

## United Kingdom

# Oldest star chart gets even older

Chinese document is from seventh century, 300 years earlier than previously thought

LONDON. The world's oldest star chart was made almost three centuries earlier than had been previously assumed. Discovered in a cave at Dunhuang, in north-western China, it is now believed to date back to the mid seventh century. The scrolled chart, more than two metres long, depicts 1,339 stars.

The star chart was acquired in 1907 by the archaeologist Aurel Stein, from a sealed chapel in one of the Caves of the Thousand Buddhas. The small chamber, packed from floor to ceiling, held over 40,000 documents, dating from 400 to 1,000.

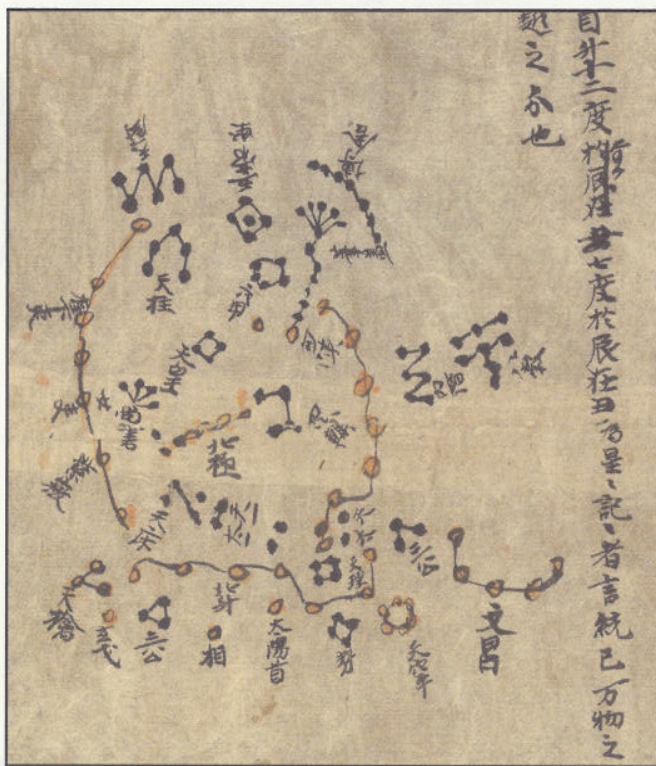
Preserved by the dry desert atmosphere, the Dunhuang manuscripts are described by British Library curator Dr Susan Whitfield as "equal in importance to the Dead Sea Scrolls". Seven thousand documents, including the star chart, were acquired by the British Museum (they are now in the British Library).

Surprisingly, the Dunhuang star chart has been subjected to relatively little scholarly examination. Although sections of the scroll have been displayed in a handful of exhibitions in the past hundred years, it is normally in store and rarely consulted by specialists.

The *Art Newspaper* was last month given a privileged view of the full chart. Following our questions, it was redated by Dr Whitfield to the seventh century.

The star chart was first published in 1959, when historian Joseph Needham dated it to 940. Five years ago, in a British Library exhibition on the Silk Road, French astrophysicist Professor Jean-Marc Bonnet-Bidaud and astronomer Françoise Praderie tentatively proposed that it is much earlier, from 705-710. Their subsequent analysis will be published in the next issue of Australia's *Journal of Astronomical History and Heritage*.

Dating the star chart has depended on assembling the clues. At the end of the scroll is a figure of the God of Lightning,



Star scroll: view of polar stars with Big Dipper (lower part)

with a bow and arrow. His clothing is rather nondescript, but one feature of the hat is important. The flaps flop down at the side, whereas from around 800 the fashion was to starch them, making them stick out horizontally.

The positioning of the stars does not give a precise date, but on astronomical grounds the chart must be from between 600 and 800. The style of the calligraphy is also from this period.

However, the most detailed evidence on dating comes from the use of "taboo" characters in the calligraphy. During an emperor's reign, it was prohibited to use the normal form of characters that were combined to make his name. After his death these characters were written in a slightly different form, to show deference.

Dr Whitfield's new analysis reveals that the scroll's text was almost certainly written after the reign of Taizong (626-49) and before that of Ruizong (684-90).

This means that the star chart dates between 649 and 684.

Chinese astronomers therefore produced the earliest known star chart (the Egyptian Dendera zodiac ceiling of around 50BC and the Farnese celestial globe, a Roman second

imperial astronomer from around 648 to 664. He was based in the capital Chang'an, nearly 1,000 miles east of Dunhuang. The latest dating of the chart to 649-684 therefore fits closely with his period.

It is unclear whether the star chart is Chunfeng's original or a contemporary copy. Detailed knowledge of the heavens would have been regarded as highly sensitive and confined to a small group of court astronomers, so very few copies of charts would have been produced. However, although the Dunhuang example is on high quality mulberry paper, its calligraphy and layout is somewhat clumsy, making it less likely to be Chunfeng's original.

Despite the slightly crude presentation, the position of the stars is highly accurate. The chart is divided into twelve sections, in a projection that is similar to that created by Flemish geographer Gerhard Mercator in 1569, and there is also a 13th section showing the north polar area.

The position of the 200 brightest stars has recently been checked by the two French astronomical specialists, confirming that they are nearly all accurately plotted.

The big surprise is that there is one major omission from the chart, the polar star. The Plough or Big Dipper (long known by

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century AD copy of a Greek original, depict only constellations, not stars).

The earliest Islamic star chart was compiled by the Persian astronomer Al-Sufi in 964 (his work only survives in later copies, with the earliest dating from the 11th century). In Europe, the first real star chart was compiled in Vienna in 1440 (it is held in Austria's National Library).

But even if the dating is resolved, who made the Chinese star chart? Half of the four metre-long scroll comprises divinations—sketches of unusual cloud formations with texts explaining what they foretell.

Written by the same hand as the star chart, one divination includes a phrase saying "your servant Chunfeng". This is now believed to be Li Chunfeng, the

Chinese as the "North Dipper") is very clearly visible, but not the key feature to which it points, the polar star. This omission cannot be accidental, so it was probably excluded out of deference to the emperor, who was associated with the polar star.

A taboo on reproducing the polar star (known in Chinese as the "First Ancestor") has not previously emerged in other Chinese sources. In China, earth and sky were regarded as part of a single system, and the actions of the emperor were believed to be reflected by stellar events, such as comets. Beyond China, nearly all other societies regard the heavens as a completely separate realm.

Martin Bailey

□ The star chart will go on show in the British Library's "Treasures" gallery from 20 March

## Next step for Apsley House: a three-person committee



Apsley House: family home and historic monument

LONDON. After five years of wrangling between the Duke of Wellington and English Heritage (EH), a three-member committee has been set up in an attempt to improve the management of Apsley House. The Duke of Wellington and his son Lord Douro opposed EH taking over the house, creating an atmosphere in which it has been difficult to upgrade the visitor experience, leading to falling numbers.

The Apsley House Committee, established earlier this year, is chaired by Sir Hayden Phillips, a former permanent secretary at the Department for Culture, Media and Sport. Lord Douro represents the family. The EH representative is Lord Leicester. Inquiries by *The Art Newspaper* suggest that the new committee faces a potential "conflict of interest" situation, since Lord Leicester is a personal friend of the Duke of Wellington.

Lord Leicester's appointment to the Apsley House Committee needs to be seen against the background of serious tensions between EH and the eighth Duke of Wellington (whose family retains a private apartment on the upper floor). EH hopes that appointing a commissioner who personally knew the Duke would improve relations.

Apsley House was given to the nation in 1947, and the public rooms on the main floor are open to visitors, showing the first Duke's paintings and furnishings. The house was administered by the Victoria and Albert Museum until 2004, but the Wellington family were dissatisfied with arrangements and it was then transferred to EH.

As an EH commissioner, Lord Leicester formally declared an interest when Apsley House was discussed at Commission meetings up until July 2006, recording that he was "a friend of the Duke of Wellington". Since then, Apsley House has come up at three Commission meetings at which Lord Leicester did not declare an interest, although others did; he did declare an interest on two other occasions.

Last month Lord Leicester told us: "I always declare an interest. If I didn't on an occasion, it was an omission. Everyone on the Commission knows by now that I am a friend, but however trivial, one must declare an interest." He strongly rebuts any suggestion that he might lean towards the Duke of Wellington's side in the new committee, saying that "I take every precaution to make certain I don't."

Lord Leicester, who inherited Holkham Hall in Norfolk, has a long record of public service. He is a former chairman of the Historic Houses Association, with a special interest in conservation.

An EH spokesman told us last month that "we cannot see how there could be a conflict of interest", since the new committee is responsible for overseeing the house as an historic property, not in dealing with "domestic arrangements" with the Wellingtons. However, in practice these two aspects have in recent years become intertwined. EH stresses that it is "confident that Lord Leicester will act in the best interests of EH and Apsley House". M.B.

## Arts Council pulls plug on gallery at The Public

LONDON. The Arts Council has withdrawn revenue funding from The Public in West Bromwich; as a consequence the gallery has formally announced its closure. To date more than £62m has been spent on the Midlands arts project. Although the Will Alsop-designed building opened last June, the gallery never did, ostensibly because of technical problems with the computerised works on permanent display.

On 27 January the Arts Council finally decided to withdraw support from Public Gallery Ltd, the charitable company responsible for running the art gallery. Outgoing Arts Council chairman Sir Christopher Frayling explained: "Although the building is open, the interactive art gallery at the centre of the vision for The Public is not. We have done everything we can, but there comes a point where we have to make a difficult judgement—and regrettably, that moment is now."

The Arts Council had already given £29.8m in capital grants,

along with £2.4m in revenue funding. Money for 2009-10 has already been paid, but there will be no further revenue grants.

However, the Arts Council decided on 27 January to offer a one-off award of up to £3m to Sandwell Metropolitan Borough Council, which owns and operates The Public, to develop a revised artistic and business plan to bring the building into full use. Although critics believe this is "throwing good money after bad", the Arts Council wants to see the building fully opened.

Following the Arts Council decision, Public Gallery Ltd issued a statement, saying that it would "close its business", since it is "no longer financially sustainable". The company is in administration, under Baker Tilly Restructuring & Recovery. Among those who are owed money is Canadian photographer Shari Hatt, whose exhibition of "Dog Portraits" had been billed to open on 12 February (*The Art Newspaper*, February 2009, p5). M.B.

ARCHIVIO

**Pino Pascali**

In view of the preparation of the *Catalogue Raisonné* for Pino Pascali, we are attempting to locate and document the works and writings of the artist. Owners of the works who are interested in the archiving and future publication are kindly requested to get in touch with us.

[www.frittelliarte.it](http://www.frittelliarte.it)

**Frittelli**  
ARTE CONTEMPORANEA

Archivio Pino Pascali  
via Val di Marina, 15 - 50127 Firenze  
tel +39 055410153  
fax +39 0554377359  
info@archiviopinopascali.org

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