Zimingzhong: 凝时聚珍
Clockwork Treasures From China's Forbidden City

Víctor Pérez Álvarez

Fig. 1 *Gallery view of Zimingzhong 凝时聚珍: Clockwork Treasures from China's Forbidden City. © Science Museum Group.*

Between 1st February and 2nd June 2024, the Science Museum held 'Zimingzhong: Clockwork Treasures from China's Forbidden City', a temporary exhibition (Fig. 1) of clocks from 'The Palace Museum' collections in Beijing offering a rare opportunity to see these objects all together in the UK. The pay-what-you-can ticketed exhibition showcases 23 clocks as well as some documents, tools and different interactive clockwork models.

Mechanical horology has been considered an European invention by historiography, however, in the 16th century, in the context of the beginning of the globalisation, clocks crossed the European borders to make their way into very different cultures from distant places, including China. Clocks were initially received as diplomatic gifts from Europeans seeking their social integration in China, the favour of the authorities for trading, exchange, or evangelisation. Clocks were received as foreign curiosities named 'Zimingzhong', the Chinese word for 'clock', not just meaning plain timekeepers, but also lavishly decorated devices with musical trains and different sorts of automata for spectacle and wonder. Time-telling was actually a secondary function in many zimingzhong. The emperors ended up collecting them, boosting a specific trade of clocks in Europe for the Chinese market and developing a horological industry in China copying the European models and creating new ones inspired by them.

The exhibition opens with a clock in the shape of a pagoda with a telescopic stacked roof which expands and contracts vertically when the mechanism is wound up (Fig. 2). The object is exhibited not working, but the performance can be watched in an accompanying video. From this point the visitor starts experiencing the atmosphere of the exhibition, dominated by the music, which has been electronically created by converting traditional Chinese songs into music by the striking of clock bells. The dark and amber coloured decoration matches the colour of the objects and together with the music creates a very atmospheric space.

After the telescopic roof pagoda, a show case containing printed books and other documents from the Science Museum collections illustrate the very beginning of the cross-cultural exchange between China and Europe since the 16th century, when the first European clocks reached the far East. During that early period Portugal and the Jesuits missionaries were the pioneers in carrying clocks to China. The Anglo-Chinese trade increased significantly from the end of the 17th century importing tea and porcelain, but the golden era of English clock exports takes place in the 18th century and the early 19th, the period to which the clocks in the exhibition belong. After that date watches imported to China outnumbered clocks and the production centre shifts from England to Switzerland, in line with the decline of the English horological industry.

A small section about the making of the objects illustrates the technical aspects of the movements and their construction. The visitor can operate by hand oversized models of different clockwork and musical mechanisms, helping him to understand their intricacies. Some tools from the James Watt

Fig. 2 *Moving Pagoda, displayed in the Zimingzhong* 凝时聚珍 *exhibition. © The Palace Museum.*

Fig. 3 *Zimingzhong with Turbaned Figure, displayed in the Zimingzhong* 凝时聚珍 *exhibition. © The Palace Museum.*

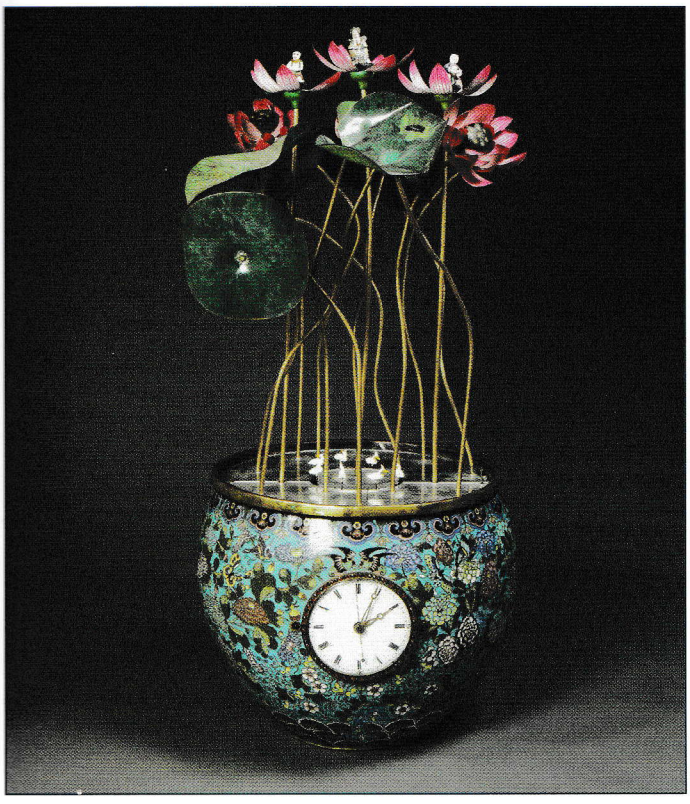

Fig. 4 *Zimingzhong with British and Chinese mechanisms, displayed in the Zimingzhong* 凝时聚珍 *exhibition. © The Palace Museum.*

Fig. 5 *Zimingzhong with parts from China and Britain, displayed in the Zimingzhong* 凝时聚珍 *exhibition. © The Palace Museum.*

workshop, also exhibited on the ground floor of the Science Museum, represent the craft of clockmaking. In addition, a video shows how the objects are conserved in the Palace Museum of Beijing.

The Palace Museum of Beijing keeps more than 1500 zimingzhong, 23 of which have been selected for the exhibition at the Science Museum of London. All of them stand out individually for their own reasons and the quality of their craftmanship of most of them is at the top end. For example, the clock in the shape of a chest with a dove on the top stands out for the quality of its enamels.

One of the most interesting aspects shown by the clocks is how the English and the Chinese perceived each other. On this matter, the musical clock with a turbaned figure under a tasselled tent embodies the European and, more specifically, the English views of the Eastern cultures (Fig. 3), often based on stereotypes and clichés which lead to misconceptions. For that reason, the representation of the Asians is often generalised using common features to characterise people from Chinese, from the Ottoman Empire or from India. In the same way, some Chinese made clocks show their Europeanness by their dial signatures, including one in the exhibition with the name letters upside down and written backwards. At that point the Chinese horological industry was capable of making their own clocks, but they were still considered foreign objects.

Some clocks were entirely made in China but others combined imported parts from Europe with locally made ones, leading to the creation of hybrid objects. That can only happen after a long and deep technical exchange process between both cultures. A good example is the potted lotus flowers zimingzhong (Fig. 4) from the beginning of the 19th century with bird automatons driven by a Chinese made mechanism and an English made musical mechanism.

One of the leading English makers who specialised on the Chinese market was James Cox, maker of complicated musical clocks and automata. Cox's signature is on some of the clocks in the exhibition including the crane with a pavilion on its back holding a pocket watch movement (Fig. 5) with a small dial. This object is another interesting example of cross-cultural hybridisation. The watch movement is by Cox but the figure of the crane, loaded with Chinese symbolism, is thought to be Chinese made.[1] The zimingzhong in the shape of an elephant on a base with hunting scenes is also signed by Cox.

The Science Museum of London holds other interesting permanent exhibitions with scientific instruments which are always worth visiting. The Clockmakers Company Museum is in the same building and it is a 'must' for anyone interested on the history of horology, especially their current temporary exhibition on Breguet until 8th September, showing some objects which aren't normally on public view.

Note

1. Ian White, Ian. *English clocks for the eastern markets,* (Ticehurst: The Antiquarian Horological Society, 2012), pp. 182-184.

Author's email address: vpamm2016@gmail.com