

CHINA AND THE COMPLEXITIES OF WEAVING TECHNOLOGY

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The pre-eminence of silk in the economic and cultural development of China significantly affects our perceptions of textiles and weaving technology from East Asia. The initial Western notion of China was shaped by this fibre. To the ancient Greeks and Romans, China was known as Seres, the Land of Silk. To some extent, our expectations of history and the search for knowledge continue to be preconditioned by this factor. Yet ethnology, archaeology and documentary evidence provides a far more complex picture for Chinese and other East Asian textile technology than that for the silk industry alone.

For the purposes of this discussion, a distinction is made between the terms "China" or "Chinese" in a cultural sense, and "East Asia" or "East Asian" in a geographical one. The area at the eastern edge of the Eurasian landmass, extending from the grassland steppes in the north to the subtropics of Southeast Asia and from the Tibetan Plateau at the foot of the Himalayan massif to the Pacific coast, has witnessed an evolution of culture we identify as Chinese. Despite what is a normal tendency in this age, to generalize along nationalistic lines, it is important to appreciate that the present-day political entity we call China is not monolithic in geographical or cultural terms. During the past seven millenia, the area we have identified as the homeland of that culture has varied from the localized watershed of the middle reaches of the Yellow River to a vast empire with frontiers pushed westward to Afghanistan, northward to Manchuria and Korea and southward to Tonkin.

Geographic diversity results in climatic variety. This in turn supports regionalized lifestyles. Despite the effects of modern technology, diversity of lifestyle is true today and was even more pronounced in the past.

Similarly, there is no easily defined notion of a Chinese people in an ethnic sense. Some ethnologists, as well as many Chinese historical sources, identify the Han as the Chinese people. While this designation had validity in a tribal sense four millenia ago, by the second century B.P.E., Han had become a socio-political designation. Since that time, the invasion and migration of many non-Sinic peoples, including Uighur Turks, Tungus-speaking Khitans, and Mongols have gained control of the empire and identified themselves with Chinese cultural and ethnic ideals--the most recent example being the tribal group known as Manchu, who ruled China from 1644 to 1911. The present "Chinese" population includes speakers of Tibeto-Burmese, Indo-European, Tungus, Turkic, Mongol, as well as Sinic languages.

The political reality of China does not pre-date the third century B.P.E. China's first unifier and founder of the Qin Dynasty styled himself emperor, assuming the title Qin Shi Huang Di (literally, first emperor of the Qin. The empire called Qin is the source of the Western word for China, although the nation referred to itself as Chu Kuo (Central Kingdom).

These factors and others shift both our perceptions of, and the content of, the culture we call Chinese. Textile technology exists within a *dynamic* of this cultural development. This paper examines some traditional Chinese views of technological development, as well as Western perceptions of that technology. The range of evidence concerning fabric types, pattern styles and data about technology is diverse. In contrast, historical and contemporary commentaries tend to disregard diversity in the interests of conformity to single norms, be they notion of cultural superiority or technological evolution.

Chinese culture has dominated East Asia for centuries. Wide-spread socio-political organization and urbanization began on a significant

scale on the north China plains during the second millennium B.P.E. Politically, economically, artistically and technologically China overshadowed its neighbours. With the notable exception of Japan, no other region or group developed a sustained alternative to rival China.

The development and standardization of a single written language during its formative period is among the more significant aspects of Chinese culture. Links between literacy and politics contributed to the rise of a civil service. In time, the civil service became a major means of social and economic advancement. As a result, bureaucratic standards became a force in shaping Chinese culture. These standards typically stressed conformity to conservative values, and advocated regulation through precedent. While the act of writing was valued as an aesthetic expression, it served more importantly as a means of recording and preserving data. Such documentation promoted a sense of the past. By the first century B.P.E., a Chinese notion of historiography was firmly established. Standardized civil service examinations were based on these historical sources.

A notion of past, and a culture which outranked any other neighbouring group, led to an exclusive rather than an inclusive world view. For the Chinese, the empire was self-sufficient; it was orderly, regulated, balanced and rational. As a political entity, China was a civilized centre surrounded by a barbarian outside. The Chinese world view was supported by a bureaucratic filter that regulated the types of data that were relevant, and shaped the manner in which those things were recorded. History was written to enhance the concepts of Chinese moral and physical superiority. Comparisons with the outside could only be unfavourable. If by chance the comparison proved favourable, those aspects were frequently appropriated into a "Chinese" context.

If China's perceptions of her own culture are bureaucratic and xenophobic, Western views of China are decidedly romantic. Marco Polo's Cathay, or the even more ancient notions of a Land of Silk, have shaped Western perceptions of a distant, exotic East. Even as

the West learned more about China (admittedly usually from a prejudiced position) the West remained predisposed to treat China favourably. Chinese civilization produced a significant built environment, practiced engineering, developed high aesthetic standards, and created a documented history. In other words, China could be fitted into Western notion of culture with history that could be interpreted as possessing progressive and rational traits. Although the reasoning differs, it has been very easy for Westerners to accept the privileged position of China within East Asia. Even those Westerners who have attempted to penetrate the romanticism by becoming proficient in the Chinese language often succumb to the exclusive superior Chinese viewpoint.

Chinese and Western cultural biases both stress conformity rather than diversity. Things that conform can be ordered, assigned a priority or chronological sequence. Diversity tends to be equated with chaos. However, notions of progress, evolution and priority are difficult to maintain in the face of diversity, particularly as they relate to evidence for textile technology from East Asia. Cultural biases reveal both distortions and gaps in interpretation when we consider fibre, fabric and woven pattern making technology.

FIBRE

The inventory of fibre resources for textile production in East Asia is considerable. Bast fibres include hemp, ramie, banana, orchid, various bark fibres, among others. Animal fibres include sheep, goat, camel and horse. In addition, there are cotton and silk.

Bast fibres predominate in coastal and southern regions, although they were raised in historical times as far north as the steppe and as far west as the Tibetan plateau (Ho, 1977; Li, 1974). Archaeologically, the evidence suggests that hemp (*Cannabis sativa*) is the oldest fibre used in Chinese cultural contexts. Ramie, or grass linen (*Boehmeria nivea*), is present by the early historical period. Yet, with the exception of localized tax levies, there is virtually no written record of bast fibre production in China. From the

ethnographical record, we can deduce that bast fibres were processed locally for domestic consumption, that they seldom had an economic impact on the state economy, and that they may not have entered a marketing system much beyond a very localized town or village.

Wool and hair fibre relate to the north and west of East Asia (Dimand, 1973). Culturally, Chinese sources identify these with barbarians beyond the moral sway of empire and tend to discredit them. Yet wool formed a major trade commodity in northern East Asia, and the fact that many of the conquerors of the Chinese empire came from that area would suggest that the whole story about wool and hair textile production in China is not known.

Cotton is a relatively recent import to East Asia, coming via Central Asia with various Semitic groups from western Asia (Waston, 1977). Both Jews and Arabs appear to have been involved with development of hybrid annual cotton plant from perennial stock. This development significantly extended the growing range of the plant. Although cotton has been grown in China since the eighth century, its wide-spread use among the population does not significantly pre-date the twelfth to thirteenth centuries. Cotton production was also localized and tended to play a relatively minor role in the imperial economy; however, interprovincial trade in cotton cloth was significant in the later imperial period.

The perspective changes radically when we focus on silk. Silk is seminal to a notion of Chinese civilization, being present at the earliest stages of the developments which witnessed the expansion of culture on the north China plains. Sericulture, the cultivation of the *Bombyx mori* moth, was apparently the invention of Neolithic farmers living along the Yellow River over 4000 years ago (Hyde, 1984; Kuhn, 1982; Xia, 1972). This discovery is recorded in myth: the consort of the mythical Yellow Emperor, who bestowed agricultural and other knowledge on the Chinese, is reported to have made a chance observation of the spinning of a silk moth cocoon and learned that the thread could be reeled by soaking the cocoon in hot water (some sources claim the hot water was tea). Regardless of its origin, sericulture is based on two fundamentals: knowledge of how

to gather and hatch moth eggs at one time, and access to fresh leaves of the white mulberry tree.

By the second millenium B.P.E., sericulture had come to support the economic supremacy of the Chinese state. Sericulture is labour intensive, demanding skill and coordination for success. Traditionally, silk was produced within farm families that supplemented meager livelihoods derived from other agricultural pursuits. It was a specialized woman's activity. While raising the worms to the cocoon stage was handled within an individual household, reeling, which had to be done with all possible haste to prevent the cocoon from being ruined by the emerging mature moths, was often centralized at a commercial filature (Kleinwachter, 1917; Man, 1917; Shih, 1976). This began a process of specialization which marked silk production apart from other textile manufacture. Weaving silk also required equipment and skill beyond that normally maintained for domestic production.

Each step in this specialized process enhanced the prestige and symbolic value of silk, transforming sericulture into a major economic factor for the Chinese state. The state encouraged sericulture by making taxes payable in silk cocoons. By controlling production of the finished product, the state ensured the prestige of silk fabric and transformed its use into an imperial prerogative. Silk not only demonstrated the special status of noble classes, but celebrated aristocratic position when silk garments and trappings became the rewards of government office.

Fully aware of the unique value of the silk industry, early Chinese governments prohibited the export of silkworm eggs. Those who were caught divulging the secrets of silk making, or exporting eggs to foreigners, faced execution.

Not surprisingly, this cultural emphasis has contributed to the scholarly attention by many archaeologists, historians and chemists on the origins of sericulture and the beginnings of the state-controlled silk industry.

The archaeological evidence for *Bombyx mori* silk is, however, surprisingly thin. Evidence dating from the Neolithic period amounts to two finds. The first, made in 1926, is an artificially cut cocoon recovered from Shanxi province now housed in the National Palace Museum in Taipei (Li, J., 1927). It was regarded as dating from the Yangshao culture--2200-1700 B.P.E. and was claimed by its excavator to represent 50 percent of a *Bombyx mori* cocoon. Several Japanese and Chinese scholars have done extensive analysis of this cocoon and over fifty other ancient silk samples dating before 1000 B.P.E. (Nomura, 1968; Sato, 1977; Wan, 1977). Cross-section microscopy and other tests suggest the cocoon represents 80 percent of the original size, leading to the conclusion that the cocoon belongs to the species *Rondotia menciiana Moore*, that is, a wild species (Kuhn, 1982). The cut most probably was done to remove the chrysalis undamaged, possibly for food.

The 1958 finds of silk fragments, discovered in a bamboo basket at the site of Quianchanyang, Zheiang province, have been identified as *Bombyx mori*. Through Carbon-14 testing, a date of 2740 +/- 100 B.P.E. has been assigned (Barnard, 1975; Chang, 1979).

Several Chinese and Japanese scholars have also investigated the oldest Chinese pictographs and inscriptions dating from the Shang Dynasty (1523-1028 B.P.E.), and have made exhaustive studies of representations for the words *silk worm*, *mulberry* and *silk* (Nunome, 1968; Shima, 1977; Sun, 1965; Wen, 1948; Xia, 1972). Although not conclusive, most scholars would concede that a vocabulary for silk and sericulture most probably existed by the second millenium B.P.E. and that silk already played a major role within early Chinese society of that period, particularly as presentation gifts. Whether silk was the prerogative of the king and its manufacture strictly organized into state-controlled workshops by this early period, as is claimed by some scholars, is not accepted by all (Kuhn, 1982).

FABRICS

The body of evidence for actual fabrics from East Asia is truly overwhelming. Surface survivals date from the seventh century in the form of woven pictures for Buddhist temples--the most famous is probably that at the Horyuji in Nara, Japan (Harada, 1929). Mountings on paintings include textiles from the twelfth through fourteenth centuries. By the sixteenth century, public furnishings survive, some in European, as well as in Japanese and Chinese collections. From the seventeenth century, costumes and domestic furnishings survive. These, of course, increase in number dramatically as we approach the end of the nineteenth century.

Some surface survivals can be dated by inscription or by associated commentary, but these instances tend to be the exception. In general, most claims for dating are based on stylistic analysis and guess work.

Although textiles of every fibre type exist from these finds, the examples of silk outnumber all others by a factor of at least 2500 to 1. This is more a reflection of the cultural dynamic that valued silk, rather than an accurate sampling of the fabrics actually produced and used within the Chinese empire. Distortions exist in all historical textile samples, but not to the degree that is typical of the Chinese situation.

Silk also played a role in imperial diplomacy, serving as prestige gifts to nomadic leaders whose tribal hordes from time to time threatened the northern borders of the Chinese empire, as well as a major trade commodity. Gifts of silk yardages or coats signified the favour of the Chinese emperor, but also promoted dependence upon China, and at times created intertribal rivalry, since none of these northern groups had access to the means of independent silk production. Some of these fabrics have come to light as a result of archaeological excavations carried out in the past seventy years.

Since Sir Marc Aurel Stein's momentous discovery of figures and plain silk fabrics at the site of Loulan in the Tarim Basin of Central Asia in 1913, over 2000 textile fragments have been recovered (Andrews, 1920; Stein, 1921, 1928; Riboud, 1977). These finds range in date from the Neolithic (roughly 4500 years ago) to the late

dynastic period (seventeenth to eighteenth centuries). Geographically, they span northern and southern centres of Chinese cultural development as well as areas of Central Asia, Mongolia, and southern Siberia associated with China through conquest or trade (Lubo-Lesnichenko, 1961; Rudenko, 1969, 1970; Trever, 1932; Umehara, 1960).

Archaeology can be divided into two periods. The first dates from Stein's discoveries at the sites of destroyed oasis cities in the Tarim Basin. Over the next twenty-five years, other discoveries were made at burial sites or refuse dumps throughout East Asia from a variety of ethnic contexts (Riboud, 1977; Rudenko, 1969; Sylwan, 1949; Umehara, 1960). Most of these expeditions were supported by western governments, and the finds have been preserved in western collections. Few are datable from the archeological context.

The second period of archaeological activity dates from the founding of the People's Republic of China (Shih, 1977). Since 1950, field archaeology within China, under the direction of the Ministry of Antiquities, has flourished. Surveys, mostly of a salvage nature, have been carried out in the northern centres of Chinese cultural development, south central China, Mongolia and Central Asia. To date, well over 100 sites in which fabrics have been found have been excavated. For the most part these are burial sites, although some public monuments and few domestic sites have been described. With the exception of the Cultural Revolution in the 1960s and early 1970s, findings have been reported in various archaeological journals and monographs. Critical reporting, conservation and analytical techniques have improved, particularly since 1972. That year also marks the first of over thirty archaeological treasure exhibitions which have toured Europe, North America, Japan and Australia.

Although fabrics made of bast, wool and cotton fibre have been recovered and recorded, they have received little attention (Sylwan, 1949; Xia, 1963). Western and Chinese scholarship, as noted above, has been biased in favour of the products of China's silk textile industry. In the West, the exotic appeal of silk is inextricably linked

with the *Seidentrassen*, that is, Baron von Richtofen's Silk Roads. Technically and aesthetically, these silk fabrics are without parallel. In addition to quantities of plain silks, most spectacular figured fabrics thus far known are silk.

By way of demonstration, the inventory of textile findings from Tomb 1 at Mawangdui outside Changsha in Hunan province provides a notion of the scope and range of fabric types (Hunan, 1973; Shih, 1977). In the early 1970s, the tumulus of the Lady of Dai, who died about 160 B.P.E., was opened. In addition to the remarkably well-preserved corpus, the finds include seventy-seven items of intact clothing, including twelve robes, two skirts, three pairs of mittens, two pair of socks and four pair of shoes. There were forty-six rolls of uncut lengths of silk, numerous wrappers, bags and pouches. Fabric types included monochrome silk tabbies (twenty-two examples, four with embroidery), mock leno silks (seven examples, three with painted or printed and painted decor), monochrome patterned silks (three examples), patterned silk gauze (ten examples, two with embroidery), polychrome warp-faced compound silk tabby (four examples), polychrome pile warp silks [technically described as warp-faced compound twill with velvet pile in the Chinese literature] (fifteen examples), as well as three fragments of hemp tabby and seventeen fragments of ramie tabby. The coffin was covered with an elaborately painted silk tabby banner.

In the face of this type of evidence, those who have concerned themselves with the analysis of woven structure to determine loom or other types of technological data have concentrated on silk fabrics.

WOVEN PATTERN MAKING TECHNOLOGY

The inventory of patterned textiles for East Asia, and China in particular, is impressive. Although the absence of actual fabrics for the Shang and early Zhou Dynasty (1028-722 B.P.E.) limits our knowledge of weaving during that period, the remains of textiles employed as wrappings on bronze burial objects survive. These remains, preserved as an integral part of the patina, exist as

pseudomorphs in which bronze corrosion has replaced organic structures (Sibley and Jakes, 1982; Vollmer, 1974). Although the vast majority of the pseudomorphs recorded are tabby structures, the presence of a lozenge figured design on an axe blade in the Malmö collection, Sweden, has been used to argue for a loom with a pick-up rod system (Kuhn, 1982; Sylwan, 1935, 1937).

For the early imperial period (Han Dynasty, 206 B.P.E.-220), geometric patterns are produced in self-patterned monochrome tabbies, mock leno, figured gauzes and in loop warp fabrics. In addition, there are heavier polychrome fabrics with pictorial imagery (Lubo-Lesnichenko, 1960, 1961; Riboud, 1973, 1977, 1983). Technically, these polychrome fabrics are classified as compound warp-faced tabbies (Burnham, 1956, 1967, 1971; King, 1968). A pattern is achieved by manipulating individual coloured warps which are held in three, four, or five end series. The particular application of this technique for silk weaving and the resulting fabrics with highly detailed patterns, some of which include woven inscriptions running from selvage to selvage, is unique to China.

For the later imperial periods, weft-faced compound twill structures surplanted compound tabby structures for pictorial patterns. True brocading, with supplemental wefts on satin, twill and tabby grounds, as well as tapestry weave on a tabby base, are added to gauze weaves. Self-patterned tabbies tend to change the figure from the warp to the weft direction. By the sixteenth century, velvet weaving on twill or tabby grounds is present.

Early complex woven silks have been analysed in an effort to determine what type of loom, or looms, may have existed in East Asia. Many of these investigations have been linked to speculations about the origins of the drawloom and the development of patterned silk weaving industries in the West and China that occurred at some point between the fourth and sixth centuries (Burnham, 1965; DeJonghe and Tavernier, 1976; Kuhn, 1977; Simmons, 1956). The absence of evidence for a loom-controlled mechanism, at least for the

pre-fourth century period, has led to the tentative conclusion that a hand-controlled pattern rod technology existed.

Another line of investigation has focused on illustrations of weaving equipment from tombs and one set of actual loom models from Yunan Province in southern China (Song, B. Y., 1964; Vollmer, 1977, 1979). Scholars have used this evidence to argue for technological evolution as it relates to the silk industry (Kano, 1952; Roth, 1977; Song and Li, 1962; Song, C. L., 1965; Xia, 1972). The earliest archaeological evidence for a loom in East Asia is a very specialized variant of the body tension loom. It utilizes the weaver's feet to brace the warp beam. Excavation in 1954 through 1957, and in 1972, from burial sites which have been identified as the Bronze/Iron Age culture of the kingdom of Dian, that flourished on the frontier of the Western Han empire (206 B.P.E.-8), have brought to light life-sized models of looms, as well as artistic representations of weavers, but no fabrics. Comparative studies with ethnic groups from southern Asia who continued to use this mechanism into the twentieth century suggest that this loom was never used for silk, but for bast fibre (Chen, 1968; Vollmer, 1977, 1979).

Ethnography further reveals hundreds of diverse ethnic groups throughout mainland and insular East Asia. It appears that the majority of these people wove their own textiles at one time. Looms, however, are generally poorly recorded in historical and ethnographic literature with a few notable exceptions: the looms of eastern Indonesia, some parts of Southeast Asia, the Philippines, and Japan (Gittinger, 1979).

The technological evidence that does survive provides a great variety of information for weaving in East Asia. A simple card loom for producing tapes and ribbons, some of which have geometric and figural patterns, is reported from south central China (Hommel, 1969). The hexagonal form with pierced corners permitting six warp elements and the possibility of six shedding positions seems to be unique to East Asia. Neither the antiquity of this very simple weaving technology nor its geographical range throughout history is unknown. This loom type was used for silk, cotton and wool.

Looms with rigid heddles for creating shed and countershed exist in several versions (Hommel, 1969). One utilizes a table or bench as a frame over which the warp is wrapped and kept under tension. Seventeenth and eighteenth century woodcut illustrations of this loom type survive, but no earlier record can be established with certainty (Kuhn, 1980). The presence of this loom type in very early cultural complexes of other parts of the world would suggest an early date in East Asia. Most of these rigid heddle looms produced narrow fabrics used for ribbons or ties. Depending on the scale of the slots and holes in the heddle board, such a loom could be used for silk, although cotton and hemp fabrics were produced on the looms recorded by Hommel. With the exception of stripes or bands, this primitive loom cannot be used to produce patterns.

The body tension loom is by far the most common type of loom used throughout the area. The loom is characterized by a warp beam, lease rod (to hold the warp in order), a heddle rod with string heddles to raise one set of warps, a large shed stick used to create an alternate shed, and a cloth beam. The cloth beam rides in the weaver's lap, held in place by a strap or yoke braced by the weaver's back. A narrow slat of wood, or sword, serves to beat the weft in place. The point of support for the warp beam, against which the weaver exerts pressure to create tension on the warp, may be anchored to posts in the ground or to the weaver's own feet as she sits with outstretched legs on the ground. Using the criteria of the support of the warp beam and the presence or absence of a reed, five types of body tension loom have been described from Southeast Asia in which the weaver's body alone supports the loom (Gittinger, 1979).

Both vertical and horizontal frame looms were present historically in East Asia (Hommel, 1969; Roth, 1977; Song and Li, 1962). These looms have parallel bars holding the warp and breast beam apart to create tension on the warp. A shed stick and a set of string heddles open the shed and countersheds for weaving. When in operation, the loom was leaned against the wall of a building. Vertical frame looms are recorded for weaving rush matting, some of which utilize a very

wide rigid heddle. Vertical looms, usually without reeds, were used to weave knotted pile carpets in Mongolia and Northwestern China, and on the Tibetan Plateau a looped weft pile structure for carpets is produced on a similar piece of equipment. Some coarser types of tapestry, woven curtains usually of wool, are reported to have been woven on vertical looms, while a horizontal frame loom is used for silk tapestry (Vollmer, 1982).

Horizontal frame looms include a variation of the body tension loom in which a frame supports the warp beam and levers which control the heddle bar. The weaver's body still controls the tension of the warp. A very early version of this loom is depicted in stone-cut reliefs from the first century and features a frame which is significantly higher at the back, hence creating a warp which slopes sharply to the weaver's waist. The loom is equipped with two levers to control the heddle bar. Other versions of frame looms maintain the warp parallel to the floor. Some are equipped with complicated shedding systems. At one end of the scale would be looms which have more than two treadles which control heddle bars (Hommel, 1969; Kuhn, 1980). Another type has a system of pattern rods which are held in a string heddle that is suspended from a frame and maintained perpendicular to the warp (Blinks, 1979). At the most complicated end of the spectrum are looms with elaborate tie ups that are controlled by a draw boy (Kleinwachter, 1917; Kuhn, 1977, 1980).

These, and probably other variations of equipment, were present in East Asia. Several were used in China within the recent past and recorded in late nineteenth and early twentieth century ethnologies. The diverse, and often restricted, distribution of some of these loom types questions links historically or ethnically to China. Yet the historical record is largely incomplete. From a Chinese perspective, weaving is only relevant as it related to the imperial system. Most of the tallies, lists, or even the illustrated encyclopedic references to textiles and textile production, were created by bureaucrats for the information of other bureaucrats. In general, they are concerned with the silk industry and the state-controlled monopolies which regulated production and tax revenues. This literature chooses to

ignore non-silk production, or the efforts of non-Han populations. The official imperial position advocated no competition. The state was prepared to intervene and establish standards. As a result, regionalism was minimized within official records. Even international rivalry was largely irrelevant.

Agencies like a patent office, which we in the West have come to rely upon to document invention and which has shaped a perception of linear evolution, did not exist in China. Although looms were described, and technical illustrations of some of the more complex mechanisms exist from the fourteenth century, in general these records exist as an aid to the bureaucratic regulation and control of the empire. This bureaucracy was more concerned with regulating products, not the conditions of production. As a result, China was a culture which continually lost track of its technology. Lines of development are impossible to reconstruct, and there probably never was only one line of development in the empire.

Eighty years of scholarship presents a more complicated picture for textile technology than we originally imagined. Textiles, textile finds and information about weaving exist from disparate parts of East Asia and extend over four millenia. This data demonstrates that our definition of what is "Chinese" needs to be re-evaluated and constantly updated. Textiles are only a part of the history of East Asia. Together with other evidence, they can shed light on our understanding of the past. In isolation, this evidence is often more baffling than revealing. There is no comprehensive history of textiles in China; nor do I believe that such a study is possible, or even useful.

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