve and
important role in the future mechanisation of the British cotton industry\textsuperscript{2}).

Why was calico so popular? Purchasers/users wanted, bought, or used calico, because it appealed to them in any form. In other words, they valued its characteristics, such as cleanliness, beautiful printing, and soft texture, more than what it was made of.

An effective way to categorise textiles by their characteristics rather than by the fibre is to focus on their names, as they reflect such characteristics. For instance, while people would choose ‘cambric’ to make a good shirt, they knew that a fabric called ‘osnaburg’ was most suitable to clothe slaves. The term ‘cambric’ became a label for its characteristics such as lightness, soft texture, and whiteness, and purchasers could immediately identify the fabric from its name. Furthermore, labels often affect the mind-set of users or wearers. Wearing a good shirt tailored from cambric would make them feel comfortable, not only because of its cosy material, but also because it is expensive and produced by employing a lot of time and labour. It helps differentiate the wearer from other people while giving them a sense of superiority.

Then, what kind of information did a fabric called ‘fustian’ embody in its label? Raised surface, thickness, and dark colour differentiated it from calico\textsuperscript{3}).


\textsuperscript{3)} Cox, Nancy, \textit{Retailing and the Language of Goods, 1550-1820}, Ashgate, 2015,
2) What fibres were used in the production of ‘fustian’?

Fustian is said to have been named after an Egyptian town, Fustat, near Cairo, though its relations to the European fustian production is obscure. It is not so popular among many other textile names, nevertheless, economic historians who intend to discuss the British (Lancashire) cotton industry, more often than not refer to ‘fustian’ as a type of cotton cloth for the simple reason cotton was used in its manufacturing process. Their focus is on the fact that cotton was used, while flax, another component of the fabric, was less valued. In addition, they do not give due consideration to its unique characteristics and how it was utilised.

Looking back to the Middle Ages in Italy and the fustian history since then, you will find ‘fustian’ that was not always made of cotton and flax. Milan (referred to as ‘Millian’ below) and Cremona in Italy started manufacturing ‘fustian’ in the twelfth century, and its production gradually migrated and extended northwards to reach Ulm (‘Holmes’) and Augsburg (‘Osbro or Augusta’) in South Germany by the end of the fourteenth century, where ‘fustian’ of lower quality was widely produced using locally grown flax. Evidence shows that England began producing fustian by the middle of the sixteenth century, and it took about half a

---


century to reach Lancashire.

‘Fustian of Norwich’ which appeared in the 1554 Act, being recognised as the first English made fustian, was a wool based fabric, suggesting that English fustian production started as part of the woollen industry. It was not until after its production was finally established in Lancashire that the fibre composition settled on cotton and flax, which prior studies have loosely defined as ‘fustian’.

From the above mentioned, it might be quite fair to say that the fibre composition largely depended on the economic conditions of the producing districts. For example, Lombardia in Italy had easier access to cotton through Venice and Genoa than other regions in Europe, and in the neighbourhood of Schwaben, there was a lot of flax grown locally. As Norwich had been one of the important production bases of woollen textiles in England when the production of fustian began, it was natural that local weavers used wool as a raw material. If we take a historical view, there are various types of fustian in terms of fibres used. The specific fibre composition is not a defining attribute of ‘fustian’.

3) What defines ‘fustian’?

Below is a list of fustians referred to in the 1660 Book of Rates. By that time, England was importing many different types of fustian. Its broad price range and the various descriptions attached to ‘fustian’ may correspond to differences in the quality of the material. These descriptions include the fabric’s place of origin, though it is not certain here whether they refer to the place of production or distribution base.

A Subsidy granted to the King of Tonnage and Poundage and other summes of Money payable upon Merchandize Exported and Imported (Charles II, 1660).
Fustians in the 1660 Book of Rates

<table>
<thead>
<tr>
<th>Amsterdam Holland or Dutch fustians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barmillions</td>
</tr>
<tr>
<td>Cullen fustians</td>
</tr>
<tr>
<td>Holmes and Bevernex fustians</td>
</tr>
<tr>
<td>Jeane fustian</td>
</tr>
<tr>
<td>Millian fustians</td>
</tr>
<tr>
<td>Naples fustians tript or velure plaine</td>
</tr>
<tr>
<td>Naples fustians wrought vocat. Sparta velvet</td>
</tr>
<tr>
<td>Osbro or Augusta fustians</td>
</tr>
<tr>
<td>wth silke</td>
</tr>
<tr>
<td>of Weazell</td>
</tr>
</tbody>
</table>

According to Sykas\(^7\), these fustians can be divided into three classes by quality. Naples fustians had a cut pile surface\(^8\), and were exclusively upmarket commodities\(^9\). Next came moderately-priced fustians, such as Barmillion, Millan, Dutch, Cullen and Weazell fustians; and finally, the cheaper varieties included Jeane, Holmes, Bevernex and Osbro. They all had a raised surface, though moderately-priced varieties had more and longer naps than cheaper ones.

The fact that there were nappers and finishers in Cremona, and shearers in Schwaben, suggests that fustians produced in these towns had a raised surface. At the end of the fifteenth century, England tried to stop

---

\(^7\) Sykas, 2009.
\(^8\) Another source says that ‘fustian of Naples’ had two piles on its surface, one shorter than the other. See Cox and Dannehl, 2007.
\(^9\) They were mentioned in the sumptuary law passed under Edward IV.
the inflow of fustians whose raised surface was singed to burn off extra fibre, because the fustians of that time had to be shorn with broadshears. Fustian of Norwich also had a napped surface\(^\text{10}\). Even when many different towns began manufacturing their own fustian, adjusting the fibre composition to their peculiar economic circumstances, the features of the raised surface remained unchanged. In eighteenth-century Lancashire, several varieties of fustian were manufactured, such as thickset, dimity, corduroy and velveret, all of which were characterised by their raised surfaces.

Broadly speaking, there were two kinds of raised surface. One kind was a surface brushed with a tool called a ‘teasel’\(^\text{11}\). In most cases, an extra fibre was seared after teaseling. The other kind was a piled surface, created on the loom. In some instances, each pile was cut, so as to give the fabric a continuous soft texture. The manner of raising the nap and cutting the pile varied according to time and place.

In order to make the finished surface hairy and downy, the weft had to be softly spun in order to keep it fluffy, and then loosely woven in order to make the weft float, so that each fibre could catch the bristles of a brush. It would be fair to assume that cotton and wool were used as wefts, because they were more suitable for creating these features than linen. The judgment as to which fibre was to be used in the production of fustian largely depended not only on its relative availability, but also on whether it had the required features for creating a raised surface, when spun as a weft. Hence while wool-based fustian was common in one


\(^{11}\) To teasel means to card or brush the surface of a fabric using a tool made of teasel.
case, cotton was used in another, as was the case in eighteenth-century Lancashire.

It may be safely concluded that from a typical consumer’s perspective, fabrics called ‘fustian’ had a uniquely distinctive appearance - namely, a raised surface, regardless of the materials and methods used in their manufacture. This commonly shared feature, rather than the fibre composition, is to be the defining attribute of ‘fustian’. The raised surfaces of different grades of fustian were used for specific purposes. While fustian of high quality, such as Naples fustian, accounted for a minimal proportion of fustian traded, less expensive varieties of fustian had a much wider market, being commonly used for protective outer garments by people of lower rank, such as labourers and rural farmers.

4) Transcending different fibres

Calico was classified under ‘linen cloth’ in the 1660 Book of Rates. It is noteworthy that Indian calico, being made of cotton fibre only, was treated as ‘linen’. In pre-industrial Britain (England), certain kinds of European linens made of flax were actually used as substitutes for Indian calico. Besides, cotton-flax mixed fabrics, which should be distinguished from fustian by its characteristics, were manufactured and marketed in place of calico. It follows that at least in the period from the latter half of the seventeenth century to the end of the eighteenth century, the term ‘linen’ did not always mean a fabric made of flax. Mixed fabrics of flax and cotton and even pure cotton fabrics as well automatically fell under the category of ‘linen’.

It can be inferred from the above mentioned that this is because they

12) Takeda, 2013, Chap. 1.
similarly appealed to the five senses and mentality of human beings, which worked as a criterion of what to buy or what to use. This kind of judgment must have affected the supply side in terms of how many of what to produce, and how. In this context, removing the walls between fibres and focusing on textile names as labels was useful not just to analyse the demand side. It could be a framework for discussing the supply side of any textile industry as well.

5) Positioning of textiles

Transcending the boundaries of fibres and focusing on textile names (labels) enables us to place each textile in a proper position in terms of its characteristics showing how each was different or similar.

This is a static positioning from the viewpoint of purchasers/users at a specific time and place. Conventional classifications by fibres, such as cotton cloth and silk cloth or cotton industry and silk industry, can be subdivided according to labels, and one label can be linked to another or others individually.

The former (subdividing) means that each conventional classification is a collection of various kinds of fabrics; calico, muslin and others are grouped together as cotton cloth. In addition, labels such as ‘calico,’ being a broad concept that included other labels, can be organised in a multi-layered framework. How many labels are included in one label depends on the time and place.

The latter (linking) relates to a redefinition of textile names. For example, as discussed above the term ‘linen’ included not only flax-made fabric but also mixed fabric of linen and cotton, and in some cases, pure cotton fabric as well. It follows that ‘linen’ described two (or possibly
more) different fibres. Linking is often done by transcending the boundaries of fibres.

The positioning explained above means placing textile labels in proper positions from the perspective of purchasers/users at a certain time and place. However, it changes, on one hand, with the flow of time, even if its geographical focus remains unchanged, and, on the other, often reflects geographical differences even at the same point in time.

6) Issues for future analysis

It is well known that, around the turn of the eighteenth century, Ireland was forced to give up its woollen industry, and the English government encouraged linen production in its stead. As has been discussed by many scholars of the history of Ireland, Ulster had maintained a brisk development in high quality linen production in the eighteenth century. Though the fabric quality was much lower, linen production was widely present in other parts of Ireland as well, which prior studies did not give as much focus to. In the course of the century, the rapid expansion of the British external trade, especially with the Americas, created an opportunity for Ireland to increase coarse linen exports.

Another vital economic environment for the Irish linen industry is Lancashire, where the textile production rapidly grew from the middle of the century. The early history of the English cotton industry, from the Indian calico imports to the mechanisation of cotton spinning, influenced the relationship between English and Irish linen and cotton-related industries.

As for the eighteenth-century Irish linen industry, the future research questions that could be derived from this paper are: first, ‘what kinds of
linen textiles were produced in the eighteenth century in Ireland and how they were similar or different?'; second, ‘how were the attributes of each textile related to the complex rivalry with the textile production in Lancashire, which was to become the leading industry during the time of the Industrial Revolution?’
Industrial Revolution, in modern history, the process of change from an agrarian and handicraft economy to one dominated by industry and machine manufacturing. The process began in Britain in the 18th century and from there spread to other parts of the world, driving changes in energy use, socioeconomics, and culture. The Industrial Revolution transformed economies that had been based on agriculture and handicrafts into economies based on large-scale industry, mechanized manufacturing, and the factory system. New machines, new power sources, and new ways of organizing work made existing industries more productive and efficient. New industries also arose, including, in the late 19th century, the automobile industry.