

by Nadine Moeller and Gregory Marouard

esearch on ancient Egyptian settlements is characterized by long and painstaking study, regardless of the fact that it uniquely addresses questions about our understanding of the urban phenomenon and also encompasses important sociological issues that relate to the town and the notion of the urban community in antiquity. Despite the immense cultural heritage and monumental art and architecture that Egypt's past has offered to the world, the question of the town remains often difficult to access due to deeply buried data and the disappearance of numerous archaeological tell sites whose scientific potential has rarely been sufficiently valued over the past centuries. In this respect, the tell of Edfu, ancient Behdet, capital of the Second Upper Egyptian nome, can be considered one of the last well-preserved Egyptian towns with a period of occupation covering several millennia.

After more than twelve years of archaeological fieldwork, including six campaigns conducted under the aegis of the Oriental Institute, the Tell Edfu Project (TEP) continues its work and has progressively uncovered almost 3,000 years of occupation. In view of the growing need for further cooperation and training of local inspectors from Edfu, in 2010 the Tell Edfu Project, with the permission of the Egyptian Ministry of State for Antiquities (MSA), launched a campaign of site management in order to protect the ancient remains and to conserve areas previously excavated. This article addresses these efforts and also presents a unique account of the evolution of archaeological fieldwork in a new sector of the site.

The Genesis of a Sector

As the cleaning and site management work at the provincial pyramid at Edfu (ca. 2600 BC; see *News & Notes* 213) have

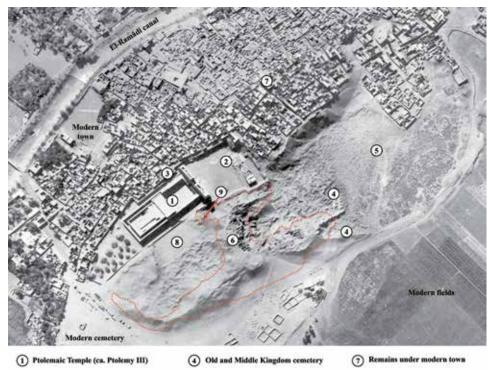
come to a fruitful completion, the TEP has focused its efforts on the investigation of the origins and evolution of the ancient settlement of Edfu, whose history reaches back to the third millennium BC. After having explored the Zone 1 area (fig. 1), which is characterized by a large silo courtyard that dates to the Second Intermediate Period and was built over the Middle Kingdom remains of a governor's palace (ca. 2000–1700 BC; see *News & Notes* 198 and 206), in 2012 the Edfu team started the excavation of a new sector.

This new area, called Zone 2, measures more than 35 meters in length and 20–23 meters in width, covering an area of 1,300 square meters. It is situated along the northeastern side of the tell, about 10 meters west of the monumental pylon of the Ptolemaic temple, and the enclosure wall of which forms its eastern limit. The area is characterized by a long strip of archaeological remains. Preced-

ing archaeologists had never considered conducting fieldwork here because of the colossal amount of debris left by the sebakhin — the looters of the site — that had accumulated over the past century. However, a reconnaissance operation here in 2009 indicated the presence of urban settlement remains dating at least as early as the second half of the Old Kingdom (ca. 2500-2200 BC) lying under 4 to 7 meters of sand and rubble. These remains constitute not only the oldest urban levels so far discovered at Tell Edfu (with the exception of the necropolis area), but also the last area of the entire tell where such early levels can be reached for excavation.

Before fieldwork in Zone 2 could begin, it was necessary to research the evolution of the area — from antiquity through the most recent and "turbulent" history — and to understand the events that have led to its now largely destroyed state. The Description de l'Égypte (chapter 5, §1 pp. 1-5, vol. 1, pl. 48) provides a relatively detailed outline of the tell of Edfu and its "two temples" before the start of illicit excavations. In 1860-1861, Auguste Mariette started to clear the temple and its entry area of sand and late buildings. The part of the tell situated along the exterior of the temple was still largely intact in 1875, the date when the temple was increasingly being cleared of surrounding ruins. The archaeological soil rich in organic material was being systematically removed from the site by sebakhin and used as fertilizer in the nearby fields. It is essentially on this occasion that Zone 2 lost the upper layers of ancient settlement remains. The sebakh diggers stopped their work at the levels dating to the end of the Old Kingdom, probably because of the large amount of burnt layers of soil and walls in this area, which has a distinctive red color and is not suitable as fertilizer for agriculture.

Between the summer of 1903 and spring of 1905, the French engineer Alexandre Barsanti undertook at the request of the Antiquities Service — and Gaston Maspero — a rescue work of the western stone perimeter wall of the temple, which was about to collapse. In order to



- (2) Mammisi (ca. Ptolemy VIII)
- (5) Early Dynastic tombs
- (8) Barsanti's plain (1903-1905)

- (3) Ramesside pylon (Seti I* Rameses
- Tell Edfu site in 1922 (actual limit in red dots
- (9) Zone 2 Old Kingdom settlemen



1 Aerial view of Tell Edfu in 1922 and the Barsanti plain in 1903 (from *ASAE* 7, 1906, pl. II)

place the 3,386 architectural stone blocks on a clean surface before the wall could be reassembled again, he cleared a large area directly to the west of the temple, stretching along more than 80 meters. This operation, in a zone already heavily destroyed by the *sebakhin*, led to the destruction of all the archaeological remains down to the bedrock. This area, almost 6,400 square meters, is now is called the "Barsanti plain." The rubble

produced by this leveling and clearance operation was deposited along the periphery of the plain, specifically in Zone 2, covering the *sebakhin* holes with more than 2 meters of debris.

About twenty years later, Henri Henne conducted two seasons of field-work under the auspices of the Institut français d'archéologie orientale (IFAO), in 1922 and 1923. He concentrated his work on the upper levels of the site. At





2 Zone 2 area in 2009 (left) and 2012 (right)

that time the Zone 2 area offered the only access point to the top of the tell. Henne's workers used it as a passage to take down to the excavation debris, and as a consequence this area is covered by another couple meters of debris. Less than ten years later, Maurice Alliot continued the excavation of the settlement and once again used Zone 2 as an access point. After 1932 this area seems to have attained its current state, and in fact its function as an easy access point to the upper part of the tell for almost eighty years contributed to its preservation.

During the mid-1970s the British archaeologist Barry Kemp visited the site, and he noted for the first time along the western side of Zone 2 several important remains of massive enclosure walls dating to the Old Kingdom. He also pointed out the presence of urban settlement remains in situ (Antiquity 51 [1977], pp. 189-91). In 2000, the construction of the new visitor center near the temple led to changes in the accessibility of this area and obscured its importance for archaeology for another ten years. In order to channel the many daily visitors as well as to prevent curious tourists from climbing on the ancient site, the local authorities built a mudbrick wall along the exterior of Zone 2. This enclosed area quickly became filled with trash. Some of the space behind the new wall was also used to store fragments of statues, inscribed stone blocks, and architectural elements that were deemed unfit for display. Some of these blocks date back to the Franco-Polish excavations on top of the tell and in the Old Kingdom necropolis area conducted between 1936 and 1939 by Bernard Bruyère and Kazimierz Michalowski. Numerous other large architectural stone elements that were unearthed by the excavations of the Antiquities Service in the courtyard of the temple in 1984 were placed here after having been stored in the Pylon for more than twenty years. This designated "storage area" for stone blocks gradually filled up, and the lack of space led to further pieces being deposited along the base of the tell farther to the west. Since 2010 the TEP has undertaken an increased effort to organize these 350 blocks and place them in rows on the ground (see below).

New Fieldwork in the Old Kingdom Settlement Area

Conducted in parallel with the excavation of the palace and silo area (Zone 1), the removal of the *sebakhin* refuse in Zone 2 took three seasons. Because the use of mechanical devices risked undermining the surrounding and underlying archaeological remains, a team of one hundred workers was necessary to take away the four to seven meters of accumulated debris (fig. 2).

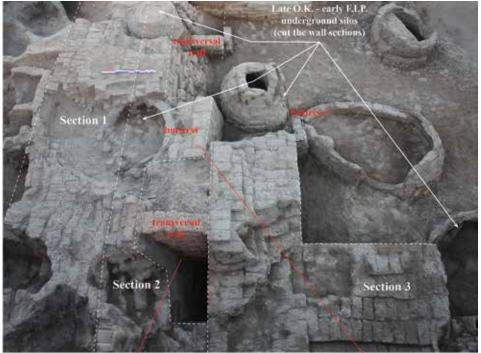
During the 2011 season, the first levels *in situ* appeared miraculously preserved under the debris deposited during the preparation of Barsanti's plain. Excavations launched in 2012 revealed extensive archaeological remains that had been quite disturbed. The area resembled a "swiss cheese," marked by pillaging holes apparently produced between 1875 and 1903, according to the large number of Ottoman smoking pipes (characteristic of the nineteenth century), modern coins (year 1261 of the Hijri), and pieces of Ar-

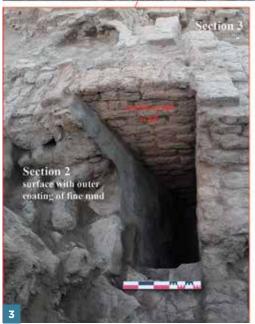
abic newspapers found in the *sebakhin* waste.

Directly under this garbage layer, the archaeological remains date to the very end of the Sixth Dynasty and the beginning of the First Intermediate Period (ca. 2200–2100 BC). Several areas of domestic nature have been found here; they appear to have suffered a major fire that precipitated their abandonment, as witnessed by several layers of complete pottery vessels left in place (see *Oriental Institute Annual Report 2011–2012*, pp. 158–59, fig. 10).

Most of the floor levels from these houses have largely disappeared, but their underground levels delivered nearly complete vaulted silos used for domestic grain storage (fig. 4). All these habitation levels seem to have been occupied during the Sixth Dynasty, after extensive leveling of the preceding installations. It became apparent that, before this domestic occupation, the area had a very different function as indicated by the large monumental remains discovered below. This earlier level is composed of several successive Old Kingdom enclosure walls, perhaps a town wall. Farther south and with an intra muros position, there was also a large building complex with massive mudbrick walls, where the peculiarity of the artifacts discovered underlines a clear difference from the subsequent domestic contexts.

The three sections of mudbrick enclosure walls uncovered here were built progressively against each other in three







phases during the Old Kingdom, following a yet unclear time line (fig. 3). The excavated segment of wall forms a right angle, and the sections measure between 1.5 and 2.0 m in width, a thickness that can be considered very reasonable for such supposedly "defensive" walls. The southern section (Section 1) is the oldest one. It was showing severe signs of wear and collapse when the second section (Section 2) was built. Section 2 is not really an enclosure per se but rather a renovation and a reinforcement of the outer base of Section 1. It is characterized by stone construction in the lower

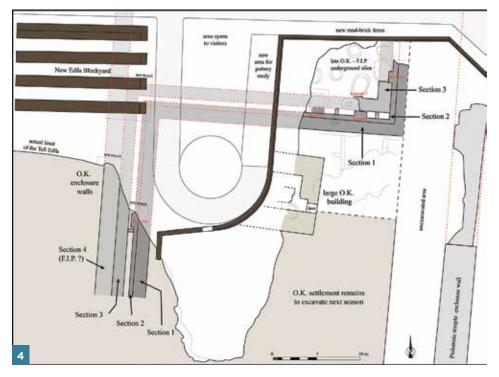
part (uncut blocks of local sandstone) with mudbricks in the upper part. The Section 2 addition had a fairly steep exterior slope and its face was covered with a fine coating of mud, a special and peculiar finish for the exterior of a presumed town wall. Even more rare, at least three redans — sort of narrow buttresses with a width of 1.5 m — were constructed on the outer face. This external face was also coated with a fine mud finish, obviously an aesthetic and not a defensive addition.

The third section is clearly visible in the northern portion of the right-an-

gle turn of the wall and has been built against the earlier walls following exactly the same course. An empty area of more than 0.70 m between Section 3 and the sloped Section 2 was divided by thin transversal walls and was filled with rubble (fig. 4). Sections 1, 2, and 3 together formed a single massive wall over 4.3 meters wide, which seems to have been maintained in the urban landscape until its collapse — or its leveling — sometime between the end of the Fifth Dynasty and the end of the Old Kingdom, just before the installation of houses and silos.

In fact, as reported by Barry Kemp in 1977, the different phases of an enclosure wall were already visible along a north-south axis in a section of the tell a couple meters west of Zone 2. This season these sections were carefully cleaned and their foundations excavated (fig. 5; see "Tell Edfu," in Oriental Institute Annual Report 2012-2013, fig. 6). It was possible to confirm that these sections correspond to Sections 1, 2, and 3 in Zone 2. As a result of this identification, it is now possible to confirm that there was another right angle in the enclosures toward the east in this area, very close to the present blockyard.

The layout of these walls therefore represent an important limit to the north and west of the town of Edfu during several centuries of the Old Kingdom. Although the feature's function as the town's enclosure wall cannot be excluded at the moment, considering its limited width and the external decorative effects that have been observed (fine mud coating and narrow buttresses), it could also have been a smaller enclosure wall inside the perimeter of a larger town wall. If this is the case, Sections 1, 2, and 3 could belong to an unknown intra muros complex, and the enclosure wall's close proximity to the Ptolemaic temple (reinstalled for centuries in the same location) could indicate that it was the enclosure for a religious building or palatial complex of the Old Kingdom. The reasons for the disappearance of this important enclosure wall in the Edfu urban landscape at the end of the Old Kingdom is still unexplained and requires further research.



Within the area bounded by the enclosure walls, we were surprised that this first season of investigation in Sector 2 has already led to the discovery of a large building. The construction is particularly impressive considering the width of its external walls, which varies from 2.2 to 2.5 meters; this is an exceptional size for any mudbrick structure dating to the Old Kingdom. Our surprise was even greater when the top of a wooden lintel and a complete wooden door, still preserved in place and left open, was revealed in the entrance of the building (fig. 5). This large structure is thus perfectly pre-

served in elevation above the level of the lintels, which still leaves at least 1.5 m of occupation layers to excavate before reaching the original floor level. The pottery assemblages found here are of good quality, often with complete pieces, but clearly dominated by the beer jars and the bread molds in proportions more common for funerary structures or palatial contexts than for domestic contexts. There are also many traces of secondary metallurgy for smelting copper (possibly from Nubia or Sinai), an activity rarely discovered in urban contexts and often operated under the exclusive control of



the state during these oldest phases of Egyptian history. This building seems to have been abandoned and was quickly filled with a huge quantity of such artifacts over the course of the Fifth Dynasty, the highest and latest levels dating to the end of this dynasty.

The Edfu Blockyard Project

Simultaneous to the excavation of the Old Kingdom urban levels in Zone 2 and the reorganization of the immediate surroundings, an additional program was implemented to ensure the protection of the 350 inscribed and decorated stone blocks stored along the base of the tell (fig. 6). Before a study or long-term conservation effort can be made, the priority was to provide adequate shelter for these blocks. Having been deposited directly on the ground, the blocks were exposed to soil moisture (the groundwater table is particularly high in the Edfu area since the construction of the Aswan high dam in 1964). The relocation of the blocks to a storage magazine of the Antiquities Service unfortunately was impossible due to the lack of space and because of the underestimated "secondary" value of most the blocks.

In the same way as at other major sites in southern Egypt, including Luxor temple and Medinet Habu, we decided to create a blockyard area at Tell Edfu. This project was made possible by the extremely generous funding of two longterm Oriental Institute supporters, Bob and Janet Helman (see bio). Four benches - or *mastabas* - of fired bricks now serve as protective platforms for most of the blocks. These keep the blocks away from the moist soil while putting them at eye level, which eases visibility for scholars and visitors alike, who can move freely between the benches. Measuring 15 meters long × 1.30 to 1.70 meters wide

- **3** The sequence of successive Old Kingdom enclosure walls excavated in Zone 2
- **4** Schematic plan of Zone 2 showing the position of the Old Kingdom enclosure walls and the new Edfu blockyard
- 5 Wooden lintel and door remains in situ from the Old Kingdom complex in Zone 2 (ca. 2400-2300 BC)





were built in several stages. The central part of the foundation was left hollow and was coated with black tar (bitumen), then filled with coarse sand from the desert, clean and free of clay, in order to ensure good drainage. Regular layers of waterproof bitumen were laid between the upper layers of brick to completely block the rising dampness. Finally, each bench is covered by a layer of lime mortar, which has a hydrophobic quality and

ensures the ultimate protection for the

blocks that lie directly on its surface.

× 0.45 to 0.90 meters high, the benches

The construction of the blockyard was quite time consuming. All the blocks were first carefully moved to an unoccupied zone where they underwent preliminary cleaning and recording. In addition, because of the position of the blockyard directly above the corner of the Old Kingdom enclosure walls, we had to be sure we were not building the benches on an important part of the settlement. A short rescue excavation in the blockyard area revealed no remaining traces of wall foundations.

In order to offer fieldwork experience in epigraphic survey work, which includes the classification, and photographic and illustrative documentation, the study of the blocks has been entrusted to two PhD students in Egyptology, Janelle Wade and Jonathan Winnerman (NELC; see *View from the Field*). They have been assisted throughout this first campaign by four inspectors of the local antiquity service, who were trained by the TEP.

Acknowledgments

The directors would like to thank the local inspectorate at Edfu, foremost Ahmed Saadi, Susi Samir Labib, and our inspectors Afrah Mahmoud (Tell Edfu) and Mustafa (Edfu Pyramid), for their collaboration and support.

We would also like to express our sincere gratitude to many of our Oriental Institute members, especially Bob and

6 Tell Edfu blockyard area in 2009 and at the end of the 2012 season

Janet Helman (who have made the block-yard project possible), Andrea Dudek, Daniel and Annette Youngberg, Stephen and Patricia Holst, Joan S. Fortune, Steven and Heidi Camp, and Rosemary Ferrand. Additionally, we would like to thank the Oriental Institute and the National Endowment for the Humanities for their financial support to the Tell Edfu Project.

Thanks also to Chicago House's team of epigraphers for their support and advice for helping Jonathan and Janelle conduct their first epigraphic fieldwork project.

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Gregory Marouard is co-director of the Tell Edfu Project and a research associate at the Oriental Institute.

Janet and Bob Helman

This year, Janet and Bob Helman joined the many generous supporters of the Tell Edfu Project. Janet began volunteering at the Oriental Institute as a docent in 1978 and subsequently became Volunteer Coordinator in 1981 and joined the Visiting Committee in 1983. A recipient of the James Henry Breasted Medallion, Janet has worked on a wide variety of Oriental Institute projects, including the Giza Plateau Mapping Project with Mark Lehner. Currently, she focuses her efforts on registering Iranian painted pottery for the Persian Prehistoric Project with Abbas Alizadeh.

Robert Helman has practiced law for more than fifty years and is a partner at Mayer Brown. The firm established the Mayer Brown/Robert A. Helman Professorship at Northwestern University School of Law, Bob's alma mater. Since 2005, Bob has been a lecturer at the University of Chicago Law School. He served on the Law School Visiting Committee from 1989 to 1992, and as a Trustee for the University of Chicago Hospitals from 1982 to 1988. The Tell Edfu team and the Oriental Institute thank the Helmans for their steadfast commitment to the preservation and understanding of the civilizations of the ancient Near East.

View from the Field

by Janelle Wade and Jonathan Winnerman

pon our arrival last October, Edfu's block area along the base of the tell was in need of much attention; many of the blocks were haphazardly deposited, even piled atop each other, interspersed with trash and covered with bird droppings. Those that had been stored in the temple's pylon for decades also showed signs of deterioration, being completely covered by a thick layer of bat guano. The blocks, which are mainly of highly porous sandstone, face a serious threat of decay by the rising groundwater level. The blocks easily absorb the humidity, and once the water evaporates, salt is left behind, which destroys the stone from the inside, causing large cracks and turning any reliefs or inscriptions into sand. Some have already been irreparably damaged by the water or careless handling. Other aggravating factors, such as the long exposure to dust and sun or the regular climbing attempts by tourists, have encouraged us to protect these invaluable antiquities.

Our immediate goal last season was to prevent further deterioration by moving the 350 blocks from the waterlogged ground, doing preliminary cleaning and first-aid conservation, and then transferring the blocks onto new water-resistant benches. Our future goal includes the complete documentation of the blocks, so that the fascinating information they provide can be preserved and made easily accessible

We began our work by categorizing the blocks by time period and type. Some of the blocks came from earlier phases of the existing Ptolemaic temple (third to first centuries BC), some from even older temples or shrines, and others from private monumental structures. while still others were individual objects like offering tables and objects of daily life. The blocks span over two thousand years of history, ranging from the second millennium BC (Middle Kingdom) through the fifth century AD. Some of the older blocks were part of a so-far unknown monumental structure built by the pharaoh Sekhemre-Sementawy Djehuty, who reigned during the Second Intermediate Period. On the other end of the spectrum, we found a group of blocks bearing the

name of Ptolemy IX or XII (both of whom reigned during the first century BC), and joins between three different blocks of this period were discovered during transportation.

During the construction of the benches, we began the complete and detailed documentation of every block. The first step was to take high-quality photos of every piece and register as much information as possible into our Filemaker Tell Edfu database. By completing descriptive sheets accessible directly on-site via iPads, an incredible amount of information was recorded, from the state of preservation to size and shape, construction marks and fitting traces (very helpful for reassembly attempts), and evidence of ancient reuse.

Pictures alone, however, cannot give us all the information on the inscribed and decorated blocks, so we also conducted epigraphic work. Considering the limited time, the state of some blocks, and our lack of experience in this kind of work, we regularly had to make slight adjustments to our methodology in the field, doing a sort of "salvage epigraphy." We also received much advice and feedback from the specialists at Chicago House, who were kind enough to visit us in Edfu twice last season. Epigraphy work essentially consists of copying on a 1:1 scale the hieroglyphic inscription directly on the block, carefully tracing any lines with permanent markers on a thick transparent plastic sheet in order to create a complete two-dimensional record (see cover image). The drawings are checked multiple times to ensure accuracy before the plastic is removed. Once back in Chicago, the facsimiles on plastic were scanned at high resolution at the CAMEL Lab then transferred to Adobe Photoshop and "inked" with Adobe Illustrator to produce final drawings for a future publication of the entire blockyard collection.

Documentation has only just begun, and several more seasons will be necessary before facsimiles of every block can be completed. For the present, our efforts at conservation have protected the blocks and considerably slowed the deterioration of those at risk. Furthermore, some of the architectural elements were so large



Janelle Wade in "extreme epigraphy" position, copying an inscription on a large architectural element

they simply could not be moved onto the benches. We were nevertheless able to copy many of these sizable pieces, which sometimes necessitated "extreme epigraphy" work (see photo, above). Some of the stones were clearly part of a major monumental structure and probably belong to an earlier phase of the temple of Horus. There are several interesting cases in which the royal cartouches on the blocks mention a King Psamtik of the Twenty-sixth Dynasty (probably Psamtik II, ca. 595-589 BC), but they have been recarved on top of a different royal name in order to erase all traces of the preceding dynasty. This group of Edfu blocks can in fact be attributed to a large construction project ordered by the Kushite kings who wrested Egypt from Nubian control and established the Twenty-fifth Dynasty. We are hoping now to use the epigraphic facsimiles of the blocks to virtually reconstruct some parts of this monument, a project that is evolving into one of the most exciting research aspects of our work at the Edfu blockyard.

> Janelle Wade and Jonathan Winnerman are PhD students in the NELC program at the University of Chicago..