The First Emperor

China’s Terracotta Army
At The British Museum
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Photographs by John Williams and Saul Peckham

THE BRITISH MUSEUM exhibition “The First Emperor: China’s Terracotta Army” opens on September 13th in the temporarily converted Round Reading Room at the centre of the museum. The exhibition takes a new look at the tomb site of China’s First Emperor and a new look at his ambitions and his achievements. It was conceived in September 2005 when I accompanied Neil MacGregor, British Museum Director, on his first visit to Xi’an. We felt that while Qin Shihuangdi’s terracotta army may be well known to many people, the ongoing excavation work at his tomb site and the significance of his achievements were not known by the general public in the Western world. At a time when China is developing so quickly and occupying a high profile throughout the world due to the imminent 2008 Beijing Olympics, it seemed to us that it was appropriate for the British Museum to present an exhibition which would educate new generations about China’s formative history.

Planning for the exhibition continued during 2006 and I made two trips to Xi’an that year to discuss the object list. The BBC also decided to make a documentary about the making of the exhibition, to be shown in September 2007 around the time of the opening. This meant that many of the stages of preparation of list, catalogue, design, etc. were filmed. The catalogue is called The First Emperor: China’s Terracotta Army, edited by Jane Portal, British Museum Press, 2007.

As with most exhibitions, the catalogue preparation preceded the exhibition design and the writing of the information panels and labels. However, we tried to keep both catalogue and exhibition design in parallel as far as possible. In 2006, under the academic advice of Professor Jessica Rawson, authors were chosen for the catalogue, to include leading figures in the field. It was decided to produce a book which could outline the exhibition and provide a resource which would be of use to scholars and the general public alike, as far as possible. To that end, we sent two British Museum photographers, John Williams and Saul Peckham, to Xi’an in January this year to produce very high quality images of great technical competence and beauty. They were given every assistance by the authorities in Xi’an, for which we are most grateful. The exhibition design is a happy cooperation with Metaphor, led by Stephen Green.

The exhibition focuses on Qin Shihuangdi and his achievements and vision. It is primarily through the evidence from his tomb complex that we can find out about him. The introduction to the exhibition explains the limitations of the historical sources and the lack of any visual representation of the First Emperor from the Qin dynasty (221–207 BC). Any “portraits” that exist of him date from the Ming dynasty (1368–1644) onwards and are purely imaginary (1). The archaeological evidence presented in the exhibition is therefore our primary source of knowledge about him. So, in the British Museum, the achievements of the First Emperor are shown in the first half of the exhibition, while the second half presents the growing evidence about him from the ongoing excavation of his tomb complex. New discoveries included in the exhibition present the growing knowledge about the scale of

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1 Woodcut imaginary portrait of the First Emperor from the Sancai Tuhui dated 1609. There are no images of him surviving from the Qin dynasty. British Library
the entire tomb complex and the Emperor’s grand vision, which was of everlasting rule over the entire universe.

The terracotta army of the First Emperor of China was discovered by surprise in 1974. Since then, millions of visitors have marvelled at it in the on-site museum opened in 1979 (2). It is evidence of the vision and organisational power of Qin Shihuangdi, who unified China in 221 BC. Archaeologists predict that excavations at the site of the tomb of the First Emperor will keep them busy for generations, as new discoveries are made year by year and new techniques of conservation and scientific research are introduced and perfected. In fact, it will doubtless take longer to excavate the First Emperor’s tomb complex than the approximately thirty-six years it took to build it.

The tomb site on the outskirts of present day Xi’an had been known for thousands of years from the Chinese written record and the tomb mound in the shape of a square, flattened pyramid had long been visible above ground. However, the terracotta army came as a complete surprise to all, because there was no record of it. The tomb itself was described in some detail by the official historian of the dynasty which overthrew and followed the First Emperor’s. There was no mention of an underground army. Also, the fact that the pits containing the terracotta army were at such a distance from the mound itself demonstrated the huge scale of the underground tomb complex. They are located 1.5 kilometres East of the tomb mound and the whole tomb complex area is now estimated to cover over 50 square km (2-4).

King Zheng of Qin was born in 259 BC and became King of the state of Qin in 246 BC when he was only thirteen. By the time he was thirty-eight, he had unified the Warring States and taken the name Qin Shihuangdi or Great August First Emperor of Qin. Before the First Emperor’s time, China was for hundreds of years divided into different states or kingdoms, many of which were at war with each other over various periods. The state of Qin, situated in the far west, was a poor and rather frugal state. However, it gradually adopted technology from other states and developed weapons and military technology until it was pre-eminent in these areas. It was never as rich or culturally developed as, for example, the state of Chu in the South, but it was better organised and succeeded in gradually conquering all the different states.

The First Emperor ordered General Meng Tian to complete the construction of the Great Wall by joining together existing sections built by other states. It was made of tamped earth during the Qin and was not the same as the present wall, which was built of brick later in the Ming dynasty (5). A major communications system was also built by Meng Tian for the First Emperor, which has been estimated to total 6800 kilometres of highways.

The First Emperor rejected Confucianism and adopted the Legalist philosophy, introducing a new law code, with its emphasis on rewards and punishments. He also presided over the unification of the coinage system, the standardisation of weights and measures and the script. He moved 120,000 families of aristocrats from defeated states to his capital at Xianyang, near to present-day Xi’an, where he built palaces copying their original ones, as well as the massive Epang Palace. He also travelled around the country he had conquered, carrying out sacrifices and setting up inscriptions on stele proclaiming his achievements and declaring himself ruler of the entire universe. This practice marked the beginning of the tradition of inscribing mountains which is still evident today (6).

Qin Shihuangdi tried very hard to avoid dying and tried many different potions made for him by alchemists at court, which may have included phosphorous and balls of mercury. It is thought that when he eventually died, when on a tour in the East, it may have been from mercury poisoning. It is written that salted fish was put in his covered carriage with his body as it was transported back to Xianyang, so that no one knew of his death, while his Chief Minister Li Si could ensure the succession.

From the time that he became King of the Qin state in 246 BC, he started the construction of his tomb complex. When he became Emperor in 221 BC, the design for his tomb was expanded. Large numbers of conscripts were used, as the military campaigns had come to an end. It was unfinished when he died suddenly in 210 BC. We know this because one of the terracotta army pits was found empty. Today a large tumulus occupies the centre
The First Emperor was responsible for the building of the Great Wall, joining up walls which existed already. This is the Qin wall, made of compressed earth, which differs from the Ming Great Wall we see today.

The tomb mound of the First Emperor, as yet unexcavated.

Rubbing of a 10th century stele inscription, based on the inscription established by the First Emperor on Mount Yi in 219 BC. Xi’an, Forest of Stelae Museum.

The tomb mound of the First Emperor, as yet unexcavated.
of the tomb compound and the artificial hill has the shape of a truncated pyramid, with a base of approximately 350 metres, planted with bushes and trees (7).

The terracotta army is buried in four pits located to the East of the tomb mound and outside the walls of the tomb complex. It is as if it were placed there to guard the tomb from attack from the East, where all the conquered states lie. Pit 1, 230 metres long, contains the main army, with more than 6000 figures of warriors (8–10) and horses. Pit 2 has cavalry and infantry units as well as war chariots and is thought to represent a military guard. Pit 3 is the Command Centre, with high-ranking officers and a command chariot (4). Pit 4 was empty, probably left unfinished by its builders. Together, the four pits seem to represent a complete garrison and the total number of figures is estimated at over 7000. All the warriors originally carried life-size real weapons, which disappeared when the pits were looted and burned in the rebellions after the death of the First Emperor.

It is perhaps the enormous scale of the terracotta army as well as the quality of the representation and manufacture of its members that continues to move visitors so greatly. These mature, life-size sculptures seemed to have appeared out of nowhere as there was no tradition of such large or such realistic sculptures in the centuries preceding the Qin (9). Although the warriors have been described by some as individual portraits in clay of actual soldiers, in fact it has now been shown that the manufacture of the army was a great and early feat of mass production: a small and quite limited repertoire of body parts was produced using moulds, coiling and slab building. They were joined together in a multitude of combinations, with details worked by hand afterwards before the whole figure was painted. Endless variety, for example of costumes, hairstyles, hand positions or facial features was therefore possible, but in no way were they individual portraits. Warriors were stamped with the name and unit of the foreman, in order to ensure quality control. Some of the names match those of inscriptions on floor tiles and drainpipes found near the mausoleum. This suggests that architectural ceramic workers were most probably responsible for the terracotta army, which would explain the construction methods, using pins or pegs to fix the ankle joints for example. Moulds, using the local loess or yellow earth,
Armoured infantrymen lined up in Pit 1. Their costumes and bodies were originally brightly painted.

Kneeling archer with a face painted green, possibly to ward off spirits.

Half life-size bronze chariot for the First Emperor to use to tour his empire in the afterlife.

had been in use for hundreds of years not only for making roof tiles but also in the production of bronzes during the earlier Shang (circa 1600–1100 BC) and Zhou (circa 1100–256 BC) dynasties. It has been estimated that over 1000 people may have been involved in the making of the terracotta army. The fact that there is no written description of it in the later historical record suggests that it must have been kept secret. Many of the labourers probably died of overwork or were perhaps buried with the results of their labours.

It is not universally understood that the warriors were originally brightly painted, both their costumes and their bodies (11, 12). The colour pigments were mixed with lacquer and applied after firing of the terracotta figures. When excavated, the exposure to air resulted in immediate loss of the colours. Over the last fifteen years, conservation work, done in cooperation with the German government, has resulted in new techniques being used to preserve some of the colours, which are surprisingly varied and bright. One spectacular example is an intriguing kneeling archer with a green face, which poses interesting questions as to why he should have had a face painted green (11).

Since the discovery of the terracotta army, ongoing excavations have furthered our knowledge of the massive scale of the entire tomb complex. Remains of above-ground buildings have been found within the large tomb area, which is surrounded by two walls—an inner wall and an outer wall. These buildings were for ritual and sacrifice. Excavations following that of the terracotta army have unearthed other pits around the tomb mound itself, which still remains unexplored. One pit contains human skeletons with severed limbs, perhaps representing people sacrificed in religious rituals. Another has rare birds and animals in rows of clay coffins with clay dishes for food and collars attached to the animals. There are many pits containing horse skeletons and terracotta grooms, perhaps representing an Imperial Stable. Also found are mass graves of more than one hundred skeletons, perhaps conscript workers.

In 1980 two magnificent painted bronze chariots were excavated, each half life-size and drawn by four horses, for the First Emperor to use for inspection tours in the afterlife (13). Consisting of over 3000 parts, they show the techniques of chariot building and horse harnessing in
great detail. Large quantities of hay were deposited in the pit for the horses, underlining an interesting feature of the First Emperor’s tomb—the mixture of the real and man-made. Real people and animals were buried as well as terracotta and bronze ones.

More recently, in the late 1990s, an intriguing find of hundreds of sets of grey stone armour (14–16), including horse armour, was discovered in a large rectangular pit to the Southeast of the tomb mound, over 13,000 square metres in size. It has puzzled scholars because, although this armour is carefully modelled on the leather and iron suits used in battle at this time, armour in stone is much too heavy to be practical and would have been useless protection against spearheads and arrows of bronze and iron—it would just have shattered. Most probably this armour was designed for use in repelling evil spirits. The famous jade burial suits which appear in the following Han dynasty (206 BC–220 AD) were probably developed from this stone armour, which can be seen as prototype jade suits.

Since China is famous for inventing bureaucracy, it is appropriate that the First Emperor also felt the need for officials in his afterlife, as well as an army to guard him. In late 2000 a group of terracotta civil officials (17, 18) and scribes came to light in a pit to the Southwest of the tomb mound. Entertainment was also provided: twelve terracotta acrobats (19) and strong men (20) were found with a large bronze tripod on top, in a pit to the Southeast of the tomb mound. The most recent find, in August 2001, was that of an F-shaped pit with a diverted underground river, containing terracotta musicians (21, 22), who were playing music for life-size bronze water birds to dance to (23).

The First Emperor’s tomb complex is an ideal model of the realm over which he had ruled and intended to continue to rule after his death. It also marks a change in the design of tombs in China—from shaft tombs (pits lined with wood and filled with boxes of grave goods and with ritual bronzes)—to chamber tombs, which were seen as palaces for the use of the incumbent in the afterlife. Chinese archaeologists have so far decided not to excavate
the actual tomb chamber, but are concentrating on the
many pits surrounding it, awaiting future developments in
excavation and conservation techniques as well as new
ways of non-destructive scanning. As excavation proceeds
in the areas around the tomb mound, the grand scale of
the First Emperor’s underground government is gradually
revealed.

The achievements of the First Emperor were enormous
and he was one of the world’s greatest leaders. Many of
the changes he initiated were adopted by the following
long Han dynasty and he established a meritocracy and
centralised bureaucracy which were to last throughout all
the following dynasties until 1911. The script and coinage
systems he introduced also lasted and aided centralisation.
His reputation in later times within China was to a large
extent influenced by the bias of Sima Qian, who had his
own agenda; some parts of the historical record cannot
therefore be trusted. The First Emperor was also used
in political campaigns in the 20th century. Through this
exhibition we hope that the First Emperor will become
much better known in the Western world at a time when
it is of vital importance to the world that China’s history
is better understood, in order better to understand its
present.
20 Terracotta strongman, with highly developed muscles. He was probably a weightlifter.

21 Terracotta kneeling musician, probably striking some sort of wooden percussion instrument.

22 Seated musician, perhaps plucking a wooden stringed instrument such as a zither, which has long disintegrated.

23 Realistic bronze crane excavated from the underground stream within the F-shaped pit to the Northeast of the tomb complex. It is thought that the bronze water birds were trained to dance to the music played by the musicians, for the entertainment of the Emperor.