Report on the
Regional Survey in the Governorate of Kafr esh-Sheikh, spring and autumn 2012

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1. Introduction

From May 4 until June 15 and from October 2 until November 14 2012 the Regional Survey in the Governorate of Kafr esh-Sheikh was continued under the auspices of the German Archaeological Institute Cairo.1 Project coordinator is S.J. Seidlmayer. We were kindly supported by the authorities of the Ministry of State for Antiquities. In particular we wish to thank the Director of Antiquities in Kafr esh-Sheikh, Dr. Mohammed Abd el-Rafaa Fadl and our inspectors Mr Khaled Ahmed Abo Elyazed Nayel (spring 2012) and Mr Saad Ibrahim Ibrahim Salama (autumn 2012).

Members of the mission this year were Robert Schiestl (field director), Julia Kaleschke (assistant in the field), André Langer (assistant in the field), Tomasz Herbich (geophysicist), Krzysztof Kiersnowski (geophysical assistant), Marcin Jakub Ordutowski (geophysical assistant), Jürgen Wunderlich (geographer), Andreas Ginau (geographic assistant) and Laura Rembart (Roman pottery specialist). The auger core drilling team consisted of Attya Ghafad, Mohammed Abd el-Gawwar, Wahid Adi and Tawfiq Semain Kheir.

The fieldwork of season 2012 concentrated on areas in the proximity of Buto. The focus was on the region between Buto and Kom el-Gir, about 4 km northeast of Buto (chapters 2 and 3), and on Kom el-Gir proper (chapter 4). In addition, material collected in the past seasons was studied and drawn in the excavation house (chapters 5 and 6).

2. Investigation in fields between Tell el-Fara’in (Buto) and Kom el-Gir

The area lies in fields about 1 km northeast of the eastern edge of the tell of Tell el-Fara’in (Buto). The objective was to investigate linear features visible on an aerial photograph in order to gain information on their nature and date.

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1 Funding for this project has been provided by the Thyssen Foundation.
The work proceeded in three steps: In the spring of 2012 a magnetic survey of the area was conducted. In autumn 2012 auger core drillings followed and a small trial excavation was carried out.

2.1. Background and objective

An aerial photograph of the region, approximately from the year 1955, shows linear features, which seem to form a large angular structure (Fig. 1).\textsuperscript{2} No architectural remains are today visible on the surface. The area lies entirely in fields used for agriculture. To the north of this area five small tells are shown on a Survey of Egypt map from the early 20\textsuperscript{th} century (Fig. 6).

2.2. Magnetic Investigations

From May 12 to May 26 2012 a magnetic survey was conducted in the fields. As the fields were being used for crops, the work was done during the narrow window in time when the fields were empty after the harvest and before they were planted with the next crop. In preparation, the agreement of every farmer was obtained. The work proceeded according to available fields, jumping from one to the next. Fixed points were placed at the bridges to the east and on the concrete base of an electric pole.

For the magnetic prospection a fluxgate-type gradiometer by Geoscan Research, model FM256, 0.1 nT resolution, was used. The variant of the method applied in this area provides the opportunity to register objects situated in near-surface layers, that is not deeper than 0.5 to 4 m, depending on the magnetic susceptibility of the object. The measurement grid applied was 20x20 m, with points every 0.25 m located on measuring lines (of 20 m length) set 0.5 m apart.

An area measuring 5.8 ha was investigated (Fig. 2). In the north and northeast features corresponding to the outline visible on the aerial photograph were detected. They consist of two parallel thin dark lines, set at a distance of approximately 11 to 13 m apart. In the north a slightly rounded corner could be made out, corresponding to the northwest corner of the feature. In the west, south and northeast no clear outlines could be made out. Long and wide

\textsuperscript{2} I am very grateful to Jürgen Wunderlich who provided me with these photographs.
linear features, running roughly north-south, are possibly traces of canals. Their date is unknown.

A working hypothesis was that the dark lines represent the edges of a trench created when a wall was removed by sebakhin. The interpretation of these magnetic anomalies, however, is difficult and remains uncertain. In order to better understand these features, further investigations by auger core drillings and a small test trench in the area where the dark lines are visible was planned for the following season.

2.3. Auger core drillings in the fields north-east of Buto

From October 6 to October 10 2012, seven auger core drillings were executed in the fields northeast of Buto which had been previously investigated by magnetometry (Figs. 2-3). This work was conducted with the help of the geographer Prof. Jürgen Wunderlich and his assistant Andreas Ginau. Auger core drillings nos. 36-40 were undertaken in field 9a, where a strong magnetic anomaly, shown as a dark line on the map, is visible. A borehole was positioned directly in the magnetic anomaly and further ones to the left and right of it. Auger core no. 41 is located in field 3, auger core no. 46 in field 6h (Fig. 4). They were placed inside the area outlined by the angular feature, in order to compare the results with those obtained from the edges of the feature. The auger cores produced homogenous silty clay. At a depth of around 3 to 4 m below the surface a layer with sherds of pottery and shells of mollusks was encountered. This possibly indicates the base of an old lake on which pottery from settlements had been re-deposited. The sherds can be dated to the Graeco-Roman period\(^3\). Pure clay layers were reached beneath this layer, at a depth between 3 and 4.5 m below the surface. The deepest layers consisted of fine sand. No archaeological layer could be identified.

2.4. Trial excavation in the fields northeast of Buto

As auger core drillings did not provide clarification, it was decided to excavate a small test trench. From October 16 to October 27 a square, 10 x 10 m large, was excavated in field no. 9A, covering the area where both the linear feature on the aerial photograph and the magnetic anomaly were prominent (Fig. 5). After removing the top soil, the trench was subdivided into four small squares. Only in the northern two squares Q I, measuring 5 x 5 m, and Q IV,

\(^3\) I thank Peter French and Janine Bourriau for their assistance and comments.
measuring 4.5 x 5m, was the excavation continued. As no cultural layers could be distinguished, it proceeded in layers 5 to 10 cm thick to a maximum depth of 1 m below the surface. The material was homogenous dark brown loam, with strong clayey and slightly sandy components. At a depth of 1 m below the surface the trench was flooded by ground water and the work was ended. The excavation did not show any built or natural feature in the ground which could be identified with the features visible on the aerial photograph and the magnetometry. It remains unclear what these features represent. We do not, however, seem to be dealing with an archaeological feature. Possibly the linear features represent the traces of modern paths and canals, used prior to the reorganization of the field boundaries in the mid 20\textsuperscript{th} century.

3. Investigation of former small tells northeast of Buto

The 1909 edition of the \textit{Survey of Egypt} map\textsuperscript{4} shows a chain of five small tells north east of Buto running in direction of Kom el-Gir (Fig. 6 a). Adjacent to the eastern most site a \textit{qubba} is marked on the map. This site can be identified with a small modern cemetery, grouped around the \textit{qubba} of Mohammed Abu Dabbus, located west of the village of the same name. This \textit{qubba} is already indicated on the map of El-Falaki of 1871. On the map of the \textit{Description de l’Egypte}, a small unnamed site is shown there, marked as “ruins”. The cemetery around the \textit{qubba} of Sidi Mohammed Abu Dabbus measures about 100 x 60 m. The area is mostly flat, but in the south, in the area used by the \textit{qubba} and the surrounding tombs, it rises about 1 m above the surrounding fields. This small modern cemetery of Mohammed Abu Dabbus may represent the last trace of a former tell-site, while the other four sites have disappeared completely and the ground has been converted into fields.

The area was first investigated by a ground survey. This was followed by a series of auger core drillings in order to find out whether traces of ancient tells were still extant beneath the modern surface. The ground survey at the cemetery of Mohammed Abu Dabbus provided some pottery fragments of most likely medieval date. The fields did not show large amounts of pottery. The origin of those sherds which were found is also unclear: Possibly they were brought to the field in the course of manuring with \textit{sebakh} from the nearby site of Buto.

\textsuperscript{4} Sheet VII 1/NW.
3.1. Auger core drilling in area of small tells northeast of Buto

In October 2012 five auger core drillings were undertaken in areas marked as small tells on the Survey of Egypt maps (Fig. 6.b). The locations of the auger cores are the following: No. 42 (31 12 25.4 N/30 45 46.5 E) is at the edge of the cemetery of Mohammed Abu Dabbas, no. 43 (31 12 24.1 N/30 45 47.0 E) in a field just south of this cemetery, no. 44 (31 12 16.6 N/30 45 20.3 E) in the village of Ezbet Demu (Fig. 7 a), no. 45 (31 12 16.2 N/30 45 35.7 E) in a field between the Masraf el-Firawun and the path to Mohammed Abu Dabbas and no. 47 (31 12 13.5 N/30 45 03.2 E) lies next to the path parallel to the Masraf el-Firawun, about 25 m north of the path turning off to Ezbet Demu. The maximum depth of the auger cores was between 4 and 7.7 m.

The auger cores did not provide any evidence for archaeological layers. One explanation could be that ancient layers were entirely removed when these tells were leveled. This has been observed at numerous sites in the survey region of the Roman or Late Roman period, which had been founded at a relatively high level. Another explanation could be, however, that these areas had been mistakenly marked as tells on the map. Possibly the “tells” represented earth heaped up from the construction of a canal, perhaps dating back to antiquity. Such an interpretation might find support by the placement of the sites in a successive arrangement and the location of an old water course just south of the western end of this chain of sites.

4. Work at Kom el-Gir

Kom el-Gir lies about 4 km northeast of Buto. The site is about 20 ha large and not overbuilt by modern constructions. It was previously investigated in spring 2010 by a surface survey and auger core drillings and in autumn 2011 by magnetic prospection. In the autumn of 2011, 4.5 ha were measured in the western part of the site with excellent results. This work was continued in 2012.

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5 The work was accomplished with the assistance of Prof. Jürgen Wunderlich and his assistant Andreas Ginau
8 Third Report, p. 4-9.
4.1. Magnetometric investigation on Kom el-Gir

From October 28 to November 8 the magnetic survey at Kom el-Gir was continued in the central part of the tell, moving east, north and south of the area investigated in 2011. 4.2 more hectares were measured by Dr. Tomasz Herbich and his assistants (Fig. 7 b), bringing the entire area covered so far up to about 9 ha. The results continue to be excellent, providing clear images of the layout of the settlement.

While the western part of the site is dominated by a dense settlement with domestic structures, this changes fundamentally when moving towards the center and the east (Fig. 8). A large rectangular enclosure was discovered. The orientation, like that of the main street grid, is northwest-southeast. The enclosure measures 125 m on the short side and at least 189 m on the long side. The western end of the enclosure is not quite clear, as it is obscured by debris and a second structure, discussed below. The walls have a thickness of 4.3 to 4.7 m. In the southeastern part the wall widens to about 6.5 m. This thickening seems to be due to an addition, attached to the interior of the wall. The area inside the enclosure is quite disturbed and we are thus not able to discern clear outlines of structures inside.

Based on the thickness of the walls and the shape and the size of the enclosure it is most likely a temple enclosure. Possibly a wide strip running perpendicularly towards the northwestern wall of the enclosure can be interpreted as a dromos. As parallels, although on a smaller scale, the temple enclosures of the Ptolemaic temples at Soknopaios Nesos and Tebtynis can be cited.9

Immediately adjacent to this enclosure in the east is the corner of what seems to be a second enclosure, surrounded by a wall fortified with a tower and bastions. The lengths of the wall uncovered so far are 84.8 m southwest-northeast and 42 m northwest-southeast. In the corner there is a rectangular structure protruding from the wall, most likely a tower, measuring about 10.3 x 12.1 m. The walls have a thickness of about 5 m. Again, the interior area is disturbed and nothing can yet be said about its layout. As only a small part of this feature has been investigated, interpretations are only tentative. If the preliminary observations of a fortified structure are confirmed, we are dealing with a Roman fort. Aspects

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of the architecture, such as the absence of rounded corners and the projecting towers, indicate a date of construction after the mid of the 3rd c. AD\textsuperscript{10}.

4.2. **Auger core drilling on Kom el-Gir**

In order to investigate whether the features discovered during the magnetic investigations were walls and in order to see how deep these features were still extant, six auger core drillings were executed on Kom el-Gir on November 10 and 11. The auger cores nos. 48 and 49 were placed inside the walls of the large enclosure, the auger cores 50 and 51 inside the walls of the fortified structure to the southeast. Auger cores 52 and 53 were placed in an easterly extension of the southern fortified wall, in order to test how far this wall continues beyond the area studied by magnetometry. The auger cores were drilled to a depth of 2.5 to 6.6 m. The top layers provided supporting evidence for the existence of a wall made of sun dried mud brick in all six cases. In the case of the large enclosure, the walls are preserved up to a height of over 3 m. In the auger cores 51 and 52, in the southern wall of the southeastern fortified structure, layers filled with limestone chips were also encountered. This layer started at a depth of 5 m below the surface in no. 51. The limestone chips most likely originated from the destruction of limestone monuments, either from this site or a neighboring site. These monuments, or their destruction, may be connected to the name of the site.

5. **Surface finds at Kom el-Gir**

To date 50 diagnostic pieces of pottery from Kom el-Gir have been documented.\textsuperscript{11} They are predominantly of Roman date. In 2012 some additional surface finds were collected, of which a selection is illustrated on Fig. 9. A grinding stone of black stone is shown on Fig. 9.a, two coins and a button, made of copper or bronze, are shown on Fig. 9.b. The base of a faience dish, with a ring base and greenish glaze, is presented on Fig. 9.c, a copper or bronze nail on Fig. 9.d. The base of a dark green footed glass vessel is shown on Fig. 9.e and the rim of a light green colored glass vessel, with a wide slightly curved disc-shaped outer lip, is displayed on Fig. 9.f. A fragment of a base of a dish is presented on Fig. 9.g. It belongs to the


\textsuperscript{11} A selection is shown in *Third Report*, fig. 1;
African Red Slip Ware and is decorated with a stamped design of concentric circles and palm fronds. Fig. 9.h shows the rim of a bowl with an outer ledge handle. All finds can be dated to the Roman period. The African Red Slip Ware (Fig. 9.g) most likely dates to the Late Roman Period.

6. Pottery study in the dig house

The documentation of ceramic sherds collected in the past three seasons of surveying continued in 2012. Approximately 150 fragments of diagnostic pottery from the sites of Abiuqa, Kom el-Asfar, Mohamed Abu Dabbas, Tell el-Daba-Shaba, Kom Dubaba, Kom el-Gir, Kom Abu Heitan, Kom Abu Khobesa/Abu Nahas, Ezbet Noweish, Kom el-Qanai, Kom el-Roka, Kom Sidi Salem, Shabas esh-Shuhada, Senhur el-Medina, Shabas Umayyir and Shinnu were drawn and analyzed at the house. The pottery dates predominantly to the Roman and Late Roman/Byzantine period. Some examples are Early Islamic and Medieval. A small group of fragments of Early Islamic and Medieval glazed wares was found and is shown on Fig. 10.12 Two Early Islamic bowls are illustrated on Fig. 10 a and b. The fragment displayed on Fig. 10 a was found at Shinnu. It is part of a bowl, with a simple rim, made of glazed Aswan ware. It displays a yellowish glaze on the inside and a light brown colored stripe on the outside, beneath the rim. The sherd shown on Fig. 10 b was found at Abiuqa. It is part of the rim of an almost straight walled open vessel. This glazed Aswan ware has a brownish glaze on the inside and outside on the rim, with some brown color running down on the outside. The exterior has otherwise a whitish color. These vessels are to be dated to the 8th-9th c. AD (Fig. 10 a) and the 8th-10th c. AD (Fig. 10 b). The sherd found at Kom Abu Khobesa/Abu Nahas is shown on Fig. 10 c. This is the fragment of a rim of a flaring bowl with a flat triangular outer lip. It belongs to the “Fayumi-Ware” and can be dated to the 10th-13th c. AD. It is covered with a brownish glaze on the inside, with a dollop of yellow on it. The glaze laps over the rim to the exterior lip.

Some further examples of Islamic and Medieval pottery were found, but the entire group is small. Shinnu and Kom Abu Khobesa/Abu Nahas were Roman foundations, which, based on the finds of surface pottery, flourished in the Late Roman period. These pieces suggest some form of settlement continuity at these sites in the Early Islamic and medieval periods.

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12 I am indebted to Gillian Pyke and Julie Marchand for their comments.
Fig. 1: Aerial photograph of Buto (Tell el-Fara'in), ca. 1955. The investigated area lies to the northeast of Buto and is marked by the black oval.

Fig. 2: Results of the magnetometric measurements in May 2012, in the fields northeast of Buto. The white lines marks the approximate outline of the feature visible on the aerial photograph above.
Fig. 3: Magnetic prospection in fields between Buto and Kom el-Gir.

Fig. 4: Borehole no. 46 in fields between Buto and Kom el-Gir
Fig. 5: Excavating test trench 1 in fields between Buto and Kom el-Gir

Fig. 6 a: Area between Tell el-Fara‘in (Buto) and Kom el-Gir, as shown on Survey of Egypt maps, (VI-1 NW, 1913; VI-2 NW, 1913; VII-1 NW, 1909 and VII-2 NW, 1916; original scale 1:50,000); area in rectangle is shown in detail on Fig. 6.b.
Fig. 6 b: Detail of map above, showing the location of boreholes nos. 42-45 and 47

Fig. 7 a: Borehole no. 44 in Ezbet Demu
Fig. 7b: Magnetic measurements on Kom el-Gir

Fig. 8: Results of magnetic measurements of autumn 2012 combined with results of season 2011
9.a. S 12/1: grinding stone

9.b. from left to right: M 1/2012: coin, bronze, corroded
M 2/2012: button?, bronze, corroded
M 1/2011: coin, bronze, corroded

9.c. 12/30: base of faience dish


9.e. 12/22: footed base of small glass vessel

9.f. 12/21: rim of small glass vessel

9.g. 11/16: fragment of base of dish,
pottery, stamped decoration, red burnished
surface

9.h. 12/15: rim of bowl with ledge handle,
Nile, surface plain

Fig. 9. Surface finds from Kom el-Gir
Fig. 10.a. Shinna. Glazed Aswan Ware, Early Islamic, 8th-9th c. AD

Fig. 10.b. Abinaq. Glazed Aswan Ware, 8th-10th c. AD

Fig. 10.c. Korn Abu Khebesi/Abu Nahas, Fayumi-Ware, Early Islamic-Medieval, 10th-13th c. AD

Fig. 10: Fragments of early Islamic and medieval glazed wares. Drawings 1-3