Discovery & Clearance of
THE INTACT TOMB OF IUFAA
at Abusir

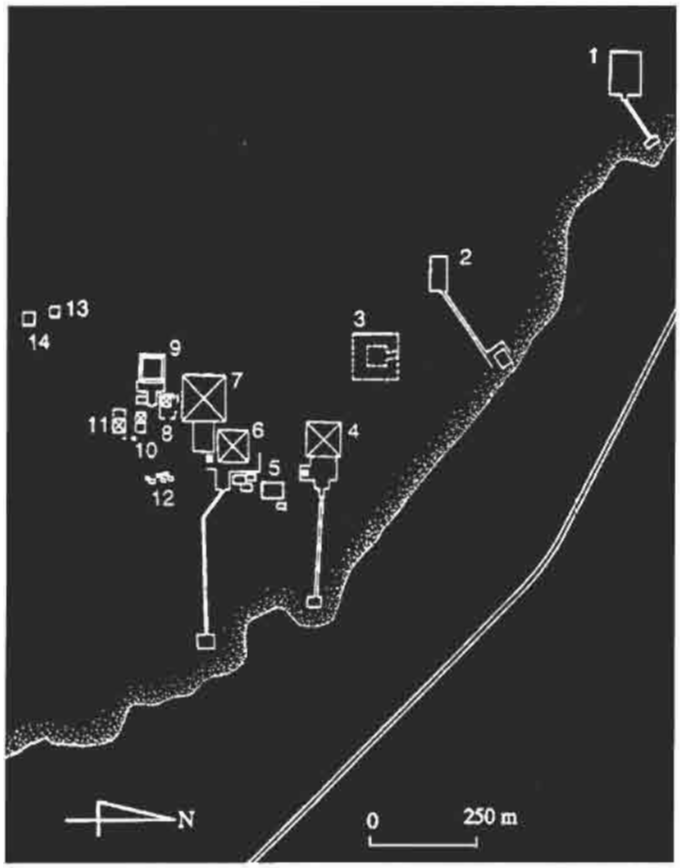
by Miroslav Verner

All Photos Courtesy the Czech Institute of Egyptology

The region of Abusir was first explored and recorded by Karl Richard Lepsius in 1843. The archaeological map he made and published in his monumental *Denkmäler aus Aegypten und Aethiopien*[1] still provides a good indication of the contours of the Abusir landscape and shows precisely some of the major monuments of the place, and his mapping references are still in use today.[2] One of these references is No. XXVII, a rectangular mound which Lepsius believed was a pyramid. Investigation of this site, however, revealed that the structure was not a pyramid, but a Saite-Persian shaft tomb, probably the first of a series of such tombs to be built in the area southwest of the famous pyramids of Abusir.

In the late 1970s, and again in the 1980s, the Czech Institute of Egyptology conducted exploratory investigation in this area.[3] A geophysical survey took place in which magnetometry and electrical resistance methods were used to identify man-made structures beneath the surface of the desert. Those probes indicated that there were a number of similar monumen-

Opposite, A portrait of Iufaa on the lid of one of the calcite canopic jars found in his intact shaft tomb at Abusir by Czech Institute of Egyptology archaeologists.



Plan of the Pyramid Field of Abusir
1. Sun Temple of Niuserre 2. Sun Temple of Userkaf
3. Unfinished Pyramid (of Shepseskare?)
4. Pyramid of Sahure 5. Mastaba of Ptahshepses
6. Pyramid of Niuserre 7. Pyramid of Neferirkare
8. Pyramid of Khentkaus II 9. Unfinished Pyramid of Raneferef
10. Pyramid "Lepsius No. XXIV"
11. Pyramid "Lepsius No. XXV" 12. Eastern Field of Mastabas
13. Shaft Tomb of Udjahorresnet 14. Shaft Tomb of Iufaa

tal structures[4] in the area. Indeed, one can still see the line of these large shaft tombs running from Lepsius No. XXVII in a southeasterly direction towards the Serapeum (cemetery of the Apis bulls), which is one of the main historical features of Sakkara.

Czech Institute work at the site began in 1980 with the investigation of Lepsius No. XXVII, mainly because it looked to the the largest of the structures and because the surface survey suggested that it had been the first of these shaft tombs to be constructed at Southwest Abusir. Very soon a well-built enclosure wall made of limestone ashlars came to light. Almost certainly most of these stones had been quarried from the unfinished pyramid of King Neferefre, which lies no more than 200 meters to the northeast.

The wall enclosed rectangular shafts situated in an orderly arrangement around a large central shaft. These had been cut from *tafla*, the Arabic word for hard clay. It is relatively easy to cut shafts in *tafla*, for it is softer than stone. But it is also an unstable material, and what sort of monument once covered these shafts it is impossible to say.

Despite the elaborate measures taken by its ancient builders to protect this tomb, it had been robbed repeatedly in antiquity, so there were few finds to be made, apart from pottery. Nonetheless, there was also an important discovery awaiting the Czech archaeologists at that time, for they determined that the tomb belongs to no less a person than Udjahorresnet, a well-known Egyptian official who had distinguished himself in service to the Persian conquerors of Egypt, kings Cambyses and Darius I. His long autobiography[5] preserved on a naophoric statue in the Vatican Museum[6] is well known; but Egyptologists matter-of-factly assumed that he would have situated his tomb in the Delta city of Sais, where he had been a priest. There never had been any hint that he might have chosen to be buried at Abusir!

At the bottom of the central shaft there was Udjahorresnet's funerary chamber, which was decorated with funerary texts, although the carving of these had never been finished. They provided no details about his life, nor did the limestone and basalt sarcophagi found lying in the middle of the crypt (both damaged by tomb robbers). Equally disappointing was the discovery that the inner basalt sarcophagus contained nothing at all.[7]

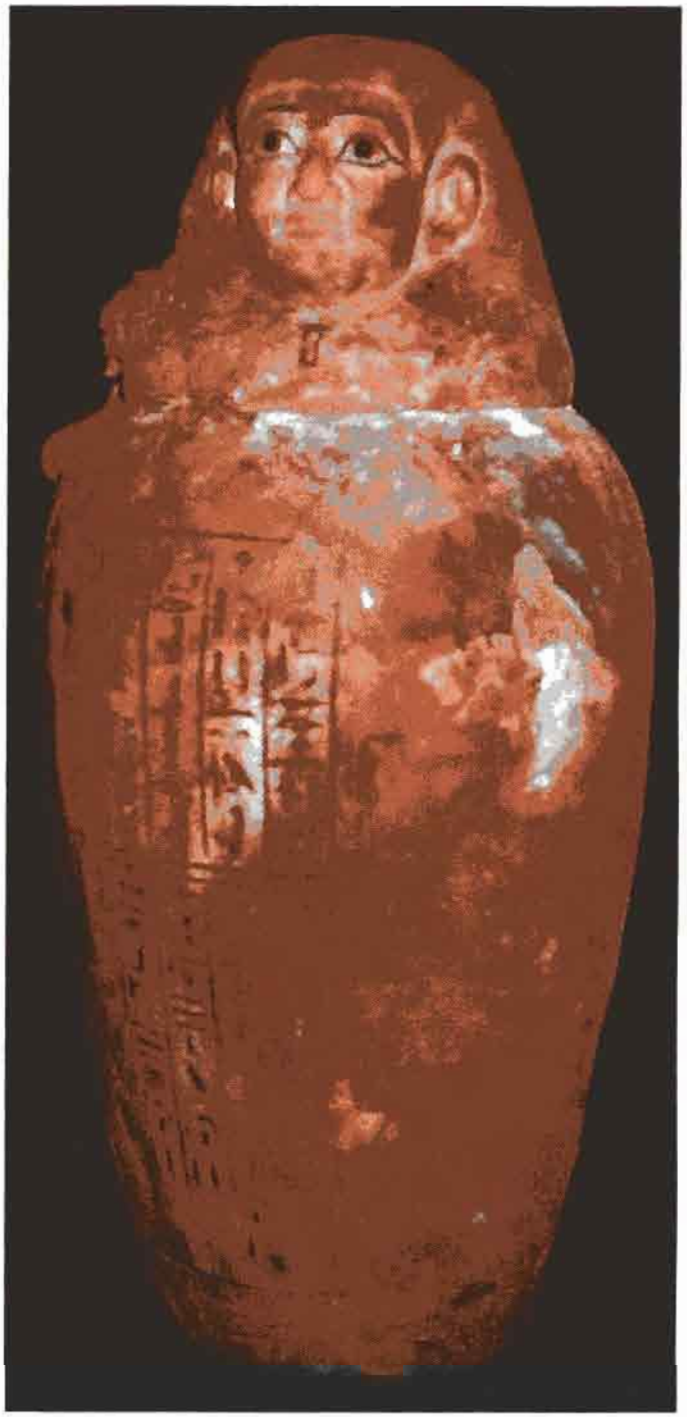
The second shaft tomb at Southwest Abusir to be examined by the Czech Institute, beginning in the spring of 1995, is one which lies close to the Udjahorresnet monument, on its southeastern corner. It took a small Czech team, lead by Dr. Ladislav Bareš,[8] months before they learned that this particular shaft tomb belonged to a hitherto unknown official named Iufaa (the name being translated as *"He is great"* or *"His body is great."*).

Once again a huge central shaft — this one much larger than that of Udjahorresnet — was found.[9] It too, had been surrounded by an enclosure wall, this one made of mud brick, however. The wall was greatly denuded, but did reveal that it had had niches on its outer sides. Fragments of limestone stelae found in the area suggested that there had been stelae set within at least some of the niches. There was no elaborate pattern of subsidiary shafts, as there is accompanying Udjahorresnet's main shaft; but one subsidiary shaft was discovered outside the tomb's enclosure wall on the west, and another one to the south. All of these shafts are cut in *tafla*.

Both subsidiary shafts were emptied by the Czech team. The western one was found to reach to a depth of about twenty-two meters, and at the bottom a short corridor was revealed, leading to the east, where the tomb's main shaft is situated. The southern shaft had been badly damaged by tomb robbers; and at a depth of about fourteen meters it ceases being vertical and turns into a steeply sloping passage, heading in a northerly direction towards the central shaft.[10]

Below, Detail of the raised-relief inscriptions and vignettes decorating the interior walls of the burial chamber of Iufaa, built at the bottom of a huge shaft out of limestone blocks, with a vaulted roof. Here the tomb owner is shown in two different vignettes, as a lector priest bringing an offering. Passages from the Pyramid Texts *and the* Book of the Dead *provide the basis of the inscriptions.*

Right, One of four calcite canopic jars of Iufaa, found in the burial chamber. The text indicates that this particular jar was under the protection of Hapi, one of the Four Sons of Horus, and of the goddess Nephthys.



After these determinations about the subsidiary shafts were made, it was decided to excavate the main one — a difficult and even dangerous undertaking, for which there promised to be few rewards. The upper part of this shaft — which had been unearthed by robbers in antiquity — had been badly eroded, and the excavators understandably anticipated that they were dealing with a thoroughly plundered tomb. To their great surprise, however, the team discovered at this main shaft's bottom (about twenty-two meters below ground level) what appeared to be a small, unviolated burial chamber. The last intact shaft tomb of approximately the same type and date had been found at North Sakkara more than half a century earlier, in 1941, by Zaky Y. Saad.[11]

The revealed chamber is constructed of limestone ashlars with a barrel-vaulted roof. The tomb has an east-west orientation, and is slightly irregular in shape — due to the fact, as would be discovered, that it had been build around the irregularly shaped limestone sarcophagus which it houses. The entrance to this chamber is in the western wall, and at the time of discovery was found to be still blocked by the original masonry. Thus it had never been entered by ancient tomb robbers.

Once this blockage had been fully documented, it was dismantled and the tomb itself was entered. Most of the chamber's interior was found to be filled with a huge sarcophagus in the form of a stone box standing some two and one-half meters high.[12] Between the chamber walls and the sides of the sarcophagus is a narrow space in which various funerary offerings had been left. The walls of the tomb, but not the vaulted ceiling, are densely covered with fine hieroglyphic texts in low relief. These texts were found to be interspersed with religious vignettes of

One of Iufaa's 408 blue-faience ushabtis *found in the burial chamber of his Abusir shaft tomb. The inscription names him as a "controller of palaces," & also mentions his mother, Ankhtisi*

equally fine relief work. The east and west walls of the chamber are higher than those on the north and south, with rounded tops to accommodate the vaulted ceiling. There is more decoration on these end walls than on the others. Some sections of the west wall are not cut in relief, the texts only being executed in red paint. This would seem to suggest that the west wall was the last to be worked on, and was unfinished at the time of the interment. It was these wall inscriptions which revealed to the Czech team the identity of the tomb owner as *"the lector-priest and controller of palaces, Iufaa."*

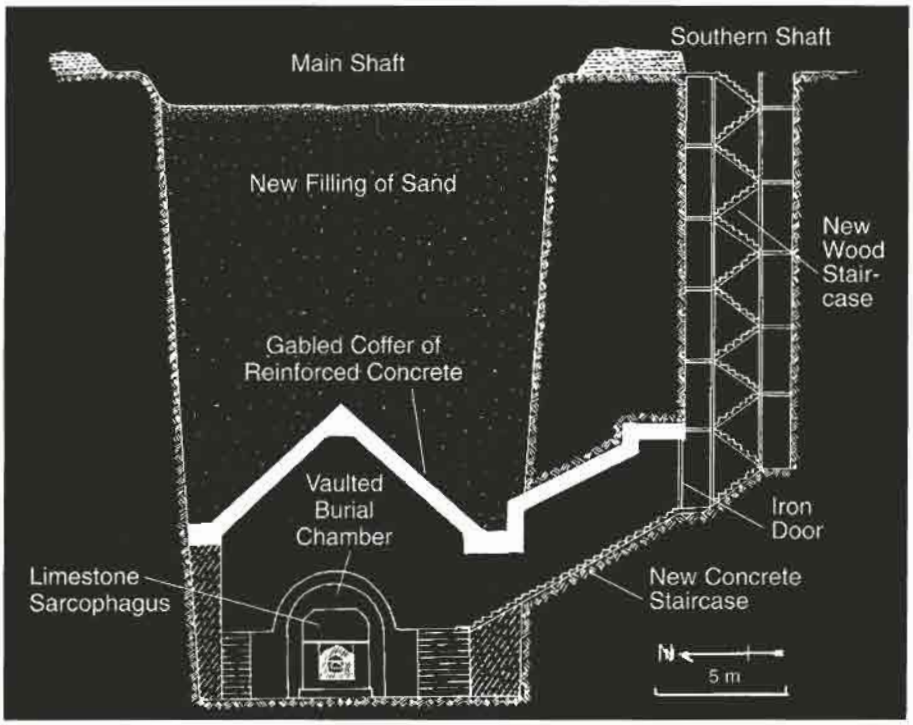
The box sarcophagus is made from two huge blocks of white limestone, one for the lid and one for the chest. The weight of the chest has not yet been calculated, but it must be even more than that of the lid, which is twenty-four tons. The four exterior walls of the sarcophagus chest are also carved with hieroglyphic texts, although these are smaller and more shallowly carved than the inscriptions on the burial chamber walls. Like the latter, however, the sarcophagus inscriptions have been taken from the Old Kingdom *Pyramid Texts*, along with passages from the *Book of the Dead*, and religious texts from other sources yet to be determined. There are vignettes on the sarcophagus, too, but these are few and rather small.

The burial equipment found in the narrow spaces between the sarcophagus and the chamber walls includes four calcite canopic jars with human-headed stoppers, and one can only wonder whether these are portraits of Iufaa himself. The canopic jars had been placed in wooden chests surmounted with couchant figures of the jackal-god, Anubis. A fifth such jar was also recovered, this one larger than the others and without a lid. It is half filled with dark resinous material, the exact nature of which is yet to be determined.

In addition to the canopic equipment, there was a set of 408 *ushabtis* made of blue faience. These figures are of the finest quality, each with two hoes in its hands and a bag over its shoulder, waiting to carry out the tomb owner's commands in the Afterlife. On these *ushabtis* Iufaa's name is preceded by the title *"the controller of the palaces."*

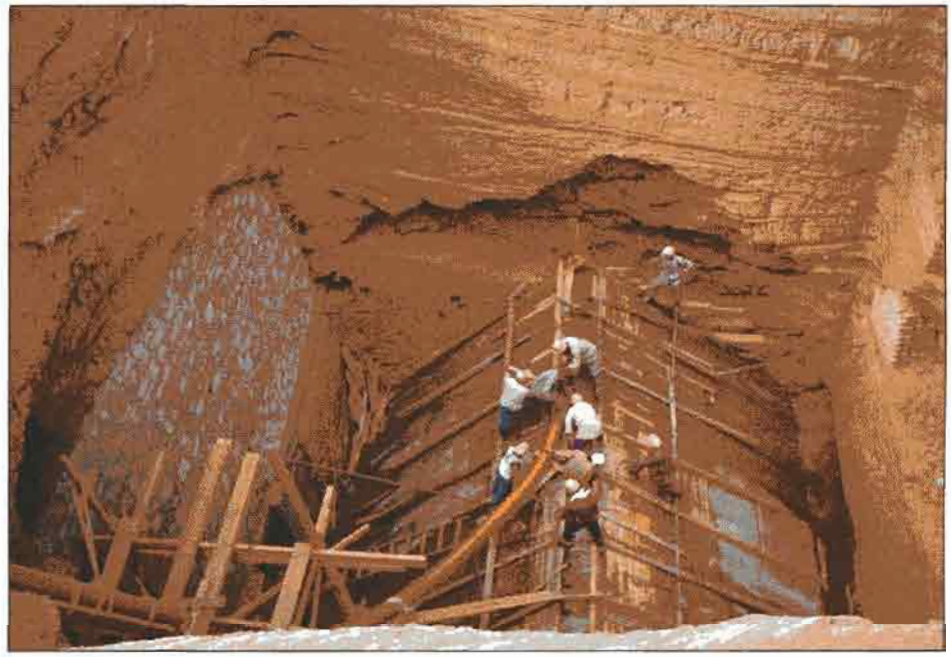
There were many other funerary objects discovered around the sarcophagus: a few pieces of wooden furniture, model items made of faience and copper, miniature stone vessels, inscribed magical bricks of clay (these badly damaged by the humid atmosphere of the tomb), the remnants of papyri inscribed with *Book of the Dead* texts, pottery, some metal scraps, etc.

The euphoria of the initial discovery quickly evaporated when, a few weeks after the spring 1995 season ended, it was discovered that the walls of the main shaft were cracking. This was because the clearance of the shaft eliminated the protective sand that had maintained the damp underground conditions over the millennia. While



The shaft tomb belonging to Iufaa had been cut in the hard-clay tafla *of the Abusir desert plateau. Once the huge main shaft had been cleared by the excavators, however, the damp* tafla *began to dry out, causing portions of the shaft walls to collapse onto the exposed barrel vault of the burial chamber roof. In order to save the burial chamber & its contents from destruction, it was necessary for the Czech Institute team to construct a reinforced-concrete coffer over the burial chamber, using 30 tons of steel rods and some 400 cubic feet of concrete. The cross-section at left shows the positioning of the concrete gabled coffer and new wooden and concrete staircases which today protect and give access to the Tomb of Iufaa.*

Below, Construction in progress of the reinforced-concrete coffer within the central shaft of Iufaa's tomb. This photo conveys the immense size of the central shaft.



this dampness had caused the deterioration of many of the grave goods in Iufaa's tomb, it had also kept the unstable *tafla* moist and relatively firm. Once the shaft was free of sand, the sunshine and circulation of hot desert air caused the tafla to dry out. Large parts of the northern wall of the main shaft, as well as minor parts of other walls, now collapsed onto the roof of the burial chamber below.

With this grim turn of events, there was a race against time to save the Tomb of Iufaa. Czech architect and engineer Michal Balik designed an ingenious gabled coffer of reinforced concrete to enclose the entire burial chamber. This was the only way to consolidate the damaged main shaft and salvage the monument.

The construction of the gable coffer in the desert at the bottom of a huge shaft created enormous logistic problems. Every drop of water for mixing concrete had to be carried to the site on the backs of donkeys. Thirty tons of steel rods (some of them almost 3 centimeters in diameter) came the same way; while bags of cement, pebbles, wooden beams and planks were all brought by tractor across the desert. The sand was collected from the desert itself, but the workmen had to sift it first to remove impurities. In total about 400 cubic meters of wet concrete had to be produced.

Once the materials were collected at the site, a daily ritual of cement making took place at the top of the Iufaa tomb shaft. The wet mixture was then rushed by wheelbarrow to a mighty plastic conduit that carried it down to the bottom of the shaft, where other workmen manhandled it into position. It is not easy to describe the courage of all of the people involved in this project — in particular of the workmen, directed by *reis* Mohammed Tallal el Qereti and his brother, *reis* Ahmed. The project's senior inspector for the Supreme Council for Antiquities, Mr. Attallah el Khouly, supervised all of the work and helped to bring about the suc-

cess of the architect's design. Truly invaluable for the success of the demanding project was the firm support and encouragement of Dr. Zahi Hawass, director of the Pyramid Zone. Thanks to all of these people, the Tomb of Iufaa was saved from destruction.

At the commencement of the Czech Institute's most recent season at the shaft of the tomb (the winter of 1997/ 1998), the first task to be completed was the tracing of the extensive inscriptions on the burial chamber's interior walls and the exterior sides of the sarcophagus — in total almost sixty-five square meters of texts and vignettes. This was done by Mr. Attallah el Khouly, Dr. Ladislav Bareš, Dr. Miroslav Bárta, Dr. Vivienne G. Callender and Dr. Dusan Magdolen. The work was directed by the author. The cramped conditions of the burial chamber and the excessive humidity (the bottom of the shaft lies close to the present level of the underground water table in the area) made the task of tracing physically demanding; but it was completed in the very last moments before the next major phase in the clearance of the Tomb of Iufaa began: the opening of Iufaa's still-intact sarcophagus box.

This presented enormous problems. Once again engineer Michal Balik came up with an ingenious plan for

When the huge limestone lid of the outer sarcophagus of Iufaa was raised, the excavators discovered that whatever it held was hidden by a peculiar layer of mud bricks. This was removed (above) to reveal a massive anthropoid second sarcophagus made of a hard green stone, either slate or schist (opposite). Like the interior walls of the burial chamber & the exterior & interior surfaces of the outer sarcophagus, the inner one was likewise inscribed with religious texts & vignettes. The image on the anthropoid lid (Iufaa) wears a false beard, wig or head covering. Note the large kheper beetle on the breast & numerous vertical bands of incised inscription.

raising the twenty-four ton lid, which was accomplished by the employment of both mechanical and hydraulic jacks. These first broke the plaster seal joining the lid to the chest, then raised the former a few centimeters. The delicate operation was achieved by lifting the lid under the handles protruding from its eastern and western ends. Wedges were then inserted one by one into the resulting space between lid and chest; and when the gap was high enough, these wedges were replaced by blocks of wood. This process was repeated until the lid was raised to a height of about one meter.

At this stage four huge wooden beams (thirty-one centimeters square, each about 7.5 meters long) were inserted under the raised lid. Two mechanical jacks were then used to push the lid along those beams and onto the stone-and-sand platform which had been constructed outside the

tomb's north wall.

The removal of the gigantic lid thus revealed the contents of the sarcophagus chest, the latter proving to be a solid piece of white limestone with an anthropoid-shaped cavity in its center. Resting inside this cavity was another stone sarcophagus carved from a dark-greenish slate or schist (?— the exact variety of the stone is yet to be determined). This was almost completely covered with a crumbled layer of mud brick, several centimeters thick. The reason for this peculiar layer is as yet unknown. Was it intended symbolically to imitate burial in the earth? Or did it have a more mundane purpose: absorbing the humidity infiltrating the limestone sarcophagus?

When the mud-brick layer was photographed, measured and drawn, this was removed. It became immediately clear that just before the earthy layer had been deposited on the inner-sarcophagus lid, liquid gypsum, mixed with pebbles and large broken potsherds, had been poured over the legs and feet portions of the anthropoid lid, around its head and down the gap between the lid and the walls of the limestone cavity The gypsum had set the carved lid into its limestone bed. In some areas molten resin had also been poured over sections of the anthropoid lid. It is difficult to interpret why this was done, but perhaps it was some part of the funerary ritual. All of this material had to be removed before the full beauty of the schist lid could be appreciated.

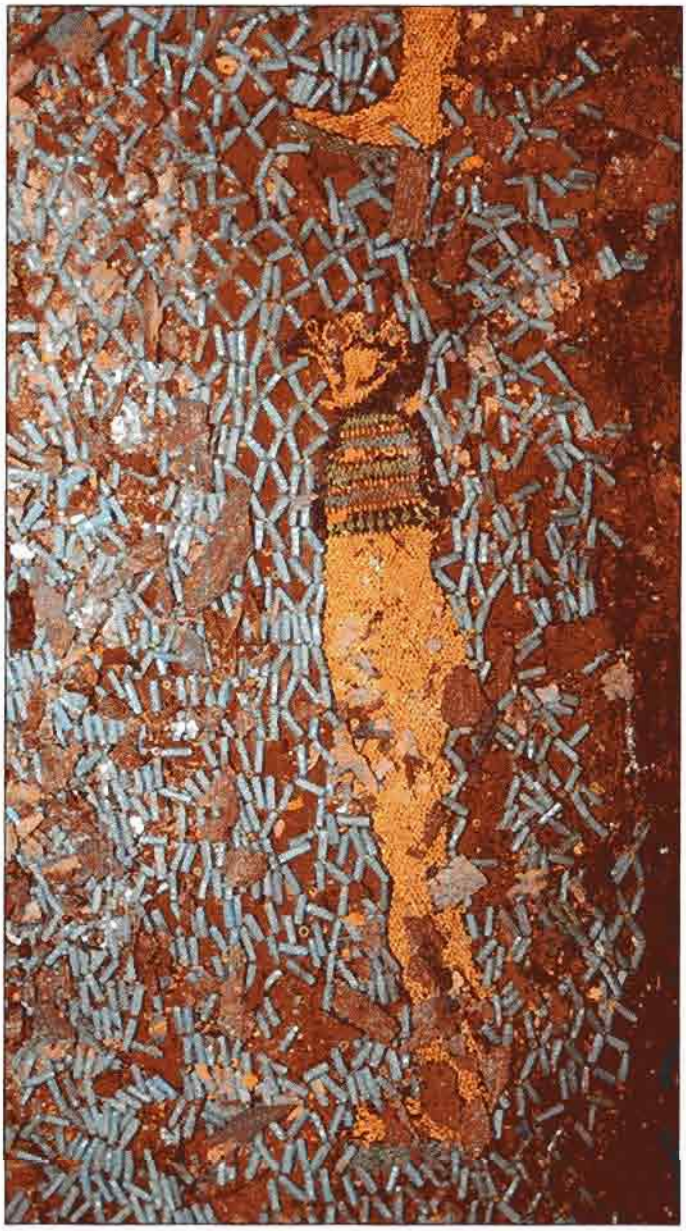
With the overlying materials removed, the anthropoid-shaped cavity within the sarcophagus was found to be decorated all around its sides with finely painted hieroglyphic texts in red, blue and black. At several points there are polychrome paintings of gods and goddesses. Re-Horakhti, for example, appears on the eastern section, immediately behind the head of the schist sarcophagus. These texts, which must go all the way down to the base of the inner cavity, are cut off from view by the chest portion of the schist sarcophagus, which is wedged into the outer sarcophagus chest so tightly that as of yet no attempt has been made to extract it.[13]

The schist lid of the inner sarcophagus is carved in the image of Iufaa as Osiris. He wears a curved beard and a headdress or wig with lappets. Around his neck a huge *wesekh* collar is carved — a funerary symbol of great antiquity. On his breast is the relief image of a large scarab beetle, representing the idea of regeneration in the Afterlife. Below this runs row upon row of vertical columns of funerary texts.

The inner-sarcophagus lid had to be lifted by block and tackle. The chains were padded to prevent them from scratching the finely worked stone. This delicate lifting operation took place in the presence of a crowd of assembled dignitaries — led by Farouk el Hosni, Egypt's Minister of Culture — and media reporters, all craning forward to get a first glimpse of the raising lid and the sarcophagus contents being revealed.

Within the second sarcophagus was an anthropoid coffin carved of wood and covered with painted stucco; but

Detail of the beaded net-shroud found covering the humidity-damaged mummy of Iufaa, as revealed when the collapsed lid of the decayed inner gessoed-wood coffin was removed by the excavators. The threading holding together the countless colored-faience beads of the shroud had also rotted, causing the netting to become somewhat disordered. The beaded figure of one of the Sons of Horus, Qebehsenuf, is visible. Figures of Nut, Isis & Nephthys also decorated the shroud.



excessive humidity in the tomb chamber over the many centuries since Iufaa's burial had thoroughly rotted the wood, and when the workmen attempted to lift the lid, it fell to bits in their hands. With the coffin lid being in this terrible state, all present feared for the condition of the mummy itself. As it turned out, those fears were justified, as it also was found to be beyond saving.

The fragments of the collapsed wooden lid were removed once they had been documented. There was no possibility of keeping the lid intact, but the Czech team did

manage to copy and photograph the single band of text which ran down its center.

The mummy inside was now exposed. It was found to have been wrapped in bandages which had been glued together with resin, forming a stiffened carapace enclosing the body. In some places this covering proved to be ten centimeters thick. The neck and upper breast of the mummy were covered with the same *wesekh* collar that is carved on the lid of the schist sarcophagus, in this case made of tiny colored-faience beads. Below the collar lay a shroud made of blue-faience beadwork. The damp conditions which had rotted the wooden coffin had also affected this garment, for the threading linking the beads had totally decayed, so that the majority of the latter lay out of their original position, many of them even having fallen into heaps along the inner sides of the coffin trough.

Iufaa's beadwork net-shroud is of a type typical of the period.[14] Interspersed among the webbing of beads were cut-out figures of several funerary deities: Nut, with her wings outspread, lay on the breast of the mummy; the Four Sons of Horus faced each other in pairs resting over the upper thighs; and Isis and Nephthys crouched facing each other across the ankles of Iufaa. These positions probably were assigned to those deities because they were considered to be weak parts of the body and therefore in need of special protection.

When the coffin and mummy had been lifted out of the inner sarcophagus, and the floor of the latter had been cleaned, carvings relating to the Afterlife were discovered there as well. These consisted of short texts and small scenes. Thus it is that Iufaa had been entirely surrounded by the magical benefit of texts and spells that were intended to safeguard him after death and in his next life. It will be the work of the next season of the Czech Institute at Abusir to record all of these texts within the two sarcophagi; but there is so much material from this tomb that final publication may take several years to prepare.

Iufaa's decomposed mummy was taken to the x-ray laboratory at Giza soon after the opening of the tomb. There the remains were x-rayed and studied by several physical anthropologists, lead by Professor Eugen Strouhal. Within the mummy wrappings amulets were revealed. Iufaa's fingers were found to be covered in gold foil. Preliminary results of the mummy's examination[15] have revealed that Iufaa was about thirty years of age when he died, and that the poor fellow was missing most of his teeth at the time.

Iufaa's still-wrapped remains will be returned to his tomb eventually, there to lie once more in the nest of magical utterances that have protected him so well in the past. He is not likely to rest in much peace, however, inasmuch as the Tomb of Iufaa is intended by the SCA to be tourist accessible in the future. Nonetheless, there may be benefits to be realized by this ancient "*controller of palaces*" from the stream of visitors who will go to see his remarkable tomb for themselves, for every time one of them pronounces the name of Iufaa, his spirit will thrive in the Afterlife — or so the Egyptians once believed.

Notes

The author is indebted to Dr. Vivienne G. Callender of Sydney for assistance with the English of this article.

1. Lepsius, *Denkmäler* I, 32.
2. Surprisingly, J. de Morgan did not mark any tombs in Southwest Abusir in his archaeological map of the Memphite necropoleis (*Carte de la nécropole memphite* [Cairo, 1897], pl. 11).
3. V. Hasek, F. Obr, M. Verner, "Application of Geological and Geophysical Methods in Archaeological Research in Abusir," *Przeglad Archeologiczny* 35 (Warsaw, 1988), 26-28 and fig. 11.
4. By "monumental" is meant large.
5. Besides Abusir, large Saite-Persian shaft tombs have been found in several places in the Memphite necropoleis, for instance at Giza (near the Causeway of Khafre) and at Sakkara (near the Pyramid of Unas, around the Pyramid of Userkhaf, east of the Step Pyramid and around the causeway leading to the Serapeum). For the precise location of these tombs and the relevant bibliography, see Porter and Moss, as well as D. Arnold, "The Late Period Tombs at Saqqara," *Etudes sur l'Ancien Empire et la nécropole de Saqqara dédiées a Jean-Philippe Lauer* (Montpellier, 1997), 31-54.
6. G. Posener, "La première domination perse en Egypte," *Bulletin de l'Égypte* 11 (Cairo, 1936), 1-26.
7. G. Botti, P. Romanelli, *Le sculpture del Museo Gregoriano egizio* (Vatican City, 1951), 32-40 (inv. no. 196).
8. In the long term, Dr. L. Bareš is in charge of the Czech Institute of Egyptology's examination of the tombs at Southwest Abusir.
9. Full publication of the Tomb of Udjahorresnet was prepared by L. Bareš (*Abusir IV, The Shaft Tomb of Udjahorresnet*); the volume is in press and will be available in later in 1999.
10. L. Bareš, K. Smolárikova, "The Shaft Tomb of Iufaa at Abusir. Preliminary Report for 1995/1996," *Göttinger Miszellen* 156 (1997), 2-26.
11. The large shaft tombs of this type occur chiefly in the Memphite necropoleis and date from the Saite period until the end of the Ptolemaic era. Jean-Philippe Lauer has expressed the opinion (in his *The Pyramids of Sakkara* [Cairo, 1977], 13) that the architects of these shaft tombs may have found their inspiration in the central shaft and burial chamber of the Step Pyramid, inasmuch as during the Saite period some reconstruction work took place in the substructure of that monument. The construction and function of these tombs has been described and explained by Lauer in his "La structure de la tombe de Hor à Saqqarah/XXVIe dynastie/," *Annales du Service des Antiquités de l'Égypte* 52 (Cairo, 1954), 133-136; and also by D. Arnold, *Lexikon der Baukunst* (Zurich, 1994), 45 s.v. Campell-Grab and 225 s.v. Schachtgrab.
12. Zaky Y. Saad, "Preliminary Report on the Royal Excavations at Saqqara, 1941-1942, *ASAE* 41 (Cairo, 1941), 381-393.
13. On the massive stone sarcophagi dating from the Saite through the Ptolemaic periods, see G. Maspero, *Sarcophages des Epoques persane et ptolémaique* I (Catalogue Général, Cairo, 1914); G. Maspero, H. Gauthier, *Sarcophages des Epoques persane et ptolémaique* II (Catalogue Général, Cairo, 1939); and M-L. Buhl, *The Late Egyptian Anthropoid Stone Sarcophagi* (Copenhagen, 1959).
14. The net shroud is known as part of sheath dresses as early as the Old Kingdom: see Rosalind Janssen, "An Ancient Egyptian Erotic Fashion: Fishnet Dresses," *KMT* 6:4 (winter 95-96), 41-47.
15. E. Strouhal, "Report on an official visit to Egypt, March 16, 1998."

About the Author Dr. Miroslav Verner is director of the Czech Institute of Egyptology at Charles University in Prague. He is also the field director of the Czech expedition to Abusir, where he has worked since 1974.