King Tut’s tomb: Egypt inaugurates replica using 3D technology

Foreign diplomats attend the inauguration of the replica of the Tomb of Tutankhamun in Luxor, southern Egypt April 30, 2014. (Reuters)

By Eman El-Shenawi | Al Arabiya News
Thursday, 1 May 2014

An exact replica of the most prominent Ancient Egyptian burial site – King Tutankhamun’s tomb - was unveiled on Wednesday, in a move which has seen the future of sustainable cultural tourism springing to life.

The exact 3D facsimile has been placed in an underground chamber not far from the original in the Valley of the Kings, and recreates the 3,245-year-old tomb down to minute details.
The inside of the replica tomb.
(Photo courtesy: the Associated Press)

Over the years, the original 60m square burial chamber which receives up to 1,000 visitors a day has deteriorated and become far more fragile due partly to the exposure to mass tourism. The facsimile of the chamber, discovered 92 years ago by British Archaeologist Howard Carter, will now form the core of a new tourist center.

The move is paving the path for sustainable tourism with the use of facsimiles to protect original sites.

**Fit for a king**

“The tombs of the Theban Necropolis were built by great craftsmen to last for eternity. They were not built to be visited,” Adam Lowe, of the Factum Foundation, a Madrid-based conservation organization that created the facsimile, told Al Arabiya News.

“They cannot withstand the dynamic environment caused by the high visitor numbers that existed in 2010. It is reliably predicted that when stability returns to Egypt the numbers will rise to new heights,” Lowe added.
A visitor reads information on a wall during the opening of an exact replica of the Tomb of Tutankhamun in Luxor, Egypt, Wednesday, April, 30, 2014.
(Photo courtesy: the Associated Press)

Tourism - a pillar of the Egyptian economy -plunged by more than 30 percent in 2011 and, after slowly building back the following year, was heavily hit again by violence following the military’s ouster of Islamist President Mohammad Mursi last year.

Tourism officials have said revenues in the first three months of this year fell 43 percent from the same period in 2013, down to around $1.3 billion, according to the Associated Press.

“The purpose of the facsimile is twofold,” explained Lowe. “One is to provide the data to accurately monitor the rate of decay to the tomb. The second is to show that technology has come of age and when used in the right way it is possible to create a facsimile that looks and feels like the original.

“There is a great sense of wonder in this!! We want large numbers of people to come to Luxor and visit both the original and the replica - we want them to use social media and communicate their response with their friends.”

Factum designed the replica in collaboration with Zurich-based Society of the Friends of the Royal Tombs in Egypt and the
Egyptian Tourism and Antiquities ministries.

During the unveiling, Egyptologists and dignitaries burst into tears as they saw the replica tomb in all its accuracy.

**Inside the burial chamber**

Inside the tomb are paintings containing scenes including the young Pharaoh in the form of Osiris and being greeted by the Goddess Nut ahead of his boat journey into the afterlife.

Factum worked with Egyptian architect Tarek Waly to build the limestone replica using digital photography, 3D laser scanning and printers.

The scenes were recreated “not as they were at the time of burial but in the time-ravaged form when they were photographed in 2009,” reported The Independent.

“In Egypt, it has involved the skills of our inspectors on site and the support team. The next phase is to undertake a major transfer of skills and technology to establish a world leading team in Luxor,” Lowe said.

In comments to Al Arabiya News, World-renowned Egyptologist and former antiquities minister Zahi Hawass expressed the importance of the facsimile being an exact copy of King Tut’s burial chamber.

“Many years ago, I had suggested that the replica of the tombs be created as I warned that they would erode in the next 100 years,” he said.

Hawass also warned that any replica sites created should be continuously reviewed by the Supreme Council of Antiquities as facsimiles will soon have a strong educational purpose.

The five-year project has been filmed for a special documentary for a BBC Travel Show called “A New Tomb for Tutankhamun.”

Describing the facsimile, the documentary’s producer Joanne Whalley said: “The tomb walls of the original are very cracked and undulating so the 3D [process] captured the cracks and...
dips of the surface.”

The quality of work at the tomb is “astonishing,” said the show’s presenter, Rajan Datar describing the replica as “state-of-the-art.”

He said: “When they recorded the information from the original tomb they recorded 100 million points of information per square meter with a laser scanner. That is state-of-the-art stuff.

“This is the future of cultural tourism … During the past hundred years many antiquities have been exposed to too much human presence and unless that is restricted they are going to collapse completely. The mindset has to change amongst tourists,” Datar added.

Similar projects to replicate the tombs of Queen Nefertari, regarded as the most beautiful Egyptian burial chamber, and Seti I, which is seen by archaeologists as the most important are now being worked on by Factum Arte.

Both Queen Nefertari and Seti I sites are already closed to the general public, Lowe said.

Lowe describes the “truly collaborative projects” as “idealistic and trying to make a positive difference.”

He wants to send across this message: “We gave the facsimile to the people of Egypt and I want them to come and visit and feel proud to be part of a project that aims to establish sustainable tourism.”

Last Update: Thursday, 1 May 2014 KSA 11:03 - GMT 08:03