Almost a century after its discovery, the burial chamber of Tutankhamun is being recreated down to the minutest detail in the Egyptian desert. Peter Aspden reports on the technical revolution that has made it possible and how a new age of ‘facsimile tourism’ could help preserve many more of the world’s antiquities.
n November 1922, Howard Carter, a British archaeologist who had spent all his adult life in Egypt, made the discovery that resonated throughout an incredulous world, and continues, even in the age of cinematic blockbuster and virtual-reality-on-demand, to enthral us. Carter was a man who combined practical ingenuity and a vivid sense of romance: he had spent five years, supported by his patron, Lord Carnarvon, excavating in the Valley of the Kings in Thebes (modern-day Luxor), conducting a passionate and well-planned search for the royal tombs of ancient Egypt. But the results were discouraging. This was to be his final dig. One day, after exposing the bases of some of the workmen’s huts, he found a step that had been carved into the rock. He intensified his efforts and days later was joined by his sponsor. Lord Carnarvon was standing by him when Carter made a small breach in the corner of a sealed door. He inserted a candle to shed light on his investigation.

He described what happened next in his account of the dig: “At first I could see nothing, the hot air escaping from the chamber causing the candle flame to flicker, but presently, as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange animals, statues, and gold – everywhere the glint of gold. For the moment – an eternity it must have seemed to the others standing by – I was struck dumb with amazement, and when Lord Carnarvon, unable to stand the suspense any longer, inquired anxiously, ‘Can you see anything?’ it was all I could do to get out the words, ‘Yes, wonderful things.’”

The wonderful things, seen by millions since that day, were the contents of the antechamber of the tomb of Tutankhamun, in a state, Carter said, of “organised chaos”. Weeks later, he entered into the boy king’s burial chamber itself, almost completely filled with a 16ft high shrine, an enormous casket, the walls of which were made of gilded wood, inlaid with a brilliant blue porcelain. Inside were three smaller shrines protecting the sarcophagus, and inside that, three coffins, the last of which held the mummified body of Tutankhamun. Carter’s mood of triumph was tempered by the sheer scale and import of his finds. “The thing was outside all experience, bewildering,” he wrote, “and for the moment it seemed as though there were more to be done than any human agency could accomplish.”

They were prophetic words. For the 3,245 years that the tomb of Tutankhamun was hidden from human eyes, it remained in immaculate condition. The pharaonic craftsmen had done their job with diligence and great skill. But with the exposure of the tomb, its troubles were only just beginning. The impact of Carter’s discovery was immediate, widespread and profound. Songs were written about King Tut; horror movies featured mummies lurching after glamorous heroines; US President Herbert Hoover named his dog after the boy king. Most of all, everyone wanted to visit the magical place made famous by Carter’s endeavours.

Today, the tomb of Tutankhamun has become one of the most publicised examples of a cultural phenomenon that is being killed by its own success. The small space, about 60 sq m, receives up to 1,000 visitors a day, with disastrous effects on the temperature, humidity and dust in the chamber. Well-meaning restoration and conservation projects have inadvertently exacerbated the problems. Poor King Tut: the stronger his grasp on the public imagination, the greater the danger to his magnificent resting place.

But later this month, help is at hand. April 30 sees the unveiling, in the very same Valley of the Kings, of a new version of Tutankhamun’s tomb: an exact facsimile of the chamber discovered 92 years ago by Carter. It will form the core of a new visitor centre, situated next to Carter’s old house, which may just help revolutionise cultural tourism.

In a world where increasing numbers of people want to see objects that become more and more fragile due to their very exposure, the use of ▶
facsimile looks like being the most promising way forward for sustainable tourism.

What has made this possible are the advances in digital technology since the turn of the millennium. The company which has developed the required techniques for high-resolution facsimile manufacture is Madrid-based Factum Arte, which uses an array of 3D laser scanners, photographic equipment and printers to produce objects and images that are, for most naked eyes, identical to the originals. The Tutankhamun project, which has been largely funded by foundations and organisations outside Egypt, has been supported by Egypt’s Supreme Council for Antiquities, which sees a way forward for sustainable tourism.

Adam Lowe, the director of Factum Arte, reels off the statistics that underlie the project: mind-boggling resolution figures, exacting standards of information retrieval and reproduction. The material, he says, is essentially “dematerialised” and then recreated. It brings to mind a certain science-fiction series. “The beam me up, Scotty metaphor is one we use a lot,” he confesses. “The ‘Beam me up, Scotty’ metaphor is one we use a lot,” he confesses. “The ‘Beam me up, Scotty’ metaphor is one we use a lot,” he confesses. “The ‘Beam me up, Scotty’ metaphor is one we use a lot,” he conf...
Howard Carter, pictured above, examines Tutankhamun’s casket.

Michael Daley is the director of ArtWatch UK, a pressure group which acts as a watchdog over various attempts at conservation and restoration, publicising what it perceives to be any threat to the “integrity” of works of art and architecture. He describes the new age of facsimile tourism as a “fascinating phenomenon”.

“What is intriguing about [Factum Arte] is that they are absolutely frank and explicit about the nature of their venture, and they are making a positive and valuable contribution towards diverting the real threats to works which can no longer withstand the pressure of mass tourism and environmental pollution,” he says.

This, Daley adds, is in contrast to the efforts of many restorers who are “turning unique and irreplaceable artworks into facsimiles of their supposed original selves”. He cites as an example a proposed scientific project to reshow a group of badly faded Mark Rothko paintings from Harvard University’s Holyoke Center, using computer-generated lighting effects to simulate what are thought to be the paintings’ original colours.

Daley also laments the “snobbery” that continues to exist over reproductions and facsimiles, which he says is “unwarranted”. “There is this superstitious feeling about ‘the real thing’. We have this very deep instinct to want to touch it when we see it – but if everyone does it, it is destroyed. Unless we are prepared to bite the bullet, we will go back to the state where only the most privileged people will be able to see great works of art.”

The technology used by Factum Arte is not only aimed at replication: it is also helping to create things that have never existed. At London’s Sir John Soane’s Museum, a current exhibition on the Italian designer and architect Giovanni Battista Piranesi has used 3D scanning techniques to make full-scale physical reproductions of the artist’s hitherto unrealised designs.

More projects are in the pipeline: back in the Valley of the Kings, where work is proposed to produce facsimiles of the tombs of Seti I and Queen Nefertari, both of which are currently closed to the public; and wider afield, too. One of these is to “reunite” the various panels of the Griffoni chapel of the Basilica of San Petronio in Bologna, spread today all over the world’s galleries.

There is, in all these ventures, a philosophical shift in the air. What was once regarded as an essentially kitsch idea is gaining currency. First, because of the sophistication of the technology; second, because there is no better alternative for saving fragile works of art from the effects of mass tourism; and finally, because it helps solve some of the ethical dilemmas around the subject of where a work of art actually belongs. I ask Lowe if he thinks he could usefully apply his attentions to the Parthenon Marbles, the most contentious such issue in today’s cultural world. “I would love to be asked to make copies of all the Marbles,” he replies. “And then put them side by side with the originals, ask the ministers of culture from Greece and Britain to come, and alternately pick from them.” He knows that is something of a fantasy, but can’t resist a wistful pitch. “It would be a brilliant project. And very possible.”

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Carter’s House and the Replica of the Tomb of Tutankhamun will open officially on April 30 during a one-day event organised by the Ministry of Tourism, the Ministry of Antiquities and the EU ambassador to Egypt. It will be open to the public from May 1. A “Travel Show Special” will feature the story behind the replica on BBC2, May 2, at 10.35am. To find out more about Factum Arte, go to factum-arte.com and factumfoundation.org