# Fragments of Information. Observations Concerning the Architectural Layout of the Middle Kingdom Settlement at ${ }^{\text {cezbet Rushdi }}$ 

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cEzbet Rushdi is a small village about 1 km north-east of Tell el-Dabca (Fig. 1). ${ }^{1}$ In the 1950 ies, a $12^{\text {th }}$ dynasty temple was discovered in the fields east of the village by the Egyptian archaeologist Shehata Adam. ${ }^{2}$ In 1996, the Austrian Archaeological Institute under the directorship of Manfred Bietak decided to reexcavate the temple. During the clearance of the temple site, it was discovered that the temple walls cut into some older buildings which lay beneath it. ${ }^{3}$

During two seasons of excavation, both the temple and the structures beneath it were investigated. The surface of the excavated area was only a little larger than the temple precinct, which consisted of the temple proper and a large secondary building complex associated with it. Only those of the deeper strata could be reached, which stretched under the courtyards and floors of the temple and its secondary building. The central temple-house with its three sanctuaries was not removed; consequently, on a surface area of ca. four squares, the walls beneath it could not be traced.

Thus, 24 squares were completely or partly excavated, all of them disturbed and partly destroyed by the thick walls of the sacred precinct (Fig. 2). Despite this relatively small surface, large quantities of finds were produced, mostly pottery. The very fragmentary character of virtually all of the finds, archaeological records as well as artefacts, causes any interpretation to be tentative. We soon started to call the structures beneath the temple precinct "the settlement", although the exact purpose remains unclear. What kind of "settlement" was found? Was it residen-
${ }^{1}$ For the topographical situation see also a map of the overall Tell el-Dabca area with reconstructed features in I. Forstner-Müller and W. Müller, $E \mathcal{G} L 16$ (2006), 80
${ }^{2}$ Sh. Adam, ASAE 56 (1959), 208-218.
${ }^{3}$ cf. the preliminary report M. Bietak and J. Dorner, EG $\mathcal{L} 8$ (1998), 9-40.
${ }^{4}$ The synopsis of the walls of strata f through c visualises how closely built the area is and to which extent the remains of the settlement are affected by the temple.
5 The analysis of flint implements caused A. Tillmann to assume the presence of workshops. Tillmann, personal communication.
tial or industrial ${ }^{5}$ in character? When was it founded, how long was it in use and when and how was it abandoned? Finally: what was the situation of the excavated structures within the known Middle Kingdom layout of the overall Tell el-Dabca area? None of these questions could conclusively be answered. The chronology of the settlement and the temple has already been discussed several times, ${ }^{6}$ and these items will be treated in the forthcoming publication. This paper, however, will concentrate on the reconstruction of the architectural layout discernible in the ground-plan of the settlement.

When the walls of the houses were numbered, no less than ca. 500 walls were identified as belonging to the strata beneath the temple, the remains of which were densely packed in a very complex stratigraphy. The sequence of layers from the gezirah, where the oldest buildings are found, to the level from which the foundation trenches of the temple walls cut into the ground, has a thickness of only 60 to 75 cm . However, it shows several consecutive phases of renovation and rebuilding, due to considerable enlargements and modifications over the course of time. Four sub-phases could be established, labelled e/1-e/4 (Fig. 3a). ${ }^{7}$ But despite these rich records, many questions remained open. The buildings had all suffered from the major destruction caused by the erection of a temple district directly above them (Fig. 3). ${ }^{8}$ Its deep foundation trenches cut through the older houses and disconnect virtually every wall from the next (Figs. 3b; 4).

At first sight, therefore, it is very difficult to recognize a pattern of the architectural layout. Even basic

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Fig. 1 The Tell el-Dabca archaeological site with the two Middle Kingdom excavation areas of F/I and R/I (czzbet Rushdi).
Survey: J. Dorner, drawing: J. Dorner, L. Majerus


Fig. 2 Synopsis of walls of str. f, e/4-1, d, c
questions, such as how many houses we are effectively dealing with, cannot conclusively be answered. The understanding of the preserved architecture is considerably hampered by the fact that four squares in the centre of the area were excluded from the excavation because the innermost rooms of the temple stretched above them and could not be removed.

The oldest sub-phase (e/4) shows the settlement in a nascent state (Fig. 5). Already at this early stage, there is an open space in the north with granaries,
store-rooms and many small retaining walls, while the south is built with houses. The layout of the houses is simple and irregular. On its west side, the settlement was restricted by a wall, which was later reused to become part of the enclosure of the temple precinct.

The northern front wall of the enclosure of the temple-precinct (including the so-called "Pylon" of the Temple) was constructed over the course of an older wall, which could have been the northern border of the settlement. However, only a short piece of


Fig. 32 profiles from the ${ }^{\text {c Ezbet Rushdi excavation (a: R/I-n/59-S, detail; b: R/I-n/61-W, detail) }}$
this previous wall has been excavated and it could only be proven that it existed in str. d. Therefore, the existence of such a wall already in str. e/4 is a likely assumption, but not assured. The eastern edge of the settlement has not been touched by the excavation. However, as a result of a geophysical survey it became visible that only a few meters east of the excavation
edge a wall ran in a North-South direction, east of which no traces of occupation were discernible. ${ }^{9}$ Although with the geophysical methods applied one cannot penetrate the ground deep enough to reach the remains of str. e/4, it is likely that this wall or a predecessor of it with an identical course bordered the settled area already in the earlier strata. If this recon-

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Fig. 4 House V with walls cut by the foundation trenches of the temple precinct
struction is correct, we would deal with a relatively small stripe of settled land, of ca. 50 m width, which was bordered on the west, north and east by walls, but probably stretched far to the south. East of the enclosure, no construction seems to have taken place. In the north, the course of the Pelusiac branch of the Nile (which locally flowed in a west-eastern direction) was only a few meters beyond the wall. Thus, the western wall was the only one which was not necessarily an enclosure wall, but which could have been an internal wall which separated two quarters of the settlement from each other. Obviously, the northern part of this tongue-shaped stripe of land must have attracted the temple builders as a most suitable plot. It was easy to cut the northern end from the remaining settlement, and the three bordering walls could be reused for the enclosure of the sacred precinct.

In the next subphase, (e/3) the settlement presents itself in its clearest, most original form, before most of the secondary alterations started (Fig. 6). If one tries to recognise patterns of the architectural layout, the map of subphase e/3 may give the best chance to find them.

Despite the four unexcavated squares in the centre, one can try to connect walls which probably once belonged together. What emerges is a clear orthogonal structure ${ }^{10}$ with regular blocks and straight, rightangled streets between them (Fig. 7).

The clearest and most promising block lies in squares $\mathrm{m} / 61$ and $\mathrm{m} / 62$. It seems that two houses are symmetrically juxtaposed, sharing a common wall Both houses have 3 rooms, two E-W oriented, and one N-S, respectively. The E-W rooms are different in size: a larger room lies in the north, a smaller one in the south.

The other houses in the 61 column can be reconstructed in a similar way, whereas in the 62 column square $\mathrm{k} / 62$ has not been excavated, square $1 / 62$ is almost completely destroyed by a huge later pit, and square $n / 62$ has not been excavated beyond str e/1. ${ }^{11}$ However, small traces in the south-western cor ner of $1 / 62$ may encourage us to reconstruct double blocks for the whole 62 column as well, which have been labelled houses I-II; III-IV and so on up to house VII-VIII. Both house I and house VII seem to have an additional room in front of the house prop-

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Fig. 5 R/I: sub-phase e/4
er, which might be called a vestibule, and which in most cases might have been an open yard. Given the evidence of house VI, such a vestibule seems also to be present in front of the symmetrical houses of column 62.

Accordingly, a clear pattern evolves: a central street runs north-south through the whole area (Fig. 7). East and west of it lay double blocks, each (most?) of them composed of two houses, whose small sides faced the street. Each (most?) of these houses had a vestibule or yard as its first room, followed by two longitudinal rooms of different size, followed by a transverse room, whose size seems to be equal to the
vestibule's. This reconstruction may be supported by the fact that the street has a breadth of $2,65 \mathrm{~m}$, which corresponds precisely to 5 Egyptian cubits. ${ }^{12}$ However, it should be noted that this scheme, almost perfectly applicable to the eastern row, is traceable in the western row to a much lesser extent.

The space between the double blocks was not used for cross-roads, but served for storage purposes and probably also for animal breeding. ${ }^{13}$ These plots of land between the blocks are almost 5 m . broad (c. 9 cubits) and we cannot say how they were shared by the inhabitants of the adjoining houses. The plots were equipped with granaries, storerooms and retain-

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Fig. 6 R/I: sub-phase e/3
ing walls according to the individual needs of the inhabitants. Obviously, these structures were an integral part of the economy of these households. Including the vestibules, each house has a surface of around $60 \mathrm{~m}^{2}$ plus its share of the land plot between the blocks, some $25 \mathrm{~m}^{2}$ each.

As stated, the blocks west of the central street can be reconstructed only with a much smaller degree of probability. Obviously, these blocks are not in line with those on the other side of the street. Along the western city-wall ran a street, which was originally bordered by an undulating wall. Step by step, this wall was replaced by the west-walls of the newly erected houses.

The structures labelled house IX-X can possibly be reconstructed according to the established pattern. House IX seems to lack the vestibule, but it might be suggested that the empty space between the undulating wall (which probably extended to this point) ${ }^{14}$ and the houses proper was used as a yard, so that no vestibule was needed. However, if our reconstruction is correct, house X would have had 2 transverse rooms facing the eastern street, which would be an extension of the usual pattern with an additional room.

What lay south of this block is totally unclear; there is not enough space for an additional block between the blocks IX-X and XI-XII.

[^5]lating wall or of a silo is hard to say. Note however, that it is not exactly in line with the undulating wall further south.


Fig. 7 R/I: sub-phase e/3, reconstructed

Block XI-XII is an almost complete reconstuction. What is preserved is possibly the vestibule of house XI, built over the former empty space and the undulating wall. If this is correct, the vestibule would be divided by several walls and connected to a courtyard, which possibly stretched along the whole north side of the block.

In the next block, house XIV is complete. House XIII had no vestibule, but used the space in front of the undulating wall instead, as was the case with house IX. The usual position of longitudinal and transverse rooms, however, is inverted.

The southernmost block was only partly excavated, but is most likely reconstructable according to an analogue pattern.

Although a clear orthogonal block-pattern is discernible, it is obvious that many irregularities occur,
both in the overall structure and in details. In the western row, houses IX to XII and the space between them can be fitted into the overall pattern only with difficulties, and a large space remains unclear. Very little of this block has been excavated and the remains are not particularly helpful to reconstruct the original plan. Further south, houses XIII to XVI seem to be more regular, but they also show many differences in details, such as how large the transverse rooms are or where they are situated. The eastern row, in general, seems to be in better accordance with a regular block-pattern, but also here the houses vary in size, shape and internal arrangement. However, the parallel running streets of 5 cubits width cannot be questioned and form the backbone of the whole structure. If one highlights the structural elements


Fig. 8 Suggested block-pattern of the settlement of ${ }^{\text {cezzbet Rushdi }}$
(Fig. 8), the evenly balanced proportions between houses and the shared space between them, streets and a "public economic area" in the north-western corner become apparent, which makes clear beyond any reasonable doubt that the settlement was built according to a pre-designed "master plan".

In the next higher sub-phase e/2 (Fig. 9), things have not changed very much in the eastern row. Note, however, that the transverse room of house V is now definitely a yard with 2 granaries, and that this room is now open to the north. The parallel transverse room of house VI, on the other hand, was enlarged and its walls were reinforced. It can certainly be considered a closed room.

The western row underwent major alterations. The structure of houses IX and X is still slightly reminiscent of the original pattern, but cannot be thoroughly restored.

The walls of house XI were completely replaced by new ones, following a different layout.

House XIV is more or less unchanged, but the former house XIII seems to have been replaced by a large courtyard with granaries and small adjoining rooms along its edges.

Houses XV and XVI were only slightly modified.
We may conclude that in this sub-phase (e/2), the pattern according to the original "master-plan" started to be adapted to individual needs to a sub-


Fig. 9 R/I: sub-phase e/2, reconstructed
stantial extent. This can best be seen at the block of former houses XIII and XIV, which was transformed into one single unit, consisting of a central "farm-house" (XIV) and a large adjoining economic area, which comprised the plot of former house XIII, and possibly also the plots of former houses XI and XII.

The development towards a more individual layout continues and is intensified in sub-phase e/1 (Fig. 10). The remains on the plot of former houses IX and X are difficult to understand at this level. Could it be that these houses were united into a single building, showing the original pattern of a single house applied to the area of a whole block? This is far from being secure, but no other reasonable reconstruction is obvious.

What happened to houses XI and XII is impossible to understand, given the scarcity of the remains.

Strangely enough, house XIII, which had been replaced by a yard in sub-phase e/2 is now back again with a very orthodox layout, but still seems to form an entity with house XIV. The other blocks seem to have been modified to a lesser degree, but there is none which does not show alterations. One of the most notable features of this sub-phase $(\mathrm{e} / 1)$ is that many walls tend to be thicker and therefore more stable than in any of the previous levels. Instead of only a one-brick thickness, many walls now are one-and-ahalf bricks thick. We may therefore pinpoint "amelioration of the construction technique" and an improved strength and quality of the walls as a general characteristic of sub-phase e/1.

Having established the possible layout of the settlement, we may ask some further questions. Can we decide which rooms were open to the sky and which were closed? As a general rule, one might argue that


Fig. $10 \mathrm{R} / \mathrm{I}$ : sub-phase e/1, reconstructed
the presence of a round granary points to a yard. This might be true, but there is no positive proof. And does the absence of such a structure automatically imply that it was a closed room? As an example, one might have a look at the smaller longitudinal room in house VI, which in the previous levels seemed to be a closed room, but which in level e/1 is suddenly equipped with a $2 / 3^{\text {rd }}$ round store. Was a closed room transformed into a courtyard? The floors, or what is preserved of them, show no visible difference between supposed open and closed rooms.

As the most probable suggestion, one might argue that the inhabitants of the houses used the given layout in a very flexible way, sometimes putting roofs over certain rooms and sometimes not. It is clear that in houses which consist of only 4 rooms, of which at
least one has to be imagined as an open court, no specific use can be ascribed to specific rooms. This is emphasised by the presence of all kinds of installations such as firing-pits, quern emplacements, water jars and round or rectangular storages in every type of room.

This constant adaptation and improvement also makes clear that the settlement came to an unexpected, sudden end when its area was needed for the completely new structures of str. d first (whatever this means) and finally for the temple and its adjoining buildings. Originally built according to a "masterplan" imposed by some authorities, the settlement soon showed aspects of "privatisation" and individual remodelling. At the height of this development, it became a victim of a new building project pursuant to the new intentions of the same (?) authorities.

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[^0]:    ${ }^{6}$ Bietak/Dorner, EG$L ~ 8 ~(1998) ; ~ E . ~ C z e r n y, ~ A ~ M i d d l e ~ K i n g-~$ dom Settlement at Ezbet Rushdi in the Egyptian Nile Delta: Pottery and some Chronological Considerations, Proceedings to the $2^{\text {nd }}$ ICAANE, Copenhagen 2000, forthcoming.
    ${ }^{7}$ Dorner in Bietak/Dorner, EG $\mathcal{T} L 8$ (1998), 28. An earlier "str. f" predates the „settlement", but consisted mainly of a large enclosure wall in the north of the plot.
    B Between the uppermost str. e/1 of the "settlement" and the temple, traces of a further enigmatic „str. d" were found Almost nothing of these structures has survived, cf. Bietak/Dorner, EG$L ~ 8 ~(1998), ~ 28 . ~$

[^1]:    9 cf. I. Forstner-Müller, W. Müller, Ch. Schweitzer, M. Weisl, EĠL 14 (2004), 105, fig. 5

[^2]:    ${ }^{0}$ The structure strikingly resembles the famous „hippodam-
    ic" system of classic antiquity

[^3]:    ${ }^{12} 1$ cubit $=0,52 \mathrm{~m}$

[^4]:    ${ }^{13}$ The analysis of the animal bones by Angela von den Driesch revealed pigs as the most common animals in the Rushdisettlement.

[^5]:    ${ }^{14}$ Whether the few bricks of a bended structure at the western border of square $\mathrm{k} / 58$ (see Fig. 7) were part of this undu-

