The site of Amheida (Dakhleh Oasis Project site no. 33/390-L9-1) lies a few kilometers south of the renowned Islamic mud-brick village of El-Qasr, in the northwest part of the Dakhleh Oasis. Amheida was the most important town of northwest Dakhleh in antiquity.

The excavations of Columbia University, as part of the DOP, were begun in 2004 after preliminary survey work in 2001 and 2002. Last year's excavations were carried out with a small team, which focused on a late Roman house with a central painted room and on clearance of surface debris from two further areas in anticipation of our 2005 campaign.

During the 2005 season, a much enlarged team continued conservation and excavation work on the late Roman house (Area 2.1), began the excavation of the site of the Temple of Thoth (Area 4.1), and excavated part of a less wealthy house in Area 1.3. In addition, several types of survey were carried out for future planning and for a more complete view of the ancient city.

Area 2.1 (Fig. 1)

Conservation activities this year on the villa partly excavated in 2004 were concentrated on the wall plaster, with painted scenes, found last year. The paintings still on the wall have been protected more completely with both a dry wall of bricks in front of them and a new roof over the entirety of Rooms 1 and 3 to prohibit access between seasons. The work carried out last year in Room 1 was checked and found to have been largely successful in consolidating the paintings on the wall. Work was also carried out on the extensive fragments kept in trays, with much cleaning, consolidation, sorting, and joining successfully carried out. In addition, much research was conducted on the possible means of more extensive conservation work with a larger team next year.

This season's excavations of the building in area 2.1 were carried out in several new rooms and in one that had already been partly excavated last year (Room 3). On the east side of the house, rooms 6 and 7 were excavated to floor level while room 8 was excavated partly to gebel.

Room 3

This room, vaulted in antiquity, is situated in the south of the excavated area and is probably part of a different building than the other rooms described here. The inside walls of the room are mud plastered and the room shows signs of heavy usage. This is evident through the blocking of two spaces, continuous re-plastering of the walls and gouges at and just above floor level. Most of the objects found in room 3 are

¹ The staff consisted of Roger Bagnall, director; Paola Davoli, archaeological field director; Olaf Kaper, associate director for Egyptology; Eugene Ball, senior archaeologist; Mirjam Bruineberg, Elly Heirbaut, Nicola Aravecchia, Maarten Horn, Anna Boozer, and Susanna McFadden, archaeologists; Gillian Pyke, ceramicist; Johannes Walter, archaeobotanist; Constance Silver, conservator; Bruno Bazzani, director of information services; Andrew Bednarski, registrar; Angela Cervi, small finds supervisor; Helen Whitehouse, art historian; Nicholas Warner, architect; Tatyana and Sergej Smekalov, geophysicists; Fabio Congedo and Valentino De Santis, topographers; Giovanni Ruffini, papyrologist; Ashraf Senussi, pottery draftsman.

from the floors and the layers separating them. These include, amongst others, several coins, a bronze pin, a bone pin and a cornelian bead. The categories of artifacts thus closely resemble those that were found last year, in the eastern half of the room.

Room 6 (Fig. 2)

This rectangular room is one of the larger rooms in the building. It is fully coated with mud plaster. The west wall in the room has a doorway leading into the courtyard we call room 2 which was excavated last year. The west wall also has a large niche set into it which used to be shelved. Both door and niche were once surrounded by a strip of white plaster. In front of this opening there seems to have been a low, baked brick set of stairs.

Of particular interest is the roof construction encountered in the fill of the room. Several decayed beams, mud plaster facing, and mud plaster with palm rib impressions show that this room had a flat roof.

Room 7

Room 7 is located to the north of room 6. This small rectangular room can be entered from the area to the east of the building. This eastern doorway has a large bolt hole on the south side which suggests it may have been (one of the) main entrance(s) to the building. Room 7 also has doorways in the north wall leading into room 8, and in the west wall leading into room 2. As a result, room 7 can be seen as an important axis in the house. The room is mud plastered on the inside. The south wall of the room had a small arched niche with a ornamental appearance set into it.

Room 8 (Fig. 3)

This room, entered from the south via room 7, is rectangular in plan. Although the springing of the vault is no longer visible on the walls, it is clear from excavation of the deposits that the roof was once vaulted and the bottom parts of it would have rested on the south and the north wall.

The floor of the room was not preserved everywhere due to heavy usage in antiquity and the pressure of the collapsed vault. Several interesting objects were found in the room, including ostraca and coins.

Room 9 This room is a particularly large area to the north of the rooms described above. It has only been partly excavated. In a small test trench dug in the eastern half of the room, a circular wall and a gypsum floor level were found. The ashy deposits associated with these features and a hollow space underneath seem to point to its usage as an oven or similar feature.

From the excavation of part of the deposits present it becomes clear that room 9 was probably used as a dump area after it lost its original function. It is not yet clear if room 9 belongs to the same building as rooms 6-8.

Rooms 11, 13, and 14

One or more test trenches were dug in each of these rooms which form the west wing of the main building in area 2.1. The purpose of these trenches has already been explained above. All three rooms are completely whitewashed and their dados painted in various motifs. Little can be said about the paintings at this point in time as all test trenches ended at the top of the paintings. Only in room 11 were we able to discern the presence of both geometric and figurative motifs in the upper frieze of the paintings. (Fig. 4)

Rooms 11 and 14 were vaulted. Room 13 probably had a conch on the west side.

Area 4.1 (Temple) (Fig. 5)

The principal hill of Amheida, which lies roughly at its centre, was chosen for excavation because previous surface examination in 1979 and again in 2004 had indicated the likely presence of a temple at this location. Surface finds included a block of weathered temple relief, found in 1979, and several bronze Osiris statuettes, found in 2004. The tempnos wall is the only identifiable structure visible on the surface, surviving only in a small section; the temple building itself was expected to be severely degraded. This was confirmed by the excavations. A single square of 10 x 10 m. was chosen in the central part of the hill, which was later extended by an adjacent square on the east.

No in situ remains of the temple were found, because the area has been severely disturbed by later human activity. The entire surface of the excavated area, which measures 20 x 10 m., displays a layer of mud brick rubble and debris, into which large holes had been dug. These holes are filled by windblown sand and by building blocks of the temple, which appear thrown in at random. This extensive digging is likely to have been the result of treasure-hunting in the past, the date of which is as yet unknown. In the nearby town of el-Qasr several temple blocks appear reused in the houses from the 17th and 18th centuries, and it seems likely, therefore, that the robbing of the temple took place at that time.

The current excavations have uncovered a large amount of temple blocks, over 200 in all, which have led to the following preliminary conclusions about this building.

1. The latest phase of the temple was constructed in the Roman period, during the reign of the emperor Domitian. The similarity of the artistic style of the reliefs to those in the nearby temple of Deir el-Hagar indicates that the same artists were employed.

2. The temple was dedicated to the god Thoth of Set-wah, whose name appears on many blocks. Setwah was the name of the area that included both Amheida and Deir el-Hagar.

3. Two phases of destruction may be distinguished: one that quarried away the Roman period temple (Fig. 6), leaving only the lowest courses of the stonework and a later phase of destruction that removed the remaining traces of the original walls. Only the lowest two or three courses of stone of the Roman period temple remained after the first phase of destruction, because the themes encountered in the relief blocks all belong to the soubassement of the temple. Fecundity figures appear and a series of goddesses of the good new year (Rnpt nfrt), which are also known from Edfu. No remains from upper registers or columns capitals have been found.

4. The Roman period temple was constructed out of building blocks from an earlier temple of the 26th dynasty. Three kings of that dynasty are named on the blocks: Necho II (610-595), Psamtek II (595-589) (Fig. 7) and Amasis (569-526). Especially the cartouche of Amasis occurs on many of these reliefs. The reuse of the blocks in the later temple of the Roman period is evident from the occurrence of gypsum mortar on the faces of all earlier reliefs. Often these blocks have a single groove cut into their faces for a better attachment of the mortar.

5. The temple of the 26th dynasty stood on the same site as the Roman temple, as it was likewise dedicated to Thoth of Set-wah.

6. Among the reused blocks in the Roman period temple are also blocks from an earlier temple dated to the reign of king Petubastis of the Theban 23rd dynasty. It is the first time that a cartouche of this king has been found in a temple relief. King Petubastis ruled from Thebes at the time of the later 22nd dynasty (around 800 BC) and not long before the Nubian king Piy conquered Egypt at the start of the 25th dynasty. These dynasties belong to the little-known Third Intermediate Period. It was not known before that the Theban 23rd dynasty controlled the oases of the Western Desert.

7. The dominance of the Theban 23rd dynasty in Dakhleh was further confirmed by an intact hieratic stela found among the remains of the temple, which is dated to the 13th year of king Harsiese of the same dynasty. The stela mentions several priests from the temple of Thoth by name. (Fig. 8)

The occurrence of large quantities of ceramics among this debris of Old Kingdom date, as well as flint tools from this period, has not yet been explained. Possibly the archaeological remains cover a layer of Old Kingdom occupation that has been disturbed during the second phase of the destruction of the temple.

Future excavations hope to uncover some in situ remains of the temple of Thoth at Amheida and provide evidence for its original ground plan. Moreover, the town of Amheida is now certain to go back to a pharaonic settlement dating back to the Third Intermediate Period, the remains of which may lie beneath the Roman period houses of the site.

Area 1.3 (Fig. 9, 10)

This season a new area, designated Area 1.3, was opened, along the broad east-west street in the north of the site. The focus was on a square building of moderate size, approx. 11 x 11 m, of which three rooms were excavated to foundation level.

The building was found to be badly eroded by the wind. In some parts of the excavated rooms approximately six courses of bricks are preserved above foundation level. In the more eroded parts only two or three courses remain. The result of this erosion is that most of the collapse, which one would expect in the rooms, was no longer present and therefore most of the room's floors have largely disappeared. The excavation however yielded enough information to suggest that all three excavated rooms would have been vaulted. In each room a number of complete pottery vessels were found.

Also noteworthy among the finds from room 3 are several beads. Two of these were almost certainly imported as they are made of clear glass with gold leaf inside. Furthermore, in both rooms 1 and 2, several ostraca were found.

Topographical Survey (Fig. 11)

The first task of the topographical survey in 2005 was to reestablish the grid where stakes had been taken up between seasons and to reorient the grid precisely North-South. The grid retains the alphanumeric names and progression of the squares from the 2004 grid, to guarantee continuity and congruence with general documentation. The grid was extended to allow the continuation and extension of excavation in Areas 4 and 2. In addition, three fixed reference points were established. Further, two cemented stakes were placed between Area 1.3 and Area 2.1, and to NW of the hill of Area 4.1.

Work was concentrated otherwise in the excavation sectors. Particular attention was paid to bringing to light profiles and sufaces of important wall structures on the south of Area 4.1 and updating general plans. In addition, the topographic team recorded profiles and sufaces of important wall structures east of Area 3 (the Pyramid); prepared prospectival sections through all the rooms and structures excavated so far in Area 2.1; planned the numerous pits excavated in Area 4.1 and prepared profiles of wall structures in this area. At the request of the inspectorate of the SCA, the team also checked details on older maps of the site and made it possible to define the area of the site to be protected with more precision.

Photogrammetry

Beyond the topographic survey described above, the team carried out extensive photogrammetry work. This work was focused particularly in Area 3, in view of possible conservation activities to be carried out there in 2006 and later years. Photogrammetry is based on the possibility of straightening photos taken even in a much inclined position. That lets us obtain by photos metric data for vectorial drawings and it allows a considerable saving of time, as well as providing for precise drawings for documentation.

Architectural survey

The project architect prepared plans and sections of the house in Area 2.1 and supervised the design and completion of protective structures for the painted areas. In addition, he studied the pyramid in Area 3 carefully with a view to developing a program to protect and restore this "signature" monument of the site.

Magnetic survey

Two geophysicists carried out two types of survey with magnetometers. First they walked over almost the entire site to see in what areas they found magnetic anomalies suggesting the presence of magnetized materials, probably in most cases as the result of combustion. They then walked in systematic grids the most promising areas of the site. The results are complex, but they give a much clearer sense of what parts of the site are likely to have contained workshops and other industrial facilities. These have been noted for possible future investigation of the economy of Amheida.

Pottery

This season saw the establishing of the main fabrics and forms of pottery present at each of the three areas excavated this year. The pottery was sorted on site, recording for each unit the total weight of the sherds of each fabric, in order to study the proportions of each fabric and for what types of vessel they were used. Within each fabric group, the number of diagnostic sherds (rims, bases, handles, spouts) of each broad vessel shape was noted. Diagnostic and other interesting sherds were kept for further analysis and as a record of what was found in each unit.

Within each area, every kept sherd was recorded individually, drawn if it represented a new shape, or a reference made to a similar shape if one had already been drawn. In this way, it is possible to estimate the number of vessels of each type, where they were found and the frequency of the type's occurrence. The drawings of the vessels were copied and made into a catalogue to show the different types of vessel found at each site. These drawings will later be accompanied by a written description of each type for publication.

The pottery in Area 2.1, the high-status house, was found to be of approximately fourth century date, as is the surface pottery over much of the site of Amheida. Several forms are characteristic of this period. A number of examples of Oasis polished ware were also found, almost always small flange-rimmed bowls in the *sigillata* tradition. A few units, particularly in the domestic rooms to the north of the entrance vestibule, contained an unusual number of footed bowls and large fragments of baggy jars, perhaps linked to the function of this area.

Although it was only possible to excavate in Area 1.3 for a few days, the pottery from this location was very interesting. A number of complete vessels were found in this area. At first, the range of forms and fabrics appeared very similar to those at the villa. As more material was processed, various differences were noted. The main fabric type, as at the villa, was a hard sandy iron rich clay (A1), making up over 90% of the sherds. Other fabric types that were represented at the villa were extremely rare in Area 1.3, such as early Christian brittle (A11) and Oasis polished ware (OPW). However, the limestone rich fabric (P37) that was rare at the villa was much more common in Area 1.3.

The ceramics from Area 4.1 give an interesting view of the history of the site. The surface material consisted mainly of fourth century types similar to those in Area 2.1, but with a few recognisable Dynastic vessels, such as a New Kingdom oasis amphora. Sub-surface deposits over the whole excavated area, including the many pits, were extremely mixed, with both fourth century and dynastic types present. The easily identified dynastic types (as explained by Colin Hope) are of various periods. These include the Late Period, represented by dimple bowls, Levantine storage jars and the P38 fabric, the Second Intermediate Period to New Kingdom (oasis amphora, Canaanite amphora, bread cones, round-based jars

with patterned scraping, Pan Grave vessels, possibly spouted bowls) and the Old Kingdom (conical, double and single bread moulds, Meidum bowls and other polished red wares and possibly spouted bowls). The polished red wares seem to be of both local and Nile valley production, with both early (third to fourth dynasty) and later (sixth dynasty) forms represented. Many of the double and single bread moulds are decorated with incised motifs, and are comparable to examples found at Mut and Ain Gazzareen. A few contexts, most notably unit 32, were found to contain entirely dynastic material, though the date range of the individual vessels covered the Old Kingdom to Second Intermediate period.

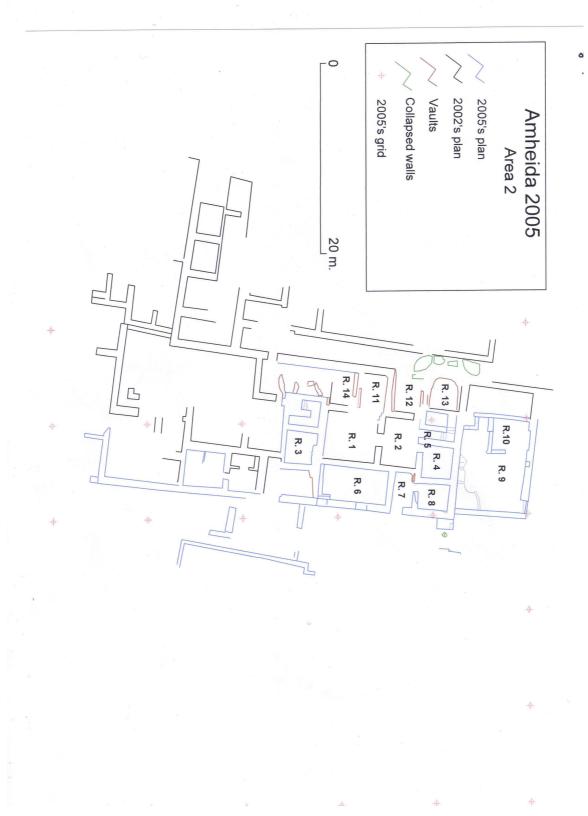


Fig. 1



Fig.2: Room 6 in area 2.1



Fig. 3: Room 8 in area 2.1



Fig. 4: Painting in area 2.1 (detail)

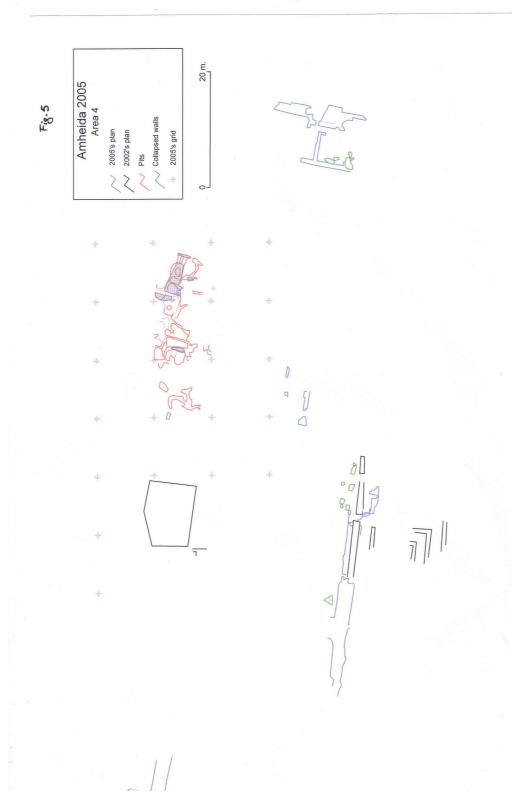


Fig. 5



Fig. 6: Area 4.1, temple



Fig. 7: Block with Psamtek II cartouche from the temple area

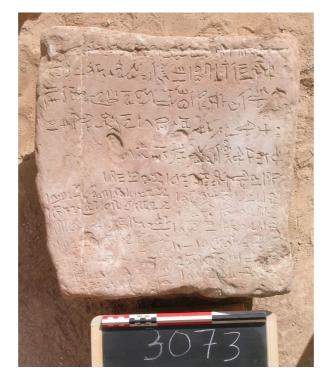


Fig. 8: Harsiese stela



Fig. 9 : Area 1.3, overview

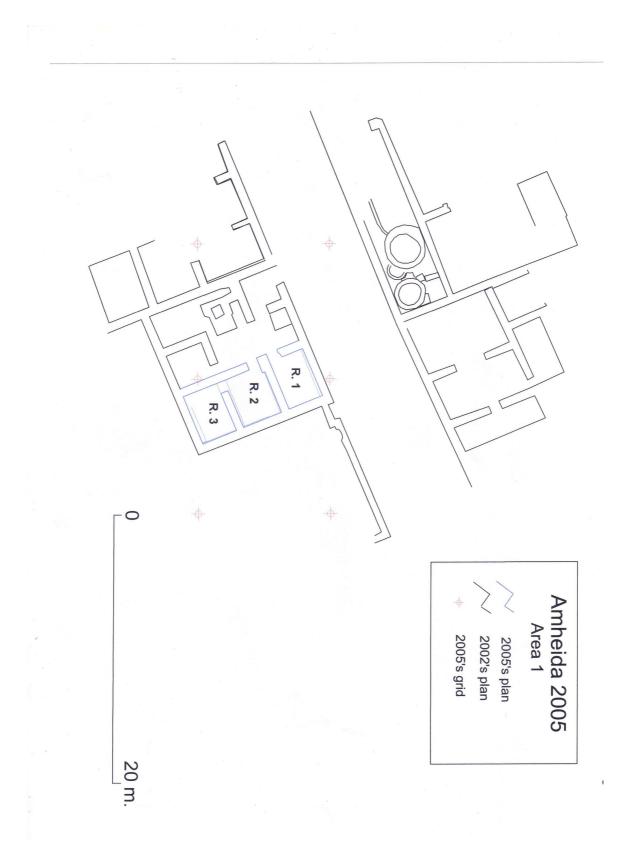


Fig. 10

