



**PRESS RELEASE: for release, 22nd April 2014**

**Exact facsimile of the Tomb of Tutankhamun installed in Luxor – official opening on the 30<sup>th</sup> April**

The exact facsimile of the Tomb of Tutankhamun has been installed underground in a building next to Carter's House, at the entrance to the Valley of the Kings and is due to be officially opened on 30<sup>th</sup> April 2014. The public opening will be 1<sup>st</sup> May 2014.

The facsimile, made by Factum Arte, Madrid is the most accurate large-scale facsimile to be made to date. This is the culmination of many years work and is an important milestone in the approach to responsible heritage management and the use of advanced technology in the promotion of sustainable tourism. It has been made with the full support of the Egyptian Ministry of Tourism, the Minister of State for Antiquities and with the backing of the European Union. The facsimile is a gift to the people of Egypt from Factum Foundation. It is housed in an underground building designed by the Tarek Waly Centre: Heritage and Architecture, Cairo.

The work has involved the development of advanced 3D technologies for recording the tombs and perfecting the method to replicate them. It is the first stage of a larger project that involves the creation of facsimiles of the Tombs of Seti I and Nefertari – both currently closed to the general public.

**The need for a facsimile:**

The Tomb of Tutankhamun was hidden for over 3,000 years, but since its discovery in 1922 it has rapidly deteriorated - not due to neglect but rather because it was not built to accommodate the vast numbers of people who visit each day; in 2011 it was announced by the Supreme Council of Antiquities that the original tomb must be closed for conservation reasons. The original tomb is currently open giving visitors a unique opportunity to visit both it and the facsimile and compare the experience. The facsimile is part of an initiative to safeguard the tombs of the Theban Necropolis that are either closed to the public for conservation reasons or are in need of closure to preserve them for future generations.

The facsimile of the Tomb of Tutankhamun will give visitors an opportunity to understand the history of the tomb since its discovery, encourage conservation of the original site and establish Egypt's Ministry of Antiquities as a world leader supporting the use of high-resolution documentation to monitor the condition of the tombs.

The gift and installation of the facsimile has very specific objects:

- o To promote a positive and sustainable approach to tourism - and to encourage an awareness that sustainable tourism can be a positive force in the conservation of Egypt's cultural heritage
- o To facilitate the transfer of technology and skills to set up workshops on Luxor's West Bank to record and produce facsimiles of the tombs of Seti I and Queen Nefertari
- o To create long term skilled jobs in Luxor

END



مركز طارق والى العمارة والتراث  
Tarek Waly Center Architecture & Heritage



*"The gift of the facsimile is a metaphor for the relationship between Europe and Egypt - the skills and technology that have been developed in Europe to create the facsimile are going to be transferred to Egypt where the local workers will be trained and those very skills and technology will become Egyptian"* **Baroness Ashton**, EU High Representative on the occasion of giving the facsimile of the Tomb of Tutankhamun to Egypt; November 14th 2012, Cairo.

Adam Lowe, Founder and Director of Factum Arte, comments *"As the number of cultural tourists increases, more people are becoming aware that each visit to a heritage site leads to its decay - we want to turn that awareness around and make each visit a positive story not just for the original but also for the visitor. We can do this by using exact facsimiles that allow an experience of the original while at the same time preserving it and providing funds to make sure the site is maintained."*

James Macmillan-Scott, President of Factum Foundation, said *"This is an seminal project both in relation to the preservation of our cultural heritage but also in the understanding and acceptance that advances in technology have, for the first time, made it possible to preserve that heritage through high resolution digital recording and, where appropriate, the creation of exact facsimiles."*

QUOTES END

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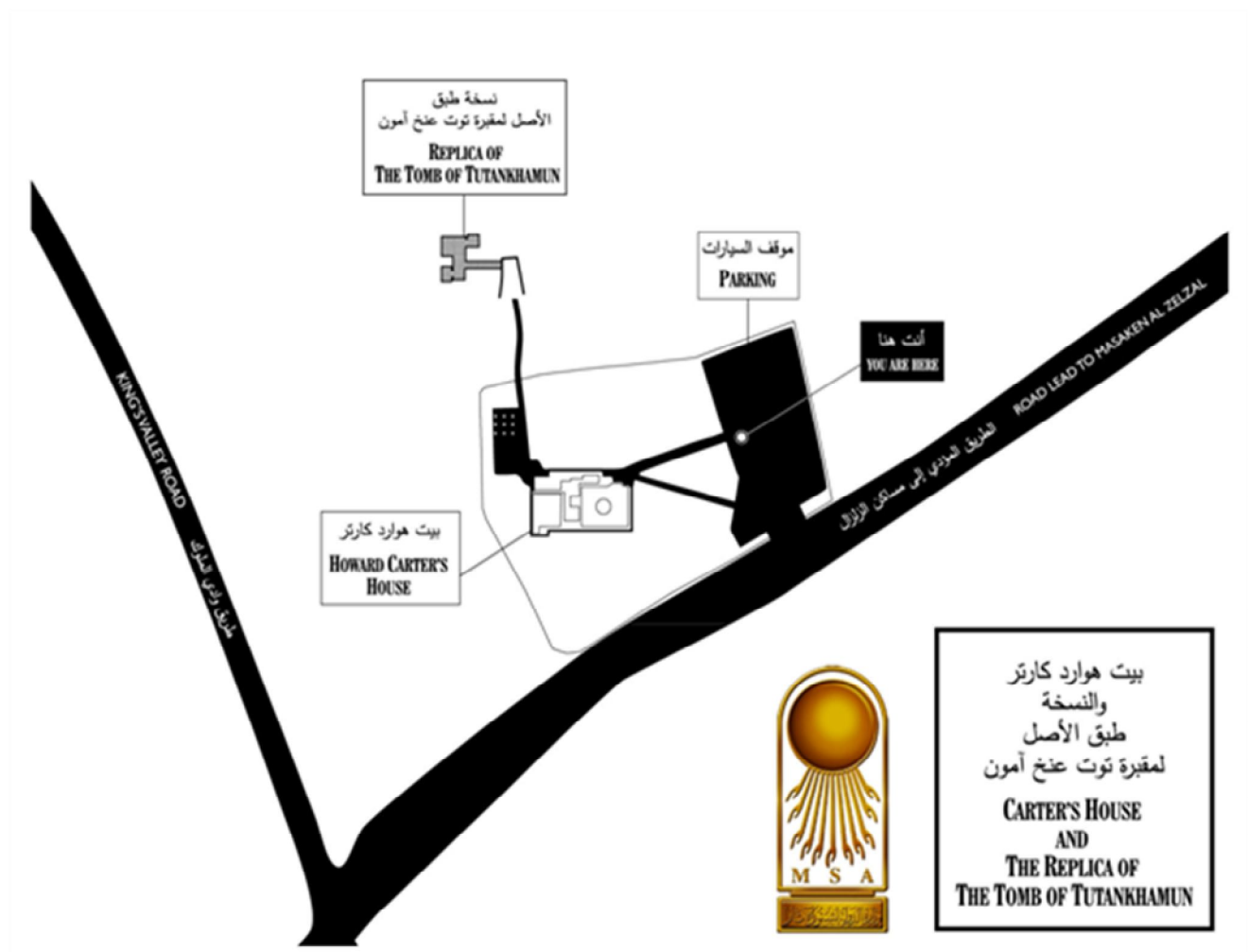
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<http://www.factumfoundation.org/Media>

#### **NOTES TO EDITORS**

- The facsimile has been installed in Valley of Kings adjacent to the Carter House - below ground.
- Funding for recording, development and construction is entirely from outside Egypt  
Key aims of the gift are to:
  - Promote sustainable tourism which can finance conservation and preservation.
  - Transfer technology & skills to an Egyptian team
  - Create long term local employment on the West Bank, Luxor
- The facsimile will be accompanied by an exhibition about the tomb, its contents and the reason it looks as it does today. The exhibition was completed by Jaromir Malek (formerly Director of the Griffith Institute, University of Oxford) and Nicholas Reeves (Lila Acheson Wallace Associate Curator of Egyptian Art, The Metropolitan Museum of Art. Formerly a Curator at The British Museum and Curator to the seventh Earl of Carnarvon at Highclere Castle)
- Factum Foundation and the Society of Friends of the Royal Tombs of Egypt are focused on preservation of cultural heritage
- The original idea to build a facsimile was championed by The Society of the Friends of the Royal Tombs of Egypt, Zurich in 1988. The society and the Swiss Embassy have given logistical and practical assistance
- The shipping and installation of the replica to Egypt was facilitated by the Ministry of Tourism, the Ministry of State for Antiquities and the Egyptian Tourist Authority. Past Preservers acted as local organisers

The location of the Replica of the Tomb of Tutankhamun adjacent to the Carter House.



ADDITIONAL MATERIAL

### A brief history of the project and key data

The work undertaken in the Tomb of Tutankhamun is an initiative that was first suggested in 1988 by the Society of Friends of the Royal Tombs of Egypt. Factum Arte's involvement began in 2001 with a research project approved by Dr. Gaballah Gaballah to develop the techniques to accurately scan the tomb of Seti I. In 2002 an exact facsimile of Thutmosis III was produced by Factum Arte for a touring exhibition. This facsimile demonstrated the level of accuracy that was possible when the application of technology was mixed with high levels of manual and mechanical skill. In 2009 the recording of the tomb of Tutankhamun began on the instruction of Dr. Zahi Hawass and with the support of the Supreme Council of Antiquities who have long supported the idea of building replicas of the tombs that are closed to the public or in need of closure for their preservation. The finished facsimile was given to the people of Egypt in November 2012 by Baroness Ashton on behalf of the European Union. The decision to install the facsimile on the site next to Carter's House was taken by the Minister for Antiquities, Dr. Mohamed Ibrahim in 2013.

A full account of the project can be read at the following links:

[www.factum-arte.com](http://www.factum-arte.com) and [www.factumfoundation.org](http://www.factumfoundation.org)

Facsimile dimensions:

Tomb 405 x 640 x 330cm with ceiling: made in sections. Total weight approx. 3,330kg

Sarcophagus: 276 (long) x 162 (high) x 148cm (wide). Weight approx 300kg.

Sarcophagus lid: 250 x 125 x 25cm (at highest point). Weight approx 80kg.

The 'missing' fragment: 145 x 240 x 7cm. Weight approx 30kg

## **BACKGROUND INFORMATION**

The management of cultural heritage sites is often a balancing act between protecting the monuments and allowing access to those who wish to study, admire and learn from them. The tombs in the Valley of the Kings are especially vulnerable because their well-deserved fame makes the Theban Necropolis one of the most visited sites not just in Egypt but in the World.

The work undertaken in the tomb of Tutankhamun is an initiative instigated in 1988 by the Society of Friends of the Royal Tombs of Egypt (SFRTTE) whose president is Dr Theodor Abt and whose vice president is Dr Erik Hornung. The work to make the replica has been carried out by Factum Arte with the full support of the Supreme Council of Antiquities (SCA) who has long supported the idea of building facsimiles of the tombs that are closed to the public or in need of closure for preservation.

The Factum Foundation has proved that it is possible, through the use of digital technology, to record the surfaces and structure of the tombs in astonishing detail and reproduce it physically in three dimensions without significant loss of information. This work has involved the development of new technologies to record, inspect, archive and reveal the complex histories of Egyptian tombs. It is an approach that is rapidly gaining acceptance and has already proved very popular with the public on projects in Europe. The aim is twofold - to provide the data to monitor the condition of the tombs and to turn the public interest into a force assisting in the protection of the tombs.

## **PAYING FOR THE PRESERVATION OF OUR HERITAGE**

The facsimile of the Tomb of Tutankhamun has been made by Factum Arte, founded and directed by Adam Lowe. It is complete and has been given to the Arab Republic of Egypt.

Factum's work on the Theban Necropolis started in the tomb of Seti I in 2001. The ideas that are now being presented have been refined since then in collaboration with many Egyptologists, technicians, cultural heritage managers and the SCA. The importance of this work and its implications for the sustainable management of world heritage sites cannot be overstated. The vision is to turn the interest of the millions of visitors into a force that will ensure the preservation of Egypt's heritage. But, only with the right financial structure can these important testimonies to the past be permanently protected for posterity. This project is about sustainable management of the world's cultural heritage at a time of mass tourism and vast popular interest. The aim is not only to safeguard the three most important tombs in the Valley of the Kings but also to raise the funding to pay for the work. Ideally a percentage of the revenue generated by the new museum housing the facsimiles will be used to continue the work of documenting other less famous but equally important tombs.

## **TOURISM BECOMES A POSITIVE FORCE IN CONSERVATION**

The effect of the temperature changes, variation in humidity levels, and dust are serious problems creating a dynamic tensions within the materials from which the tomb is made. All of these are a direct result of visitors in the tomb. Previous restoration and consolidation treatments are adding to the problems both in changing the appearance of the character of the surface thereby creating new problems to which there are currently no solutions. Conservation treatments are meant to be fully reversible but the use of Paraloid (an thermoplastic acrylic resin used as a consolidation agent) is a non-reversible treatment on an absorbent surface like the painted plaster in the tombs.

Even a non-expert can see from photographic details that the walls are in a critical condition and are deteriorating fast. A conservation report into the condition into the Tomb of Tutankhamun) is being carried out by the Getty Conservation Institute. It reveals that the tomb is not only at risk from the changes in temperature and humidity brought about by the thousands of visitors who visit the tomb on a daily basis but also by recent attempts to restore the tomb. Attempts to consolidate the plaster to the bedrock have prevented the surface from breathing and are resulting in a build-up of salts

under the plaster that is pushing it off the wall. The biography of any cultural artifact will reveal various levels of human intervention at different times in its life. Many of these interventions have been done to preserve the object. They are normally done with the best of intentions but the results often have unpredictable consequences.

There is no obvious answer to the long-term preservation of this tomb. It stood hidden for over 3,000 years. In the 90 years since its discovery it has suffered terribly. In January 2011 Dr. Zahi Hawass, (then Secretary General of the Supreme Council of Antiquities) announced to the world press that the tomb would soon be closed until a solution has been found.

We do not yet have the technology to allow multiple visits to the original without altering the appearance of the tomb or compounding the problem that will face future generations of conservators. One day we may have an answer but until then we must act with extreme caution and document what we have with great accuracy, archiving raw data that can be reprocessed at higher resolutions in the future.

The high-resolution documentation and creation of an exact facsimile is part of the solution. It is anticipated that the facsimile of Tutankhamun will provide access and information if/when the original tomb is closed. A facsimile of the burial chamber of Tuthmosis III made by Factum Arte in 2003 has now been visited by over 3 million people.

The aim is to use the tremendous public care and interest to preserve the heritage we are privileged to have inherited. While Factum Arte were working in the tomb in 2009 most visitors showed a great interest in the work that was being carried out and many expressed concern that their presence was having a destructive impact on fabric of the tombs.

As the number of cultural tourists increases more people are becoming aware that each visit to a heritage site is almost an act of desecration - we want to turn that awareness around and make each visit a positive story not just for the original but also for the visitor. We can do this by using exact facsimiles that allow an experience of the original while at the same time preserving it and providing funds to make sure the site is maintained and preserved.

This project is about sustainable management of the world's cultural heritage at a time of mass tourism and vast popular interest. The aim is to safeguard and make accessible to the public the three most important tombs in the Theban Necropolis (Seti I, Queen Nefertari and Tutankhamun).

## **EXAMPLES IN EUROPE**

The facsimiles of the painted caves at Lascaux and Altamira have demonstrated that the use of replicas can be both popular and generate revenue. Lascaux II was made in 1983. It is a fairly accurate copy made by hand. It receives 3000 visitors a day during the summer paying €9.50 each. A €50million EU funded project to build a new, more objectively accurate, facsimile was announced but has recently been put on hold.

The production of the replica of Altamira (2001), known as the Neocueva, attracts 500,000 visitors a year to this remote part of Northern Spain and many people are now directly and indirectly employed as a result of this number of visitors, just as they will be in Egypt as the Theban Necropolis is recorded and re-created using the more advanced and accurate technology developed by Factum Arte. The NeoCueva used photogrammetry to achieve its accuracy at one measured 3D point per 5sq cm - Factum Arte now uses 100 million measured points per square metre.

## **THE SCALE AND ACCEPTANCE OF THE PROJECT**

A project on this scale has never been attempted before and the technical and practical challenges are considerable, but the research and development is complete and the results speak for themselves. Changing attitudes towards originality and the role and value of the past is a slow process. Ten years ago the thought of a facsimile tended to produce a reaction of scorn from the cultural elite and a sense of being cheated from the public. Since the unveiling of Factum Arte's extraordinary facsimile of Veronese's famous painting *The Wedding at Cana* in its original location in the Palladian refectory on San Giorgio Maggiore in Venice responses have begun to change. Many art historians and journalists have declared that a copy of this accuracy, with all the surface details of the original, in its original location is actually more 'authentic' than the heavily restored 'original' that hangs framed, at the wrong height and in a location that it was not designed for, in the Musée du Louvre.

## **EGYPT'S INOVATIVE APPROACH**

Egypt, through its long term relationship with the University of Basel, The Society of Friends of the Royal Tombs of Egypt, Factum Arte and the Factum Foundation, has demonstrated that it is at the forefront of this new approach to preservation - an approach that puts the emphasis on documentation and on revealing the past as an active and dynamic force. The importance of the original is not that it is a fixed and static state but that it is part of a process that deepens and changes with time. The way we value and treat an object reveals as much about us as it does about the thing itself. Our understanding of the past conditions how we see the present and influences the way we will shape the future.

## **A PERMANENT RECORD FOR FUTURE GENERATIONS**

The digital data that is collected by Factum Arte will be stored permanently in the Supreme Council of Antiquities Documentation Centre and in the Factum Foundation's secure archive after it has been carefully codified for the future - future technologies may well develop some astonishing techniques that we can only now prepare for. The data is the property of the Supreme Council of Antiquities. The rights to all data recorded by Factum in all Egyptian sites will remain the property of the SCA at all times who will benefit from all rights of use and to any revenues created by the data. In this way our heritage is conserved, recorded and made available generally to the public and Egypt will benefit from any revenue it generates.

Factum Foundation's role is to protect, preserve and make it available for study, maintaining the digital information in a safe and secure archive for this and future generations. The Factum Foundation is committed to demonstrating that new technologies have an important role to play in the preservation of Egypt's heritage, a heritage whose deserved fame means that it is in a position to have a self financing conservation policy if it is handled sensitively. It can be a policy that leads the way for the rest of the world.

## **THE WAY FORWARD**

The Egyptian Government, Factum Foundation and its supporters, The Society of Friends of the Royal Tombs of Egypt and a wide range of people trusted with the preservation of our heritage want to show that there is a way that tourism can become a pro-active force - both learning from and protecting the past.