# The Asyut Project: Sixth Season of Fieldwork (2008)

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Abstract

The sixth season of fieldwork in the ancient necropolis of Asyut (Gebel Asyut al-gharbi) focused on Level 7 including the forecourt of Tomb N13.1, Tomb V, Tomb N11.1, the Tomb of the Dogs, surveying Level 3 to 5 (from Tomb I up to Tomb III) and the mapping of the necropolis.

From 19<sup>th</sup> August to 25<sup>th</sup> September 2008 the Egyptian-German joint mission of Sohag University and the Johannes Gutenberg-Universität Mainz conducted its sixth season of fieldwork<sup>1</sup> in the ancient necropolis of Asyut situated in the western mountains (Gebel Asyut al-gharbi).<sup>2</sup> In addition, the mission studied objects in the magazine at Shutb from 19<sup>th</sup> August to 25<sup>th</sup> September 2008.<sup>3</sup>

Fieldwork focused on Level 7 including the forecourt of Tomb N13.1, Tomb V, Tomb N11.1, the Tomb of the Dogs, surveying Level 3 to 5 (from Tomb I up to Tomb III) and the mapping of the necropolis.

Mapping of the necropolis (Fig. 1) continued surveying the middle part of Gebel Asyut algharbi. The survey helped clarify the position of a dogs' tomb which was mentioned by early travelers (cf. below). In addition, a small concentration of cat bones on Level 5 was observed.

Work also continued in Tomb V. While carrying away more than four metres of standing debris, small parts of wall decoration were detected.

Tomb N11.1 was partly cleaned for use as a magazine for the mission's equipment after closing the gebel. Tomb N11.1 consists of a row of three pillars and five shafts as well as an unfinished shaft. Based on a naming mistake by H.W. Müller, this undecorated tomb was erroneously named Tomb of Iti-ibi in Egyptology.<sup>4</sup>

<sup>1</sup> During the fieldwork we received full cooperation and encouragement from the Supreme Council of Antiquities. Thanks are due in particular to the Chairman, Prof. Dr. Zahi Hawass, to the Head of the Archaeology Sector, Mr. Sabry Abdel-Aziz, to the Director General of Asyut, Mr. Abd El-Satar Ahmed Mohamed, and to the Head of the Foreign and Egyptian Missions Affairs and Permanent Committee, Mr. Magdy el-Ghandour. We also thank R.S. Curtis and R.B. Parkinson for correcting our English.

<sup>2</sup> For previous work cf.: J. Kahl/M. El-Khadragy/U. Verhoeven, in: SAK 37, 2008, 199–218 with further literature in n. 1; M. El-Khadragy, in: SAK 37, 2008, 219–241; J. Kahl/U. Verhoeven, in: Sokar 16, 2008, 68–73; J. Kahl, in: ZÄS 135, 2008, 180–182; U. Verhoeven, in: D. Kessler et al. (eds.), Texte – Theben – Tonfragmente. Festschrift

für Günter Burkard, ÄAT 76, 2009, 434-441; U. Verhoeven, in: ZÄS 136, 2009 (in print).

<sup>3</sup> Members of the mission were: Prof. Dr. Mahmoud El-Khadragy, Sohag University, field director; Prof. Dr. Jochem Kahl, University of Mainz, field director; Prof. Dr. Ursula Verhoeven, University of Mainz, project director; Prof. Ahmed Ali El-Khatib, University of Sohag, botanist; Dr. Sameh Shafik, epigrapher; Dr. Hesham Faheed Ahmed, Egyptologist; Dr. Abdel-Naser Yasin, Islamic studies; Dipl. Ing. Manja Maschke, surveyor; Meike Becker, M.A., Egyptologist; Nadine Deppe, M.A., archaeologist; Chiori Kitagawa, M.A., zooarchaeologist; Magdalena Patolla, M.A., anthropologist; Monika Zöller-Engelhardt, M.A., Egyptologist; Hytham Aly Madkour, Egyptologist; Ibrahim Kedees, Egyptologist; Mohamed Al-Shafey, Egyptologist; Mohamed Helmi, Egyptologist; Yasser Mahmoud, Egyptologist; Eva Gervers, student of anthropology, Andrea Kilian, student of Egyptology; Laura Sanhueza-Pino, student of Egyptology; Veronika Wagner, student of Egyptology, Ammar Abu Bakr, draughtsman. The accompanying inspectors were: Mr. Emad Bostan Ata, Madame Nadja Naguib and Mr. Ahmed Abd-Alrahim Abd-Almagid.
<sup>4</sup> E.g. D. Wildung, Sesostris und Amenemhet: Ägypten im Mittleren Reich, 1984, 154.

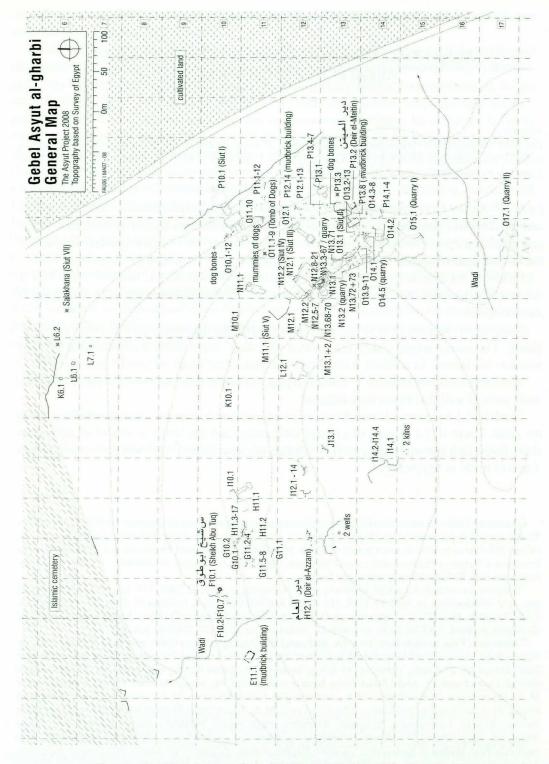


Fig. 1: Map of Gebel Asyut al-gharbi (Manja Maschke/Ulrike Fauerbach)

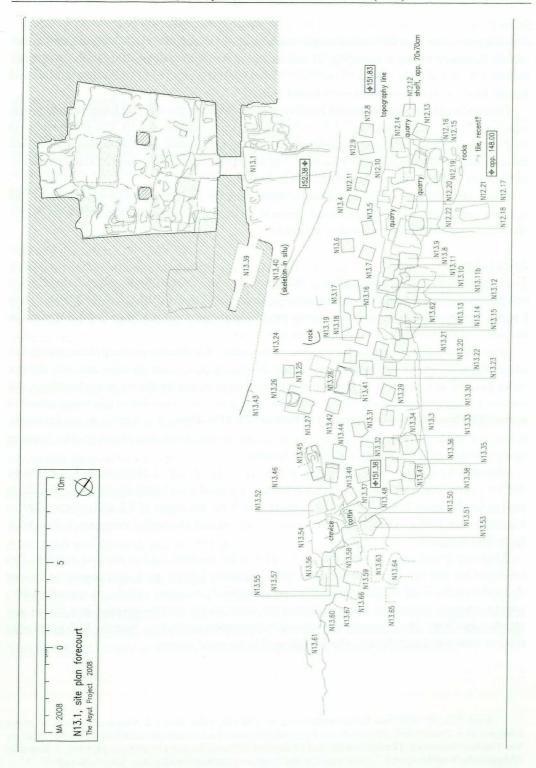


Fig. 2: Level 7, Tomb N13.1, site plan (Manja Maschke)

#### Level 7

Cleaning of Level 7 to the south brought some small Old Kingdom/First Intermediate Period/Middle Kingdom tombs to light (Fig. 2) and increased the number of small structures which are known in front and to the south of Tomb N13.1 from 49 (last season) to 67 (this season). Male and female adults as well as children were buried there.

The tombs can roughly be divided into two groups: tombs of the late Old Kingdom and tombs which might be contemporaneous to Tomb N13.1 (i.e. temp. Mentuhotep II). The first mentioned tombs consist of a vertical shaft, sometimes opening out into a small chamber which is hewn into the western and/or southern wall of the shaft. The last mentioned tombs consist of a small horizontal chamber in which one or two vertical shafts are cut.

Roads, paths or steps which could help to understand the ancient system of ways on level 7 of the necropolis have not yet been found. Ancient quarrying activities in front of Tomb N13.1 destroyed possible hints for stairways or ramps.

#### Tomb I (P10.1)

The restorers Mr. Ahmed Abd-Aldayem Mohamed, Mr. Hellal Okeli Atalla, Mr. Khaled Gomaa and Madame Abir Mohamed Ali Mosa cleaned paintings in Tomb I (P10.1; Tomb of Djefai-Hapi I, temp. Sesostris I). Due to their restoration work hitherto unknown paintings and inscriptions in the first corridor could be studied and facsimiles made.

Also a facsimile of Mortuary Liturgy no. 7 was made.<sup>5</sup> The Mortuary Liturgy was intended to secure the tomb owner's existence after death. In opposition to funerary texts, this text did not serve the dead as a text to be read in the hereafter, but was meant for the use of the living, i.e. the mortuary priest performing the rites in the tomb.<sup>6</sup> The only known parallel to this text is recorded in the 18th Dynasty tomb of Senenmut in Thebes (TT 353). There, it is written on the East wall, either side of the entrance, thus situated on a wall of the accessible cult chamber. This location might correspond to the liturgy's actual use in ritual.<sup>7</sup>

Mortuary Liturgy no. 7, as far as it is preserved in the Tomb of Djefai-Hapi I, consists of different parts. Some of them are already known as Pyramid Text Spells 94–95 and 220–222 as well as Coffin Texts Spells 723 and 751; others – with the exception of TT 353 – were hitherto unknown. It is highly probable that the whole composition of Mortuary Liturgy no. 7 dates back to the Old Kingdom.

Mortuary Liturgy no. 7 covers the eastern part of the northern wall of the first passage. The ceiling of the passage is painted with blue stars. Mortuary Liturgy no. 7 superimposes a former decoration in the Tomb of Djefai-Hapi I. Traces of pictorial decoration and of texts are still visible; among others, a sculptured scene depicting the tomb owner's statue situated in a shrine and standing in a boat. The reason for this change in decoration might have been the high prestige to refer to such a mortuary liturgy which originated in the royal sphere.

<sup>&</sup>lt;sup>5</sup> J. Kahl, S1S 380–418: Eine Textid entifizierung, in: GM 139, 1994, 41–42; J. Assmann, Egyptian Mortuary Liturgies, in: S. Israelit-Groll (ed.), Studies in Egyptology Presented to Miriam Lichtheim I, 1990, 23; P.F. Dorman, The Tombs of Senenmut. The Architecture and Decoration of Tombs 71 and 353, PMMA 24, 1991; J. Assmann, Altägyptische Totenliturgien I: Totenliturgien in den Sargtexten des Mittleren Reiches, 2002, 469–515.

<sup>&</sup>lt;sup>6</sup> Assmann, Mortuary Liturgies, 2.

<sup>&</sup>lt;sup>7</sup> Assmann, Mortuary Liturgies, 23.

During the work in the magazine at Shutb, progress could be made in studying and drawing small objects from the previous seasons, especially shells, offering trays, cartonage and coffin fragments. A part of the plant remains was also studied (cf. below: Ahmed El-Khatib).

J.K./M.Kh.

## Tomb N13.1: graffiti

During this year the hieratic graffiti from the New Kingdom continued to be collated and measured. Examination confirmed the reading of the name of the author of the Loyalistic Teaching as the vizir Kaïrsu, who is known from P. Chester Beatty IV and a Saqqara relief. A systematic inventory list was made of the almost 50 secondary drawings and carvings, identifying several groups of motifs such as gods (a head of Hathor in red ink), persons, mammals, ships and miscellaneous others.

U.V.

## Tomb of the Dogs

Gebel Asyut al-gharbi was used in different ways during the last five millennia: e.g. as a necropolis for Asyuti people (since the Old Kingdom at the latest), as a quarry (since the Middle Kingdom at the latest), as a destination for school excursions (during the New Kingdom), as a dwelling room for anachoretes (Coptic Period), as a construction area for monasteries (Coptic Period), and as a military area (in modern times).

To reconstruct the different functions of Gebel Asyut al-gharbi and its changes, its use as an animal necropolis has also to be examined. Old travelogues report on burials or mummies of animals. <sup>10</sup> Even today, mummified remains are lying on the surface of Gebel Asyut al-gharbi.

Surveying Gebel Asyut al-gharbi for animal remains will help to determine those parts of the gebel, where animals were buried. In addition, it is to be expected that there were different burial grounds for different animals. This season's aim was to determine the exact position of a dog/jackal necropolis, especially of a large dogs' tomb. Old travelogues, as well as local people, gave us information not only about the existence but also about the location of this tomb, so a survey should add further circumstantial evidence for its exact position (cf. below: Chiori Kitagawa).

According to old travelogues, one can distinguish two large dogs' tombs. One should be situated in the area between Tomb I and Tomb IV, the other near the Salakhana Tomb. The last mentioned dogs' tomb was detected only in 1889, the former one seems to have been visible and accessible a long time ago, but is currently completely hidden by surface debris caused by heavy rainfalls during the second half of the Twentieth Century AD.

During the Eighteenth Century, travellers reported on animal mummies in Gebel Asyut algharbi. In 1792, the English traveller William George Browne, noted burials of dogs, ibises, and cats. He also questioned the reason of this burial custom. He concluded that either the animals were thought to be holy or that they should accompany their owners in the beyond:

<sup>8</sup> Two individual graffiti on the west wall are now published by U. Verhoeven, in: D. Kessler et al. (eds.), Texte – Theben – Tonfragmente. Festschrift für Günter Burkard, ÄAT 76, 2009, 434–441.

<sup>&</sup>lt;sup>9</sup> U. Verhoeven, in: ZÄS 136, 2009, 87–98.

<sup>&</sup>lt;sup>10</sup> M. Becker, in: J. Kahl, Ancient Asyut: The First Synthesis after 300 Years of Research, The Asyut Project 1, 2008, 148-149.

W.G.Brownes Reisen in Afrika, Egypten und Syrien, in den Jahren 1792 bis 1798. Aus dem Englischen übersetzt und mit Anmerkungen versehen von M.C. Sprengel (Berlin – Hamburg 1801) 107–108:

In dem Gebürge oberhalb Assiût giebt es verschiedene merkwürdige Hölen, die sehr geräumig, zugleich auch mit Hieroglyphen und emblematischg, Figuren verzieret sind. Einige scheinen Grabmälen gewesen zu seyn, denn man findet daselbst noch einige Ueberbleibsel von jenen irdenen Gefäßen, in welchen man den Leichnamen nicht nur Ibisse, sondern auch Hunde, Katzen, und andere dergleichen Thiere beyzusetzen pflegte, entweder weil man dieselben für heilig hielt, oder sie deswegen umbrachte, damit sie ihren abgeschiedenen Gebietern, oder Gebieterinnen, in jener Welt Gesellschaft leisten sollten. In einer dieser Hölen sind, außer dem Eingange, drey in den aus Quadersteinen bestehenden Felsen gehauene Zimmer befindlich, von welchen das erste sechszig Fuß lang und dreyßig Fuß breit, das zweyte sechszig Fuß lang und sechs und zwanzig Fuß breit, das dritte aber nur sechs und zwanzig Fuß lang, und fünf und zwanzig Fuß breit ist. Weiter oben auf dem Gebirge giebt es einige andere Hölen, die noch geräumiger sind als die oben erwähnten.

In andern Gegenden dieses nämlichen Gebürges siehet man viele bloß aus dem Gröbsten gearbeitete Höhlungen, die ehedem Steinbrüche waren, deren man sich aber nachmals zu andern Absichten bediente. Einige gebrauchte man zu Grabstätten, wie sich aus verschiedenen noch vorhandenen Aschenkrügen schließen lässt, die auf eine ganz besondere Art mit Erdharz verpicht sind; andere die auf der Nordseite lagen, und folglich sehr kühl waren, mochten zu Sommerwohnungen gedienet haben.

In 1799, the French Expedition systematically surveyed Gebel Asyut al-gharbi for the first time. In addition to describing monumental tomb architecture, the civil engineers René Edouard Devilliers du Terrage and Jean Baptiste Prosper Jollois also mentioned remains of wolfs/jackals, cats, predatory birds, and eventually monkeys:

Devilliers/Jollois, in: Description de l'Égypte. Tome quatrième, Antiquités-descriptions (Paris 1821) 153-154:

Dans tous les hypogées de Syout, on voit un grand nombre de cases où les momies étaient autrefois renfermées. Nous avons meme trouvé, dans plusieurs, des fragmens de ces momies, particulièrement de loups ou de chacals, de jeunes chats, ainsi que d'oiseaux de preie qui avaient encore leurs plumes ... Il nous mena vers le bas de la montagne dans un endroît où il avait fait un trou dans le décombres, et nous y vîmes une grande quantité de momies d'animaux presque toutes brisées et déposées par lits horizontaux entre des nattes. Nous avons rapporté quelques-unes de ces momies, parmi lesquelles il y avait des oiseaux de proie, des chats, peut-être aussi des singes. La plupart étaient des chacals ou des loups.

The difficult distinction between wolfs, jackals and dogs often hindered the correct zoological identification of the canine remains.

During the Nineteenth Century, several travellers mentioned animal remains at Asyut in their travelogues. In 1826, Edward William Lane described rudely cut grottoes in which mummies of jackals, birds and other animals were found:

Edward William Lane, Description of Egypt. Notes and views in Egypt and Nubia, made during the years 1825, —26, —27, and —28: Chiefly consisting of a series of descriptions and delineations of the monuments, scenery, &c. of those countries; The views, with few exceptions, made with camera-lucida. Edited and with an introduction by Jason Thompson (Cairo 2000) 268:

Many of the grottoes here are very rudely cut; and evidently have never been adorned with sculptures. Most of the larger excavations contain square pits, descending to sepulchral chambers, which have all

been ransacked. At the mouth of one of these I saw several mummies, broken in pieces: they were human mummies; and to such, most probably, these tombs were chiefly devoted; but mummies of jackals and other beasts and birds have been found in them. Some, and perhaps all, of these grottoes will soon be entirely destroyed. I found workmen employed in blasting the rock, at the entrances of several of the ancient excavations.

# John Gardner Wilkinson also referred to animal remains:

Gardner Wilkinson, Modern Egypt and Thebes: being a description of Egypt (1843) 87:

In the smaller caves and excavated recesses of the rock in various parts of this mountain, the remains of wolf mummies are frequently met with; which is perfectly consistent with the fact of the wolf having been the sacred animal of the place, and with the name given to the town by the Greeks.

### Id., ibid., 88:

On the lower part of the hill are five standing statues, in high relief. Many of the burnt bones I observed were of wolves; and it is probable that most of the smaller caves were intended for depositing the mummies of those sacred animals of Lycopolis, which have since been purposely or accidentally burnt.

In 1848, an anonymous American traveller wrote about mummies of dogs, jackals, and wolves – inspired by Asyut's Greek name Lykopolis, he thought, as many other travellers did, that the wolf was also worshipped in Asyut:

(Anonymous), Journal of a Voyage up the Nile, made between the months of November, 1848, and April, 1849. By an American (Buffalo 1851) 46–47:

Here was the capital of the Lycopolite nome, where the worship of the wolf and mummies was kept up—some say the dog, but doubtless it was the jackal, partaking of the nature of both. The paintings on the tombs abound with representations of them, and the pits are filled with their mummies; a strange and sickening idolatry, which Egyptian scholars, who conceive idolatry was only symbolical, may well note. It was the worst specimen of animal worship. Wolves and jackals abounded here, and were the curse of the people; they feared them, and worshipped them.

#### Id., ibid., 49:

Here, in earlier times, even in such beauty of nature, men worshipped and embalmed the wolf, and the dog, and the jackal, because they feared them as the destroyers of their flocks.

Referring to animal mummies which lay tumbled about among the rocks, Florence Nightingale, in her unique metaphorical manner, described the plundering of the Asyut necropolis in 1849:

Florence Nightingale, Letters from Egypt. A Journey on the Nile 1849–1850. Selected and Introduced by Anthony Sattin (London 1987) 63:

Numbers of heads and tails of mummy-jackals were lying about their rags, — for Lycopolis was sacred to Anubis, a jackal-headed god, who was the god of Death in its good sense, — death in the sense of regeneration and resurrection. It was his office to preside over the dying moments, to carry away the escaping Psyche from the bed of death to the presence of his father Osiris, whose name the new-born wuxy then took, and under which name it entered Paradise. Anubis was, in the same sense, the god of Time. But Time itself now lay dead; and the mummies, so carefully put under his protection, all lay tumbled about among the rocks. It was curious to see these things, to which a reverence for life, or even for where life had been, under any form, had given birth, — a reverence so great that, even in the animal, life was sacred, — to see now, not only the mummy-animals, but even the skeleton of a human being, a young woman, 5000 years ago so reverentially cared for, now handled by our childish Arabs, pulled to pieces, and thrown at one another's heads.

Several scholars and travelers referred to mummified animals at Asyut during the following decades. <sup>11</sup> Although travelers had reported on animal mummies but not precisely on animal tombs, the German Egyptologist, Heinrich Brugsch, was the first to give a clue to the existence of a large dogs' tomb and its location. In 1853 he visited Asyut and saw a large dogs' tomb in the vicinity of the tomb of Djefai-Hapi I (Tomb I; P10.1).

Heinrich Brugsch, Reiseberichte aus Aegypten. Geschrieben während einer auf Befehl Seiner Majestät des Königs Friedrich Wilhelm IV. von Preussen in den Jahren 1853 und 1854 unternommenen wissenschaftlichen Reise nach dem Nilthale (Leipzig 1855) 102:

Die erhaltenen Inschriften [in Grab I; Anm. J.K.] belehren mich, dass die Stadt, zu welcher die Nekropolis gehörte, wie noch jetzt, so auch im grauesten Alterthume Siut hiess. Sie war dem schakalköpfigen Gott Tap-heru [d. i. "dem Wächter der Strassen"] gewidmet und ihr waren Hunde, Schakale und Wölfe heilig, woher denn auch ihre griechische Bezeichnung Lykopolis, "Wolfsstadt" stammte. Dieses mächtige Grab, in dessen Nähe sich eine Grotte mit Thiermumien der obenbezeichneten Thierclasse befindet, nennen die Eingeborenen Antar's Stall.

Twenty-eight years later, Crown Prince Rudolf of Austria also localized the burial place of dogs to this area: 12

Kronprinz Rudolf von Österreich, Eine Orientreise. I. Band (Wien 1881) 209-210:

Ossiut, die größte und ansehnlichste Stadt Ober-Egyptens, führt ihre heutige Bezeichnung nach dem alten Namen Siaut, eine schakalsköpfige Gottheit (Anubis) hatte hier einst ihre Tempel und Altäre. Sämtliche Thiere vom Hundegeschlecht waren ihr geweiht, vor allem der Wolf, daher die griechische Benennung der Stadt Lykopolis, "die Wolfsstadt". In den Höhlen des hinter Ossiut liegenden Gebirges, das einen Vorsprung der lybischen Gebirgskette bildet, werden noch heute die wohl einbalsamirten Körper der erwähnten Thierclasse aufgefunden, in dichter Nähe berühmter Grabkapellen, welche aus den Zeiten der XIII. Dynastie herrühren (um 2200 vor Chr. Geb.) und vornehmen Hofbeamten der erwähnten Epoche angehörten.

In 1889, an excavation conducted by Mohamed Halfawee brought to light a dog/jackal necropolis close to the Tomb of another Djefai-Hapi (not Tomb I and II). It seems quite plausible that Djefai-Hapi III, owner of the Salakhana-Tomb, is this person. The American businessman and traveller Charles Edwin Wilbour (1833–1896) reported on this excavation:

Jean Capart (ed.), Travels in Egypt [December 1880 to May 1891]. Letters of Charles Edwin Wilbour (Brooklyn N.Y. 1936) 528:

March 22, 1889 ... Omar told me of new work in the mountain and took me after noon to a considerable excavation, quite grandiose, which Mohammed Halfawee, with permission from Grébaut, was making. It is only a few rods north of the end of the causeway, perhaps one third of the way to the cemetery, and thirty or forty feet up. A narrow way cut through rock leads to an open place, on the north side of which are two rock chambers, the door of the farthermost being inscribed in the name of

<sup>&</sup>lt;sup>11</sup> (Anonymous), Journal of a Voyage up the Nile, made between the months of November, 1848, and April, 1849. By an American, 1851, 46–47; Aegypten. Reisebilder aus dem Orient. Dem Hochgebornen Herrn Grafen Joseph Breunner hochachtungsvoll gewidmet, nach der Natur gezeichnet und herausgegeben von Ludwig Libay, 1857: L. Libay; neu herausgegeben von D. Magdolen 2006; G. Ebers, Aegypten in Bild und Wort dargestellt von unseren ersten Künstlern beschrieben von Georg Ebers, Bd. 2, 1880, 205; P.F. Kupka, Wiener "Papyri". Skizzen aus Jungund Altaegypten, 1894, 138–139.

<sup>12</sup> Rudolf from Austria referred to tomb chapels, which were dated to Dynasty 13 during his time (e.g. Tomb I).

the same Hap-jef whose two tombs have been a wonder for many years. <sup>13</sup> Why two? And now it is, Why three? Two or three broken steles have been found and an offering table with name of Hap-jef. Digging is only begun on the north side of the place. Above six feet of sand is a four or five foot layer of jackal mummies in pots, some of which are ornamented. Their shape and decoration is wonderfully varied. One had a face with protruding tongue; many had raised work. I remember too, a hawk-headed Sphinx with the beginning of a Demotic inscription. To finish the work Mohammed Halfawee thinks would take two hundred pounds.

Sophie Rohe, who also travelled in 1889 with a Boston family to Asyut, corroborated Wilbour's report:

Sophie Rohe, Drei Monate in Egypten. Reiseerinnerungen, (Kaiserslautern 1892) 54:

Immer noch an Mumienteilen vorbei schritten wir wieder bergab und kamen zu einem erst entdeckten Grabe, mit dessen Bloßlegung man gerade beschäftigt war. Gerne hätten wir der Eröffnung eines Raumes beigewohnt, den seit mehr als 3000 Jahren vielleicht kein menschlicher Fuß betreten; aber trotzdem man die Thür schon sah, musste erst der aus Schutt und Hundsmumien in Vasen bestehende Hügel vorn und darüber sorgsam abgetragen und eine Kommission von Kairo abgewartet werden, ehe man das Geheimnis ergründen konnte. So gingen wir denn unseres Weges weiter, froh, wenigstens einige gerade ans Licht beförderte Väschen und Näpfchen als Andenken erhandelt zu haben.

Summarizing the old travelogues, two large burial places for dogs/jackals can be roughly located. The one situated near Tomb I, the other near the Salakhana-Tomb.

The Asyut Project started this season to clarify the exact position of this Tomb of the Dogs which is situated near Tomb I. According to information from local people, a large architectural structure with dog burials was visible between Tomb I and Tomb IV several decades ago, which confirmed Brugsch's localization of the Tomb of the Dogs. Consistent with these sources, the tomb must be situated on level 4 in Gebel Asyut al-gharbi.

Surveying this area in a wider radius attested to its position on level 4 (cf. below: Chiori Kitagawa). The tomb is buried by several meters of debris which seems to have been caused by rainfall.

Among the objects found during the survey in the debris of the Tomb of the Dogs, a lotiform chalice fragment (Fig. 3; S08/st751) must especially be mentioned. The preserved rim fragment of a blue-green faience chalice allows us to reconstruct the decoration of the upper part of the vessel. It has a block border, sepals and petals, and in the gaps, papyrus. Similar vessels are known from the late New Kingdom and the Third Intermediate Period and especially worth mentioning for comparison is the lotiform chalice Louvre E 11349 bought in Cairo in 1913. 14

Some lotiform chalices are said to be from Hermopolis, because they were purchased in the late Nineteenth Century at Tuna el-Gebel. <sup>15</sup> The Asyut chalice fragment raises the question of whether there could have possibly been a faience workshop at Asyut.

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<sup>13</sup> I.e. Tomb I and Tomb II.

<sup>14</sup> G.A.D. Tait, in: JEA 49, 1963, pl. XIII.1.

<sup>&</sup>lt;sup>15</sup> F.D. Friedman (ed.), Gifts of the Nile. Ancient Egyptian Faience, 1998, 224.



Fig. 3: Faience chalice (S08/st751)

The fauna materials from the surface survey in the central part of the Gebel Asyut al-gharbi<sup>16</sup> Although the study of animal remains in Egyptian archaeology has gradually increased since the 1980s, there are several debatable issues which still need answering. One of these issues is the canine gods, i.e. Anubis, Khenty-Imentiu, Duamutef, Sed and Wepwawet, which were worshipped in ancient Egypt.<sup>17</sup> The animal species depicted in ancient Egyptian representations sometimes puzzle us since ancient Egyptian artisans tended to follow a conventional, somewhat stylised method of representation. Although the jackal is, for instance, often associated with the god Anubis, its identity is disputed, as indeed it is for others with several previous researchers' suggestions ranging between dog, wolf, jackal or fox.<sup>18</sup> Two of such gods, namely Wepwawet (Upuaut) and Anubis, were worshipped in ancient Asyut (s3wti, Lycopolis). They are known as canine gods; however from their depictions, it is hard to identify which canine species were concerned.<sup>19</sup>

<sup>16</sup> The author would like to thank to A. von den Driesch (Munich) for her valuable comments on this paper and J. Peters (Institut für Paläoanatomie und Geschichte der Tiermedizin, Ludwig-Maximilians-Universität München) for his kind advice and support on zooarchaeological work on the site.

<sup>17</sup> Cf. D. Kessler, in: LÄ VI, 575–587, s.v. Tierkult; D. Kessler, Die heiligen Tiere und der König I: Beiträge zu Organisation, Kult und Theologie der spätzeitlichen Tierfriedhöfe, ÄAT 16, 1989, 18–34, 106–107, 171–172, 257–277, fig.1; T. DuQuesne, The Jackal Divinities of Egypt I: From the Archaic Period to Dynasty X, 2005; T. DuQuesne, Anubis Upwawet, and Other Deities: Personal Worship and Official Religion in Ancient Egypt, 2007.

<sup>18</sup> Cf. J. G. Wilkinson, Manners and customs of the ancient Egyptians III, 1837, 157–161, 258, 274–279; Davies, Ptahhetep and Akhethetep, 18, pl.VI; E. Meyer, in: ZÄS 41, 1904, 97–107; L. Lortet/C. Gaillard, La faune momifiée de l'Ancienne Égypte, 1905, 249–250; Abydos, 108–110; Emery, Archaic Egypt, 127; W.J. Darby/P. Ghalioungui/L. Grivetti, Food: The Gift of Osiris I, 1977, 245–246; D.A. Mackenzie, Egyptian Myth and Legend, 1978, 75; D.J. Osborn/I. Helmy, The Contemporary Land Mammals of Egypt (Including Sinai), Feldiana Zool. N.S. 5, 1980, 367; E. Brunner-Traut, Die Alten Ägypter, 1974, 160, fig. 52; D.J. Osborn, The mammals of Ancient Egypt, 1998, 56, 68, 75–79; M. Rice, Swifter than the Arrow. The Golden Hunting Hounds of Ancient Egypt, 2006, 125–180.

<sup>19</sup> Cf. N. Durisch, in: BIFAO 93, 1993, 210.

Mummified canine as well as other different animal species, such as cattle, cat, ibis and birds of prey, from Asyut were sporadically reported in previous studies.<sup>20</sup>

Successive fieldwork in Gebel Asyut al-gharbi, therefore, may be able to give us an opportunity to reconstruct not only the usage of canine species but also the comprehensive human-animal interactions in Gebel Asyut al-gharbi in the past.

#### Methodology

In this season the surface survey, particularly focusing on animal remains and pottery, was conducted in the central part of Gebel Asyut al-gharbi (Fig. 4). A great number of fauna remains and other artefacts were scattered on the surface. They would have been derived from different past human activities such as the reuse of the pharaonic necropolis by Copts,<sup>21</sup> the plundering and perhaps past explorations.<sup>22</sup> Animal remains may also have been derived from food refuse littered by people who used/lived in the gebel in the past. The main aim of the survey in 2008 was not only to corroborate the location of Tomb of the Dogs in the gebel whose locus was roughly known but also to study archaeozoological and recent animal remains that help us to understand the history of the site. It was, therefore, chosen to include the area of concentration of animal remains scattered on the surface of the ground.

In order to distinguish the differences in frequencies and species among scattered animal remains, the area was divided horizontally into four different levels (level 3a, 3b, 4 and 5)<sup>23</sup> and also vertically into two parts (survey line 1, 2 and 3, fig. 4).

<sup>&</sup>lt;sup>20</sup> Cf. Jollois/Devilliers, in: Description de l'Egypte, 153; Wilkinson, Manners and customs, 27; G. Ebers, Cicerone durch das alte und neue Ägypten. Ein Lese- und Handbuch für Freunde des Nillandes II, 1886, 162–163; L. Lortet/C. Gaillard, La faune momifiée de l'Ancienne Ègypte II, 1909, 259–286; C. Gaillard, in: ASAE 27, 1927, 33–42; Kessler, Die heiligen Tiere, 22; S. Ikram/N. Iskander, Non-Human Mummies, 2002, CG 24048–24056; 29504–29903 (selected); 51084–51101; 61089, 2002, 4; Becker, in: Kahl, Ancient Asyut, 148.

<sup>&</sup>lt;sup>21</sup> Cf. J. Clédat, in: ASAE 9, 1908, 213–223; É. Chassinat/Ch. Palanque, Une campagne de fouilles dans la nécropole d'Assiout, MIFAO 24, 1911, 2–3; M. El-Khadragy/J. Kahl, in: SAK 32, 2004, 234.

<sup>&</sup>lt;sup>22</sup> Cf. Kahl, Ancient Asyut, 28-29.

<sup>&</sup>lt;sup>23</sup> Although they corresponded approximately to the geological stages, level 3 was divided further in two parts, 3a and 3b, for the convenience of separating the relatively wide area of level 3. Horizontal levels for the survey corresponded with the geological layers along which rock-cut tombs were hewn in antiquity (cf. R. Klemm/D. Klemm, Geological Report (on occasion of a visit at Gebel Asyut in 2005), 2006 (unpublished); J. Kahl/M. El-Khadragy/U. Verhoeven, in: SAK 34, 2006, 242; Kahl, Ancient Asyut, 59–60).

# Gebel Asyut al-gharbi, survey area

The Asyut Project 2008 Topography based on Survey of Egypt

 level 2
 app.
 .... m <-> app.
 82 - 88m AMSL (above mean sea level)

 level 3a
 app.
 82 - 88m <-> app.
 91 - 103m AMSL

 level 3b
 app.
 91 - 103m <-> app.
 102 - 111m AMSL

 level 4
 app.
 102 - 111m <-> app.
 123 - 126m AMSL

level 5 app. 123 - 126m <-> app. .... m AMSL

cultivated land 5 dog remains concentration 1 mummified dogs ™ Tomb of the Dogs level 3a level 3b dog remains concentration 2 🕱

Fig. 4: Survey area, central part of Gebel Asyut al-gharbi (Manja Maschke)

120

140 altitude [m]

The macroscopically-visible fauna materials on the surface were picked up as many as possible together with diagnostic pottery.<sup>24</sup> They were hand-picked level by level and labelled with the study numbers according to the sub-sectioned area to associate the materials for more detailed study. The study numbers given to the surface survey were from S08/st601 to S08/st659 (Tab. 1).

Level	Study numbers (st) from the surface survey: pottery (upper) / animal remains (lower)
5	S08/st613, st614, st616, st628
	S08/st615, st617, st618, st619, st625, st626, st629
4	S08/st602, st631, st633, st635, st637, st639, st641,
	S08/st601, st603, st604, st610, st630, st632, st634, st636, st638, st640
<b>3</b> b	\$08/st611, st612, st642, st645, st648, st651, st653,
	\$08/st605, st606, st609, st643, st644, st649, st650, st652,
3a	S08/st647, st655, st657, st659,
	S08/st607, st608, st646, st654, st656, st658

Table 1: Vertical levels and study numbers of surface survey for pottery and animal remains on the central part of Gebel Asyut al-gharbi in 2008

Faunal remains were studied and recorded on site (Gebel Asyut al-gharbi) with the aid of comparative specimens of dog Canis familiaris, golden jackal Canis aureus, red fox Vulpes vulpes, and some bird and fish species brought from the Staatssammlung für Anthropologie und Paläoanatomie München.<sup>25</sup> The number of fragments of each identified species is shown in Table 3 as the primary data. Measurement data help us to identify osteological remains among species sharing similar morphological characteristics and/or to study the size variation of intra-species, which could be due to sexual dimorphism, types of animal and/or the ecology at that time. If measuring points on retrieved specimens were preserved, they were measured according to standard established by von den Driesch.<sup>26</sup> Teeth wear (eruption and abrasion), conditions of alveolar (whether they are closing/closed), state of epiphysial fusion, presence and size of horn, presence of os penis, morphology of pelvis and canine size were also recorded for any corresponding taxa, when possible, to see the population structure (age and sex). Features which could be macroscopically observed on bones, such as cut-marks, traces of fire and pathologies, were also noted. In this report only the brief overview on animal taxa and frequencies will be shown. The data concerning the measurement, population structure and other features are now being processed, and will be presented in our future publication(s).

<sup>&</sup>lt;sup>24</sup> Pottery retrieved from the survey has been under study by L. Sanhueza-Pino who took charge of the survey on pottery.

<sup>&</sup>lt;sup>25</sup>The author would like to thank to H. Obermaier and the Staatssammlung für Anthropologie und Paläoanatomie München for the kind permission for the loan of comparative osteological specimens for the Asyut Project.

<sup>&</sup>lt;sup>26</sup> A. von den Driesch, A Guide to the measurement of animal bones from archaeological sites, Peabody Museum Bulletin 1, 1976.

#### Preliminary result on fauna materials

In this field season a part of the fauna materials collected from the surface survey was studied, especially focusing on the area in which the Tomb of the Dogs was expected in level 4 (S08/st601, st603 and st604), 3b (the area below the Tomb of the Dogs; S08/st605, st606 and st609) and 3a (the area below the Tomb of the Dogs; S08/st607 and st608), and the area in which the concentration of animal remains was observed near Deir el-Meitin in level 5 (S08/st615 and st617). Bone concentrations were spotted clearly in three parts of the surveyed area, namely in front of the expected Tomb of the Dogs in level 4, "dog remains concentration 1" in level 3b<sup>27</sup> and "dog remains concentration 2" in level 5 (see Fig. 4: O.11, O.10 and P.13).

In general, the condition of bone preservation was good. If not exposed to direct sunlight and bleached, the colour of bones differed from light yellow to dark brown. Remnant soft tissues and/or skins which were attached on surface and particularly around the epiphyses of single bones as well as articulated bones, were still observed. Accordingly, faunal remains with such details could have been derived from mummified animals.

Table 2 shows the number of animal remains by classes studied in this season: the areas of the concentration of animal remains were situated near Deir el-Meitin (level 5) and around the expected Tomb of the Dogs (and adjoining area: ca. 70m in front of the expected Tomb of the Dogs). Mollusc, fish, bird and reptile remains are present in small numbers, while the large majority of animal remains are mammals. Mollusc remains include a fragment of *Chambardia rubens arcuata*<sup>28</sup> from the expected Tomb of the Dogs area (level 4) and two specimens of *Corbicula fluminalis* from Deir el-Meitin (level 5), both of which were of the freshwater species. As for the fish remains, there are seven samples of freshwater species, all retrieved from Deir el-Meitin (level 5): one *Synodontis schall* (cleithrum), one *Bagrus* sp. (cleithrum), four Clariidae (neurocranium fragments and pectoral spines) and one *Lates niloticus* (vertebra). Bird remains are still under study, however one complete femur retrieved in level 4 at the expected Tomb of the Dogs area was identified as an imperial eagle *Aquila heliaca*. One carapace fragment of *Trionyx triunguis* was observed in level 3b at the area below the Tomb of the Dogs.

Level	5	4	<i>3b</i>	3a S08/st607, st608 area below Tomb of the Dogs		
Number	S08/st615, st617 Deir el-Meitin area	S08/st601, st603, st604 Tomb of the Dogs area	S08/st605, st606, st609 area below Tomb of the Dogs			
Molluse	2	1	0			
Fish	7	0	0	0		
Bird	2	5	0	0		
Reptile	0	0	1	0		
Mammal	4789	418	116	21		
Total	4800	424	117	21		

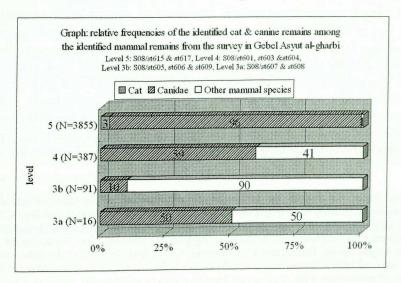
Table 2: Numbers of animal remains collected and studied in this season

<sup>28</sup> C. r. arcuata is also known as Aspatharia rubens.

<sup>&</sup>lt;sup>27</sup> Faunal remains from the "dog remain concentration 1" were not yet studied in this season.

The graph and table 3 show the breakdown of the relative frequencies and numbers of animal taxon. Due to the very similar morphological features and size overlaps between dogs and golden jackals, it was usually difficult to separate osteological remains of these two species. To separate golden jackal cranial bones from those of dogs, the criteria set by Osborn and Helmy<sup>29</sup> were used as markers. Since the criteria for distinguishing postcranial bones of dog and golden jackal are not yet well established, the above-mentioned comparative specimens were referred to, although most of them were categorised as "dog/golden jackal" at this stage. Therefore, a study on their postcranial skeletal parts will be one of the future research plans of this project. At the current stage of the study, however, osteological remains of Canidae (dog, golden jackal and red fox) retrieved at the site were divided in the following categories: dog, dog/golden jackal (specimens which are indeterminable and should be studied further), golden jackal, red fox, dog/red fox (small dog or red fox) and Canidae (those which belong to golden jackal/dog/red fox, but are difficult to determine due to fragmentations and lack of diagnostic parts).

As seen in the graph, the majority of remains belongs to canine species at the expected Tomb of the Dogs area in level 4, which accounts for nearly 60%. On the contrary, far less canine remains, 10% of the whole mammal remains, were retrieved from the area below the expected Tomb of the Dogs in level 3b. In level 3a, below the Tomb of the Dogs area, canine remains consist of 50%; however, this may much relate to the very small sample size (N=16). At Deir el-Meitin, materials from level 5 were studied. This indicates that an extremely high percentage of the remains, 96% of all identified mammal bones, was derived from canine species. Other identified mammal species provides only 4%; three-quarters of them are derived from small cat species. Concerning the other mammal species, domestic animals such as cattle, sheep/goat and donkey are present (follwing Table 3). A large number of them belongs to cattle, some of which had traces of fire on the bone surface (1% of cattle bones from level 3b, 88% from level 4 and 6% from level 5). One camel bone was retrieved in level 3a below the expected Tomb of the Dogs area.



<sup>&</sup>lt;sup>29</sup> Osborn/Helmy, Contemporary Land Mammals of Egypt, 360-371.

30 Mostly wild cat Felis silvestris and/or domestic cat F. catus.

As mentioned above, canine species were the most frequently observed mammal bones at the areas of bone concentration (level 4 in front of the expected Tomb of the Dogs and level 5 near Deir el-Meitin). Table 3 shows the number of identified specimens (NISP) and the minimum number of individuals (MNI).<sup>31</sup>

NISP: Number of identified specimens, MNI: Minimum number of individuals

Taxon / Level	5		4		3b		3a	
	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI
Dog Canis familiaris	518	48	33	6	2	1	0	0
Golden jackal Canis aureus	6	2	0	0	0	0	0	0
Dog / Golden jackal	2864	78	111	7	5	1	2	1
Red fox Vulpes vulpes	47	7	3	2	0	0	0	0
Dog / Red fox	11	2	3	1	0	0	0	0
Canidae	244	27	78	5	2	1	6	1
Cat Felis sp.	110	6	0	0	0	0	0	0
Donkey Equus asinus	3	1	1	1	0	0	0	0
Cattle Bos Taurus	33	2	128	2	69	2	4	1
Camel Camelus dromedarius	0	0	0	0	0	0	1	1
Goat Capra hircus	0	0	0	0	2	1	0	0
Sheep Ovis aries	4	1	5	1	4	1	1	1
Sheep / Goat	15	1	25	2	7	1	2	1
Unidentified mammal	934		31	_	25		5_	_
Mammal total	4789		418		116	-	21	

Table 3: Numbers of mammal remains retrieved from the survey at Deir el-Meitin (level 5) and the expected Tomb of the Dogs (level 4, 3b and 3a)

Among the identified canine species (dog, golden jackal or red fox), dog was the most common species and a small number of red fox was also observed. Golden jackal was also identified although in very small quantity (N=6) from the area of Deir el-Meitin. Identification of golden jackal presented in Table 3 is based on cranial parts, therefore more jackal bones could be expected from the materials in the category of "dog/golden jackal". On the other hand, a large number of bones in the "dog/golden jackal" category would probably be derived from dogs, given the fact that many neonatal/infantile bones, several bones with fractured and healed traces, and some old individual mandibulae whose alveolar bones were closing/closed (due to lost teeth) were included among the retrieved samples. These features observed on osteological remains could point to the domestic status that dogs would have been reproduced in dog keeping ground(s) near the gebel, <sup>32</sup>

<sup>&</sup>lt;sup>31</sup> There is an opinion that a calculation (MNI) normally underrepresents the real number of animals in archaeozoological samples (A. Gautier, in: C. Grigson/J. Clutton-Brock (eds.), Animals and Archaeology 4, Husbandry in Europe, BAR Series 227, 1984, 237–251; A. Gautier/S. Hendrickx, in: C. Becker et al. (eds.), Historia Animalium ex Ossibus, Beiträge zur Paläoanatomie, Archäologie, Ägyptologie, Ethnologie und Geschichte der Tiermedizin, Festschrift für Angela von den Driesch zum 65. Geburtstag, 1999, 170–171), of which the author shares the same view. Hence, although MNI is presented as one of the data in Table 3, it will not be discussed in detail here.

<sup>&</sup>lt;sup>32</sup> By way of comparison with other animal keeping places at other ancient Egyptian sites (cf. Herodot, Historiae II, 153; J. Vercoutter, in: LÄ I, 338–350, s.v. Apis), the dog keeping ground could have been placed in the field(s) belonging to the Anubis/Wepwawet temple in Asyut (cf. Durisch, in: BIFAO 93, 1993, 218–219; Becker, in: Kahl, Ancient Asyut, 148–149). The Anubis-temple was supposed to be situated in the vicinity of Gebel Asyut al-gharbi (Kahl, Ancient Asyut, 49, 69, fig. 103), while the Wepwawet-temple was in the western part of modern Asyut (Kahl, Ancient Asyut, 44, fig. 5).

hence young dogs that could not survive in the provided reproducing ground(s) would have been brought to the gebel, their final resting-place. The presence of dogs that could survive for a while in spite of bone fractures and lost teeth also provide us with clues on the keeping of these individuals.

In addition to the survey, cleaning at the area in front of the expected Tomb of the Dogs in level 4 was started in this season. From here at least one mummified bird and three mummified canines were retrieved. The wrapping material of the three mummified canines were already torn in the debris, hence their contents were exposed in varying degrees. Those three wrappings contained one adult male dog (S08/st715), one neonatal dog/jackal (S08/st727) and two individuals of infantile dog/jackal (S08/st733) respectively. A fragment of old Italian newspaper was found very close to the spot where the mummified adult dog (S08/st715) lay. This points once again to the activities of the Italian archaeologist Schiaparelli at the site. 33 Other single bones of birds, canines and other mammal species were scattered around the same area.

In some publications on mummified canines from Asyut, it was reported that dogs bore traces of strangulation.<sup>34</sup> Such traces could not be observed on the mummified adult male individual (S08/st715). Instead, it must have suffered from the osteoarthritis in its lumber vertebrae (*spondylosis deformans*) which would have caused pain and eventually resulted in difficulty getting food provided at the dog keeping ground. No clear evidence of killing in other mummified young canines (S08/st727 and st733) could be found. This issue, however, will now be studied with caution.

Concerning the dating, since there has been no direct connection between animal remains and pottery up until now, the exact dating of the faunal remains is still debatable.

# Concluding remarks

To sum up the preliminary result of this season's survey, canine bones were mostly retrieved from the "dog bone concentration 2" near Deir el-Meitin in level 5. It is still equivocal from where these bones at "dog bone concentration 2" were brought. Considering the long history of the gebel, these materials may have been moved multiple times from their originally buried location by different human activities. Although the number of retrieved canine remains was less in level 4 at the expected Tomb of the Dogs area, a significant number of canine remains as well as mummified canine remains (still in wrapped condition) were found. This result could correspond to the location of the Tomb of the Dogs which was described in the travelogues in the 19<sup>th</sup> and 20<sup>th</sup> century<sup>35</sup> and accordingly, the spot that we have forecasted for the past few years.

Further analysis of the data retrieved from the survey in 2008 would enrich the preliminary result. Along with the ongoing analysis of osteological materials, more comprehensive research questions, such as the animal keeping ground, the mummification technique of animals in Asyut and so on, are still to be studied.

Studying the rest of the surveyed materials and continuation of the survey will be planned next season. Cleaning of the expected Tomb of the Dogs area will also be continued. Further work will yield more materials and will help us to understand the diversified use of Gebel Asyut al-gharbi in the past.

C.K.

<sup>33</sup> Cf. Kahl, Ancient Asyut, 28, 32.

<sup>&</sup>lt;sup>34</sup> Lortet/Gaillard, La faune momifiée de l'Ancienne Ègypte II, 283; A. Charron, in: RdE 41, 1990, 211; Durisch, in: BIFAO 93, 1993, 219, n. 32; Becker, in: Kahl, Ancient Asyut, 148.

<sup>35</sup> See previous section in this paper Kahl.

Plant Remains Found in the Tombs of Gebel Asyut al-gharbi

An archaeo-botanical investigation was conducted at Gebel Asyut al-gharbi during August-September 2008 as an activity of the action plan of an Egyptian-German cooperation of Sohag University (Egypt) and Mainz University (Germany) in the sixth season of fieldwork. Visible plant objects were gathered during the excavation of Tombs III, IV, and N13.1 of the First Intermediate Period/11th Dynasty. These tombs have been reused during the later periods and also visited by numerous scholars. In addition, they were partly destroyed during the last centuries.

The objective of this inspection was to retrieve plant macro remains to identify the plant taxa, and to reconstruct possible human activities associated with plant processing, and their origin. During the inspection, the plant objects were collected from around the corpses within the coffins, baskets and mats. Inspection of 1080 objects showed that they represent the two main categories of plant kingdom, gymnosperms and angiosperms. Magnified lens eye binocular light microscopes and scanning electron microscopy were used to examine the objects. The identified objects included seeds, fruits, flowers, reeds, rushes, tree remains and worked-wood.

The majority of seeds were to native plant species such as date palm, doum palm, barsah, cordia, and common olive. Other authors previously described all of these species as ancient ones, which were considered the main components of the plant communities during the Pharaonic period. Nowadays, the majority of these species are rare and comprise the eradicated flora of Egypt. Other recorded seeds belonged to foreign species characterizing the floras of the neighbouring areas, i.e. Lebanon, Turkey, Syria, and Asia. These included peach, plum, almond, walnut, and Turkish hazel. Fruit objects are represented by those of cypress, Jericho Balsam and Christ-thorn. The inspected samples included only one floral object of Asteraceae type calling marigold.

The woody type plant remains were of acacia, tamarisk, date palm, Christ-thorn, willow, sycamore fig, pine, and oak; cereal type of broom-corn; vegetable type of onion, crop type of flax and fruit type of grape vine and fig. These remains were found as detached plant branches in the debris. Originally, these objects were elements of the local flora, except date palm which was introduced from India during the ancient period.

The inspected worked-wood objects were dominated by those of local trees such as acacia, willow, tamarisk and sycamore. Other types, of low presence value, in the worked-wood objects were from trees of cypress, ebony and cedar that had been either traded or cut from places very remote from Egypt such as Asia Minor, Lebanon, Syria, Turkey, India, Sri Lanka, Somalia, and Greece. The inspected worked-wood objects denoted that both local and exported types were used for construction, manufacturing of coffins, farm tools, and furniture.

Reeds and rushes are among the botanical elements recorded during the inspection of the tombs. Reeds were represented by common reed and papyrus plants. Sharp grass and cat's tail represent the rushes component in the inspected objects. These plant objects were found as the bulk materials for basketry, construction and the manufacture of mats.

A.Kh.