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## Soknopaiou Nesos Project: The Resumption of the Archaeological Investigation. The settlement and its territory

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The Centro di Studi Papirologici of Lecce University has been working in Soknopaiou Nesos since 2001, under the direction of Mario Capasso and Paola Davoli. After more than seventy years from the University of Michigan excavation in Dime the archaeological investigation of the site re-started with the ideal purpose of continuing what the team of A.E.R. Boak and E.E. Peterson did.¹ Among the aims of the Soknopaiou Nesos Project there are the excavation of the urban area² and the documentation of the ancient settlement according to modern archaeology methods and with the most advanced technology. The surveys of the visible structures and of the contour lines were carried out during the 2005 and 2006 seasons.³ Since 2003 an excavation has been opened inside the *temenos*, in an area located north of the still standing building previously identified as Soknopaios' temple.

## The topographical surveys (I. Chiesi, S. Occhi, N. Raimondi)

The surveys were carried out in the field with the aid of an electronic total station (TOPCON GTS-226) that permitted the positioning of all the visible buildings and walls within the site contour lines. The graphic elaborations of the surveys were made with the GEOPRO MERIDIANA 2005 topographic program and then rendered with an AutoCAD program (Fig. 1).

These surveys were necessary because of the lack of detailed plans of the archaeological area that would enable the understanding of the urban layout in its morphological context. Few plans of the settlement were already published: the one made by Karl Richard Lepsius in 1843,<sup>4</sup> very detailed for the time, but not exact; and those made during the University of Michigan excavation campaign in 1931–1932, in which, however, not all of the individual structures were surveyed.<sup>5</sup> The latter have been the only certain topographical and morphological base of the site to date. The topographers and draftsmen of the University of Michigan, headed by Peterson, based the survey on datum points, marked on the ground with small cement markers, most of which still exist. It was thus deemed necessary to follow and fully consider the choices made by the topographers of the University of Michigan and use the same cement

<sup>&</sup>lt;sup>1</sup> A.E.R. Boak (ed.), Soknopaiou Nesos. The University of Michigan Excavations at Dimê in 1931–32 (Ann Arbor 1935).

<sup>&</sup>lt;sup>2</sup> The topographical survey and the analysis of the buildings were partially made by the joint archaeological mission of the Bologna and Lecce Universities during the seasons 2001 and 2002. However, the directors of the Soknopaiou Nesos Project decided to completely redo the topographical survey and contour lines. For the work carried out on the site between 2001 and 2003 see P. Davoli, "New Excavations at Soknopaiou Nesos: The 2003 Season," in S. Lippert and M. Schentuleit (eds.), Tebtynis und Soknopaiu Nesos. Leben im römerzeitlichen Fajum. Akten des Internationalen Symposions von 11. Bis 13. Dezember 2003 in Sommerhausen bei Würzburg (Wiesbaden 2005) 29–39.

<sup>&</sup>lt;sup>3</sup> P. Davoli, "Examples of Town Planning in the Fayyum," BASP 42 (2005) 224–231, Pls. 13–18.

<sup>&</sup>lt;sup>4</sup> K.R. Lepsius, *Denkmäler aus Aegypten und Aethiopien* I (Berlin 1849–1859) Bl. 52. An unpublished plan of J.G. Wilkinson is preserved in the Bodleian Library at Oxford.

<sup>&</sup>lt;sup>5</sup> Boak, op.cit. (above, n. 1) plans I–II.

markers for the positioning and geo-referencing of the topographical survey. In addition, the reference elevation used is the one published by Boak for the datum point G (30.7 m above sea-level). In this way, it is possible to compare the new elevations with those published in the Michigan excavation report. In fact, the markers were 10 cement pillars that permitted a perfect triangulation of the site and allowed us to create a closed polygon, which is the base of the survey. Seven of the datum points of the University of Michigan were used as points of the polygon.

Soknopaiou Nesos has an elongated shape and extends from north to south for about 640 metres and from east to west for 320 metres. Overall, the settlement covers an area of 167,500 square metres. The difference in elevation from the base of the *kom* to its top is about 13 metres. The site, reasonably well preserved, is a settlement mainly characterised by mud-brick dwellings. It arose around an important temple area that occupies a large part of the northern area of the *kom* (9,000 square metres). South of the *temenos*, the site is also divided longitudinally by a long paved street (320 x 6.5 m), the *dromos*, that led to the temple area from the south. An imposing perimeter wall protected the temple area. Ancient dump areas are along the outskirts of the town, above all to the east and west.

It is important to state in advance that the survey was limited to the visible structures emerging from the sand and that their cleaning concerned only the top surface of the visible walls. For this reason, the general plan testifies to the current state of preservation of the site. To facilitate the work, the area was divided into three sectors: the northern one including the *temenos* with the buildings inside; one to the southeast of the *temenos*; and one to the southwest of it, both occupied mainly by dwellings.

The plan shows that perimeter walls enclosed the settlement at least in its northern half (Fig. 2). These allowed the control of people going in and out through easily controllable gateways, two of which can possibly be recognised on the *kom* to the north and east of the *temenos*. In complex, the urban layout is well preserved, especially in the area east and southeast of the *temenos*, where it is possible to follow the layout of the blocks. The urban plan becomes less and less organised towards the south and southwest, where blocks and streets lose much of their legibility and are reduced to simple alignments of walls. The area with the greatest density and number of buildings seems to be the one east of the *dromos*. On the contrary, the buildings and blocks seem to be limited to a narrow strip adjacent to the *dromos*, to west-southwest of this road. However, it must be noted that the ground in this sector is rather flat, such as to suggest that the area was levelled by the *sebbakhin*. The impact of this activity, very frequent and common in the sites closest to the cultivated area south of Birket Qarun, is still in doubt as regards Soknopaiou Nesos.<sup>6</sup> Another hypothesis that can explain this situation is that the town was less stratified in this area and that the buildings are less densely built.

During the survey of the contour lines the site was divided into squares, inside of which points with evident differences in elevation were measured. In fact, the settlement, a true *kom*, has particular orographic characters, being an elevated unit, with slopes that are quite accentuated on the inside and in

<sup>&</sup>lt;sup>6</sup> The razing activity by the *sebbakhin* is mentioned in Boak, *op.cit*. (above, n. 1) 3; however, the correspondence of D.L. Askren with F.W. Kelsey (letter on 27 July, 1915) indicates that the *sebbakhin* themselves considered such activity in Dime as too costly and time-consuming, especially because of the difficulty in transportation. See K.D. Clarke, "Paleography and Philanthropy: Charles Lang Freer and his Acquisition of the "Freer Biblical Manuscripts"," in L.W. Hurtado (ed.), *The Freer Biblical Manuscript: Fresh Studies of an American Treasure Trove* (Atlanta 2006) 63.

respect to the surrounding desert plain. The measured elevation points thus have a rather variable distribution, with the greatest concentration in areas characterised by differences in elevation. The graphic representation of flat areas needs a smaller number of elevation points as compared to areas with frequent differences in elevation. Our aim was to create a highly detailed image of the morphology of the site, which entailed the measurement of 8,000 elevation points. We used the datum points of the University of Michigan for these operations as well.

The result is an orographic survey with contour lines conjoining elevation points at regular intervals (0.50 - 1.00 m), but it is possible to increase the detail up to 0.20 m). The physical map (Fig. 3) of the site shows how the higher elevations of the *kom* are concentrated along the perimeter and in particular in the northeastern area, where the contour lines reach an elevation of 30 metres above sea-level and then gently slope towards southwest. In this area, which appears as a small, slightly elevated plain in respect to the surrounding desert, the dwellings are poorly preserved, as we mentioned before.

The three-dimensional rendering of the contour lines plan also allows us to suggest a new hypothesis about the original orography of the ground upon which the settlement was founded. These should be verified in the future with other methods of investigation. It is particularly evident that the highest point in the town is reached in the *temenos* area (attested by contour lines of 24–25 m above sea-level) and that the contour line at 21–22 m above sea-level runs from north to south along the *dromos* line. The overlapping of the topographical survey with the contour line map permits one to grasp the close relationship between the morphology of the site and its urban development, as in the case of the *dromos*, which along with the temple represents one of the most important architectonic and urban elements of the settlement. This seems to suggest the hypothesis that the temple was built on a raised area and that the *dromos*, exploiting the orography of the ground, rose towards the north creating a monumental perspective (Fig. 4). It is thus probable that both urban elements were founded at the same time in the Ptolemaic period.<sup>7</sup>

The profiles of the site that come out from the current measurements are not very different from those carried out in the excavation campaign in 1931–1932. These show how the accumulation of sand and the erosion of the site in the past 70 years have not progressed in a significant manner.

The plotting of the structures brought to light in the excavation area is updated season by season using both the Total Station and the photogrammetry technique. Photogrammetry is realised with a digital reflex camera (with a 18-75 millimeter lens) that is placed on a telescopic rod, raised vertically on the area being examined. It covered a visual field of 3 x 3 m. The photographs are taken on surfaces previously geo-referenced with the electronic total station. The photographs are then straightened with the Photometric software that created the photo mosaics as well. In this way, the high-definition images thus obtained are imported into the CAD program and used as a graphic base for the creation of detailed drawings. The same process is applied to the vertical surfaces of the temple walls and annexed buildings.

The use of high definition photogrammetry saved considerable time in the field and at the same time is a valid addition to the documentation of the structures. The metric photographs taken in this way are important georeferenced zenith and vertical photographic documents that can be used as archives of data

<sup>&</sup>lt;sup>7</sup> A detailed survey of the *dromos* is planned for the 2007 season.

and used for subsequent analysis as well. They offer the possibility of making traditional graphic measurements in a laboratory with CAD software.

Beginning from the 2007 season a multi-disciplinary territorial survey will start. This will allow us to fully appreciate this ancient settlement in its natural landscape and context.

## The archaeological excavations (P. Davoli)

In 2003 season the excavation inside the *temenos* started (Fig. 5). Soknopaios' temple is one of the best-preserved sacred areas in the Fayyum but it was never scientifically excavated. The great number of papyri, mainly demotic, that came from this temple at the end of the 19<sup>th</sup> century, offers the extraordinary possibility of a multidisciplinary study of an important context.

The excavation sector is situated<sup>8</sup> north of the temple built in mud brick and stones (labelled ST 18) previously identified as the temple of Soknopaios and Isis Nepherses.<sup>9</sup> Its entrance is located in front of the main gate in the *temenos* and in front of the *dromos*. On the basis of its plan it has been interpreted as a Ptolemaic temple transformed into a monumental *propylon* with the opening of a door in the rear wall of the *naos*.<sup>10</sup> Thus it was evident that the temple proper was situated north of this building, in a centrally located area where a huge number of heavy lintels and blocks was concentrated. These ruins have been described or photographed in the past beginning with G.B. Belzoni, K.R. Lepsius, F. Zucker, Ahmed Kamal and A.E.R. Boak.<sup>11</sup> It was probably the source of objects, monuments and documents, which partly entered the Cairo Egyptian Museum<sup>12</sup> and partly were sold on the marked.<sup>13</sup>

Until 2006, we excavated an area of 25 x 25 m (Figs. 6–7), beginning from the rear wall of the building ST 18. Its north gate leads to a paved courtyard in front of an imposing temple built in limestone blocks, the facade of which is 19.40 m long. Two small auxiliary buildings closed the courtyard on its west and east sides, forcing the entrance to the courtyard from the south through the *propylon*. The temple proper had a secondary entrance from its west side, through room D. Eight rooms, a staircase and part of the *pronaos* have been brought to light so far and are preserved to a height of about 1.6 meter. Of

<sup>&</sup>lt;sup>8</sup> The temenos area with the visibile buildings are described in P. Davoli, "The Temple Area of Soknopaiou Nesos," in M. Capasso and P. Davoli (eds.), New Archaeological and Papyrologycal Researches on the Fayyum. Proceedings of the International Meeting of Egyptology and Papyrology. Pap.Lup.14 (2005) 95–124.

<sup>&</sup>lt;sup>9</sup> B.P. Grenfell and A.S. Hunt, "Excavations in the Fayyum," in *Egypt Exploration Fund. Archaeological Report 1900–1901* (London 1901) 5.

<sup>&</sup>lt;sup>10</sup> Davoli, op.cit. (above, n. 8) 101-104.

<sup>&</sup>lt;sup>11</sup> For a synthesis cf. E. Bernand, Recueil des inscriptions grécques du Fayoum I. La «méris» d'Herakleidès (Leiden 1975) 121–26; P. Davoli, L'archeologia urbana nel Fayyum di età Ellenistica e Romana (Naples 1998) 40–45.

<sup>&</sup>lt;sup>12</sup> See for example two statuettes and a vase (*JE* 28126–28, 1887), a complete censer in wood and gold (*JE* 30700, 1893), two stelae of the Ptolemaic and Roman periods (*JE* 30701, 30702, 1893) and a limestone *naos* with a Greek inscription (G. Roeder, *Catalogue Général du Musée du Caire. Naos. Nr. 70001–70050* [Leipzig 1914] n. 9287, p. 112, Taf. 35b).

<sup>&</sup>lt;sup>13</sup> In 1887 a number of Greek and Demotic papyri reached the antiquities market in Cairo and was divided and sold in several lots to many institutions: U. Wilcken, *Grundzüge und Chrestomathie der Papyruskunde*, I (Leipzig-Berlin 1912) XIX; E.G. Turner in *P.Aberd.*, pp. v–vi. Monuments or fragments of them found during the excavation of Ahmed Kamal in 1915–1916 were also probably sold: A. Kamal, "Quelques jours de fouilles à Dimeh es-Sebaâ," ASAE 16 (1916) 183–186.

these, two are wide rooms on the main axis of the temple (rooms A, F), both with a grey limestone slabs floor in quite good condition and with ramps flanked by two rows of three steps.

The decoration of the temple was not finished: the external surfaces were not levelled and rough bosses were left on the walls and the cornice of the gate also. Some of the inside walls are smooth and some others are simply flattened. For the first time in the 2006 season we found substantial evidence of the decoration of the temple. This consists of a number of fragments from dismantled blocks and of two reliefs partially preserved in room F and in the *pronaos* L.

The walls of room F were all smooth and finished ready to be decorated. The reliefs are preserved only on part of the northwest wall of the room. The figurative register is at about 60 cm from the floor (Fig. 8). It represents nine partially preserved characters (the shoulders and heads are missing) in different stages of completeness. On the actual wall there are seven male figures, two of which can be identified as depicting a king and five as gods. All the figures are outlined with red ink and only two were carved in bas-relief, but these are not finished. The gods are all standing and have the same peculiarities. The king is wearing a triangular skirt with the front decorated by two hanging cobras. The register was probably divided into two panels: the first one to the right showing the first two figures where the king, turned to the left, was presenting an offering to the god; the second one, to the left, enclosed the other five figures, with the king making an offering to four standing gods.

Other two figures are represented at the same level as the aforementioned register, but on the flat cornice that surrounds the door between rooms F and L. Only the legs of the characters remain, perhaps the king followed by a queen or a goddess. They were entirely carved and finished, but apparently not painted. The king walking towards the right seems to wear the same type of triangular skirt, of which only a tip of the front corner remains, and a false tail. The female character behind him wears a long close-fitting dress and holds the *ankh* in her right hand, of which only the lower part remains. The lack of sceptres suggests the idea that the two figures had their arms raised for praying or making offerings.

As is well known, the decoration of the Graeco-Roman temple followed series of rules that here have been disregarded, as for example the inverted position of the king and the gods. The king in fact is always represented looking at the entrance of the temple and not vice versa.<sup>15</sup>

The walls of the *pronaos* L have been smoothed ready to hold decorations. Only the west half of the facade of the *naos* has been brought to light so far. A double flat cornice surrounds the door of the naos. A completely finished and painted figurative register, with a red base line, is found on the west side at about 55.5 cm from the offset. Only the feet of two facing male figures remain (Fig. 9): it is certainly one of those scenes, enclosed in squares and arranged on more than one register, that usually decorate the cornices of the portals and often comprise two figures: the king, always turned towards the entrance of the temple, making an offering in front of the standing god with his back turned towards the door. In this

<sup>&</sup>lt;sup>14</sup> Type similar to E. Vassilika, *Ptolemaic Philae* (Leuven 1989) MS 79.

<sup>&</sup>lt;sup>15</sup> A. Gutbub, "Remarques sur quelques règles observées dans l'architecture, la decoration et les inscriptions des temples de Basse Epoque," in F. Geus and F. Thill (eds.), *Mélanges offerts à Jean Vercoutter* (Paris 1985) 125.

<sup>&</sup>lt;sup>16</sup> The outermost cornice is 13.7 cm wide and 2.5 cm thick; the innermost is 60 cm wide and 2.3 cm thick.

<sup>&</sup>lt;sup>17</sup> See Vassilika, *op.cit.* (above, n. 14) 11. This decorative scheme is typical of the Graeco-Roman temples. See for example the gate of the *naos* of the temple at Dendera: E. Chassinat, *Le temple de Dendara* (Cairo 1934) I, Pl. XLVI.

case, the king is painted brown-red, while the god is light blue. The lower part of two hieroglyphic inscriptions on facing columns is recognisable between the two figures. They end both with the  $\underline{d}t$  formula, separated by the was sceptre, the end of which has a bulb shape.

Fragments of decoration and hieroglyphic inscriptions, already carved or only outlined in red were found among the debris that filled the rooms.<sup>18</sup> Among these the most remarkable fragment shows parts of two figures both turned towards the right and in bas-relief (Fig. 10):<sup>19</sup> the first one is a king, of whom only the double crown and the right ear remain; the second is a queen, of whom the left hand raised, in act of adoration, the nose, the forehead and the outline of the high crown with two feathers, usually worn by the queens of this period, are still visible. An inscription in column is recognisable between the two figures. It is the caption of the queen: *neb(t) tawy* followed by an empty cartouche.<sup>20</sup> The certain presence of a queen alongside the king in this relief introduces doubts about the dating formerly attributed to the temple.<sup>21</sup> Up to now in fact, I was inclined to think that this temple had been founded between the end of the Hellenistic period and the beginning of the Roman period;<sup>22</sup> however, the presence of queens next to emperors in Egyptian temple reliefs is rare.<sup>23</sup> One could thus put forth the hypothesis that the temple and its decoration date to the Ptolemaic period. Some papyri and a *stela* attest to works done in the temple during the reign of Ptolemy VIII and the construction of a *peribolos*, that may be identified with the *temenos* of the temple, in 24 B.C.<sup>24</sup>

The decoration of the temple is described in a Demotic papyrus kept in the Papyrussamlung in Vienna (p.Wien D10100) and recently published by G. Vittmann.<sup>25</sup> The text was transcribed during the Roman period (1<sup>st</sup>–2<sup>nd</sup> century AD), but it describes figurative scenes depicting a Ptolemaic king. The decoration of a portal is described in another Vienna papyrus (p.Wien Aeg 9976) from Soknopaiou Nesos, which mentions Ptolemy VIII.<sup>26</sup> In both cases, however, the depictions and texts in the papyri do

<sup>&</sup>lt;sup>18</sup> The fragments were found among the surface debris and inside rooms H, G, and L. The latter also yielded a fragment of a foot painted in light blue.

 $<sup>^{19}</sup>$  ST03/26/351 + ST06/315/1267 (35 x 24.5 cm; thickness 45 cm). The first fragment was found among the debris that covered the facade of ST 20, while the second one was found inside room H, under the staircase.

<sup>&</sup>lt;sup>20</sup> An empty cartouche is often found in the captions of queens in the temple at Dendera, see for example: E. Chassinat, *op.cit.* (above, n. 17) II, Pl. XCVIII. Part of the relief was published by S. Pernigotti and dated to the Roman period; the author did not noticed the presence of the queen behind the king: S. Pernigotti, "Ptolemy III at Soknopaiou Nesos," *SEP* 1 (2004) 120, Pl. II.

<sup>&</sup>lt;sup>21</sup> I would like to thank O. Kaper for discussing with me the interpretation of the reliefs found, and for his useful comments and advices.

<sup>&</sup>lt;sup>22</sup> See Davoli, op.cit. (above, n. 8) 107-9; ead., op.cit. (above, n. 3) 230.

<sup>&</sup>lt;sup>23</sup> The only example known to me is in the temple of Kalabsha, in which the emperor is followed once by the queen crowned by two high feathers: H. Gauthier, *Les Temples immergés de la Nubie. Le temple de Kalabchah* (Cairo 1911) I 41; II, Pls. XIVA, XVIIIB.

<sup>&</sup>lt;sup>24</sup> See at least Davoli, *op.cit.* (above, n. 8). The size of the mud bricks used for the construction of the *temenos* and the buildings inside suggest a dating between the end of the Ptolemaic period and the beginning of the Roman period: for a detailed discussion see *ibid.*, 109, n. 57.

<sup>&</sup>lt;sup>25</sup> G. Vittmann, "Ein Entwurf zur Dekoration eines Heiligtums in Soknopaiu Nesos (pWien D 10100)," *Enchoria* 28 (2002/2003) 106–136, Taf. 14–21.

<sup>&</sup>lt;sup>26</sup> E. Winter, "Der Entwurf für eine Türinschrift auf einem ägyptischen Papyrus," NAWG 3 (1967), 59-80. The wide

not match what has been found so far. Thus, it is possible that the papyri refer to parts of the temple still not brought to light or decorations that were designed but never made.<sup>27</sup>

The investigated stratigraphy was mainly composed of debris, blocks, huge architraves related to the original covering of the building and lintels of doors, which came from the collapse and demolition of the building. Such stratigraphy was proven to have been already disturbed by previous excavations. Nonetheless, some intact contexts were found on the floors in rooms E and G and belonged to a late living phase, perhaps not continuous, when wooden furniture from the temple and papyri were used as fuel.<sup>28</sup> The fragment of a literary Coptic papyrus<sup>29</sup> from the 6<sup>th</sup> century AD circa and late Roman amphorae datable between the end of the 4<sup>th</sup> and the 6<sup>th</sup> century belong to this phase. The coin found by Boak and dated to the beginning of the 4<sup>th</sup> century is no longer the only late object found in Dime.<sup>30</sup>

Before closing the description of the excavation, I would like to draw attention to an unexpected but important find. It is an iron Roman cavalry sword, very well preserved, found in building ST 21 west of the temple ST 20. The sword (ST06/338/1474) is 1 m long and 6 cm wide; it is complete, with an iron scabbard and an ebony pommel. The sword, which has only been consolidated so far, will be restored in the future. It is comparable to the depiction of three swords on a relief representing the gods Aglibôl, Baalshamêm and Malakbêl coming from Palmyra area and dated to the first half of the 1st century AD.31

With the help of modern technologies our topographers completed the topographical survey of the settlement and of its contour lines in the 2006 season, as has been already fully explained. In the mean-time Tatyana Smekalova from St. Petersburg University started a geomagnetic survey beginning with some tests in the settlement and in the area west of it by means of a magnetometer and a conductivity meter.<sup>32</sup> The results were so interesting that we are planning a complete geo-archaeological survey of the territory for the next years. Five areas (**Fig. 11**) have been surveyed in the settlement. Inside the *temenos* 

temple building program of Ptolemy VIII is well known: G. Hölbl, A History of the Ptolemaic Empire (London-New York 2001) 257 ss.

<sup>&</sup>lt;sup>27</sup> Both papyri can be defined as copies of "pattern books" for the decoration of the temple: Vassilika, *op.cit.* (above, n. 14) 7–11.

<sup>&</sup>lt;sup>28</sup> For Greek and Demotic papyri and ostraka found during the excavation see in these Proceedings the article of M. Capasso, pp. 105–108.

<sup>&</sup>lt;sup>29</sup> I would like to thank R.S. Bagnall for this dating.

<sup>&</sup>lt;sup>30</sup> Coin of Costantius I (AD 305–06): R.A. Haatvedt, "The Coins," in Boak, op.cit. (above, n. 1) 38, n. 87, 47.

<sup>&</sup>lt;sup>31</sup> Limestone relief: Louvre Museum, AO 19801 (height 56 cm, width 72 cm) from Bir Wereb, near Palmyra (1945). Three similar pommels, but smaller, are exhibited at the Egyptian Museum in Cairo. Two of them are in bone and ivory (*JE* 45047) and belonged to swords found in Mit Rahina in 1914. The third one is in serpentine (*JE* 25554) and was found in Thebes.

<sup>&</sup>lt;sup>32</sup> The conductivity survey has been carried out with EM38RT round conductivity meter from Geonics limited (Ontario, Canada). The magnetic fields were measured with an Overhauser magnetometer. T.N. Smekalova, O. Voss, and L.S. Smekalov, *Magnetic Survey for Archaeology* (St. Petersburg 2005); T.N Smekalova, A. Mills, and T. Herbich, "Magnetic Survey on the Old Kingdom Site with Mudbrick Architectural Remains in Dakhla Oasis," in G. Bowen and C.A. Hope (eds.), *Proceedings of the Third International Conference of the Dakhleh Oasis Project* (Oxford-Oakville, CT 2004) 131–135; T.N. Smekalova, "Magnetic Testing using Overhauser Gradiometer GSM-19WG and Cesium Magnetometer MM-60," in C.A. Hope and G.E. Bowen (eds.), *Dakhleh Oasis Project. Preliminary Reports on the 1994–1995 to 1998–1999 Field Seasons* (Oxford-Oakville, CT 2002) 31–41.

(Area 1, 26 x 80 m) a row of rooms and buildings was revealed along the west *temenos* wall, in which are several positive magnetic anomalies, which can be interpreted as fireplaces or ovens. Areas 3 and 4 are located on the *dromos* line. The magnetic field here is quite informative and shows the inner structure of the *dromos*. The space between two parallel stone retaining walls has been filled with different materials, in some points highly magnetic. An extensive negative anomaly was measured immediately to the south of the *temenos*, where a huge pit suggests excavation and spoliation activities. This anomaly could mark the presence of the foundations of a building in stone or mud brick. Almost all the settlement demonstrates very low conductivity measurements, except for area 5 located east of the *temenos*. This anomaly has been provisionally interpreted as created by the natural soil, a sort of hill on which the temple was built, in keeping to similar measurements observed near Qasr el-Sagha temple and the four conical hills west of Dime.

The area west of Dime and part of the shore of the lake Qarun south of Dime have been surveyed with the "free search" method. The aims were to test the possibility of finding traces of the fertile land mentioned by several papyri (as public and *aigialos* land)<sup>33</sup> and to try to identify the possible source of fresh water. To date the only possible agricultural land provisionally identified is located in flat areas in the valley west of the settlement and north of the so-called "west Dime basin," a palaeo-lake identified by G. Caton-Thompson and E.W. Gardner during their 1925 survey.<sup>34</sup> This area revealed a number of interesting features, like the famous "dykes," a dry lake, numerous tombs, houses and small settlements of different periods as well as crater-like structures that need deeper investigation.

All these new finds open new perspectives on the history of the temple,<sup>35</sup> of the settlement and on the landscape in general. In the future we will continue these investigations and researches with multidisciplinary collaborations.

<sup>&</sup>lt;sup>33</sup> D. Hobson, "Agricultural Land and Economic Life in Soknopaiou Nesos," BASP 21 (1984) 89–109.

<sup>&</sup>lt;sup>34</sup> G. Caton-Thompson and E.W. Gardner, *The Desert Fayum* (London 1934) I 153, 156–157.

<sup>&</sup>lt;sup>35</sup> Several Greek papyri bought on the market, dated from the 4th century AD and believed to come from Dime have been finally excluded from the list of documents that belong to Soknopaiou Nesos: Cf. with previous bibliography M. Capasso, "Libri, autori e pubblico a Soknopaiou Nesos," in S. Lippert and M. Schentuleit (eds.), *Tebtynis und Soknopaiu Nesos - Leben im römerzeitlichen Fajum*, *Akten des Internationalen Symposions vom 11. Bis 13. Dezember 2003 in Sommerhausen bei Würzburg* (Wiesbaden 2005) 3–9; Clarke, *op.cit.* (above, n. 6).

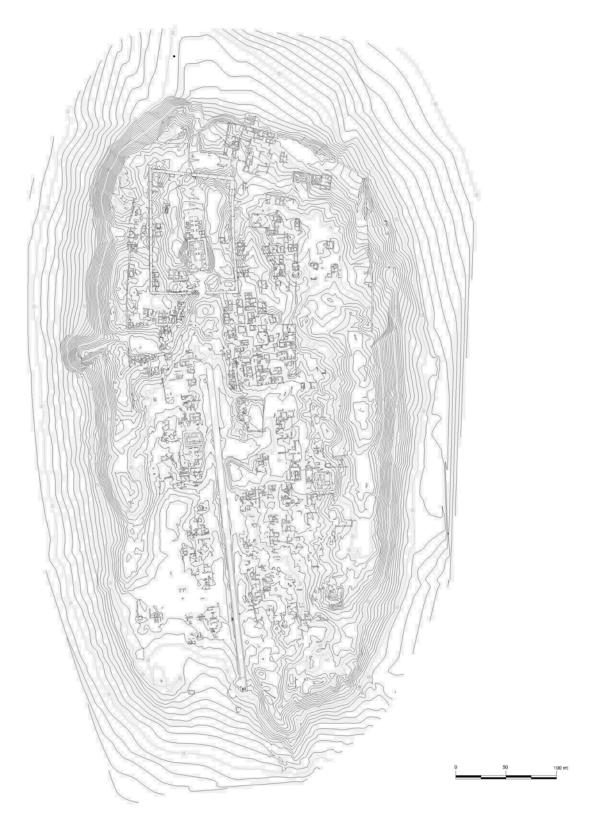


Fig. 1:
General plan of Soknopaiou Nesos.



Fig. 2: Plan of the buildings and structures in the north sector of the site.

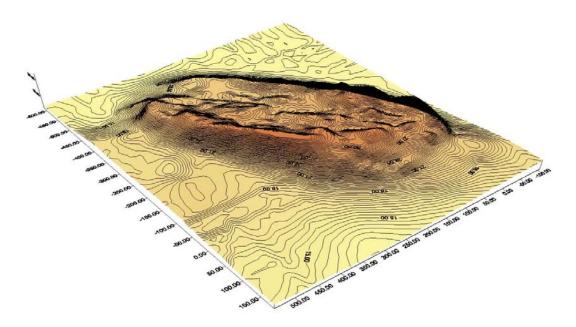


Fig. 3: 3D model of the *kom* from northeast.



Fig. 4: Perspective from south with the *dromos* and the *temenos*.

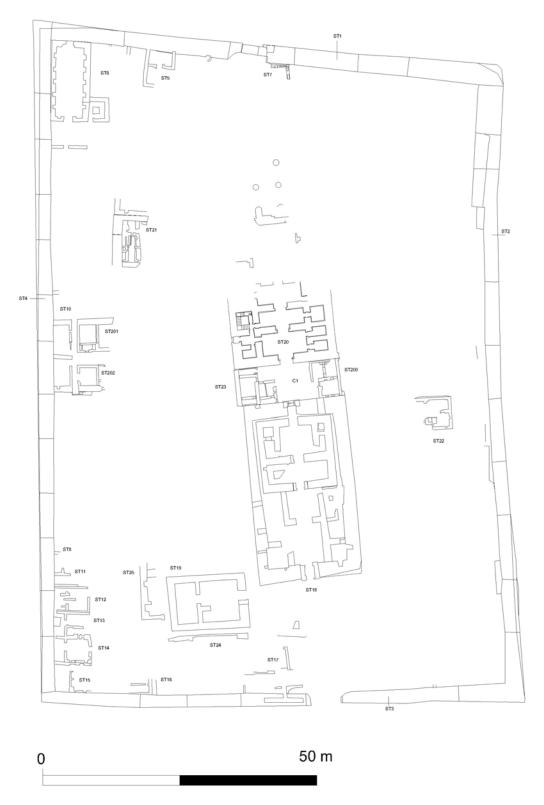
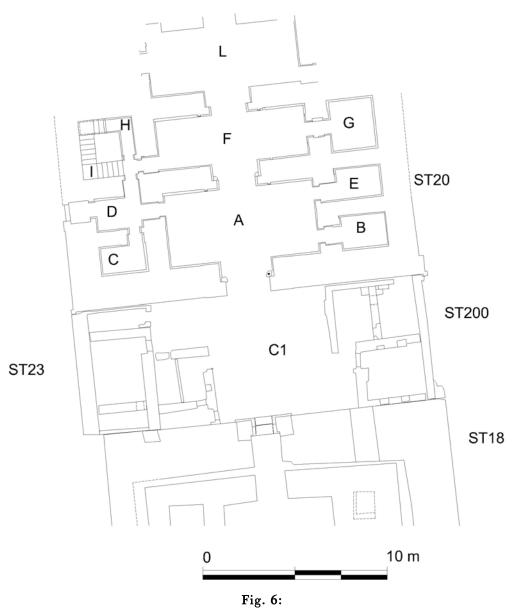


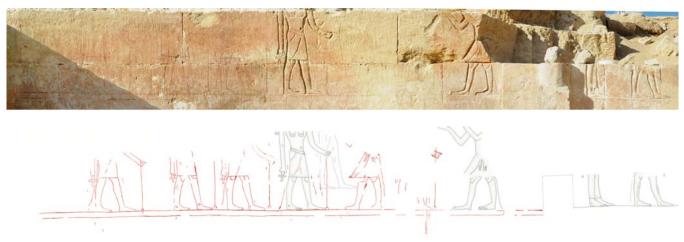
Fig. 5: Plan of the *temenos* area (updated end excavation 2006).



Plan of the excavated area (2003–2006).



Fig. 7: View from southeast of temple ST 20 at the end of  $2006\ {\rm season}.$ 



**Fig. 8:** Photograph and drawing of the figured register in room F.



**Fig. 9:** Painted relief on the west doorjamb of the *naos*.



Fig. 10: Fragmentary block with relief.

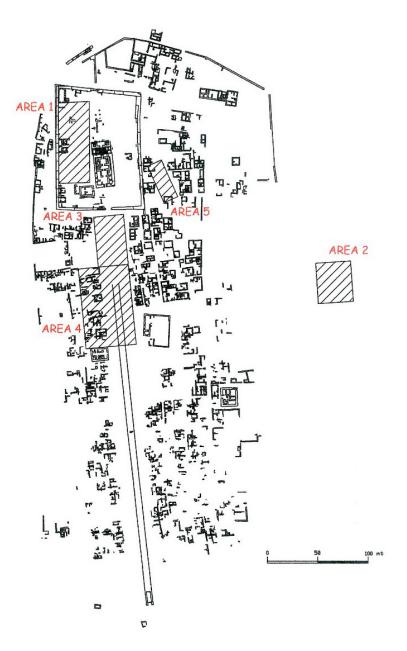


Fig. 11: Magnetic survey plan.