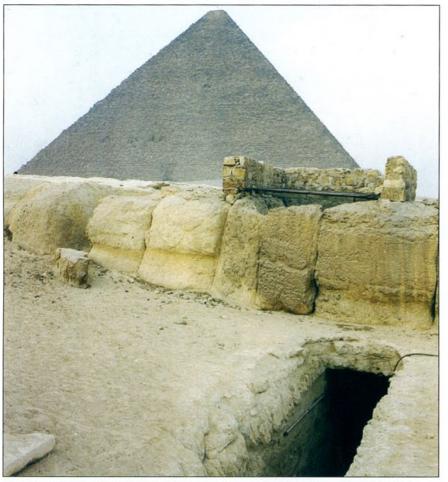
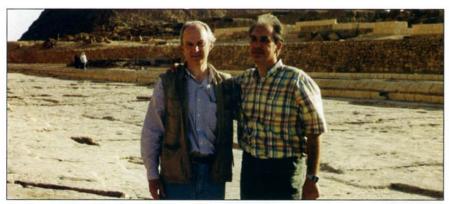


GETTING AT THE TRUTH ABOUT ANCIENT EGYPT

ROBERT TEMPLE EXPLAINS THE CHALLENGE POSED TO EGYPTOLOGY BY A NEW DATING TECHNIQUE



Entrance to the Osiris shaft beneath the causeway leading to the Pyramid of Chephren. Photo: Robert Temple



Professors Robert Temple, and Ioannis Liritzis during their dating of the stonework at Giza.

Photo: Olivia Temple

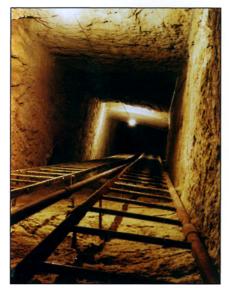
ur ability to truly understand ancient peoples and cultures has been handicapped until now by the lack of any method to date ancient buildings directly. Archaeologists have been forced to infer the date of a structure by dating organic remains or pottery found in or around it. Thus, dates for the buildings themselves have never been certain, because they are based on indirect evidence. Now things have changed.

My colleague Professor Ioannis Liritzis, of the University of the Aegean at Rhodes, a former nuclear physicist who turned his expertise to the needs of archaeology, has devised the Liritzis Dating Technique, the technical name of which is optical thermoluminescence. By his technique he can date the time of construction of a stone building by taking a small sample at the join of two blocks of stone. His technique yields a date for when that stone was last exposed to sunlight, or in other words, when the stones were placed together to build the structure.

Professor Liritzis has now dated a sample of the exterior granite casing stones of the Pyramid of Mycerinus (Menkaure) at Giza to between 3590 BC 2640 BC. With and optical thermoluminesence, one often gets these wide spreads. But let us just see what this means for Egyptian chronology.

The most recent possible date for the pyramid is thus one year before the foundation of the Egyptian Fourth Dynasty by its first king, Sneferu (using currently accepted chronologies). But according to conventional notions, the Giza pyramids were all built by Fourth Dynasty kings, and the last of the three to be built was the small one called the Pyramid of Mycerinus. Cheops (Khufu) was said to have built the Great Pyramid, often called the Pyramid of Cheops, and Chephren (Khafre) was said to have built the second largest (which still has some casing stones on top), called the Pyramid of Chephren. Now we see that none of this can be true, unless the chronologies are altered.

A median date for the Pyramid of



Looking down the Osiris shaft.

Photo: Robert Temple

Mycerinus is 3090 BC, which is 58 years earlier than the conventional date for the founding of the First Dynasty. Whereas the earliest date is so far back in Pre-Dynastic times that we have no idea of what may or may not have been happening then at Giza, or whether anyone was there at all.

In other words, our sampling indicated that the pyramids are far too old to have been built by Cheops, Chephren and Mycerinus, if one keeps them at their conventional dates. We must conclude, then, that instead of building them these pharaohs merely appropriated them.

Naturally this is all very upsetting to people who like to think conventionally. Whenever puzzling new discoveries are made, what happens next always boils down to human psychology. Acceptance or rejection of new evidence often depends not on some austere 'quest for the truth', but instead upon the all too human question of psychological attitude. Scholars are notoriously afflicted by the unspoken preoccupations their kind: Will I get that professorship if I dare to take notice of this new finding? Could I bear the shame and humiliation of having to admit that I was wrong?

It is worth noting that these early dates that we found accord with the results of two Carbon-14 analyses made of organic material found within the mortar used between the blocks of the Giza pyramids; prominent in this study was Dr. Mark Lehner, who has been studying the Giza Plateau since 1979. The first was published in 1993: they reported that all sites were older by an average of 374 years; the second, published in 2001, simply coyly reiterated that the match between the accepted dates and the Carbon-14 dates was only approximate. The conclusion that the structures were older than thought was assiduously backpedalled!



The 'Tomb of Osiris', 114 feet beneath the surface. The sarcophagus is surrounded by water and originally had four pillars, one at each corner. They were intact in 1944 and have since been destroyed; the remains of one can be seen upper left. Photo: Robert Temple

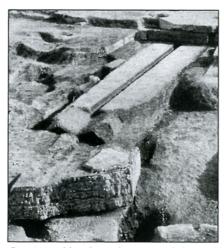
The Osiris Shaft

We took two dates from a deep shaft beneath the causeway that leads up to the Pyramid of Chephren. This shaft, which drops 114 beneath the surface, is called the Osiris Shaft because at the bottom of it, there is a replica of the mythical 'Tomb of Osiris', a stone sarcophagus set in the middle of a small island surrounded by an artificial canal. Before they were destroyed, apparently by Muslim fanatics at some time subsequent to 1944 (when we know they still existed), the island had four columns at each corner. The site has been so savagely vandalized that that may be the reason why no photos are ever circulated of it, and those which I have taken are essentially the only ones available

We have dated the sarcophagus on the Osiris Island and also a sarcophagus on the burial level above it, as the shaft contains three horizontal levels. From our dating results, we can now demonstrate that the third level with the 'Tomb of Osiris' was evidently a later extension of the shaft made in the period between the Fifth Dynasty and the end of the Middle Kingdom, when the Osiris religion was at its peak.

But the really interesting results came from Level Two. We dated a sample from one of the giant stone sarcophagi in that level and the result was 3350 - 2250 BC. The upper limit for this date is also, like the pyramid date, way back in Pre-Dynastic times. And a median date is 2800 BC, which is early in the Second Dynasty. This particular sarcophagus was also determined by X-ray diffraction analysis to have been made from the mineral dacite, which is otherwise unknown in the entire history of Egypt, having, as far as we know, never been used either before or since for any object, however small. Deposits of dacite in Egypt are uncommon and none have been reported with veins large enough to make a sarcophagus.

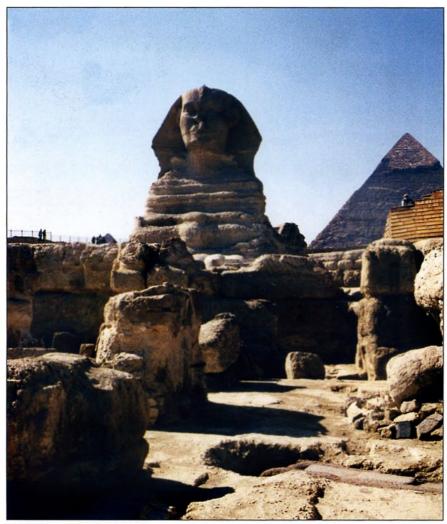
What are we to make of all this? The Giza pyramids are surrounded by tombs of the family and courtiers of the Fourth Dynasty kings, starting with Cheops. So clearly Cheops, Chephren and Mycerinus were fixated on the pyramids that bear their names. But it appears that they 'usurped'



Granite cable channel excavated beneath the floor of the funerary temple of Chephren in 1909. Photo: Uvo Hölscher



Old Kingdom basalt pulley excavated at Giza. Photo: Selim Hassan



The Sphinx seen from the Sphinx Temple. The cable channel is in the depression to the right foreground.

Photo: Robert Temple

channels can be seen in the remains of the funerary temples of Cheops and Chephren as well as the Valley Temple of the latter and the Valley Temple of Mycerinus. If burials exist beneath these temples then they will never have been robbed or excavated! Dr Zahi Hawass, Director of the Egyptian Supreme Council of Antiquities, has stated publicly and enthusiastically several times that he believes around 70 per cent of ancient Egypt still awaits discovery. Yet one can be forgiven for concluding that many might prefer it to stay that way; their comfortable theories are now more important than new, but contrary, data. An historian of science and expert on ancient technology, Professor Robert Temple's new book, Egyptian Dawn, is reviewed on page 58 and many unique illustrations relating to the discoveries it presents are on the website www.egyptiandawn.info

royal, all of which I believe are still sealed and intact. In two sites in the Sphinx Temple, set into the floor, are very large stones with small grooves in them. They are 'drainage channels' by the excavators, but use of an inclinometer soon establishes that they are draining the wrong way, inwards rather than outwards. In the 1940s a very competent Egyptian archaeologist, Selim Hassan, discovered stone pulleys used with triple ropes in order to lower very heavy sarcophagi into their shafts. These grooved stones in the Sphinx Temple are more likely channels for these ropes, channels which enabled some very heavy objects to be lowered into shafts beneath the temple itself. Indeed, similar

them rather than built them. So who then really did build them? I have spent a great deal of time attempting to answer this perplexing question. But one thing is sure, it was someone much earlier than we thought.

The hidden tombs

And that brings us to the question of the tombs of Cheops, Chephren, and the other Fourth Dynasty kings. The explicit testimony of the fifth century BC Greek historian Herodotus is that these kings were buried at Giza but not inside the pyramids. Egyptologists have perversely overlooked this evidence - perhaps encouraged by the unexplained exclusion of Herodotus' statement from some popular editions of his works - in favour of their fantasy that the pyramids were tombs, despite the fact that the 'coffin of Mycerinus' found inside the Pyramid of Mycerinus was exposed as a shameless fake made in 1837, and there is no evidence of any kind that any of the three main pyramids of Giza really functioned as a tomb of anyone.

I have found strong evidence, supported by photos, plans and diagrams, of the possible locations of no fewer than seven unexplored tombs at Giza, undoubtedly



Cable channel carved into bedrock beneath the Sphinx Temple. It is plugged with a granite slab estimated at around 100 tons; the slab has a central groove filled with granite blocks.

Photo: Robert Temple

EGYPTIAN DAWN. EXPOSING THE REAL TRUTH BEHIND ANCIENT EGYPT.

Robert Temple, Century, London, 2010. Hardback, 514 pages, £25.00. ISBN 9780712684149.

Robert Temple is an historian of science, an expert on ancient technology and the author of several books and academic papers on the subject. He has a keen eye for detail, especially for those objects which seem out of place or subjected to an inappropriate identification. He is sceptical about explanations that 'all' agree on; this causes a widespread malaise he terms 'consensus blindness' where anomalous objects are dutifully ignored by professionals who really should know better.

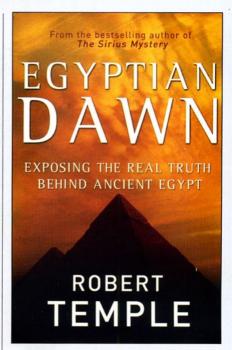
He was working in a restricted site in Egypt, the Sphinx Temple, when he noticed something that did not fit: a socalled drainage channel, which was extravagantly over-engineered and, worse, drained into the temple rather than out. A meticulous and detailed search through archaeological reports turned up seven of these channels around structures in the Giza plateau. Close inspection of them led him to the conclusion that these were not for draining water but channels for rope cables allowing a measure of control when lowering extremely heavy objects. Do the ends of these channels point to the shafts leading to seven important burial sites, perhaps including Cheops? Temple

considers so and, given the evidence, it is hard to disagree with him.

But his main object was to date the stonework around the Giza Plateau and the ancient site of Abydos using a new technique devised by his colleague, a former professor of nuclear physics, Ioannis Liritzis. They discovered, astonishingly, that the major Giza structures were several hundred years older than normally thought. The implications of this caused Temple to re-evaluate the chronology of archaic and early dynastic Egypt with truly astonishing implications.

Archaeologists working in the field may find themselves opposing his arguments – sound and perfectly logical though they are – but what they cannot do is oppose the data he produces. In addition to on-site discoveries and redating, Temple produces excavation reports of crucial importance which have been long ignored or forgotten. The weight of evidence is impressive and when gathered together, as Temple has done, it supports his arguments while exposing the 'consensus' position as a route leading not to insight and knowledge but to misjudgement.

This is a wonderful book to ponder as you progress through although it made



me angry that so much extraordinary evidence has been ignored in order to maintain a safe explanation of Egypt's past.

Michael Baigent