RICE-PAPER PLANT – *TETRAPANAX PAPYRIFER*

The Gauze of the Gods and its products

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Summary. From the 1820s pith became a familiar material in Europe, under the name of rice-paper, as a raw material for artificial flowers, and as a medium for export paintings from China. The structure of pith sheets was early recognised as different to that of paper, but it was not until 1852 that William Jackson Hooker was able to describe the source plant, as *Aralia papyrifera* Hook., now *Tetrapanax papyrifer* (Hook.) K. Koch. Using his consular contacts, Hooker was able to build up a remarkable collection of pith, as raw materials, artificial flowers and Chinese paintings. Many are described and illustrated in this article, in the context of recent work on the history and conservation of pith paintings.

Introduction

In the 1820s European travellers began to bring home a new form of souvenir from China: wonderfully luminous watercolour paintings on 'rice-paper'. Usually featuring scenes of everyday life in China, these export paintings were produced in large quantities until the early 20th century. At the same time, small sheets were used in the manufacture of artificial flowers in China, Europe and North America. Rice-paper came to the attention of botanists soon after its role as a souvenir was established. They immediately recognised that it was not made of rice, although paper (with very different properties) is made in China from rice straw.

In 1830 Dr John Livingstone gave a piece of the stem, from which the sheets of pith were cut, to Hooker, then Regius Professor of Botany at Glasgow University. Hooker (1830) accurately described the use of pith for paper sheets and artificial flowers, and wrote to Thomas Hardwicke, the eminent naturalist of India, for advice on the identity of the source plant. Hardwicke suggested an Indian plant, *Aeschynomene paludosa* Roxb., (Leguminosae) possibly through confusion with *Aeschynomene aspera* L. This is the sola plant, with a soft light pith, then much used for sunhats, artificial flowers and suchlike. This confusion between the rice-paper plant and the sola plant (and, sometimes, with members of the genus *Artocarpus*), was perpetuated in subsequent literature. It was not until 1852, while Director of the Royal Botanic Gardens at Kew, that Hooker was able to name the rice-paper plant with confidence (DeCesare, 2004).

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Fig. 1. Chinese pith paintings illustrating pith production, given to Kew in 1849/1850 by C.J. Braine (EBC 79765), and as interpreted by Sir William Hooker (1850b). From top left: A, selecting seed; B, washing seed; C, planting seed; D, cluster of plants.

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Fig. 1. (continuation) E, Man holding plants; F, plunging plants in pond; G, shaving plants; H, peeling outer rind.

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Fig. 1. (continuation) I, Cutting sheets of pith; J, piling sheets on a table; K, placing the rice-paper in bales; L, packing the sheets for exportation.

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Export art is part of the record of China's relations with the outside world in the troubled 19th century. It is only sporadically that art historians have given full attention to pith paintings (Crossman, 1991; Salmen, 2007; Williams, 2001a). However, many sheets of pith are now dangerously brittle and require conservation, and this has led to an increase in publications and research on the subject. In this paper we retell the story of Hooker's assignation of a botanical name to the rice-paper plant, with attention to the remarkable range of raw materials and artefacts he collected at the time, many of which still survive at Kew. We also investigate the properties of pith, with particular relevance to conservation, and survey its rise and fall as an art material.

William Hooker and the Naming of the Plant

Following his appointment as Director of Kew in 1841, Sir William Hooker emphasised the role of Kew in promoting plants as economic products, both in agriculture and in manufacture. In 1848 Kew's Museum of Economic Botany opened to the public, and Hooker used all his contacts, official and unofficial, to ensure that its coverage was comprehensive (Desmond, 2007: 184–186). At the same time, European contacts with China, previously restricted to the port of Canton, opened up following the defeat of China in the first Opium War (1839–1842). The British occupied Hong Kong and five coastal ports in 1842, including Amoy (now known as Xiamen), opposite the island of Taiwan (Fan, 2004).

In 1849 Temple Hillyard Layton, British consul in Amoy, sent to Kew some pith and a model of the knife used to cut it, with a description of how the plant grew 'in the swampy grounds in the province of Sam-swi (Tam-swi), in the northern part of the island of Formosa, where it is said to form large forests' (Hooker, 1850a). This was the first indication that the rice-paper plant was native to Formosa (now known as Taiwan), the island so close to Amoy. Discussing these findings, this time Hooker ruled out the sola plant *Aeschynomene aspera* as a candidate, and sought complete plants that could be properly identified.

By the time of his next article on the topic, in late 1850, Hooker had received many plant specimens from Charles J. Braine, a merchant recently returned from Hong Kong. These included, in Hooker's words, a 'thin volume of well-executed drawings by a Chinese

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artist, on Rice-paper, - said drawings exhibiting the several states or conditions of the Rice-paper plant, from the preparation of the seed to the packing of the material for exportation. . . the drawings are of good execution, the countenances of the men well and even beautifully done. The perspective, as usual with the Chinese, is far from good, and, were we to judge from the largest specimens we have received of the cylinders of pith, and the largest sheets of pith in our museum, the diameter of the stems is represented much too bulky in proportion to the size of the human figures' (Hooker, 1850b). The paintings survive today, disbound, in the Economic Botany Collection (Accession Number EBC 79765), and are shown in Fig. 1.

Hooker again did not feel able to make an identification on the basis of these drawings, of which he reproduced two (see Fig. 1D and H) in his article: 'The first of these does, indeed, exhibit the growing plant of so strange a character, that no botanist to whom we have shown it can conjecture to which family it may belong; and one is naturally led to inquire how far the correctness is to be depended upon. . . '. In the meantime, T.H. Layton had died near Amoy, on June 20, 1850. His widow, Sarah, continued the quest, beset by misfortune. She sent a healthy plant on board ship, but it died during the voyage; a Chinese admiral offered to help obtain a plant from Formosa, but he died; another plant was killed by brown ants on board ship; an assistant claimed that a 'large tree' had died while he was waiting for a junk, and it had been thrown overboard after an attack by pirates (Hooker, 1852a).

However, Mrs Layton was able to bring back to Britain a portion of stem, and leaves, which were given to Kew. Hooker also had sight of a drawing in the possession of John Reeves, tea inspector in Canton 1812–1831, and very active naturalist in China. On the basis of the specimen (which has not been traced) and drawing, reproduced by Hooker in *Journal of Botany* (Hooker, 1852a) and here as Fig. 2, he described the rice-paper plant as a new species, *Aralia ? papyrifera* Hook.

From 1850 onwards, there was a steady flow of pith materials into the Kew Museum. In 1850 John Reeves donated two bunches of artificial flowers, made of dyed pith (EBC 71870, 71871), shown in Fig. 3; it is possible that specimen 71870, which incorporates a wide variety of flowers, also includes some of the artificial flowers sent to Kew by John Bowring. Reeves also donated an example of the

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Fig. 2. Hand-coloured lithograph of *Tetrapanax papyrifer* by W.H. Fitch. Plates I and II (combined as one plate) from Hooker's paper in *Hooker's Journal of Botany* (1852a). Drawn from a dried specimen brought to Kew by Sarah Layton. The pith plant is a shrub up to 3.5 m tall; the large leaves are deeply lobed, in the manner of fig trees, and are densely covered in stellate hairs.

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Fig. 3. Artificial flowers given to Kew in 1850 by John Reeves. Upper: chrysanthemums (71871); Lower: detail of peony (71870).

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earthenware tiles on which the paper was cut, and one of the two pith-cutting knives held in the collection (Fig. 6); a second knife was given by Mrs Layton. The most significant series of donations came from Sir John Bowring, Consul at Canton 1848–1853, and Governor of Hong Kong 1854–1859. In February 1853, the Museum Entry Book at Kew records the receipt of five or six specimens from Bowring; four survive and are shown in Fig. 4 (Bowring, 1853, Hooker, 1852b; 1853). The Museum Entry Book (1850 : 38) for Bowring's Item 1 (EBC 53958) states '. . . it is also called Poo-le-cho or Gauze of the Gods'. Bowring and his son also sent two living plants, one was presented to the Duke of Devonshire; one flowered at Kew in December 1855 and was illustrated as plate 4897 in *Curtis's Botanical Magazine* (Hooker, 1856). Since then, the rice-paper plant has become a popular garden plant in Europe and North America, prized for its architectural quality.

The exact affinity of the plant remained unclear; Hooker (1856) cautioned that the placing of the plant in *Aralia* was provisional. It was soon recognised that the species is not closely related to *Aralia*, though within the Araliaceae family. In 1859 it was separated by K. Koch into a monotypic genus, as *Tetrapanax papyrifer*. However, in most 19th century literature, the species is referred to as *Fatsia papyrifera* (Hook.) Miq. ex Witte; since then, *T. papyrifer* (Hook.) K. Koch has been widely accepted as the botanical name. In China and Taiwan the plant was known as *tung-tsao* (the term used in most European literature), or *bok-shung*.

Production

Tetrapanax prefers wet, warm conditions, such as those in the mountains of northern Taiwan and southern China. It is unclear whether the current distribution of *Tetrapanax* in Taiwan and southern China represents its native area, or whether one or both result from widespread introduction, for cultivation, from a smaller region. This question can only be resolved by a careful study in historical ecology. There is perhaps a consensus that *Tetrapanax* is native only to Taiwan, but the position of the plant in China is unclear (Frodin and Govaerts, 2003). One reason for this uncertainty may lie in the subtle gradation between wild and cultivated trees, as explained by James W. Davidson, Consul for the USA in Formosa: 'The Pith-paper plant is indigenous to the island, and appears to thrive best on burned-off plots of ground in the savage border districts. Small forest fires on the

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savage border are frequent. . . Among the new growths that spring up over these blackened areas, the Pith-plant is often prominent, and though generally found wild, the savages will, if the cleared spot is within their territory, often increase the production by putting out numerous cuttings' (Davidson, 1903). The ease of propagation, using suckers surrounding the trunk, means that wild populations could easily be augmented. In any case, there is abundant reference to the cultivation of *Tetrapanax* between 1850 and 1960, both in Taiwan and in southern China.

Our account of pith production draws on several sources and may obscure some practices specific to particular regions or times (Bell, 1985; Bowring, 1853, quoted at length in Hooker, 1853; Colleran, 1979; Davidson, 1903; Fortune, 1857; Swinhoe, 1864–1865). The most detailed and useful study is that by Perdue and Kraebel (1961), who visited a pith factory in Taiwan in about 1960.

The trees were usually harvested in winter, with the first cutting in the third year and a second cutting in the fifth year. The final cutting, in which the tree was cut down, was in the seventh year. The harvested branches or stems [of approximately 2–3 inches (50–75 mm) in diameter] were cut into lengths of up to 18 inches (450 mm). They were then soaked for several days to soften the pith and make it easier to extract. This could be done either by stripping off the bark, or by the use of a wooden dowel or metal rod to force the pith out of the centre of the stem. Holding the rod against a solid surface, the stem was forced downwards forcing the pith out, often making a sound similar to the popping of a champagne cork.

The pith rods were dried naturally, often being exposed to the sun for several days which prevented staining. Sometimes the still moist pith was placed inside a hollow section of bamboo culm to dry so that it dried straight and cylindrical. The dry rods, now between 25–50 mm diameter, were cut into shorter lengths.

Davidson (1903: 542) describes the cutting as follows: 'With the knife at the extreme right of the plate and its edge facing inward, the pith cylinder is placed lengthwise against the blade, and is given with the left hand a rolling movement backwards, while the knife, guided by the right hand, follows closely, and thus paring off a long thin sheet. The operation requires considerable skill, and in the hands of an adept workman so quickly is it performed that it

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Fig. 4. Pith specimens obtained in Hongkong and sent to Kew in 1849 by Sir John Bowring. Three of the four specimens retain their original notes. Front, left: 'No. 1. Specimen of stalk not yet cut into sheets.' (53958), diameter 21–33 mm; front, right: 'No. 3. Specimen of the pith or core after immersion and paring into sheets. Used medicinally.' (53953), diameter 5 mm; Back, left: 'No. 4. Specimens of Sheet, small size, cut at Formosa and not dyed.' (53956), 75 mm square; back, right: specimen with museum label 'Small sheets of rice paper. Cut from the cylinders of pith. These are made up in bundles of 100 each, and sold in China for $1\frac{1}{4}$ or $1\frac{1}{2}$ d per bundle: they are principally used for making artificial flowers.' (53954), 120 mm square.

appears as though a roll of white ribbon was merely being unwound.' Examples of the type of slab and the knife used were given to Kew by John Reeves and are still at Kew (Fig. 6). The coarse construction of the knives, clearly visible in the Kew specimens, was no obstacle to maintaining the razor-sharp blade observed by many travellers. According to Alexander Hosie, who witnessed pith manufacture in Chongqing, western China, the skill required meant that pith sheets were 'manufactured only at night, when the city is asleep and the makers not liable to be disturbed' (Hosie, 1890: 24).

The slabs usually had metal strips along the top and bottom edges. The pith rods were placed within these on the slab and the knife would be held on top of the metal strips so the thickness of the metal determined the thickness of the pith strips. To obtain thicker pith, the edgings could be packed with paper to increase their height. The ribbon-like strips were stacked under weights, to remove moisture,

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Fig. 5. Cutting pith sheets in Taiwan, c. 1960. USDA negative 94763, reproduced from Perdue and Kraebel (1961: Fig. 6).

and later cut into rectangular sheets. Poor cutting results in uneven thickness or wrinkling. It is sometimes possible to see parallel marks where the knife has left slight indentations in the sheet during cutting.

Nothing was wasted, larger sheets being used for paintings, smaller ones for flowers. The scraps were used as a medicine, as stuffing for pillows or in the bottom of coffins to soak up fluids. Paper sizes ranged upwards from $3\frac{1}{2}$ inch (90 mm) square, the largest sheets being about 10 × 12 inch (250 × 300 mm). It is an indication of the skill required to cut large sheets that these cost $1\frac{1}{2}$ d each, whereas the same sum would buy 100 sheets of the typical size, about 3 inches square (Fortune, 1857: 234). The rods left after cutting were used as floats for fishing, or for young school-children to make little animals in craft lessons.

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Fig. 6. Knife and earthenware slab for cutting pith (53967, 53968). The slab was given by John Reeves, probably with the tea paintings (Hooker, 1852a: 53). The knife is one of two in the collection, both received in 1852, from Sarah Layton and (via John Lindley) from John Reeves. Both knife blades measure about 300 × 75 mm. The slab has faded traces of glue or paper along both edges on each side, possibly showing where metal strips were attached. It measures 310 × 155 × 19 mm.

The EBC has a fascinating collection of pith items from various stages of the production process, illustrated by the specimens given by John Bowring (1853) (Fig. 4) and received from the Japan-British Exhibition of 1910. Taiwan was occupied by Japan from 1895 to 1945. During this period local industry was encouraged, hence the prominent display of manufactures from the island at the Japan-British Exhibition (Hung 2007; 2008). Davidson (1903) reports that pith from Taiwan was exported in large quantities to Hong Kong (for transhipment to Canton) and the China ports, both as peeled sections, and as sheets. In 1960 Perdue and Kraebel (1961) found a flourishing pith industry in Taiwan, mainly producing small sheets for the production of artificial flowers in the USA and elsewhere (Fig. 5).

Pith Sheets: Properties and Conservation

Although commonly called 'rice-paper' in the English-speaking world, pith sheets are not paper in the strict sense of the term. Paper is generally made from sclerenchyma fibres, long, double-walled cells

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Fig. 7. Pith from Taiwan, exhibited at the Japan-British Exhibition of 1910. From top: pieces of stem (53964); bundles of pith paper (53939); plaits made from pith (53960) – the bundle is 520 mm long and comprises four rolls of plait, each 28 mm wide; pieces of pith (53961), diameter 20–40 mm.

with narrow lumens and tapering ends which function as structural support in the plant. These fibres are first dispersed and then reformed into 'felted' sheets during the papermaking process. In contrast, pith consists of single-walled parenchyma cells which serve to store water and nutrients in the plant (Fig. 8). The pith cells form honeycomb shapes when packed together and have a 'hexagonal cross-section and an irregular but basically rectangular longitudinal section' (McKay, 2002). Sheets of pith 'paper' are cut from the plant, not reformed from dispersed fibres.

The unique qualities of pith - a soft, almost spongy surface and its translucent nature - result from this structure. The characteristic velvety character of pith paintings was noted as early as 1837 and was attributed inaccurately to its ability to absorb water: 'Rice-paper absorbs water and swells so as to present an elevation which continues after it becomes dry and gives to the drawing a velvety appearance and a relief which no other kind of paper produces.' (Anonymous, 1837). This effect is in fact the result of a thick application of paint which fills the hollows of the cells and then sits on the surface, producing a raised effect. In contrast, lighter washes and touches of colour seem to

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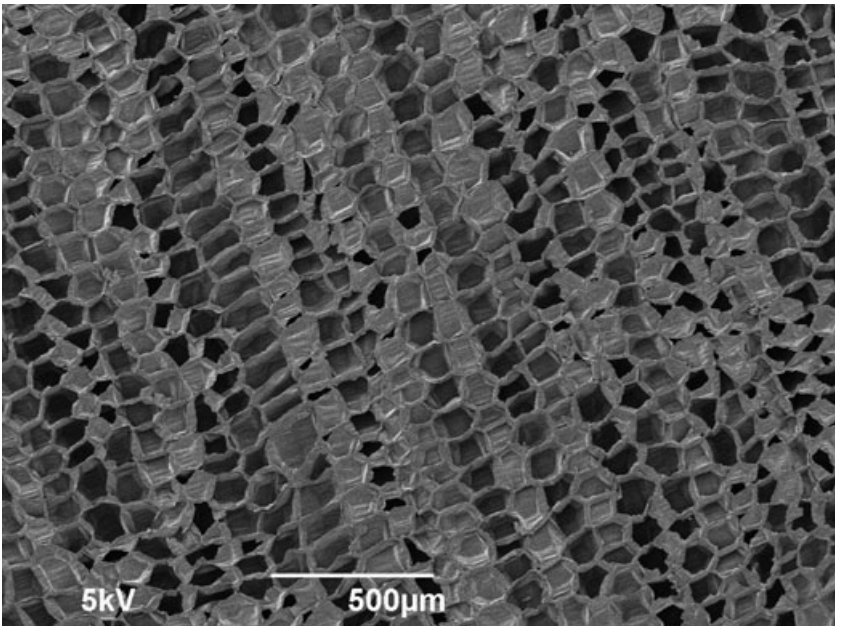

Fig. 8. Scanning electron micrograph of cross-section of pith. Courtesy of David Randall, York JEOL Nanocentre, University of York.

cling around the edges of the cells. The translucency of rice-paper was exploited by Chinese painters who sometimes employed the technique of back painting, traditionally used on silk, for paintings on pith.

When wet, pith becomes flexible and can be moulded into shapes which it retains on drying. It can be dyed easily and was therefore well suited to its traditional use in the manufacture of paper flowers. Figure 7 shows a sample of pith that has been plaited, presumably when wet. Unfortunately, when dry, sheets of pith have little folding endurance and split easily, becoming more brittle on ageing. The soft surface is also easily indented.

Many conservators have been reluctant to apply the aqueous methods often used to treat discoloured or distorted paper to pith paintings because of reports of the extreme expansion and contraction of pith on wetting and subsequent drying. Nevertheless, controlled dampening and slow drying under light restraint has been carried out with some success. Often it is not necessary to humidify the entire painting. Small areas of distortion and isolated staining may be treated by localised application of moisture. A variety of pigments,

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including some mixtures, were used and conservators have often found these sensitive to the application of water.

Once damaged, the repair of pith sheets can be problematic. Unlike most tears in paper, the splits in pith have 'sharp' edges with no projecting fibres to overlap back in place. The translucent nature of pith means that paper repairs may be visible on the front. Japanese papers and adhesives have been used for repair, the aim being to achieve maximum reinforcement whilst applying the minimum of materials. Sometimes conservators have chosen to adhere the painting completely to a paper backing to avoid the visibility of small local repairs. However, this inevitably results in some overall loss of translucency and the possibility of the reduction of natural irregularities. Infilling of missing areas can be done using pieces of pith which can be cut and toned to make repair patches, although they cannot be pared down at the edges. When cutting patches it is necessary to align the lines of cells of the infill and the painting. Japanese paper splints are applied to attach the repair patches in place. If pith is unavailable, Japanese papers are normally used, various combinations being laminated and toned to simulate pith.

Small areas painted with lead white may darken due to the formation of black lead sulphide in the presence of sulphur–containing pigments or hydrogen sulphide in the atmosphere; these can be changed back to white by treatment with hydrogen peroxide (Webber, 2004).

Pith paintings were often sold in albums and were attached to the pages with strips of silk and small dabs of glue, often carelessly applied. As a result, the pith sheets slip around and are damaged by the mounting silk. The adoption of the use of strips of silk or paper for attaching pith sheets to supports has proved to be effective when undertaken with more care. Ideally the paintings should be kept in the original albums whenever possible as these can provide valuable information. When not in albums, they should be provided with suitable acid-free mounts. As with most objects, preservation is best achieved by careful handling, mounting and storage that provides adequate physical protection and the appropriate environmental conditions. Useful case studies of pith conservation include those by Arpo (2000), Jenkins (1995), McKay (2002), Nebel and Stiebel (2001), Rickman (1988) and Webber (2004).

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Watercolour Paintings

From 1757 to the end of the first Opium War and the treaty of Nanking in 1842, Canton (now Guangzhou) was the only Chinese port officially open for foreign trade. A small area called the Hongs, on the waterfront just outside the city walls, was set aside for visiting merchants. They established their trading stations, known as factories, in buildings owned by the Chinese (Williams, 2001a). The increase in the number of visitors to Canton reflected the growth in the Western demand for tea.

To show friends and family at home where they had been and what there was to see, visitors sought inexpensive pictorial souvenirs, small, light and easy to carry home. Export watercolours were painted and sold in studios, shops and stalls in Hog Lane and New and Old China Street between the factories. Some of the established artists set up studios employing assistants to produce souvenir pictures in quantity. Small sheets of pith began to replace the more expensive Chinese manufactured paper and paper imported from the West. We have as yet no firm evidence for the use of pith for painting before 1825 but the production became so prolific that by 1835 *The Chinese Repository* could record that there were some thirty shops or studios in or around the Hongs selling pictures on pith (Anonymous, 1835). The catalogue for the Chinese exhibition, at Hyde Park Corner, London in 1842, includes no less than 18 groups of paintings on pith (more than 100 pictures in all). The curator commended the Chinese artists who 'paint insects, birds, fishes, fruit, flowers and the like with great correctness and beauty. . ..' (Langdon, 1842: 111).

We get an insight into how one studio worked from a set of three albums of line drawings by the painter Tingqua, used to show potential customers samples of what they could buy (Huang and Sargent, 1999; Williams, 2003). The first 18 drawings in the Tingqua pattern books show the production of tea and include 14 originals for the beautifully painted watercolours of tea production in the collection at Kew. One shows a monkey plucking leaves from plants on an inaccessible cliff face (Fig. 9). Stories of monkeys trained by monks to gather tea go back at least to the beginning of the 19th century, and tea said to be picked by monkeys is sold on the internet today (Williams, 2008).

Kew's series of paintings on pith, depicting the process of preparing pith sheets, is a rare, perhaps unique, set. It was probably

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commissioned from the artist's studio. It is not surprising that the pictures of the stems being prepared for cutting into sheets are wildly inaccurate (Fig. 1). To admit that they had never set eyes on the pith plant would probably have lost the painters a sale. Exaggerating the scale of the tree (the stem of which is seldom thicker than a man's wrist), and not having seen the process of cutting the sheets, has led the painter to show the cut sheets as much bigger than they were. The cutting scene (Fig. 1I) is also inaccurate in that the stick of pith must be supported on the block along its whole length to make proper contact with the knife. Cutting on a narrow ceramic block, such as that preserved at Kew (Fig. 6), meant that paintings on pith were seldom much larger than 30 × 20 cm. This limitation on size is an essential characteristic of the style of painting that evolved.

A comparatively unusual feature of these pictures of preparing pith (unlike the series on tea, Fig. 9) is that the figures and the furniture cast shadows on the floor. The shadows result from the adoption of the Western convention of bringing in the light in from one side of the picture, as opposed to the Chinese tradition of having no single source of light in paintings. Such directional light and shadows appear in the work of Sunqua and it may be that these paintings come from his studio (cf. Williams, 2003).

The use of pith for artificial flowers and medicine long predates its use for export art. Artificial flowers may have been produced in the Tsin Dynasty, 1500 years ago, but Tsai (1999) suggests that mass production probably did not begin until the Ming Dynasty (1368–1662 A.D.). The earliest references by Europeans date to 1690: a brief mention in Rumphius' *Herbarium Amboinense*, and an account of the making of artificial flowers from the pith plant in 1727, by the Jesuit missionary Francis Xavier d'Entrecolles (Perdue and Kraebel, 1961). Its medicinal use is described by Shizhen Li's monumental *Compendium of materia medica*, published in 1593 (Li, 2003: 2136–2137), and continues to be important. The earliest references to the presence of pith in Britain are to its use for artificial flowers in about 1805; by 1826 paintings were being imported (Brewster, 1826; Hooker, 1830).

Decline

After the second Opium War (1858–1860) the old policy of the containment of foreign traders and tourists was never re-imposed. In

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Fig. 9. Monkey harvesting tea leaves. One of 24 pith paintings of tea production, given to Kew in 1847 by John Reeves (EBC 33725).

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Canton a reclaimed sand-bank at Shamian Island, just up river, was developed by foreign firms in a Western style with no place for the shops and studios clustered in the lanes of the Hongs. Photography had arrived in Hong Kong as early as 1846; it was more immediate and more accurate. China had begun to lose its remote and exotic image (Williams, 2001b). By 1860 what demand there was for paintings on pith was largely satisfied by the cheap and gaudy daubs which were still for sale into the early years of the 20th century. An example of these is the nine miniature paintings on pith (EBC 73342) given to Kew in 1882, by Thomas Watters, British Consul in Formosa.

Pith was still used to make artificial flowers in China and exported in quantity to Japan and South America for this purpose until silk took over after the Second World War. It could be bought as small squares of 'craft fiber' in America in the 1960s and as sticks for children's craft work in Taiwan until 1995. To this day pith can occasionally be found as Christmas tree decorations, in artificial flowers and as a painting surface on decorative little birds.

A small group from the Canton museums and Zhongshan University, with one author (IW), set out in 2002 to see the trees growing in their natural habitat in south-west China. They found the trees in the hills and, in Guiyang, they saw one man still cutting by hand narrow sheets of pith. These seemed to be used mainly for elaborate tableaux, and for making decorative flowers, little birds and butterflies. That workshop has since gone out of business. There is said to have been no cutting of pith in Taiwan since 1994. Yet there is evidence that small sheets of pith (possibly cut by machine) are still available since modern fakes are beginning to appear on the internet.

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