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An Architect's Sketch from the Theban Necropolis

By Daniel Polz

(Plate 33)

Ancient Egyptian architectural plans and sketches are comparatively well attested[1]). They are usually drawn with ink on limestone chips or on papyrus, or roughly scratched on stone. Out of the known total number of sixteen of those plans and sketches, only two or three are identifiable, with a certain amount of probability, with the actual buildings to which they refer[2]). The following lines introduce a new architectural sketch of a recently discovered ancient Egyptian building in the Theben Necropolis[3]).

The seventh field season in the necropolis of Dra' Abu el-Naga[4]) in the winter of 1996 was partially devoted to the further clearance of a large rock tomb in the hillside of the northern part of that necropolis[5]). The tomb (K 93.11) is oriented roughly east-west and consists mainly of a rock-cut part with a four-pillared chamber and a small adjacent chapel. Both the chamber and the chapel are unfinished and lack any signs of decoration. In the center of the area delimited by the pillars descends a huge shaft which opens at the bottom into a long horizontal passage of more than man size height. The passage ends in a small chamber on a higher level than the floor. In front of the chamber is a deep mummy-shaped recess in the floor that was once covered with massive sandstone slabs. Remains of plaster on the walls of the passage as well as a number of carefully carved, but undecorated, limestone blocks found in the passage, indicate that the subterranean part of the tomb was indeed used for a burial.

In front of the tomb's façade there are two large open courts, also carved from the rock, and separated from each other by a massive rock-cut pylon. The first, eastern court probably had a mud

[1]) For a list of published plans and sketches see Arnold, *Building in Egypt*, 1991, pp. 7–10 and table 1.1; cf. Clark and Engelbach, *Ancient Egyptian Masonry*, 1930, pp. 46–58 (reprinted as: *Ancient Egyptian Construction and Architecture*, 1990). For a detailed study of architect's plans and sketches in antiquity, see Heisel, *Antike Bauzeichnungen*, 1993, passim, especially pp. 76–153 for Ancient Egypt (I owe this reference to W. K. Simpson).

[2]) Arnold, *op. cit.*, table 1.1; clearly identifiable are the plans of the royal tombs of Ramses IV on a papyrus in Turin (Turin 1885; Arnold, *op. cit.*, no. 13; Heisel, *op. cit.*, pp. 96–102), and Ramses IX on a limestone ostrakon from the Valley of the Kings (Cairo CG 25184; Arnold, *op. cit.*, no. 14; Heisel, *op. cit.*, pp. 102–105). Two other limestone ostraka from near Theban Tomb no. 71 were originally thought to be sketches of a part of the subterranean burial system of that tomb (Cairo CG 66262; Hayes, *Ostraca and namestones from the tomb of Sen-mût (no. 71) at Thebes, PMMA*, vol. 15, 1942, p. 15 (no. 31 and 32), pl. VII; Arnold, *op. cit.*, no. 6; Heisel, *op. cit.*, pp. 94–96, no. Ä 9 and Ä 10). However, Dorman in his publication of the tomb sees no reason to believe that the sketches 'conform to any of the interior spaces of tomb 71' (*The tombs of Senenmut, PMMA*, vol. 24, 1991, p. 26 note 52).

[3]) I am indebted to P. Dorman and H. Guksch for comments and suggestions on a draft of this article.

[4]) For the results of previous excavation seasons in Dra' Abu el-Naga, see the preliminary reports in *MDAIK* 48, 1992, pp. 109–130; *MDAIK* 49, 1993, pp. 227–238; *MDAIK* 51, 1995, pp. 207–225; cf. also *SAGA* 12, 1995, pp. 25–42.

[5]) For a general plan of the area and the location of the tomb, see *MDAIK* 51, 1995, p. 211, Abb. 2.

brick pylon on its eastern side. It seems that at the time of the original use of the tomb the courts were mostly undecorated. For reasons which cannot be detailed here, it is highly probable that the original layout of the tomb goes back to the late Second Intermediate Period or the very early New Kingdom and that the tomb was initially excavated for the burial of a royal person[6]).

From the results of the excavations it is apparent that during the later Ramesside Period the entire tomb complex was re-used and underwent drastic architectural changes, mainly in the two courts:

The floor of both courts was paved with sandstone. The first court received a portico of four sandstone columns on either side of the central doorway, in front of the second pylon. Both eastern and western faces and the entrance of the second pylon were encased with sandstone slabs, decorated in raised relief. The rock walls of the second court were apparently entirely cased with decorated sandstone slabs. This formerly open court was turned into a colonnaded court or peristyle with altogether twenty-six sandstone columns of which the negative impressions in the bedrock were found or, in several instances, remains of the column bases. In addition, two intact column bases were discovered in situ in the southern half of the second court. A preliminary plan of the second court is shown in fig. 2.

Although the identity of the original owner or builder of the tomb is still uncertain, there remains but little doubt as to who re-modeled the complex during Ramesside times. Among the more than five thousand decorated sandstone fragments found so far, several hundred are inscribed with the titles and/or the name of the well known High Priest of Amun, Ramses-nakht, who is attested from year 1 of Ramses IV until year 2 of Ramses IX[7]). Since two fragments of decorated sandstone give the names of Ramses IV and Ramses VI, respectively, and another fragment mentions the titles of one of Ramses-nakht's sons who himself is already in an advanced position, it seems likely that Ramses-nakht began the construction project not before the second half of his career, which lasted for more than twenty-five years.

At this stage, it is too early to attempt an explanation of the main function of Ramses-nakht's building. The 'outside architecture' of the courts very much resembles Ramesside private funerary architecture: quite a few of the nearby tombs in Dra' Abu el-Naga/South show the same type of colonnaded courts[8]), although most of them are smaller in scale. Tomb K 93.11, however, lacks the entire – and usually rather elaborate – 'inside architecture' of those tombs. There are none of the decorated interior rooms and no subterranean structures that one would expect in the tomb of a person of high standing[9]): a sloping passage and a burial chamber suitable for a large stone sarcophagus are still missing.

It has to be emphasized, however, that so far only the southern halves of the two courts have been completely excavated – the northern halves are still partially covered with huge amounts of debris[10]) and with Coptic structures[11]). The lowest layer of the prevailing stratigraphy of the debris in the courts almost invariably consists of large numbers of sandstone fragments, both from the decorated blocks of the wall casing and from the paving stones of the courts. This layer is the destruc-

[6]) *MDAIK* 51, 1995, pp. 211–18 and Taf. 45 a and b.

[7]) See: Bierbrier, in: *JEA* 58, 1972, pp. 195 ff.; idem, *The Late New Kingdom in Egypt*, 1975, pp. 10–13; Kitchen, *The Third Intermediate Period in Egypt*[2], 1973, pp. 246 ff.; see now Polz, in: *JSSEA* 25, 1995 (in print).

[8]) For example, TT 158, 282, 283, and the newly discovered court of the tomb of Ramses-nakht's son-in-law, the Third Priest of Amun, Amenemope (TT 148).

[9]) For subterranean parts of Theban tombs, especially during Ramesside times, cf. Assmann, in: *MDAIK* 40, 1984, pp. 277–290; Seyfried, in: *ASAE* 71, 1987, pp. 229–49.

[10]) For a view of the two courts still covered with debris, prior to the excavation, see *MDAIK* 51, 1995, Taf. 45 a and b.

[11]) see *MDAIK* 51, 1995, p. 215.

tion horizon of the Ramses-nakht building, which – for reasons still unknown – does not seem to have lasted past the Third Intermediate Period. It is this layer which also contained the subject of this article: a sandstone ostrakon with an architect's sketch[12]) of a building (fig. 1 and pl. 33)[13]).

The ostrakon was found near the southeastern corner of the second court, 65–70 cms above the bedrock. It is rather irregularly shaped and measures 14 cms in length, 13 cms in width, and 5.5 cms in depth; there are no signs of intended smoothing. The inscribed side shows the outline of an approximate square roughly sketched in black, but mostly faded, ink. Only those places where the scribe continued a line after filling his stylus with new ink are still dark black. The square outline has a small rectangle added in the middle of the lower side and a smaller similarly shaped addition in the middle of the upper side. It should be noted that the lower ink line is interrupted where the rectangle is added, whereas the upper ink line is continuous – the upper rectangle consists of two parallel strokes indicating an additional small structure starting at the line. The sandstone at this point is slightly erased and it therefore remains unclear whether the two small strokes continued towards the upper edge of the stone or were connected at the edge. Along the four inner sides and close to the lines of the square are circular ink dots at approximately the same distance from each other, except at the centers of the two horizontal lines, where no dots occur.

At first sight, the interpretation of the fairly simple drawing does not present major difficulties: based on other known plans and sketches, it shows a rough outline of a more or less square, apparently open building or part thereof with – in its central axis – an entrance[14]) at one side and an additional construction at the opposite side. The inner part of this building is represented as a colonnaded court or peristyle with four columns along each side of the front (i. e. the entrance) and back walls and with an additional six columns along each side wall, bringing the total amount of columns to twenty-eight. Thus, the proposed layout of the structure is based on a symmetry of eight columns on each side (with the corner columns counted double). The only problems that remain are the orientation of the building and whether the sketch depicts the inside or outside portion of a building[15]).

These problems are immediately solved if we compare the sketch with our preliminary plan of the second court of K93.11 (fig. 2): obviously, the 'entrance' at the upper line of the sketch is the doorway to the four-pillared chamber of the tomb proper, and the 'open rectangle' on the lower line is the entrance of the second pylon. Interestingly, sketch and plan also roughly correspond in terms of relative proportions: in the sketch, the width of the court (north-south, 9.5 cms) clearly surpasses the length (east-west, 8.5 cms), giving a ratio of 1:1.11. A similar ratio (1:1.25) is shown on our plan of the court (fig. 2; the scale is 1:200) which measures an approximate 19.80 meters in width and 15.80 meters in length.

[12]) It is outside the scope of this paper to discuss the difference between ancient Egyptian architectural 'plans,' 'sketches,' or 'descriptions.' It seems, for example, that sketches are usually drawn on ostraka, whereas for 'more exact drawings' papyri were preferred (Heisel, *op. cit.*, p. 114). In addition, it is very likely that the two above mentioned 'plans' of royal tombs (see footnote 2) are actually descriptions or 'building specifications' of the already finished buildings, see Stadelmann, in: *LÄ* I, 626–37.

The author follows both Clarke and Engelbach's (*op. cit.*, p. 48) and Arnold's (*op. cit.*, p. 7) assumptions that there must have been actual construction plans, possibly with an underlying grid or net, and indicating measurements and dimensions. These are clearly not indicated in the drawing presented here, thus the term 'sketch' seems more appropriate.

[13]) I am indebted to U. Rummel for the drawing of the ostrakon in fig. 1.

[14]) Compare, for example, the representations of doorways and entrances in the plan of the royal tombs of Ramses IV and Ramses IX, Heisel, *op. cit.*, pp. 96–105; Clarke and Engelbach, *op. cit.*, p. 49, figs. 49 and 50.

[15]) On the other preserved drawings, obviously no difference is made between the depiction of 'rock-cut walls' and built 'brick' or 'stone walls', cf. Heisel, *op. cit.*, p. 117.

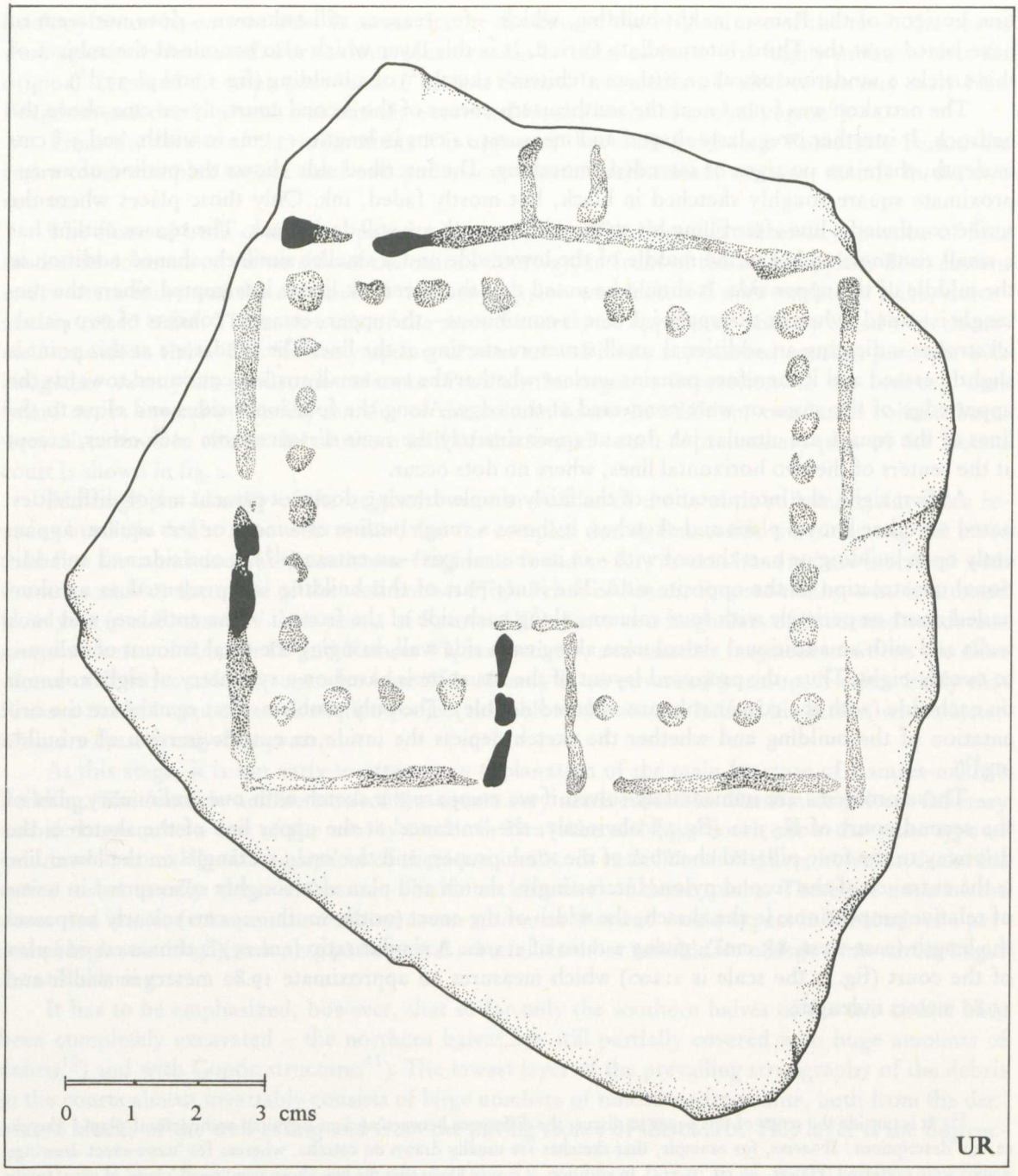

Fig. 1: Drawing of the ostrakon from tomb K 93.11

The comparison, however, also raises questions: first, on the sketch, the two side walls of the court each show eight columns, while the excavated southern half of the court has seven. Second, the entrance to the four-pillared chamber (the top line of the drawing) is indicated by the continuous ink line, whereas the structure at the pylon (the bottom line of the drawing) has one open side, where the base line is interrupted.

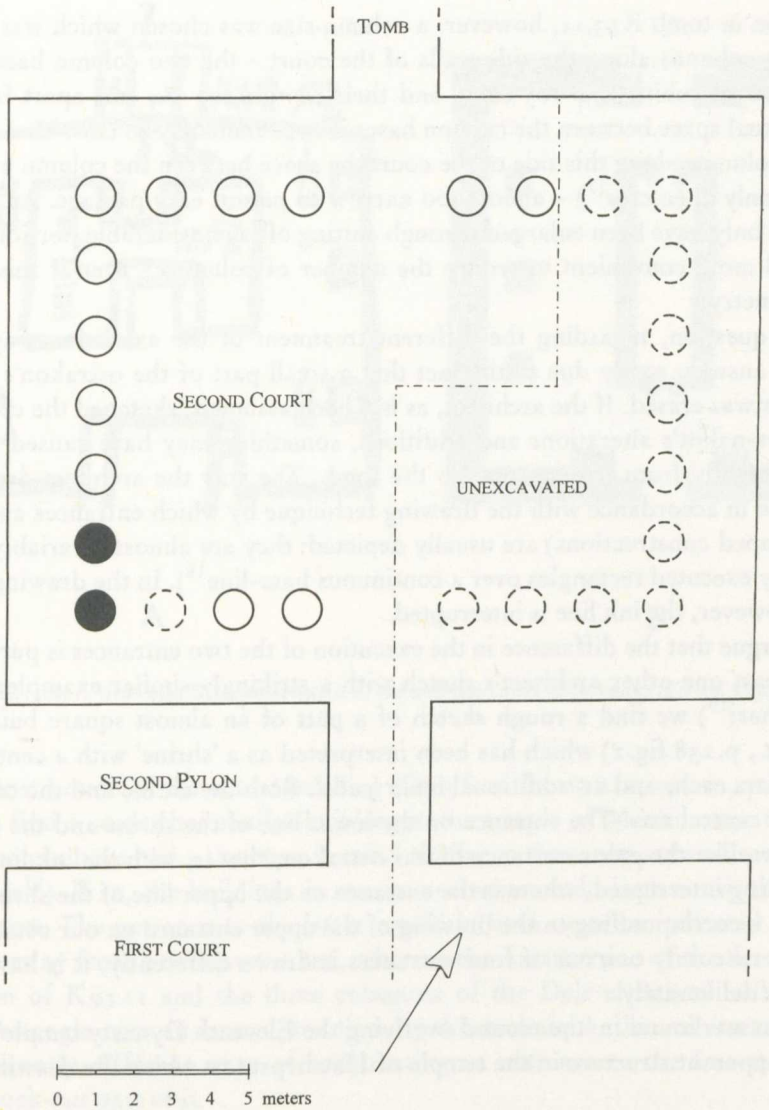

Fig. 2: Preliminary reconstruction of the ground-plan of the second court of tomb K 93.11

The first discrepancy can be answered easily if we assume that the sketch was drawn during a preliminary survey or visit of the building before its actual re-modeling by Ramses-nakht was begun. The architect found the court in a certain state of preservation and designed a preliminary sketch of how it could be turned into a colonnaded court. He subdivided the east-west length of the north and south walls of the court by the number of columns of a certain diameter and filled the space on the ostrakon with eight dots. The same was done with the east and west walls of the court (i. e. the inner side of the pylon and the façade of the tomb) but the fact that on the sketch the width of the court is longer than its length allowed for open spaces along the central axis. Perhaps the architect followed the pattern of contemporary colonnaded courts: actual New Kingdom peristyles seem to reflect a certain symmetry in terms of the numbers of columns or pillars on each side of a court[16]). For the

[16]) The other known examples of colonnaded courts of Ramesside tombs in the Theban Necropolis clearly show a cer-

actual construction in tomb K93.11, however, a column size was chosen which was much too large to allow for eight columns along the side walls of the court – the two column bases in situ have a diameter of two royal cubits (104–105 cms), and their centers are 184 cms apart from each other. Therefore, the actual space between the column bases is approximately 80 cms. Had there been eight instead of seven columns along this side of the court the space between the column bases would have been reduced to only c. 60 cms[17]) – almost too narrow to permit easy passage. As the court's east-west length could only have been enlarged through cutting off a considerable portion of the pylon, it may have seemed more convenient to reduce the number of columns – even if this solution would 'destroy' the symmetry.

The second question, regarding the different treatment of the axial doorways, is somewhat more difficult to answer, partly due to the fact that a small part of the ostrakon's original surface may be missing or was erased. If the architect, as has been assumed, sketched the court's layout previously to Ramses-nakht's alterations and additions, something may have caused him to treat the pylon portal differently from the entrance to the tomb. The way the architect drew the tomb entrance seems to be in accordance with the drawing technique by which entrances and doorways (including pylon-shaped constructions) are usually depicted: they are almost invariably drawn as more or less elaborately executed rectangles over a continuous base-line[18]). In the drawing of the entrance at the bottom, however, the ink line is interrupted.

One might argue that the difference in the execution of the two entrances is purely accidental, if there wasn't at least one other architect's sketch with a strikingly similar example: on an ostrakon from Deir el-Bahari[19]) we find a rough sketch of a part of an almost square building (fig. 3 A = Glanville, *op. cit.*, p. 238 fig. 2) which has been interpreted as a 'shrine' with a central axis and two rows of three pillars each, and an additional inner 'cella'. Both the shrine and the cella have two entrances along the central axis. The entrance on the lower line of the shrine and the two entrances of the cella are drawn like the pylon entrance of our ostrakon, that is, with the ink lines indicating the walls of the building interrupted, whereas the entrance on the upper line of the shrine is drawn from a continuous line – corresponding to the drawing of the upper entrance on our ostrakon. Keeping in mind that in this case only one out of four entrances is drawn differently, it is hard to believe that this was not done deliberately.

The ostrakon was found in 'the mound overlying the Eleventh Dynasty temple'[20]), and it seems that there is no apparent structure in the temple of Hatshepsut to which the drawing might refer. If

tain pattern of symmetry: the number of columns or pillars are the same on each side of the courts, usually there are six or eight columns/pillars in front of each side, although a four/six combination is also quite common (e. g. TT 23, TT 32). See, for example, the tombs of Nebwenenef (TT 157), Bakenkhonsu (TT 35), Roma/Roy (TT 283; Fisher, in: *Pennsylvania Museum Journal* XV, 1924, pp. 41–43 and plan on p. 46), and Amenemope (TT 148) all of which are situated in the cliffs of Dra' Abu el-Naga/South. The court of the tomb of Tjanefer (TT 158) shows an unusual solution: the east face of the court had eight pillars, both the north and south sides have six each, and the west side (the façade) would have had eight pillars if there wasn't a mud brick 'portico or vestibule' (instead of the innermost pillars) which took the weight of the roof of the colonnade (Seele, *The Tomb of Tjanefer at Thebes*, *OIP* 86, 1959, pp. 2–3 and pl. 41). Cf. also the peristyle in the first court of the tomb of Horemheb at Sakkara, Martin, *The Memphite Tomb of Horemheb, Commander-in-Chief of Tutankhamun* I, 1989, p. 11, fig. 4, and pl. 5, and the Ramesside tombs south of the causeway of the pyramid of Unas at Sakkara, Tawfik, in: *MDAIK* 47, 1991, pp. 403–409, fig. 1.

[17]) Based on an overall length of the south side of the court of 15.80 meters, with the space for the casing slabs of the pylon and the façade subtracted.

[18]) Cf. the examples in Clarke and Engelbach, *op. cit.*, pp. 46–58, figs. 49–51 and 55–58; Arnold, *op. cit.*, pp. 7–10, figs. 1.3 and 1.5.

[19]) oBM 41228. Glanville, in: *JEA* 16, 1930, pp. 237–239 and pl. XLII, fig. 1; cf. Heisel, *op. cit.*, 91 (Ä 7), figs. on p. 92. Our figs. 3 A and 3 B are slightly modified versions of Glanville's drawings.

[20]) Glanville, *op. cit.*, p. 237.

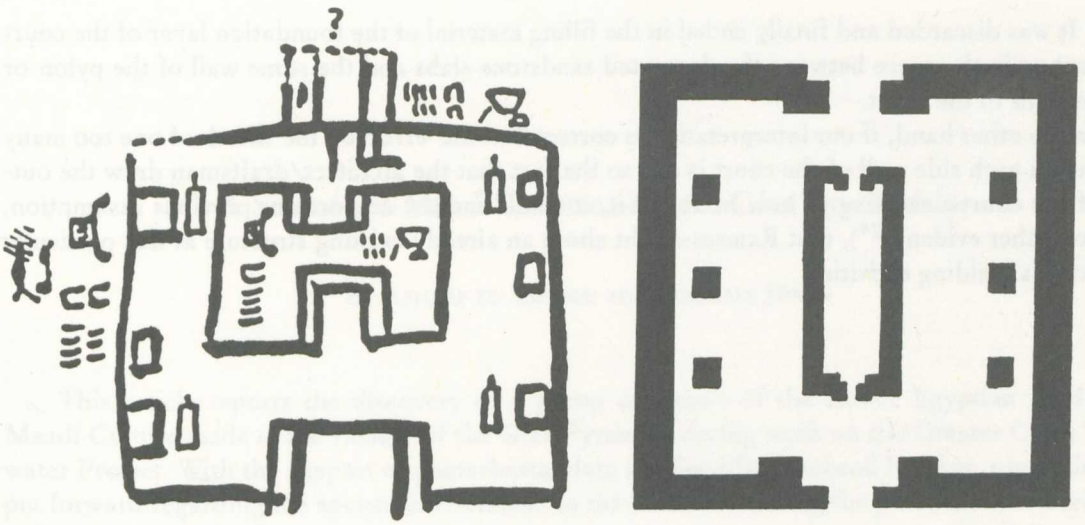

Fig. 3: Ostracon BM 41228. A: drawing; B: reconstruction of the building (after GLANVILLE, *JEA* 16, 1930, pp. 237–38, fig. 1–2)

GLANVILLE's reconstruction of the actual building (fig. 3 B = GLANVILLE, *op. cit.*, p. 237 fig. 1) is correct[21]) we might find a somewhat similar building in the temple of Mentuhotep: the architect who drew the sketch might have had a structure in mind similar to the sanctuary and speos at the western end of this temple[22]). If so, the buildings in our two ostraka would both consist of a built-up part and a rock-cut part. The entrance to the latter would in both cases be indicated by the canonical drawing of a doorway from a continuous line, whereas the construction of the 'free-standing' doorways – the pylon of K 93.11 and the three entrances of the Deir el-Bahari building – would be marked with a rectangle over an interrupted line. By this technique, the architect would simply indicate the significantly different ways of constructing an entrance to the free-standing part of a building vs. the rock-cut part of it.

The importance of the ostrakon from tomb K 93.11 is twofold: it is – to my knowledge – the first time that an architect's sketch has been found within the confines of the building it depicts[23]). This fact provides us with an insight regarding the work routine of an Egyptian architect (or draftsman). The second court's groundplan was apparently sketched on the spot by the person responsible for the layout of this particular part of the building. After further considerations or alterations of the proposed building project, the sketch became useless and was possibly replaced by another or

[21]) Compare, however, a more recent discussion by VAN SICLEN, in: *GM* 90, 1986, pp. 71–77.

[22]) ARNOLD, *Der Tempel des Königs Mentuhotep von Deir el-Bahari*, Band 1, *AV* 8, 1974, Taf. 32 and 33.

[23]) With the possible but unlikely exception that the sketches found near the tomb of Senenmut (TT 71) do in fact refer to the subterranean part of this particular tomb, see footnote 2.

REEVES' re-interpretation (in: *CdE* 61, 1986, pp. 43–49) of two architectural sketches from the Valley of the Kings seems to be plausible only in the first of the two ostraka which he examines. It probably came "from rubbish of Rameses IV" (*op. cit.*, p. 45, note 4) and may depict the entrance part of the tomb of this king (KV 2).

During the recent clearing of KV 55 in the Valley of the Kings, a 'fragment of a tomb plan' was found which seems to refer to the royal tomb, PINCH BROCK, in: WILKINSON (ed.), *Valley of the Sun Kings – New Explorations in the Tombs of the Pharaohs*, 1995, p. 42.

others. It was discarded and finally ended in the filling material of the foundation layer of the court pavement or in the space between the decorated sandstone slabs and the stone wall of the pylon or the side walls of the court.

On the other hand, if our interpretation is correct that the 'error' on the sketch of one too many columns on each side wall of the court is due to the fact that the architect/draftsman drew the outlines of the court according to how he found it, it would indeed support our previous assumption, based on other evidence[24]), that Ramses-nakht chose an already existing structure at this particular place for his building activities.

[24]) See *MDAIK* 51, 1995, pp. 216–18.

Ostrakon from tomb K 93.11