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THE MONUMENTAL GATE AT TOL-E AJORI, PERSEPOLIS (FARS): NEW ARCHAEOLOGICAL DATA

BY

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Abstract: Thanks to new evidence brought to light in 2015 at Tol-e Ajori, Persepolis (Fars), further information has been acquired on two fundamental architectural aspects, the technique of construction on one hand, and the plan of the inner room on the other. A third important objective, the topographic context of the Gate, has also benefited from new information, which is however insufficient to complete the picture. Finally, interpretation of the destruction phase of the Gate has also been further advanced.

Progress in the study of the glazed bricks decoration, particularly thanks to a preserved stretch of wall with *in situ* glazed decoration, has also been considerable, and little by little we are gaining a fuller understanding of the technique and iconography of this unique find of relief glazed bricks in Fars.

Keywords: Archaeology, Proto-Achaemenid Fars, Babylon, Glazed bricks, Fitters' marks

Introduction

In Autumn 2015 the fifth excavation season was carried out at the monumental gate at Tol-e Ajori, 3.5 km to the NW of the Persepolis Terrace in the area of Bagh-e Firuzi[1]. Three new trenches were opened (Pl. 1).

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[1] The 2015 season was conducted from 17th September to 31st October 2015. The authors wish to thank Mr. Seyyed Mohammad Beheshti, Director of the Research Institute for Cultural Heritage and Tourism (RICHT), and Dr Ms Hamideh Chubak, Director of the Iranian Center for Archaeological Research (ICAR).

The team was composed by Alireza Askari Chaverdi and Pierfrancesco Callieri, directors; by Vahid Barani (archaeologist, field supervisor), Luca Colliva (archaeologist, field supervisor), Marco Galuppi (archaeologist), Nabil Ibnoerrida (archaeologist), Emad Matin (archaeologist, field supervisor), Davide Maria Meucci (archaeologist), Davide Pierantoni (archaeologist), Domiziana Rossi (archaeologist), Paolo Severi (archaeologist), Maryam Soleimani (conservator), Francesco Tessa (archaeologist), Stefano Tilia (topographer) and Vahid Younesi (archaeologist).

Trench Tr. 11 (7 × 11 m, with N-S main axis) was excavated immediately SE of Trench Tr. 9 in order to study the inner room of the Building and the inner face of the southern wall (Pl. 2a).

Trench Tr. 12 (10 × 5 m, with N-S main axis) was excavated one meter E of Trench Tr. 8 to examine the external stratigraphy of the Building, the condition of the south-western wall and the possible presence of an external wall adjoining to the Building (Pl. 3).

Trench Tr. 13 (5 × 5 m) was excavated one meter E of Tr. 5 with the N side two meters S of the N side of Tr. 5, in order to examine the external stratigraphy of the Building, the condition of the north-eastern wall and the possible presence of a fence wall (Pl. 2b).

On the basis of the comprehensive information obtained to date, we can state that the monument of Tol-e Ajori (Pl. 1) is rectangular in plan and measures 39.07 m (NW-SE) × 29.05 m (NE-SW), oriented from WNW to ESE, with a 20° shift to N from the E-W axis. Its outer perimeter is formed by a wall of considerable thickness which encloses a rather limited inner room accessed along two corridors on the NW and SE short sides: the inner room is 8.00 m wide and 14.36 m long, while each of the corridors is 4.56 m wide and 12.36 m long. Neither of the two entrances has so far been brought to light, and we have no idea of their plan, while the presence of benches along the walls of the inner room is now certain.

In the long stretches which delimit the inner room, the perimeter wall has proved to be characterized by a mud-brick core c. 5 m in width, encased on its outer and inner sides by two sections in baked bricks, each c. 2.5 m wide, with facing in glazed bricks[2]. To simplify description, we will approach it in terms of the five structural blocks we have identified in the wall structure:

– Block A – outer (i.e. facing the outside) projecting foundation in baked bricks;

Four students from the M.A. Course in Archaeology at the Shiraz University (Habibeh Abbasi, Addiyan Guraki, Maryam Hosseini and Hadi Mehranpur) were also present.

Abdorreza Esnaashari and Fatemeh Farazandeh Shahraki worked as draughtspersons.

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[2] These measurements are different in the area of the two corridors, where however no complete section has been obtained to date.

– Block B – outer section of the elevation in baked bricks with facing of glazed bricks;
– Block C – the core of the wall elevation in mud-brick with odd baked bricks;
– Block D – the inner (i.e. facing the inner room) section of the elevation in baked bricks with facing of glazed bricks;
– Block E – the inner projecting foundation in baked bricks (Askari Chaverdi, Callieri & Gondet 2013: 13-14, fig. 9).

The interpretation of the building proposed in 2014 (Askari Chaverdi, Callieri & Matin, 2014) has found confirmation. At the same time, significant new features have been discovered which enhance the reliability of our picture of the monument.

Nevertheless, excavation of the collapsed bricks yielded several important fragments of brick with relief glazed decoration, including two fragments of cuneiform inscriptions. Thus the last section of the paper will present some new reflections on various aspects of the study of glazed bricks, while in a separate article Dr Gian Pietro Basello will present the two new fragments of cuneiform inscriptions.

(A.A.C., P.C.)

Technical features of the Gate construction

The extensive robbery trenches which were dug after the destruction to pillage the baked bricks and which had dire consequences for the preservation of the Gate, nevertheless made it easier to investigate building techniques.

Although some general conclusions can be drawn on each of the features of the Gate, based on the correlation of the results of the 2015 season in the light of the previous works, the construction technique shows such a variety of devices that it is almost always necessary to refer to each specific trench to single out their peculiarities[3].

Pre-construction levels

Illustration of the new data obtained on the monument begins with details regarding the soil prior to its construction. In the previous seasons,

[3] I wish to thank Dr Rémy Boucharlat for accepting to read a draft of the article and sharing his views.

only Trench Tr. 10 had yielded some weak evidence of human presence prior to the start of the construction[4] (Askari Chaverdi, Callieri & Matin 2014: 233). In 2015, exploration of the pre-construction levels was carried out under the floor level of the inner room in Trench Tr. 11. The pre-building soil was investigated in an area sufficiently large to obtain satisfactory results, also with the collaboration of the pedologist Dr Sophie Cornu of the project "PaleoPersepolis"[5]: she recognized these layers as consisting essentially of pure clay, the only difference being the fact that the two lowermost layers[6] still showed the soil structure while the upper one[7] had been compacted to such an extent as no longer to show the soil structure. The lowermost layer[8] was reached at the bottom of a sounding measuring 2.00 × 3.00-2.00 m excavated in the W half of the trench[9] (Pl. 2a).

The interesting discovery, which confirms what had been ascertained in 2014 in Trench Tr. 10, is the presence of anthropic material in this otherwise sterile soil: indeed in SU1139 one single small potsherd showing fabric, surface treatment and traces of production different from the Achaemenid Late Plain Ware was recovered, probably belonging to the same Shoga cultural phase hypothesized on the basis of the fabric characteristic of the sherd recovered in 2014 (Askari Chaverdi, Callieri & Matin 2014: 233).

In the other two trenches Tr. 12 and Tr. 13, the pre-building soil was not excavated but only reached at the bottom of the excavation in the wall robber trenches which pillaged most of the baked bricks of the structure (Askari Chaverdi, Callieri & Gondet 2013: 25).

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[4] In Trench Tr. 10 the earliest phase evidenced is represented by the layers cut by the foundation trenches of the monument's structures, which unlike other trenches here are not sterile. The lowermost of these layers (Stratigraphic Unit SU1038), depurated clayey soil of dark yellow colour, is cut by a probable grave (Negative Stratigraphic Unit NSU1036, SU1037), unfortunately disturbed by a large hole made by an animal which left only the NW long side of the grave pit intact. The grave has an orientation from SE to NW, parallel to the wall Structural Stratigraphic Unit SSU1021: since a long bone was found in the W area, the head should have been to the E. This episode was then covered by the following layer of depurated yellowish clay SU1034, which yielded a fragment of red-painted Shoga Ware rim of a small jug.

[5] I thank Dr Sophie Cornu (INA, Marseille) and Dr Morteza Djamali (IMBE, Marseille), coordinator of the project "PaleoPersepolis", for this invaluable help.

[6] SU1138 and SU1139.

[7] SU1135.

[8] SU1138.

[9] Covered by SU1139 and the latter by SU1135.

In Trench Tr. 12, the pre-building clayey soil[10] (Pl. 3) was only exposed at the bottom of the foundation trench (see below). Another possible area of this layer[11] was exposed at the foot of the structure adjoining the Gate to the SW[12]. In both the loci, the soil consists of pure and compact clay of a yellowish colour.

In Trench Tr. 13 the pre-building stratigraphy was exposed at the bottom of two pillage pits as well through excavation of a trial trench in the NE corner of the trench, in the outer area to the NE of the building (Pl. 2b). In the first instance, clayey soil was identified at the bottom of the main wall robber trench which pillaged the baked bricks of the building[13] and at the bottom of the later tunnel pit which was cut into the soil to the N of the wall, in the originally outer area[14]: the difference between these two areas lies in the fact that, while the latter shows no trace of human activity, the former was compacted by the setting of the lowermost course of baked bricks and still bears the impression of these bricks. In the trial trench excavated in the E part of the outer area (measuring 1.50 × 1.50-0.75 m), the pre-building soil is a clayey layer[15] from the surface of which the foundation trench of the building was cut (see below).

In the trenches excavated in the previous seasons, the pre-building soil was only excavated in very limited soundings, proving sterile in all cases.

Construction procedure: preparation of the terrain

The first action of the ancient builders when starting construction of the Gate consisted in cutting the existing soil in order to lay the lowermost courses of the baked-brick foundation (representing the Blocks A and E of the structure).

As previously suggested (Askari Chaverdi, Callieri & Gondet 2013: 15; Askari Chaverdi, Callieri & Matin 2014), it has now been confirmed that the baked-brick foundations were set within foundation trenches which started from the surface considered solid enough to support the floors, and reached a depth considered sufficient for the height of the foundations of

[10] SU1221.
[11] SU1248.
[12] SSU1247.
[13] SU1336.
[14] SU1339.
[15] SU1349.

the wall: we thus have evidence of the pre-building soil preparation both outside the walls and at their base.

As regards the cuts of the soil at the bottom of the foundation trenches, they could be seen as a result of the action of pillage of a large part of the baked-brick sections of the walls, including the foundations. On the whole, it is evident that the builders tried to make the best possible use of the existing soil and its cuts, particularly to endow the foundations with stability. This important feature of the builders' approach is seen at best also in Trench Tr. 12, where the pre-building clayey soil[16] was cut[17] in the shape of a whole row of bricks forming a step adjacent to other rows of the lowermost baked-brick course of the Block A foundation of wall[18], in order to save on use of the equivalent baked bricks: this band of compact soil still bears the impressions of the baked bricks of the overlying course (Pl. 3, 4a). The same stepped device was recorded in Trench Tr. 6, at the bottom of the W wall of the SE entrance corridor (see below) and in Trench Tr. 9, at the bottom of the E wall of the NW entrance corridor (see below).

In Trench Tr. 13, the pre-building soil[19] was compacted for the setting of the lowermost course of baked bricks and still bears the impressions of these bricks: in fact, at the centre of the area, parallel to the wall structure, the compacted soil forms a raised band corresponding to a whole row of bricks, with the function of horizontally anchoring the lowermost layer of baked bricks (Pl. 2b, 4b).

Comparing these data with information from the previous trenches, we note a similar situation adapted to the local conditions of the soil, showing that wherever possible the builders made functional use of the existing soil, cutting it in order to satisfy the local requirement[20].

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[16] SU1221.
[17] NSU1222.
[18] SSU1220.
[19] SU1336.
[20] In Trench Tr. 6, at the corner between the inner room and the SE entrance corridor, the impression of the baked bricks on the hard clay of pre-building soil SU625-SU640 artificially levelled by cut NSU626, observed at the bottom of the wall robber trench, was visible on the whole band on the E, corresponding to the W side wall of the entrance corridor, for a width of 3.5 bricks: further SW, the bottom level rose with a step forming a row obtained cutting the pre-building clay, above which were the lower course of baked bricks. In the same area, further E, despite the pillage, the impression which the foundation left against the stratification accumulated outside it helped recognition of the base of the

As regards the area facing the walls, in Trench Tr. 11 the N limit of the foundation trench of the wall of the inner room was easily distinguished on the surface of the uppermost layer of the pre-building phase[21]. This cut[22] runs parallel to the foundation[23] at a distance of c. 0.15 m from it and to a depth of c. 0.50 m (Pl. 2a, 5b).

In Trench Tr. 13 the limit of the foundation trench was also evidenced in the trial trench excavated in the E part of the outer area, to the N of the wall robbery trench which pillaged most of the baked bricks of the NE wall of the Gate[24] — a wall which nevertheless left its impression in the adjoining stratification. Here a foundation trench[25] almost parallel to the baked bricks Block A of the wall was cut in the existing soil layer[26] for a height of c. 0.35 m, 0.10 m wider than the wall (Pl. 2b).

If we compare these data with the previous information, we see similar trends adapted to local specific situations. On average, the limit of the foundation trenches had a depth of c. 0.50 m and exceeded the width of the walls by 0.20 m. However, the surface of the pre-existing terrain was not level throughout the area occupied by the construction. For this reason, it is possible to see foundation trenches of very different measures recorded in the various areas of the site[27].

W side of the corridor wall SU621: this shows that the base of the wall ran on the same horizontal level for 11.5 bricks, then made two descending steps, the first of the height of one brick, the second of the height of three bricks: probably corresponding to these steps in the inner structure of the wall were similar steps in the outer floor level at the foot of the wall.

[21] SU1135.

[22] NSU1137.

[23] SSU1140.

[24] SSU1322.

[25] NSU1351.

[26] SU1349.

[27] For example, in Trench Tr. 1, excavated at the centre of the SW outer side of the Gate, the foundation trench NSU081 is only c. 0.25 m deep and 0.70-0.80 m wider than the wall, dug in a very hard soil SU080 which could not be tested but which shows characteristics similar to the natural soil brought to light in other trenches.

Also in Trench Tr. 3, at the S corner of the Gate, the foundation trench NSU325 for the wall of the SW side of the monument is only c. 0.15 m deep and is c. 0.50 m wider than the wall, and was dug in a very hard soil SU324 which could not be tested but which has characteristics similar to the natural soil brought to light in other trenches. In the SE entrance corridor, Trench Tr. 6, the foundation trench NSU638, only c. 0.25 m deep and 0.10 m wider than the wall, was discovered cutting into the upper surface of the pre-building soil SU635.

Construction procedure: laying the foundations

The foundations of the monument, described as the Block A of the structure in the sections of the walls facing outside and Block E in the sections facing the inner room, represent a projecting foot below the foundation offset, and are built in unglazed bricks of slightly larger dimensions than the rest of the bricks, particularly in thickness, which averages 9 to 10 cm instead of the average 8 cm of the bricks of the elevation.

Given the considerable dimension of the building and the different situation of the pre-building soil, the recorded height of the foundation Blocks A and E below the wall elevation was not uniform in all the excavated trenches, but varied in accordance with the level of the pre-building soil, in order to ensure horizontal uniformity in the Blocks B and D of the elevation with glazed brick facing.

In Trench Tr. 11, study of the foundation Block E was confined to the outside, since the pillage here did not involve the foundation courses. Thus from the excavation inside the foundation trench we could see that five 11 cm thick bricks courses were set inside the foundation trench[28] (h. c. 0.50 m). The space left between the trench and the foundation was then filled with loose soil containing potsherds, and also a fragment of a pot with traces of bitumen: the presence of this potsherd with bitumen confirms that bitumen was used as mortar also for the foundation courses of unglazed bricks.

In Trench Tr. 12, due to the structures adjoining against the SW outer face of the Gate wall[29] (see below) it was possible to carry out excavation only inside the wall robber trench. Here the impression left by the Block A foundation in the stratification which accumulated to the SW of it in the outer area seems to indicate that the offset marking the upper end of Block A foundation, projecting from the elevation with an offset of 0.10 m, is on top of six courses of unglazed bricks.

In Trench Tr. 13, the impression of the Block A foundation in the outer accumulation, visible thanks to the successive wall robbery pit, shows that it was made up by four courses of bricks; the narrow space, c. 0.10 m wide, between the foundation trench and the wall which originally occupied it before the pillage was then filled with looser soil[30], characterized by the presence of bitumen fragments. However, the offset marking the end

[28] NSU1137.
[29] SSU1213.
[30] SU1350.

of the foundation and the beginning of the elevation Block B was recorded, on the impression which the wall left on the outer stratification, at a level higher than the top of the foundation trench: this means that two courses of Block A were outcropping from the outer floor level and were visible. A soil accumulation which could be associated with the construction is the lowermost layer accumulated directly on the pre-building soil[31], which has bitumen fragments.

Comparison with previous evidence from other trenches reveals a general consistency. We see in all cases a number of courses in the Block A foundation corresponding to the higher or lower elevation of the pre-building soil given the need to present a uniform elevation with its glazed facing. In some trenches the foundation presents more than one offset[32]. Often the foundation filling contains fragments of baked bricks and bitumen as well as fragments of glazed bricks[33], confirming that at least some of the glazed bricks had already arrived on the construction site from the very beginning of the work.

A peculiar situation is evidenced along the NE outer side of the Gate, in Trenches Tr. 5 and Tr. 7. In Trench Tr. 5 examination of the lower courses of the baked brick Block A of the NE wall[34], shows on their N face the presence of a section, the bricks of which are not joined to those of the main body of the wall. This portion is in turn composed of two adjacent rows, not joined between them, each preserved for a maximum elevation of six bricks, the bottom course lying slightly below the surface of the first

[31] SU1348.

[32] As for the W side of the corridor wall in Trench 6, SSU621, no brick was left *in situ* by the later substantial pillage of the Gate, and only the impression of the baked bricks against the stratification accumulated outside them allowed for recognition of the wall structure. This is characterised by a profile with two offsets at different levels: starting from the bottom of the wall, after six courses of bricks there was a first offset recessed by 0.10 m, then the wall continued for three more bricks and had a second offset recessed by 0.06 m. Furthermore, we already mentioned the two descending steps of the foundation bottom towards the SE: we do not know whether corresponding to these steps in the inner structure of the wall there were similar steps in the outer floor level at the foot of the wall or whether these steps were confined to the foundation structure. In the former case we could reconstruct an entrance corridor with steps c. 1.00 m long, probably limited by a row of bricks binding the clay floor level, and side walls characterized by two recessing offsets, the lower of the two probably set into the foundation trench but the second probably visible in its elevation.

[33] The foundation trench NSU1032 of the walls at the E corner of the inner room was filled by two successive layers SU1033, SU1035, the lower one more compact: in SU1035 there was a fragment of yellow glazed brick.

[34] SSU508.

course of main Block A. The impression of the lowermost course of bricks in the pillaged part of Trench Tr. 13, too, shows two parallel lines corresponding exactly to the two adjoining rows of Trench Tr. 5. On the whole, given the limited extension of these trenches, we should perhaps have more evidence before conclusively confirming our working hypothesis that these adjoining rows do not make up a later addition, as originally thought, but are only successive construction steps, possibly required by verification of the measurements of the wall [35].

Summing up the information on the foundations, we have in all the trenches evidence of a block of unglazed baked bricks, of variable height: starting from the W corner, six courses in Trench Tr. 8, eight courses in Trenches Tr. 1 and Tr. 3, six courses in Trench Tr. 6, five courses in Trenches Tr. 10, Tr. 11 and Tr. 9, four courses in Trench Tr. 13, and finally seven courses in Trench Tr. 5. In all cases the first brick of the successive block, recessed by a 0.10 m offset, is still unglazed like the bricks of Blocks A and E and is likely to be part of the foundations as well. All the bricks of the foundations are baked and are slightly thicker than the bricks of the elevations. These bricks are set in partially overlapping position course by course and row by row, and the outer rows of bricks are alternatively square and rectangular.

Coming to comparison with the Babylon Ishtar Gate, we see there a particular situation, for we find a succession of periods which present different decoration techniques and which are each used as the foundation of the subsequent phase (Koldewey 1918: 41). Similar, however, is the use of rectangular bricks allowing for the lateral shift course by course (*ibid.*: 19).

Construction procedure: avoiding moisture infiltrations in the foundations

In Trench Tr. 12 the pillage of most of the baked bricks of Block A has laid bare a refined system used to drain and prevent moisture infiltration in the core of the wall: in the bottom part of the baked-brick foundation

[35] In Trench Tr. 7 also there is an outer row of bricks, measuring 0.33 m in width, not joined to the rest of the Gate wall SSU716, as also found in Tr. 5; these bricks are not homogeneous in thickness and dimensions, with clay used for filling the gaps, and some of them show a lower quality of production. Also along the NW limit of the second extension of the trench, the preserved surface of the wall shows a patch where irregular bricks were used: a square brick cut in the shape of a hexagon, and set in the wall next to another irregular brick fragment, the whole covered by bitumen. This is a sign of lower quality in this area.

Block A, the band bordering the part of pre-building clay cut for the preparation of the terrain[36], having the width of two rows of baked bricks in the lowermost visible course (second course from bottom) and of one row in the upper course[37], is made up of fragments of baked bricks set with some voids between each fragment, with the clear aim to provide drainage or air circulation (Pl. 3, 4a).

The same device had been noticed in Trench Tr. 8 at the bottom of the wall robber trench adjacent to the mud-brick core: here the baked-brick section visible on top of the pre-building soil is obtained also with the use of fragments of baked bricks laid flat instead of whole bricks: in the lowermost course, this system is used throughout an inner band of 0.50 m, corresponding to one and half bricks; in the course above, the inner brick is whole, and the fragments of bricks fill a gap of about 0.31 m up to the next brick.

In Trench Tr. 12 this system is further implemented with a small channel[38], obtained by leaving a distance of 0.10 m between two baked bricks of the second lowermost course of Block A, found filled with a later loose filling[39] (Pl. 4a). The presence of small channels recorded between the courses of baked bricks is also described by R. Koldewey at Babylon (Koldewey 1914: 84), having the same aim of securing the dryness of the building.

The rest of the foundation, above this drainage section, where preserved, shows courses of normal baked bricks.

Significant confirmation of a previous hypothesis also resulted from the excavation of Trench Tr. 12. With reference to the results of Trench Tr. 9, it had been proposed that the baked-brick foundation could be present not only below the baked-brick section Blocks B and D, as suggested in 2012 (Askari Chaverdi, Callieri & Gondet 2013: fig. 11), but also below the mud-brick Block C, particularly thanks to results of auger coring in the mud-brick portion (Askari Chaverdi, Callieri & Matin 2014: 226-227). And indeed the wall robbery trench which pillaged most of the baked-brick section Block B in Tr. 12, halting where mud-brick Block C took the place of baked bricks, showed that in fact a section built with courses of baked bricks with bitumen mortar, of variable height, is visible under the mud-brick with the function

[36] SU1221.
[37] SSU1220.
[38] SSU1224.
[39] SU1223.

of preventing moisture from underground to rise in the elevation of the core. Throughout the length of the trench, the section of baked bricks below the mud-brick exceeds by six courses the six courses of the Block A foundation, and thus the baked-brick elevation Block B extends towards the core below the mud-brick Block C; moreover, in a band measuring two-three bricks adjacent to the E limit of the trench, the baked brick section rises by four more bricks, reaching a total number of ten courses above the six foundation courses (Pl. 5a). This could mean that the mud-brick section filled a grid of baked bricks, strengthening the whole structure.

The same situation was in fact also recorded in Tr. 13, where the robbery trench left a small area of the mud-brick Block C and a part of the baked brick Blocks A and B. Below the mud-brick, sixteen courses of baked bricks are visible in the "stepped" profile of the wall-robber trench, the same number observed in Trench Tr. 12 (Pl. 4b). Also in Tr. 13 the offset marking the end of Block A appears (in its impression on the stratification accumulated outside the structure) at the sixth course of baked bricks: also in this area the baked-brick elevation Block B extended towards the core of the Gate below the mud-brick.

In Trench Tr. 11, too, baked-brick Block D extends below the mud-brick Block C with at least nine courses (Pl. 5b).

The only exception to this interpretation is a single instance in which the mud-brick Block C seems to lie directly above the hard natural soil: in Trench Tr. 9 the cut along the N side of the NW corridor of the building[40] seems to extend vertically with no baked-brick interruption between the pre-building hard clay and the lower part of the mud-brick Block C.

The walls elevation

Only in Trenches Tr. 1, Tr. 3, Tr. 5[41], Tr. 6[42] and Tr. 9 had the outer facing with glazed bricks of Blocks B and D been found *in situ*, the former

[40] NSU928.

[41] In Trench Tr. 5 a very short patch of the inner SW glazed face (Block D) of the NE wall of the Gate SSU522 was discovered inside the wall robber trench, consisting of three superimposed glazed brick fragments belonging to three successive courses, laid with bitumen mortar.

[42] In Trench Tr. 6 above the foundation of the corner of the inner room, the SE wall SSU621 had no elevation preserved, whereas the SW wall SSU623 showed two courses set back by 0.10 m to form an offset: of these two courses, the lower one was, as elsewhere,

two being parts of the outer SW face, the latter three respectively part of the inner room and of the SW wall of the NW entrance corridor.

In Trench Tr. 1, the elevation proper above the recessed unglazed brick topping Block A has preserved nine courses of baked bricks (Block B of the structure) with glazed outer facing: this block has the lowest five courses in dark glaze[43], then three courses in yellow glaze, while finally the last preserved course is white-glazed. These bricks are of irregular thickness, and a few larger bricks (36 × 36 cm) are also included. Also these bricks are set in partially overlapping position course by course, and the outer rows of bricks are alternatively square and rectangular. As shown by the two topmost preserved courses of bricks, the two outer rows of bricks of each course are set in a bitumen mortar about 1 cm thick.

In Trench Tr. 3, above the offset in the foundation the elevation proper continued on the same line as the recessed course of unglazed bricks with five courses of glazed bricks (Block B of the structure): the glaze is dark. As shown by the two topmost preserved courses of bricks, the two or three outer rows of bricks of each course are set in a bitumen mortar about 1 cm thick, with the probable function of preventing moisture infiltration from outside to the core of the platform. An extremely interesting element of the courses of glazed bricks is that, unlike the bricks observed in the adjacent Trench Tr. 1, they did not bear any fitters' mark, despite being set in a bitumen mortar. Since the fitters' marks were observed in Trench Tr. 1 in the bricks with yellow and white (?) glaze above the dark ones, it is evident that the fitters' marks were not present on the surface of the dark glazed bricks, which in Trench Tr. 3 are the only preserved ones.

In Trench Tr. 9, the wall on the SW side of the corridor[44] preserves the Block D corner between the corridor (N face) and the inner room (E face). The wall is well preserved for a 1.50 m-long stretch from its SE corner, and above the deteriorated course in unglazed bricks above the offset bears thirteen superimposed courses of baked bricks showing glazed decoration of various types: from the bottom five courses with white or dark (?) glaze, one with orange yellow glaze, one alternating yellow and white squares,

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of unglazed bricks 9 cm thick (foundation), the upper one of bricks with yellow glaze, 8 cm thick (elevation).

[43] As regards the definition of the present vs. original colours, see the section "New observations…".

[44] SSU912.

again one with orange yellow glaze, one with yellow or white (?) glaze, three courses forming a row of open rosettes (of which three are partly preserved) and finally a white glazed course (Askari Chaverdi, Callieri & Matin 2014: 230, fig. 9).

In the 2015 season in Trench Tr. 11 a stretch of the elevation of the wall of the inner room was found preserved from the subsequent pillage, in a reasonably good state of conservation. The wall as usual consisted of a baked-brick section[45] (Block D) and a mud-brick section[46] (Block C): the outermost part for a thickness of 2.50 m had an elevation entirely constructed in baked bricks, while the mud-brick sections lay on some courses of baked bricks section, with no uniform number of courses. The outermost three-four rows of baked bricks of Block D used bitumen as mortar, as visible from what was left by the wall robbery trench. The NE face of Block D, above the course of unglazed bricks set back by 0.035 m, was built with glazed bricks, of which eleven courses are preserved for a 2.70 m long stretch. The lower ones were damaged by a disastrous event while the portion above still shows its well-preserved glazed decoration, even though it was horizontally shifted by 0.10 m to NE. In view of this situation, to avoid the risk of collapse it was decided not to excavate the whole portion below the shift, which was only investigated in a 0.50 m long "window", showing in the courses from the second to the fifth from the bottom the effects of strong compression and horizontal movement, possibly caused by an earthquake (see "Destruction of the Gate Process"). Above this damaged portion, the glazed-brick courses are well-preserved and show from the bottom upwards: a band composed by a course with alternating yellow, white and dark squares between two courses of monochrome yellow bricks and two courses belonging to a band of open rosettes in dark ground above a monochrome dark course (Pl. 5b). This is the same composition as the one discovered in Trench Tr. 9, and corresponds exactly to that of the Ishtar Gate, with a difference in the present preservation of the blue glaze. Another interesting feature of this portion of wall consists in the fitters' marks, well preserved on the upper face of the glazed bricks under the bitumen mortar: here the meaning of the central fitters' mark could be effectively understood in relation to the course position.

[45] SSU1120.
[46] SSU1109.

In Tr. 12 the elevation of the wall also had an outer section in baked bricks[47] and an inner core in mud-brick[48]. Block B is built set back by an offset of 0.10 m cm. No glazed brick of the facing of this section was spared by the pillage, but impressions of the bricks remain on the stratification accumulated to the SW outer area, above the last preserved brick course of the offset.

In all the trenches where the preservation of the wall was good enough it was noted that the transition between the fired bricks of Blocks A-E and Blocks B-D and the mud-brick Block C had been carried out gradually both horizontally and vertically, in order to avoid abrupt transition between the two materials. So much is inferred from two pieces of evidence: vertically, the passage between the foundation of baked bricks (Blocks A-E) and the mud-brick elevation (Block C) was not uniform in the excavated trenches, since the height of the baked-brick section below the mud-brick is quite different; horizontally, the joint between the baked-brick elevation (Blocks B-D) and the mud-brick elevation (Block C) is accordingly also gradual and in no trench was abrupt transition found between the two blocks[49].

The bench along the walls of the inner room and the floor

In 2014, in Trench Tr. 10 it was noticed that the presumed S face of the NE wall of the Inner room[50], preserving above the projecting foot in unglazed baked bricks one course of the elevation in glazed baked bricks, was not on the same line as that discovered in Trench Tr. 5 but was advanced towards the centre of the room by three rows of bricks: thus the hypothesis of a low bench in glazed bricks adjoining the S face of the proper elevation was proposed (Askari Chaverdi, Callieri & Matin 2014: 234).

In Trench Tr. 11 the existence of benches running along the side walls of the inner room hypothesized in Trench Tr. 10 has in fact been confirmed. Above the foundation offset a 0.93 m-wide bench[51] was built at the

[47] SSU1213, Block B.

[48] SSU1207, Block C.

[49] In Trench Tr. 1 the transition between the baked bricks of Block A and Block B and the mud-brick Block C was also carried out through two courses of baked bricks separated by a 0.05 m thick course of *chineh*, which allowed for gradual transition between the two different materials.

[50] SSU1021.

[51] SSU1130.

foot of the W part of the wall, with one course of 11 cm-thick unglazed bricks and a few courses of glazed bricks, of which only one was preserved, covered by a layer of bitumen mortar, proving the original existence of more courses which had been pillaged (Pl. 5b): two fragments of bricks, recovered in collapse layers, showing a glaze layer also on the upper flat surface, confirm that originally the bench was covered by a course of bricks glazed also on their upper face. The bench ends with a right-angle profile and the corner brick shows glaze on two adjoining faces. The glazed-brick course projects by 0.035 m from the underlying course of unglazed bricks, and this projection also continues at the base of the stretch of the wall where the bench was absent. At a distance of 1.65 m from the end of the first bench, a second bench[52] with the same two courses of unglazed and glazed bricks begins, parallel to the first one, but exposed only for a short stretch at the junction with the wall, along the E section of the trench (Pl. 5b), which was likely to continue as far as the SE corner of the inner room, as shown by the existence of a similar bench in Trench Tr. 6. It is interesting to note that the area without the bench corresponds approximately to the centre of the inner room, and this interruption can be accounted for with the presence on the wall above the bench of a special feature, perhaps the inscription of which four fragments were recovered in the central room.

The floor of the inner room can be hypothesized as a baked-brick surface subsequently pillaged. Three elements support this hypothesis. The first, albeit of a subjective nature, is the poor appearance of the clay floor level in a building enhanced with sumptuous decoration in glazed bricks. The second, more objective, element is the poor compaction of this earth floor, which does not appear to have been "beaten" in any part. The final element, perhaps the most telling, is the projection of 0.035 m shown by the first course of glazed bricks above the course of unglazed bricks topping the foundation Block A both in the bench and in the side wall of the inner room: this projection could have served to "block" the unglazed bricks of the floor at their junction with the side elevations of the benches and of the wall where the bench was absent. At Babylon too, the usual floor is made with a single layer of bricks (Koldewey 1914: 104), and only at special places did the mason resort to a sub-paving set in asphalt (Marzahn 1992: 8).

[52] SSU1133.

The evidence from the other excavated areas of the inner room does not contradict this hypothesis. The only difference with Trench Tr. 11 is the existence of an intermediate layer for preparing the floor above the surface of the pre-building soil, both in Trenches Tr. 9 and Tr. 10. In fact, in Trench Tr. 9 and Trench Tr. 10 the original floor level of the corridor at the junction with the inner room has been identified in the upper surface of a layer of light depurated clayey soil of medium hardness which covers the previous stratification and levels the area at the level of the upper offset[53]: no real indicators of utilisation of the surface as a floor have been found, while the poor compactness of the floor had also suggested very limited usage (Askari Chaverdi, Callieri & Matin 2014: 230-234).

(P.C.)

The External context of the Gate and its topographical setting

In Trench Tr. 12 Phase 6 sees the construction of a structure built in the outer area against the SW outer face of the Gate and at right-angles to it (Pl. 3, 4a). The structure consists of three progressive sections, each set against the other, parallel to the long side of the Gate wall: the first[54] and the second[55] sections are limited by two rows of baked bricks, including reused glazed bricks, which delimit on the NE and SW sides a core of mud-brick and baked-brick fragments; interestingly enough, the first section is not set directly against the outer face of the Gate[56] but is built at a distance of 0.10 m from it, the gap[57] between the two structures being filled with clay and baked brick fragments. The third section[58], further to SW, seems to be entirely built in compacted clay, and its SW limit was recognized only thanks to a regular line of plant roots, generally growing against hard surfaces.

Even though the presence of this structure set immediately against the SW outer face of the Gate has made it impossible to verify the level from which it was built, the physical relationship between Gate and structure

[53] Respectively SU927 and SU1027.
[54] SSU1228.
[55] SSU1229.
[56] SSU1213.
[57] NSU1250.
[58] SSU1247.

seems to indicate that the latter was built after completion of that part of the Gate.

This structure is evidently the continuation of the two structures partially brought to light in Trench Tr. 8. Here, on top of two compact soil accumulations[59] brought to light in the small E sounding, a mud-brick structure[60] was built, running around the outer face of the corner wall, abutting against the projecting foot of the Gate's wall and topped by a row of baked bricks[61] which also made use of fragmented bricks. Actually, the mud-brick was found in a very corroded state and the excavation produced no evidence of any individual bricks: however, the wall texture in mud-brick was visible in the NW face of the successive wall robbery trench which spoliated the Gate baked bricks. Here the mud-brick lies on the projecting foot offset; besides, a few odd baked bricks set in the same texture parallel to the wall confirmed that originally they were part of a mud-brick structure, as noticed in Trench Tr. 1. Unfortunately, it was impossible to make out the outer limits of this mud-brick structure, since the structure was found collapsed towards the outside and the baked bricks of SSU813 had been pillaged by the robbery trenches of the successive phase.

Summing up the width of the two stretches of the structure brought to light in the two Trenches Tr. 8 and Tr. 12, its total exposed width amounts to more than 11.50 m, but it must have been greater considering that both its NW and the SE boundaries have not been found. The interpretation advanced for the evidence in Trench Tr. 8 has been to consider it a buttressing of the Gate W corner or part of a defence wall. With the new evidence brought to light in Trench Tr. 12, we should not rule out the possibility that the structure is the starting point of a defence wall encircling the area accessed through the Gate. This would make our Gate once again closer to Babylon than to other Achaemenid sites: in fact, while Gate R at Pasargadae does not seem to be a true passageway opened in a perimeter wall, at Babylon the city defence wall joins the Ishtar Gate in a position similar to that of the structure in Trench Tr. 12; at Babylon the wall is crossed by a second, minor, entrance not far from the Gate, which was probably used by commoners, leaving use of the Gate for royal ceremonies.

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[59] SU824, SU822.
[60] SSU811.
[61] SSU813.

Also the way in which gate and walls were connected finds comparison at the Ishtar Gate: here R. Koldewey describes the "expansion joints" meant to avoid cleavages between walls which had different foundations: "by this means walls that adjoin each other but which are on foundations of different depths and are not built in one piece. A narrow vertical space is left from top to bottom of the wall, leaving the two parts standing independent of each other" (Koldewey 1914: 36).

The Tol-e Ajori Gate represents an official building of the Early Achaemenid period built in the area of Bagh-e Firuzi before the construction of the Persepolis Terrace according to a Mesopotamian building tradition. Its rectangular plan differs from that of the Babylon Ishtar Gate only in few elements, among which the dimensions, which are slightly larger. Two corridors opening in the short sides of the gate gave access to an elongated central room, where low benches flanked the long walls, leaving in the middle a free space probably dedicated to a special function. The faces of the walls above the projecting foundations in unglazed bricks were decorated with glazed bricks, which in the lower section composed geometrical and floral motifs: the same patterns, which imitate those of the Ishtar gate, seem to be evidenced in the outer as well as in the inner walls. On the basis of fragments of relief glazed bricks found in the collapse layers, both inside and outside the Gate, it is possible to reconstruct figural panels representing mythological creatures belonging to the same decorative scheme as displayed by the Ishtar Gate and which probably, as in the case of that monument, decorated the parts of the walls above the geometrical and floral patterns; cuneiform inscriptions, too, were written with glazed bricks. The Gate was therefore a monument that stood out prominently in its landscape. What was its original context?

What is to be stressed, after confirmation of the function of the Tol-e Ajori building, is the need to place the Gate in connection with an inner area where monumental buildings of an official nature rose, much as, at Pasargadae, Gate R opens the way to Palace S and Palace P: even though Achaemenid gateways had symbolic value corresponding to their practical function as entrances (Codella 2007; Root 2015: 17), the Tol-e Ajori building was not necessarily the main architectural focus of the area of Bagh-e Firuzi[62].

[62] I wish to thank Dr Sébastien Gondet for suggesting these texts and for his other precious remarks on the section.

One of the constructions accessed through the Tol-e Ajori gate must surely have been the large building discovered at the nearby site of Firuzi 5, unfortunately preserved only at the level of its foundations, and only half of its original surface according to the 1960 cartographic documents (1:5000 maps designed for the Dorudzan dam). The surface and geophysical surveys carried out by an Iranian-French team directed by R. Boucharlat and by M. Fayzkhah followed by K. Mohammadkhani, have shown first that the subsoils layers over Firuzi 5 have been greatly disturbed by recent levelling and terracing works. However, they suggested we might recognize here the remaining SW square part of a monumental (40 × 40 m) building marked on its NE limit by a row of basements built in large stones (Gondet 2011: 295); the 2011 Iranian-Italian soundings showed that this portion must have been larger, due to the discovery of a further row of basements on the SW side (Pl. 7a). For these stone basements an interpretation as possible foundations for column bases has been cautiously put forward (Gondet 2011: 295) and seems likely: at any rate, they show the use of stone, which is absent in the Tol-e Ajori Gate.

To this evidence we must add the so-called Gowd-e Gavmishi, a stone structure having the same orientation as the site of Firuzi 5 (Sami 1970: 34), which had been interpreted by Sumner as a bridge on a canal (Sumner 1986: 9), built according to A.B. Tilia with reused stone blocks of Early Achaemenid date (Tilia 1978: 84; Gondet 2011: 301-303).

This area of the plain had been flattened and prepared for cultivation mainly on the orders of the Buyid governors in 436 A.H. (Ibn Balkhi, in Le Strange & Nicholson 1921: 127). However, S. Gondet's close examination of the evidence recorded by W.M. Sumner before the construction of the Dorudzan dam in the 1970s, which finally destroyed all traces of archaeological remains in surface, has in fact shown long depressions forming three sides of a rectangle: combining this evidence with the results of the geophysical surveys carried out by the Iranian-French team, Gondet has been able to propose the existence of a defence ditch all around the site of Firuzi 5 (Gondet 2011: 305). Some elongated elevations parallel to this ditch were also interpreted as a defence wall. Thus the interpretation proposed by Gondet, which is based on the combined interpretation of maps used by Sumner during his 1960's surveys, his description and the recent results of geophysical works confirming in some cases the presence of parallel linear features NW of Firuzi 5, shows the building of Firuzi 5 to

be at the middle of the rectangular perimeter of the ditch and of the fortifications (Gondet 2011: 300, fig. 5-53): the site of Tol-e Ajori stands in the left upper corner of this map, outside this perimeter.

The new picture opened by our understanding of the function of Tol-e Ajori now suggests correcting this map, including also Tol-e Ajori in the area centred on Firuzi 5. This is also supported by the fact that both Tol-e Ajori Gate and Firuzi 5 building share the same orientation, different from that of the Persepolis Terrace, and that the main axis of the Tol-e Ajori Gate is exactly parallel to the possible central axis of the Firuzi 5 building (Pl. 6b). The distance between the Tol-e Ajori Gate and the Firuzi 5 building is c. 360 m, and in the space between the two structures, geophysical surveys have demonstrated the existence of at least two ditches (Gondet 2011: 303-305; Askari Chaverdi, Callieri & Gondet 2013: fig. 32)[63]: a profile of coring tests has in fact enabled definition of the depth of these ditches (De Dapper, in press): the one next to Firuzi 5 is the deepest, and pieces of bitumen have been found in it. It is therefore clear that our understanding of Tol-e Ajori must be supplemented by an understanding of the Firuzi 5 building, which might altogether have been a monumental complex.

The field levelling carried out all around Tol-e Ajori has probably deleted any possible information on its immediate encircling architectural context, since no superficial evidence is now visible in the area. However the results of the geophysical surveys carried out by the Iranian-French team in the field to the NW of the ditch and pathway cutting the NW side of Tol-e Ajori recorded an anomaly interpreted by Gondet as a ditch or as a structure in *chineh* or mud-brick (Gondet 2011: 312): this could represent another section of the Gate, possibly corresponding to the outer section of the Ishtar Gate in Babylon, which may have been destroyed; here we might find further evidence regarding the Gate entrance.

No trace has been found in the fields surveyed to the SW of Tol-e Ajori of a possible wall in the same line as the structure adjoining the Gate in Trench Tr. 12, but in 2014 an interesting long feature facing the Gate was identified in the field to the N of Tol-e Ajori; it continues to NE, and

[63] The geophysical investigations carried out by Dr Sébastien Gondet and Dr Kourosh Mohammadkhani are an important section of the research project, adding information for reconstruction of the original context of the site.

remains of uncertain interpretation (Gondet & Mohammadkhani, personal communication). It is crucial to carry out more investigations in the fields to the W and SW of Tol-e Ajori, in order to verify or rule out the existence of more architectural features corresponding to those of Trench Tr. 12. As mentioned before, the existence of a wall would make the Gate closer to Babylon than to Pasargadae, with tremendous implications, since it would evidence Mesopotamian influence not only on building techniques, but also on architectural conceptions.

On a wider scale, further research in the whole area surrounding Tol-e Ajori monumental gate will clarify its functional relation in that archaeological context, especially when considering that thirteen sites were located in the Firuzi area thanks to the systematic surface surveys carried out in the past (Askari Chaverdi, Callieri & Gondet 2013: 4-6). The chronology assigned to these sites is largely the Achaemenid, and particularly Early Achaemenid, periods, and therefore most likely contemporary with the Tol-e Ajori Gate.

We should not forget that the tomb of Takht-e Gohar (Takht-e Rostam) and a palace next to it are only 2 km from of the Firuzi area, towards the North-East. According to A.B. Tilia there is a close correspondence between the palace in Takht-e Gohar and the building of Firuzi 11, to the W of Tol-e Ajori, both sharing the use of white column bases and the same orientation of plan, suggesting that the occupation of the Firuzi area and of Takht-e Gohar were contemporaneous (Tilia 1978: 80). The new exploration of the Persepolis plain will add further information for our understanding of the role of the areas of Firuzi and Takht-e Gohar before the construction of the Terrace, in an Early Achaemenid horizon.

(A.A.C.)

Destruction of the Gate Process

Summing up the results of the new excavated trenches with the evidence recorded in previous seasons, it is now possible to advance some hypotheses on the end of the Gate — an event of the utmost importance for its archaeological and historical implications. Two different situations in particular have been recorded in the inner room (Trenches Tr. 6, Tr. 9, Tr. 10 and Tr. 11) and in the areas external to the Gate (Trenches Tr. 1, Tr. 3, Tr. 8, Tr. 12, Tr. 13) before the extensive robbery trenches which led to the looting of baked bricks in recent times.

Inner room and corridors

The first indicator of decay in the inner room is to be seen in a phase of abandonment characterized, with slightly various patterns in each trench, by accumulations of clay and by rodent holes[64].

In Trenches Tr. 10 and Tr. 11, the following step in the stratigraphic sequence consists in the pillage of the upper courses of the benches along the walls of the inner room, which was probably associated with the pillage of the hypothetical baked-brick floor. Along with this evidence regarding the bench and possibly the floor, the presence in the clay accumulations of this point in time of fragments of baked bricks, also including glazed bricks, suggests that the destruction of the monument had begun[65].

In Trench Tr. 11, on the upper surface of the already mentioned clay deposit with fragments of baked and glazed bricks[66] a disastrous event[67],

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[64] In Trench Tr. 6 above the clay floor level in the area of the entrance and inner room we see then a deposit of homogeneous clay (SU634), corresponding probably to a similar layer in the E part of the trench (SU633). This layer had first been thought to represent the main life of the building, with no significant accumulation.

In Trench Tr. 9, above the clay floor level a phase of abandonment has been evidenced by the presence of animal holes (NSU933, SU932) cutting the existing stratigraphy in front of wall SSU912.

In Trench Tr. 10 the presence on the original clay floor SU1027 of several animal holes (NSU 1028, SU1029) indicates a phase of abandonment of the building: the absence of later superimposed floors suggests that this phase occurred not long after construction was completed. We have, then, an accumulation of clayey soil deriving from the collapse of the mud-brick core (SU1024).

In Trench Tr. 11 above the clay floor level SU1135 a thick clay accumulation (SU1131, SU1128) with rodent holes points to a phase of abandonment.

[65] In Trench Tr. 6 an initial episode of destruction of the monument is suggested by the presence of fragments of baked brick and of worked black limestone. This phase is present both in square A (SU632, SU611) and in square C (SU627, SU619, SU616).

In Trench Tr. 9, on top of the clay floor level SU926 two successive layers of clayey soil then accumulated (SU925, SU922).

In Trench Tr. 10 the bench SSU1021 is partly spoliated (NSU1026) in its three front baked-brick rows.

In Trench Tr. 11 the pillage is perpetrated on the upper courses of the two benches SSU1130 and SSU1133, respectively NSU1129 and NSU1132, as well, probably, as the hypothetical baked-brick floor. This pillage is immediately followed by the accumulation of a layer of depurated yellow-brown clay with no baked-brick fragments (SU1127) and subsequently a layer (SU1126) of similar clay with few fragments of baked bricks, including some of small dimensions, but also a few fragments of glazed bricks, among which a *mushkhushshu* fragment.

[66] SU1126.

[67] NSU1134.

possibly an earthquake[68], damaged the part of the inner room SW wall[69] emerging from the accumulated deposits. With this episode begins a phase of collapse, our understanding of which remains only partial.

The lower courses of the wall elevation were damaged by this disastrous event, while the portion above is perfectly vertical and still shows its well-preserved glazed decoration, although horizontally shifted by 0.10 m to NE (Pl. 7b). This situation prevented excavation of the whole portion below the shift, which, in order to prevent the preserved part above it from crumbling, was only investigated in a 0.50 m-long stretch: this short stretch shows in the brick courses from the second to the fifth from the bottom the effects of a strong compression and horizontal movement of the further portion of the wall. Above this damaged portion, the glazed brick courses are, by contrast, well-preserved; they were described in the preceding pages.

The stratigraphy sees a succession of layers in which the clay component doubtless derives from the collapse of the mud-brick part of the wall, while the baked bricks fragments can be associated both with episodes of collapse from the disastrous event and, perhaps, also intentional pillage accumulations. The lowermost layer[70] is a mud-brick collapse with a few glazed fragments. This is followed by a layer[71] containing only thick and dense accumulations of fragments of baked bricks of large dimensions, some of them whole (Pl. 8a); and then by a layer[72] with both small and large fragments and one[73] with small fragments only, up to the layer closing the succession[74].

In Trench Tr. 9 the SW wall of the inner corridor was also found in damaged conditions, although not shifted as in Trench Tr. 11, so in this case

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[68] The evidence regarding this disastrous event is being carefully studied by Professor Manuel Berberian (Ocean County College and New York Academy of Sciences, USA) who has for decades been carrying out research on the effects of earthquakes on the Iranian archaeological mounds and monuments. The main point which Professor Berberian underlined to the authors is that a strong earthquake, like the one which could possibly have caused the shift at Trench Tr. 11 of Tol-e Ajori, should have left traces in other areas of the monument as well as the numerous archaeological mounds on the Persepolis plain, but so far no traces have been identified. Therefore, all the information regarding the various episodes of collapse will be re-evaluated in the light of the new evidence from Trench Tr. 11. Numerous archaeoseismologic indicators have already been documented on the Persepolis Terrace, Naqsh-e Rostam, and Pasargadae Achaemenid monuments (Berberian, in preparation).

[69] SSU1120.

[70] SU1125.

[71] SU1124.

[72] SU1123.

[73] SU1122.

[74] SU1108.

a possible seismic cause of the damage had not been suggested: in fact, even though most of the glazed bricks of its facing, particularly the lower courses, had several fractures, the wall only bulged at the corner between the side of the corridor and the inner room. In the stratification of the area in front of the wall, a layer of compact soil with very small fragments of baked and glazed bricks[75] attests to the first destruction of the monument. This was followed by a series of large accumulations of bricks and clay from the collapsed mud-brick, which extends throughout the trench[76]: the nature of these accumulations, as for Trench Tr. 11, is still unclear.

Evidence of a secondary occupation of residential nature was recovered in Trenches Tr. 6 and Tr. 10.

In Trench Tr. 6, after the first episode of destruction we see further accumulations, suggesting a secondary occupation of a residential nature. A *chineh*/mud-brick wall using two baked bricks, at right-angles with the entrance side[77] was built in phase with the occupation surface[78] against the SW wall of the corridor[79], which was still in existence. The residential nature is indicated by the presence of ceramic fragments and, in the area of the corridor, of ashes and secondary structures such as stone bases for wooden poles or pillars and a simple small, low wall built in the form of a corner with small fragments of bricks around an area paved with other brick fragments[80].

In Trench Tr. 10 a fireplace[81] was built in front of the spoliated bench, parallel to the walls of the room, using four baked bricks for the bottom and other baked bricks on edge to delimit two of its sides; a series of post-holes[82] were dug all around the fireplace and the corner of the room, showing that a tent must have been pitched here. The fireplace yielded ashes[83], which were scattered in the following clay deposit[84], in which bones and potsherds are also present. This episode, representing the main evidence of the secondary occupation of the ruined building, was followed by a clay

[75] SU921.
[76] SU916, SU911, SU907.
[77] SSU620, SSU614.
[78] SU619 and SU611.
[79] SSU621.
[80] SSU637.
[81] SSU1025.
[82] NSU1030, filled by SU1031.
[83] SU1022.
[84] SU1023.

accumulation[85] containing a few fragments of worked stone: the presence of some potsherds lying flat on it suggests its use as an occupation surface.

Outer area

In Trench Tr. 12, the upper surfaces of the three progressive sections of the structure built against the Gate's external wall were found in ruined conditions. Also in Trench Tr. 13, in the outer area to the NE of the wall, we have uncertain evidence of abandonment: we see a layer with potsherds and fragments of baked bricks[86]: however, given the limited extension of its excavated area it has been impossible to characterize it better.

In Trench Tr. 12 the upper negative interfaces of the three sections of the external structure[87] bear traces of a subsequent occupation. On top of a first clayey layer[88] was a fireplace[89], covered by a clayey layer[90], whose upper interface has some flat potsherds suggesting an occupation surface. A subsequent clayey layer[91] was then cut[92] to prepare the ground for a small drain[93], built between the SW face of the second section of the structure[94] and a row of rectangular reused baked bricks: the W part of the drain is well preserved, while the E part collapsed in layers with baked bricks and clay[95]. On top of the last one was a second fireplace[96]. This occupation was then covered by a series of layers containing fragments of baked bricks[97]; the last one was covered by a layer of clay with fragments of bricks representing an occupation surface with pottery[98].

A similar situation had been recorded in Trench Tr. 8, which saw the accumulation of a clay deposit[99] against the collapsed limit of the added

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[85] SU1017.
[86] SU1347.
[87] Respectively NSU1230, NSU1231 and NSU1251.
[88] SU1245 plus SU1244.
[89] SU1246.
[90] SU1243.
[91] SU1240.
[92] NSU1241.
[93] SSU1237.
[94] SSU1229.
[95] SU1239, SU1238 and SU1242.
[96] SU1236.
[97] SU1235, SU1234-SU1232, SU1233.
[98] SU1226.
[99] SU821.

structure[100], and the successive construction of a row of reused baked bricks cut into smaller square or rectangular shape with a few bricks on edge[101], running almost parallel to the W limit of the structure[102], slightly winding and sloping to SE, which have been interpreted as a simple drain.

In Trench Tr. 13, after the first abandonment a secondary occupation is suggested by a layer with a considerable amount of potsherds[103].

In the SW outer area of the Gate, at the foot of the wall there is also remarkable evidence of a secondary occupation before the final collapse of the structure[104].

A successive phase of collapse is evidenced in Trench Tr. 12, where two layers with clay from the mud-brick collapse as well as a large number of fragments of baked bricks[105] show the end of the secondary occupation and the continuation of the process of destruction, until a level with a sloping surface to S covered the whole area[106].

In Trench Tr. 13 the first destruction is seen in the succession of layers showing an appreciable amount of baked brick fragments, including fragments of glazed bricks[107]. In the area in the NW corner the same phase is evidenced by layers with baked brick fragments[108].

A succession of collapse layers has also been recorded in the SW area outside the Gate, at the foot of the wall[109].

(A.A.C.)

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[100] SSU811.
[101] SSU818.
[102] SSU811.
[103] SU1346.
[104] In Trench Tr. 3 over the first clay occupation surface (SU322), a series of deposits (SU321, SU320, SU319, SU315) gradually raised the level of the area: here the occupation surface with the best evidence of human presence is the top of SU315, where several fragments of large jars lying level on the floor were found, along with two thick blocks of bitumen.
[105] SU1225, SU1227.
[106] SU1210.
[107] SU1345, SU1344 and SU1343.
[108] SU1329 and SU1327, SU1312.
[109] In Trench Tr. 3 over the last of the occupation surfaces, a series of layers of clay collapse from the mud-brick with a large amount of baked brick fragments (SU313, SU310, SU316) mark the end of the life of the structure and the process of its destruction. In these collapse, besides the plain baked bricks, also fragmented glazed bricks decorated in relief were found: the destruction of the decorative facing of the structure should also be placed in that phase.

New observations on the decorated bricks of Tol-e Ajori

The main finds from the excavations at Tol-e Ajori consist of fragments of decorated bricks, discovered in the heaps left by destruction and looting. Most of the decorated bricks were found in the collapse and accumulation layers. Most of them were corroded, the decorated faces of the bricks severely damaged, and the glazes only partly preserved. Few complete decorated bricks were found in the excavation, and most of the bricks have reached us in the form of fairly small fragments.

All the bricks had been produced by firing clay; in some cases, traces of impressions of the mat used in producing the bricks are present on the upper or lower surface of the bricks. Based on their measures, these bricks can be divided into two main size groups: the larger group measures on average 33 × 33 × 8 cm, while the smaller group, considered to consist of "half-size bricks", shows measures averaging 33 × 16.5 × 8 cm. Using the latter, it was possible to lay the bricks in partially overlapping courses. All these bricks were used in a horizontal position. Traces of bitumen mortar are documented on various surfaces of the bricks.

The coloured glaze which covers the entire decorated face of a brick also runs with drippings on the other surfaces of the brick, especially the upper and lower ones, probably because the bricks were painted and fired with the glazed face up.

As regards the motifs, no single brick shows the whole motif, each brick forming part of a larger scene. The bricks of Tol-e Ajori can be divided into four groups according to the type of decoration:

Glazed monochrome bricks: they are in different colours, but each shows just one colour.

Glazed flat polychrome bricks: various colours were used in the process of making these bricks, which show flat surfaces where the design is rendered solely with colours on a flat surface.

Glazed relief bricks: in this group the decoration with design in relief is associated with coloured glaze.

Unglazed relief bricks: they are in relief, like the bricks of the previous group; however, colour was not apparently used, or at least no trace of colour is now clearly visible. The existence of this group of bricks raises considerable doubts because some traces of colour seem to be present on some of these bricks. They are very few, and some of them show figures similar to those of the glazed relief brick group.

Bricks of the first two groups were also found *in situ* in the outer face of the wall exposed in Trenches Tr. 1 and Tr. 3 (Askari Chaverdi, Callieri and Gondet 2013: 14) and in the face of the inner room of the monument in Trenches Tr. 9 (Askari Chaverdi, Callieri & Matin 2014: 230, fig. 9a-b) and Tr. 11 (see "The walls elevation").

Conversely, the relief bricks (glazed or unglazed) were never found *in situ*, but only in collapse and accumulation layers. On studying these materials, we were able to deduce that almost all these bricks belonged to panels representing the bull or the dragon-snake called *mushkhushshu* in Babylonian sources (Lambert 1985: 87). The bulls from Tol-e Ajori correspond exactly to those of the bull panels on the Ishtar Gate, while many brick fragments from Tol-e Ajori correspond exactly to panels representing the *mushkhushshu* on the Ishtar Gate. Therefore the panels formed by the assemblage of bricks with these two animals seem to be copied from the Babylonian monument and the animals are shown facing in both directions, exactly as on the Ishtar Gate building (Pl. 9). The first graphic reconstructions of the panels of Tol-e Ajori have just been published (Askari, Callieri and Matin 2014: figs 21-22); they show the correspondence of each brick composing the two animal motifs present on the glazed bricks of Tol-e Ajori to those on the Babylon Ishtar Gate. Those reconstructive panels were prepared by Abdolreza Esnaashari by placing the photos of the Tol-e Ajori decorated bricks in the Ishtar Gate graphic schemes. Thanks to the new investigations[110] we have been able to make better comparison of minor details of the bricks of Tol-e Ajori and those of the Ishtar Gate (Pl. 10). It turned out that some of the bricks of Tol-e Ajori do not fit perfectly in all their small details in the graphic schemes of the Babylonian panels, which are in fact themselves a reconstructive generalization: the excavator of the Ishtar Gate calculated that at least 575 animal panels were designed on this monument (Koldewey 1914: 41). For the moment it seems impossible to decide with certainty whether the same moulds used for the Ishtar Gate panels were also used to produce the bricks of Tol-e Ajori[111]. A point

[110] While in the first instance it was necessary to adapt the existing photographs to the new purpose, during the fifth campaign it was decided to photograph all the bricks composing the animal panels from the same distance, at the same angle and with the same light. I wish to thank Mr Paolo Severi, who carried out the photographic documentation of the decorated bricks according to these requirements of the draughtsperson.

[111] Two recently published fragments of bricks, found between the materials of an old German expedition, have been attributed to Neo-Babylonian panels from Borsippa showing

to bear in mind is that we do not know how many sets of moulds were used to make the panels decorating the Ishtar Gate. Thanks to diagnostic analyses, we know that the Tol-e Ajori bricks were produced using local clay (Amadori et al., in preparation): this means that very probably their workshop was not very far from the monument.

As regards the composition of the decorative patterns of the walls, it seems that both the internal and the external faces of the walls were decorated in the same way. The lowermost five courses above the foundations, including the recessed course of unglazed bricks above Block A, now show a dark monochrome colour. Above this dark section is a band composed by three courses: a course with alternating yellow, white and probably dark-coloured squares between two courses of monochrome yellow bricks. Above that is again a course in dark monochrome colour, and then three courses composing a row of open rosettes. The uppermost course of bricks so far found *in situ* is an apparently monochrome course above the row of open rosettes, found only in Trench Tr. 9. The whole composition is very similar to the remains of one of the towers of the Ishtar Gate found *in situ* during the excavation at Babylon (Koldewey 1914: fig. 29), which belong to the second building phase in which flat glazed bricks were used. There is just one difference: in the Babylonian wall there are only two courses in dark colour at the bottom of the order, while, as mentioned, in Tol-e Ajori the lower part of the wall begins with five courses of these dark monochrome bricks. The results of the XRF analyses carried out by Maria Letizia Amadori and Gianluca Poldi with a portable instrument on the part of the wall found in Trench Tr. 11 show that also the original colours should be very similar to those of the Ishtar Gate, and the presence of the blue colour which is not visible to the naked eye has also been reported (personal communication of M.L. Amadori and G.M. Poldi)[112]. Confirmation of this decorative scheme comes from the flat glazed polychrome bricks found in the collapse layers, which can also be divided into two large groups: floral and geometrical respectively. The floral group consists of a series of bricks showing petals associated with the central yellow disc

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the same iconography as the panels of the Ishtar Gate (Kaniuth 2013: 53-80): however, in their details these two fragments do not fit into the panels of the Ishtar Gate, while generally the fragments of bricks found in Tol-e Ajori do.

[112] I thank Prof. M.L. Amadori and Dr G. Poldi for this advance news of the results of their study, which is in preparation.

of rosettes like those found *in situ*. This motif is also found on the glazed bricks from Susa and Persepolis but the Tol-e Ajori rosettes are definitely more similar to those of the Ishtar Gate (Askari Chaverdi, Callieri & Matin 2014: 242-243).

The second group of flat glazed polychrome bricks includes geometrical motifs belonging to different patterns, the most common of which shows a horizontal row of alternating squares in various colours.

While similar bricks have also been found *in situ*, the accumulation layers also yielded other patterns on flat polychrome glazed bricks, never found *in situ*. The latter include very few brick fragments that seem to show two parallel horizontal bands in different colours, probably belonging to a larger group that shows two superimposed horizontal bands, the lower one made by a row of alternating small squares and the upper one showing just a horizontal yellow band (Pl. 8b). Some rows of this kind of bricks were used in the Vorderasiatisches Museum in the reconstruction of the façade of the Throne room of the Southern Palace of Babylon, as a border of the panel with palms (Pl. 10)[113]. There is also another group of polychrome bricks showing some curving fields of different colours (Pl. 12a); it is very difficult to place them in a definite brick panel but they are somewhat similar to the geometric and floral designs in the reconstruction of the Southern Throne panels of Babylon (Pl. 11).

Moreover, some corner bricks have been found in collapse layers. These bricks have two adjoining glazed surfaces and were therefore used in corners: in fact, most of these bricks come from Trench Tr. 6, where the corner between the SE entrance corridor and the inner room was exposed. The two adjoining surfaces may be both monochrome and polychrome, or one monochrome and another polychrome[114]. The interesting point about these bricks is that the bricks left almost intact are all half-size, and in no case does the brick length exceed the maximum half-size length. Also J. Marzahn mentioned that in the Neo-Babylonian period only half-bricks were employed at corners (Marzahn 2008: 46): the truth of this observation for Tol-e Ajori is borne out by the evidence of the corner between the

[113] I wish to thank Staatliche Museeen zu Berlin-Vorderasiastisches Museum and in particular Dr Lutz Martin (Deputy Director) and Mrs Alrun Gutow (Photo Archive/Fotoarchiv) for their collaboration and giving us the possibility of publishing the photos of the Ishtar Gate and Southern Throne façade, reconstructed in this museum.

[114] In many cases the conserved surfaces of the brick is very limited. Therefore in these cases, what today seems to be monochrome, could have originally been polychrome.

NW corridor and the inner room found *in situ* in Trench Tr. 9. The whole of this corner is made up of half-size bricks only, which alternate in the superimposed courses in the position of the longer dimension (Pl. 13). Here it also seems that the band of rosettes ends at the corner with alternating squares instead of flowers. Actually, most of the few corner bricks found in the accumulation layers show glazed monochrome or alternating squares decoration, and only one brick shows a small part of a petal: this also indicates that at least some of the bricks bearing together part of a rosette and alternating squares (Pl. 12b) were probably used near the corners. Also it seems that the uppermost conserved course of this corner is made up by some of the bricks showing a yellow vertical band and a band of alternate squares (Pl. 13). However, due to the poor preservation of the colour on these bricks, we cannot be sure about this hypothesis.

New investigations were also carried out on the fitters' marks (Askari Chaverdi, Callieri & Matin 2014: 239-240). The most interesting aspect of the glazed bricks of Tol-e Ajori, apart from their motifs, is the fact that the bricks were marked on the upper side with a series of simple signs to show the bricklayers the right place of each brick. The upper surface of each glazed brick of the two exposed topmost glazed brick courses found in Trench Tr. 1 bears three fitters' marks made in white paint with a brush along their outer edges: one on each of the lateral sides and one in the middle of the front side. Their function is evident thanks to the fact that they were found in their original position: the central mark, which is in fact different in the two visible superimposed courses, indicated to the mason the course level to which each brick belonged (Askari Chaverdi, Callieri & Gondet 2013: 19). In Trench Tr. 1 the central mark on the lower of these two courses is made by three closed half circles, while on the upper course the marks are made by two closed half circles only (Pl. 14a): thus it seems that the number of circles decreased upwards. This could support the J. Reade's explanation regarding "the marks concerned with the course to which the brick belonged" on the glazed bricks of Courtyard T of Fort Shalmaneser in Nimrud: "The bricks in the uppermost course of each set were marked with a single stroke, those in the second with two, and so on" (Reade 1963: 39). This also corresponds exactly to the description of some fitters' marks on glazed bricks found in the Principal Court in Babylon: "of the central signs that mark the courses the top course of the upper row of volutes has one stroke, the second has two and so on to seven […] The seven courses of the lower row of volutes are numbered in the

same way, but the groups of strokes are preceded by a dot to distinguish them from those of the upper series" (Koldewey 1914: 105). Reade, too, stressed that thirty-five courses of bricks with fitters' mark of Nimrud are divided into five sets of seven (Reade 1963: 39).

In Trench Tr. 3, where we have only five courses of monochrome dark bricks, no fitters' marks have been discovered. In Trench Tr. 1 the marks were found on the third and fourth courses above the block of five dark monochrome bricks: since the fourth course has a central mark in the shape of two half circles, and the third course has three circles, we may suppose that the lowermost course with marks could have had five half circles. This would mean that here we have a set made by five courses.

During the 2015 excavation season more fitters' marks were found, again *in situ* in Trench Tr. 11. Fitters' marks are preserved on the uppermost row of the bricks found *in situ*. In this row the central mark is made by six open half circles (Pl. 14b). Due to the poor state of preservation of the wall, the marks of the courses immediately below are not visible down to three courses below, where the bricks show yellow monochrome glaze and the central mark consists of three half circles (Pl. 15a), but while above the half circles were open, in this part the half circles are closed by a line, exactly as in Trench Tr. 1. On the following course below the latter, the central marks of the bricks with alternating squares are partly uncovered: two closed half circles are visible (Pl. 15a) and based on what was documented in Trench Tr. 1 we can conjecture that in this row the central fitters' mark consists of four half circles. Based on this hypothesis, further below there is just another course of glazed bricks (showing yellow monochrome glaze) with probable fitters' marks, unfortunately not visible, before the start of the courses in dark monochrome bricks, which according to the evidence in Trench Tr. 3 bear no marks. The two rows above the one on which the central fitters' mark consists of three closed half circles should bear respectively two and one closed half circles. If this is so, we may go on to add that the system of central fitters' marks seems to be generally equal in all parts of the wall of this monumental gate, because the number of strokes regularly and progressively decreases rising to the upper course. But the most interesting point is that the central fitters' mark used on each course of decorated bricks in the central room of this gate corresponds exactly to that of the bricks of the same course in the outer wall, having the same decoration.

While the upper preserved course of the stretch of the wall exposed in Trench Tr. 11 bears a central mark made by six open half circles, in the lower courses the half circles are closed by a line. This similarity between the two kinds of central marks in the following sets is not surprising if we consider that also Koldewey explained that in the central marks in the upper set of the glazed bricks panels of the Throne Room in Babylon "the group of strokes are preceded by a dot to distinguish them from those of the upper series" (Koldewey 1914: 105). Also in the case of the wall exposed in Trench Tr. 11, as mentioned, it seems that the circles of the central fitters' marks of the bricks of the first set are designed with an added line which closes these circles to distinguish them from those of the second set. In the typological classification of Babylon central marks (Andrae 1902: Abb. 2), the empty circles, the circles with a horizontal line and those with a vertical line belong to different sets. The fact that the fitters' marks consisting of half circles and points are documented between the bricks found in the accumulation layers (Pl. 15b), supports this idea. Therefore we can suggest that this course should be the start of the second set of the central fitters' marks, which probably included six rows, unlike the first set, which should incorporate five courses of glazed bricks. However, this does not tally with the fact that the maximum recorded number of strokes in the central mark evidenced on the bricks found in the collapse or accumulation layers is seven (Pl. 17a-b), and therefore the bricks were also grouped in sets of seven courses as in Mesopotamia.

As regards the colour of the fitters' marks, also in this case, the materials of Tol-e Ajori are more similar to Babylonian than to Assyrian bricks, in consideration of Reade's observation that at Nimrud the sets themselves were to some extent distinguished from each other by the colour used to mark (Reade 1963: 39). Koldewey, while mentioning that a "poor somewhat blackened, glaze" is used for marking the bricks of one of the panels of Principal Court (Koldewey 1914: 105), gives no more information about the colour used for the marks. Almost all the fitters' marks on the bricks of Tol-e Ajori are white[115].

With regard to the compulsory or optional presence of marks on the bricks, Reade recalls that at Nimrud the marks indicating the courses to which the brick belonged, "had been omitted from the top and two bottom

[115] There are very few bricks marked in yellow, probably representing isolated exceptions.

courses, as the shape or decoration of the bricks was itself distinctive" (Reade 1963: 39): this Assyrian approach would also be confirmed in the case of the decorated bricks of Khorsabad, for Loud remarks that at this site "marks appeared only where the glazed design upon the face offered an insufficient guide for assembly" (Loud 1936: 93). On the contrary, however, Reade mentioned that in Babylon the marks were ubiquitous (Reade 1963: 40). As mentioned, at Tol-e Ajori only the lowermost courses of dark monochrome bricks bear no fitters' mark.

The fact that the technique of marking and the form of each mark on the Tol-e Ajori glazed bricks is very similar to the Babylonian ones is confirmed by comparative study of the shape of marks of another group of bricks found at Nimrud during the British Museum excavation (Curtis 1993: figs 21-26)[116] and those published by the excavators of Babylon (Andrae 1902: figs 1-3; Koldewey 1914: fig. 65)[117].

Koldewey also mentioned that the fitters' marks are employed in the Ishtar Gate in "the same manner" as those of the Principal Court (Koldewey 1914: 104).

As regards the lateral fitters' marks, so far it has not been possible to verify and document whether these marks are repeated in the superimposed courses as at Babylon (see Koldewey 1914: fig. 65) or not. At Tol-e Ajori two adjoining marks are drawn in the same direction when parallel to the lateral edges of the bricks, while they are drawn symmetrically when parallel to the front decorated face of the bricks (Pl. 16a). Based on the design of the decorated bricks throne hall in Babylon (Koldewey 1914: fig. 65), we may underline the similarity between the two sites, both in function and in system.

The study of the fitters' marks can also help us to reconstruct some details of the Tol-e Ajori Gate panels. For example, on the basis of study of these marks we may suggest that two bricks of Tol-e Ajori (Pl. 17a-b) belonged to the same panel. Since the central mark on these two bricks

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[116] Some of the fitters' marks found on the bricks of Nineveh (Russell 1999: figs 7-12) are very similar to those of Tol-e Ajori. But as the number of published fitters' marks is very limited (six marks only), it is not possible to make a reasonable comparison.

[117] Systematic explanation of the Assyrian fitters' mark system would call for further studies and the materials of the different Assyrian sites should be exanimated together; some other aspects of these bricks should also be considered. The author simply wishes to stress that the *function* of the fitters' marks at Tol-e Ajori is more similar to the Babylonian marking system than to the Assyrian one.

seems the same, we can conjecture that they come from the same course. Adding our information on the figural motif of these bricks (even if they are badly damaged and one of them is fragmented), together with our knowledge of the Babylonian panels with *mushkhushshu* and our awareness of the fact that both bricks came from the same stratigraphic unit (SU124), we can propose that the brick GB00273 was probably on the left of the brick GB00274, even if it is not possible to read the mark along the left edge of the brick GB00273 completely. They probably belong to the uppermost course of a panel representing the body of a *mushkhushshu* to right.

Another example of the utility of study of these marks lies in the fact that we can understand that the brick GB01743 (Pl. 16b) found in Trench Tr. 11 and showing part of a rosette with adjoining petals should belong to the uppermost course of the bricks found *in situ* in Trench Tr. 11, as evidenced by the fact that the central mark found on this brick corresponds to those appearing on the bricks of this course in the monument (Pl. 14b).

Study of the Tol-e Ajori bricks is still in progress. It is hoped that these researches in parallel with interdisciplinary studies will help to uncover others points and answer more questions about these materials.

(E.M.)

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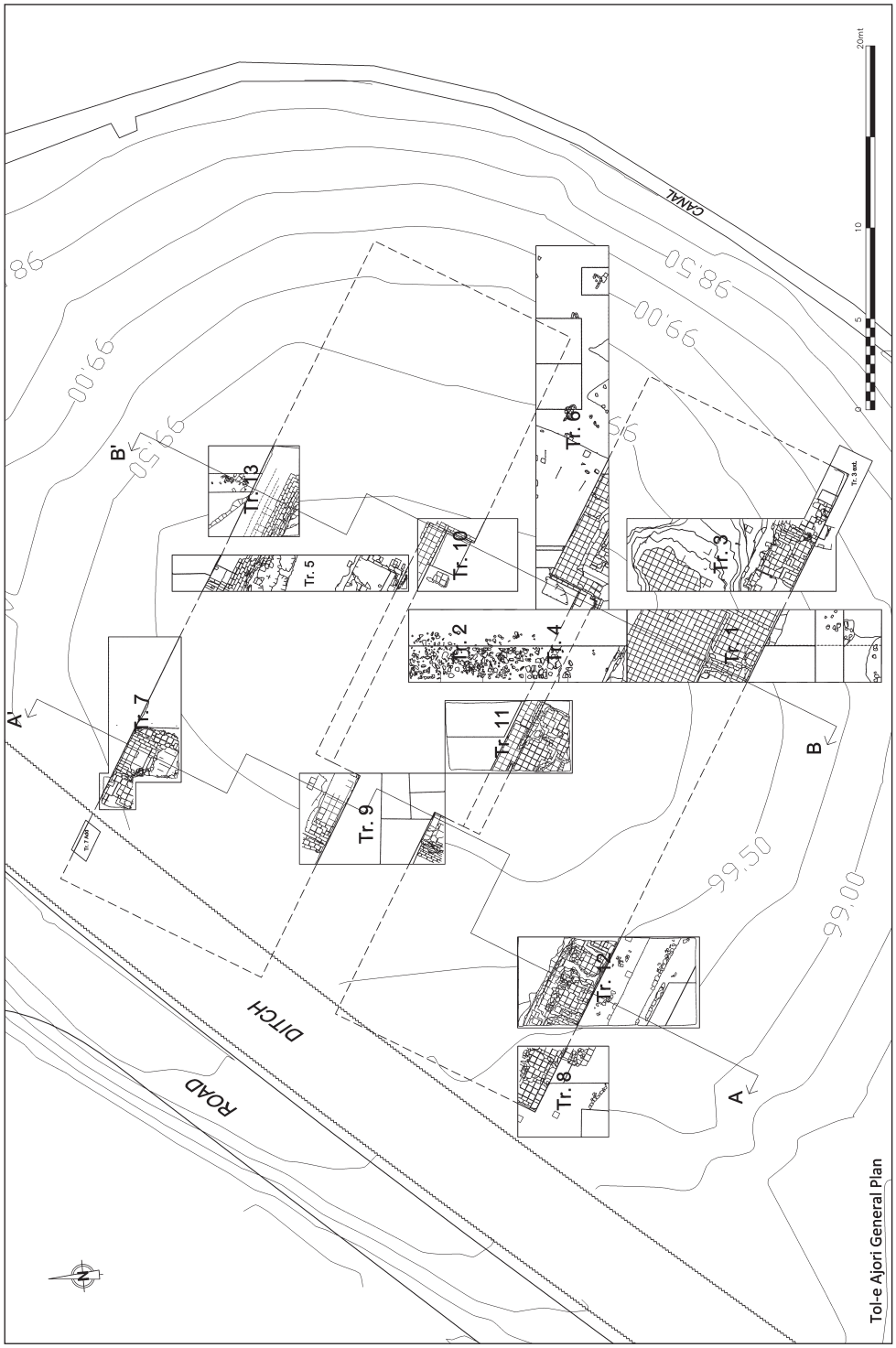
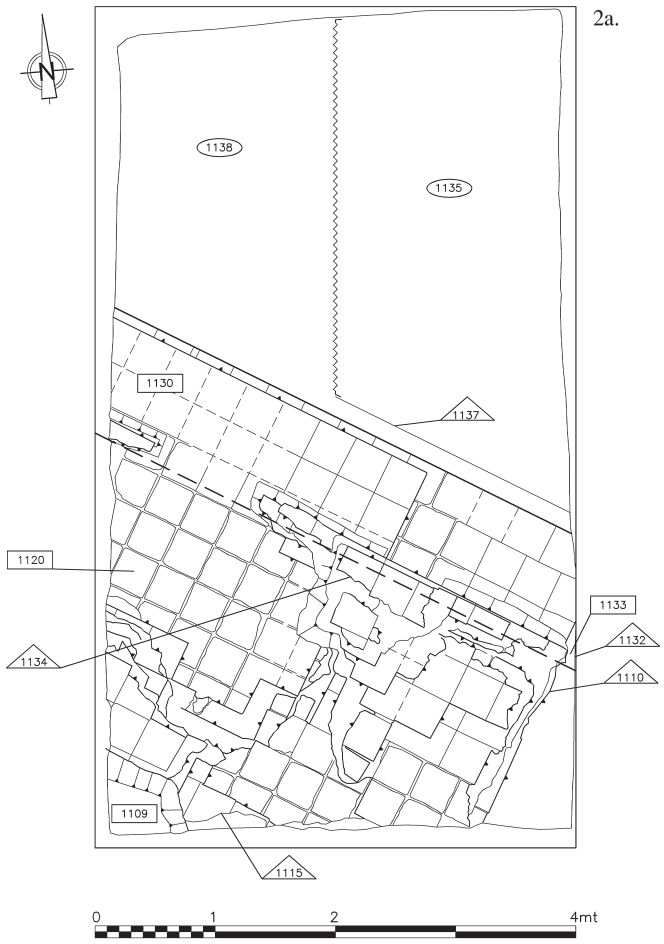
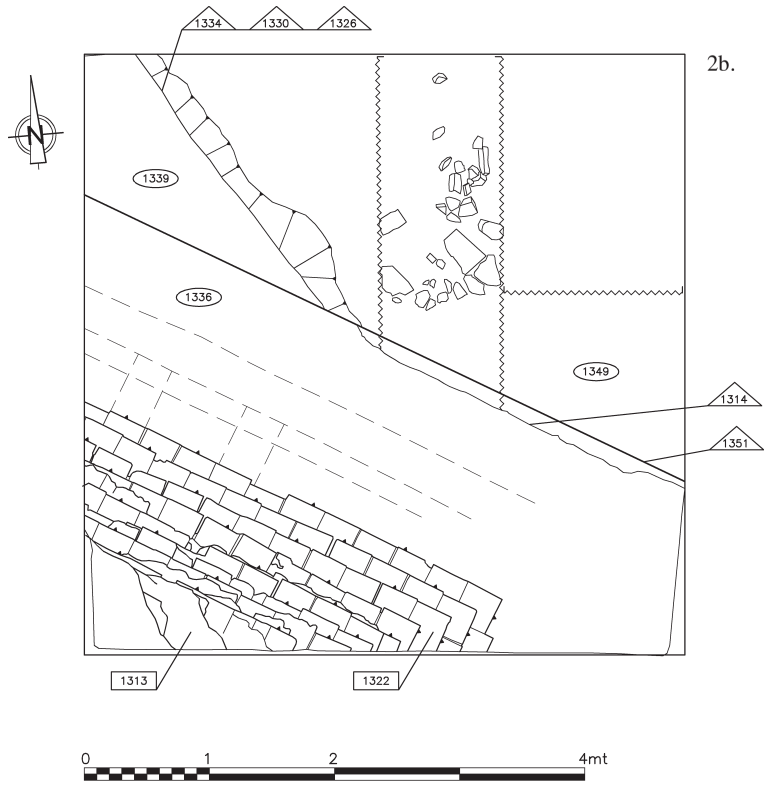


Pl. 1. Tol-e Ajori: general plan (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia).

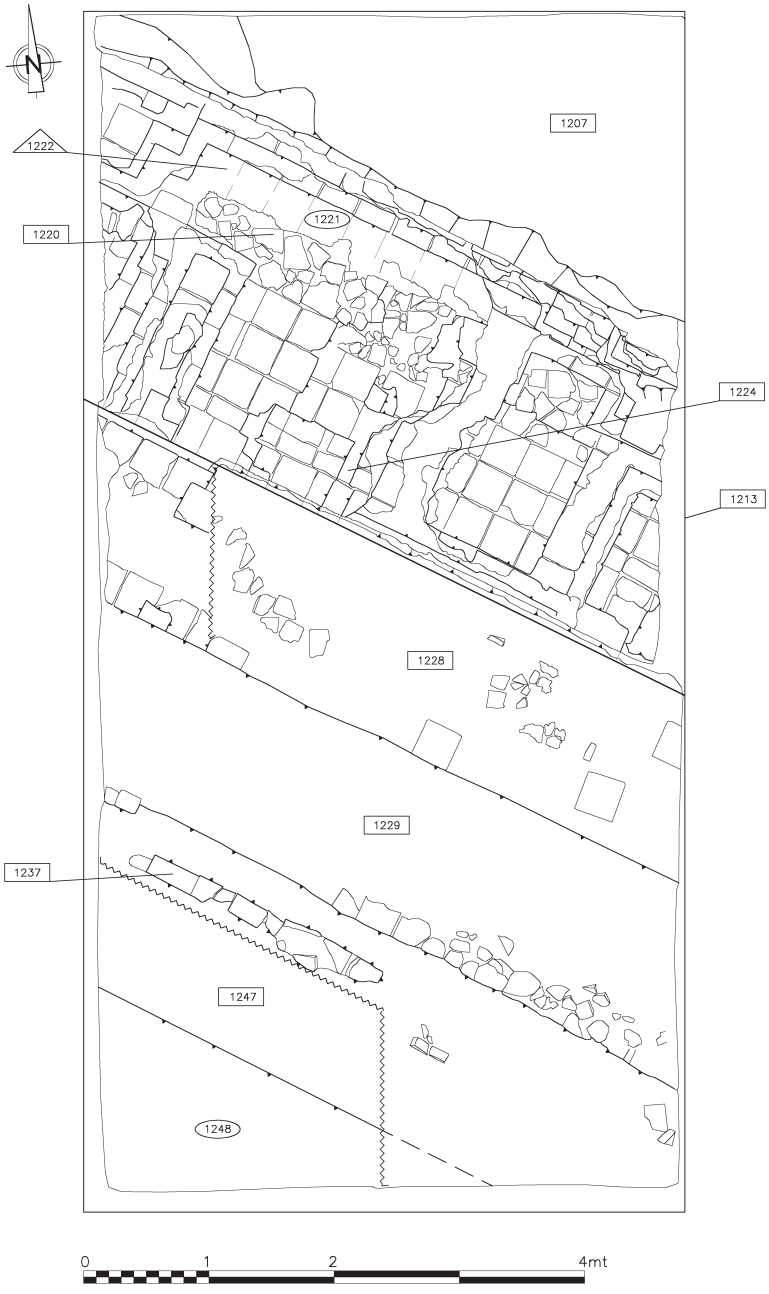


Tol-e Ajori Tr. 11

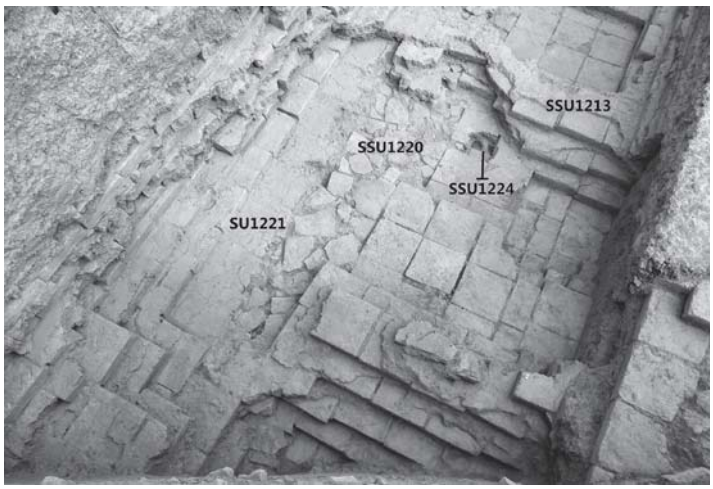


Tol-e Ajori Tr. 13

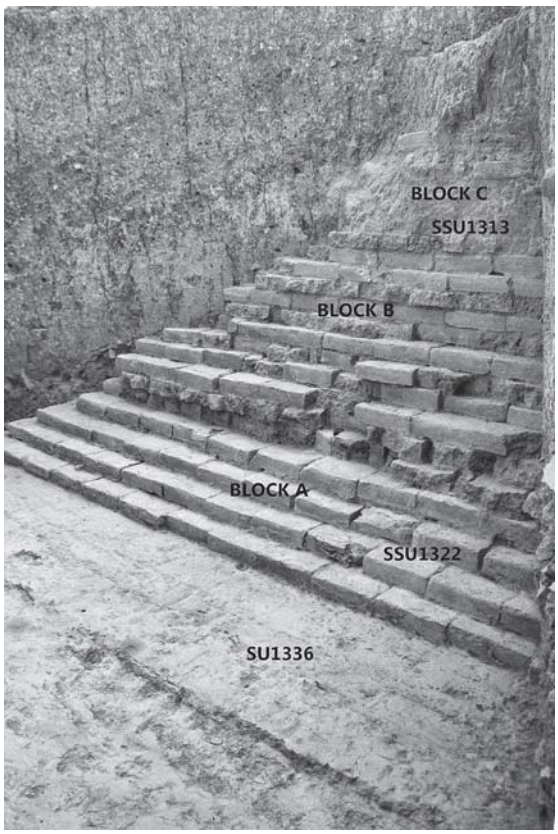
Pl. 2a. Tol-e Ajori, Trench Tr. 11: plan at the end of the 2015 campaign (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia);
Pl. 2b. Tol-e Ajori, Trench Tr. 13: plan at the end of the 2015 campaign (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia).



Pl. 3. Tol-e Ajori, Trench Tr. 12: plan at the end of the 2015 campaign (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia).

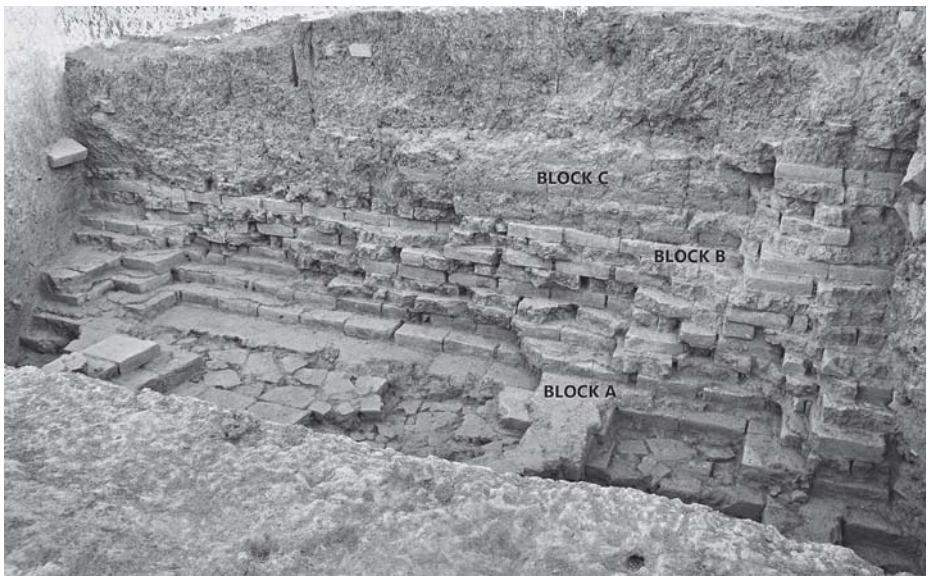


4a.

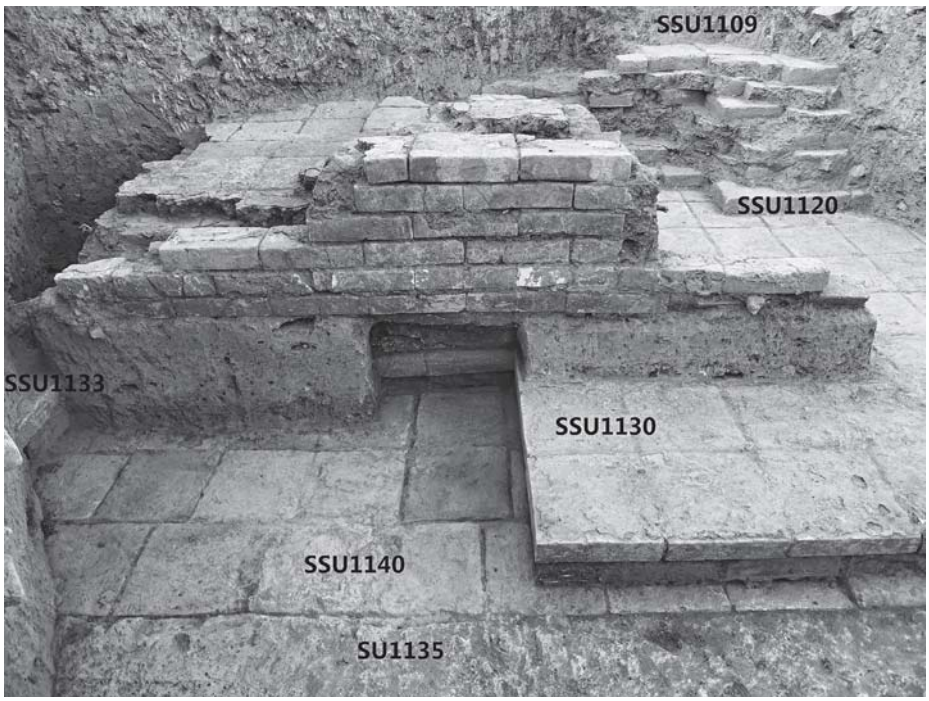


4b.

Pl. 4a. Tol-e Ajori, Trench Tr. 12: impression of bricks on the pre-building soil SU1221, courses of broken bricks SSU1220 and channel for drainage SSU1224 (©Iranian-Italian Joint Archaeological Mission, elaboration A. Tare);
Pl. 4b. Tol-e Ajori, Trench Tr. 13: impression of bricks on the pre-building soil SU1336, baked bricks Block A and Block B, below the mud-brick Block C (©Iranian-Italian Joint Archaeological Mission, elaboration A. Tare).

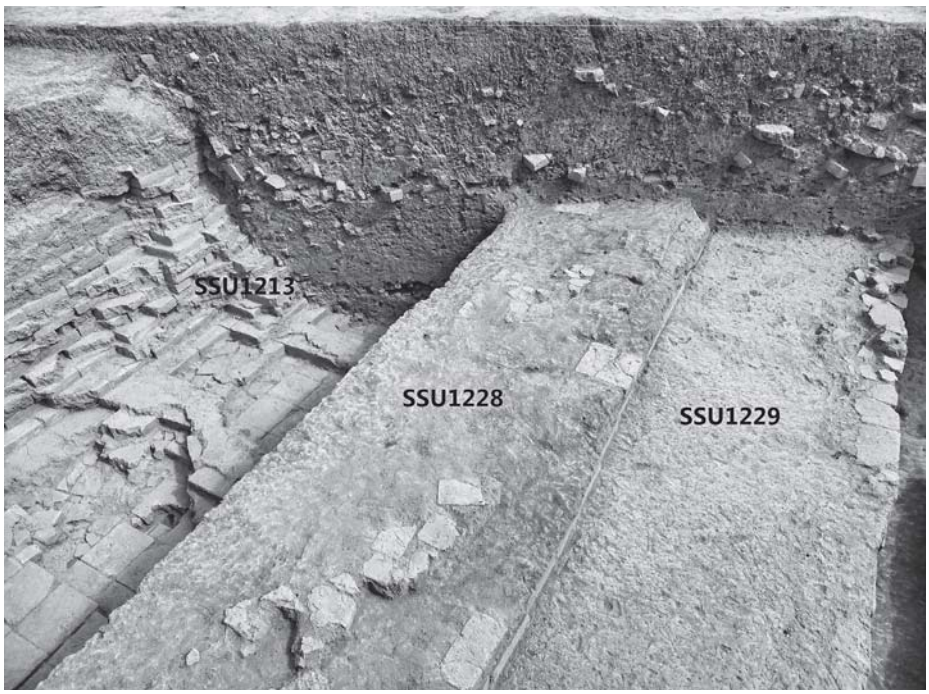


5a.

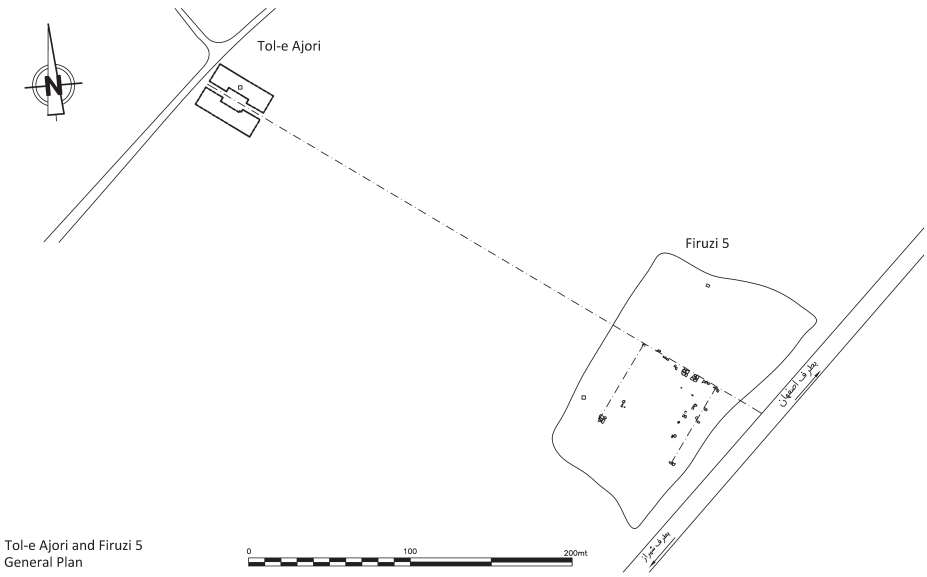


5b.

Pl. 5a. Tol-e Ajori, Trench Tr. 12: baked bricks Block A and Block B, below the mud-brick Block C (©Iranian-Italian Joint Archaeological Mission, elaboration A. Tare);
Pl. 5b. Tol-e Ajori, Trench Tr. 11: benches and stretch of the inner room Block D wall with glazed bricks decoration *in situ*. The remarkable forward shifting of the upper portion of the wall is visible above the damaged lower part (©Iranian-Italian Joint Archaeological Mission, elaboration A. Tare).



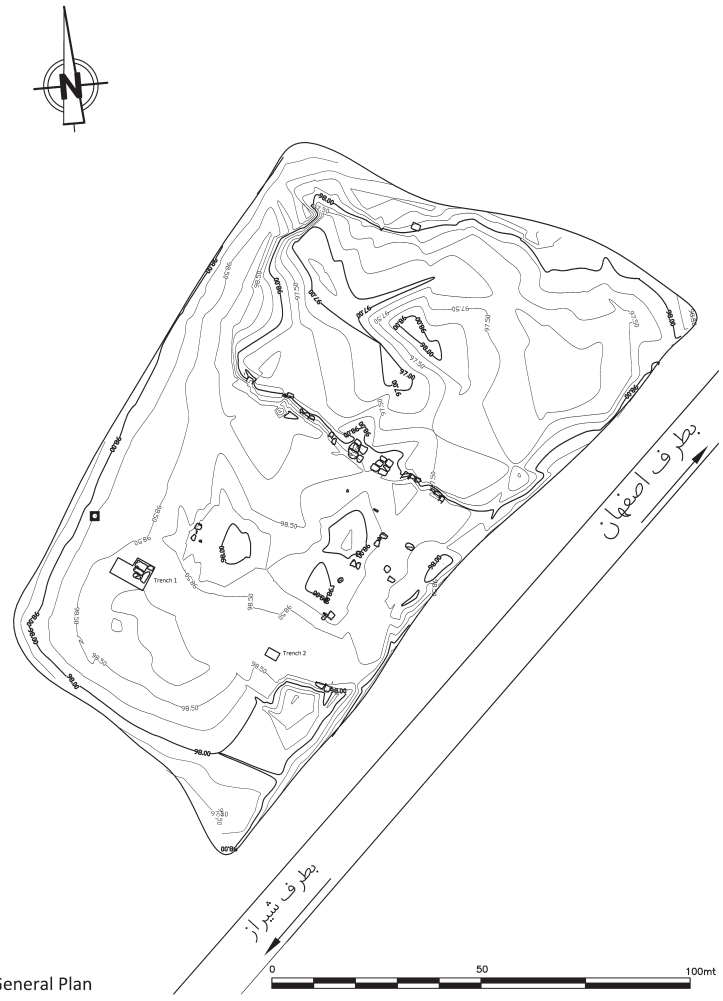
6a.



6b.

Pl. 6a. Tol-e Ajori, Trench Tr. 12: external structures SSU1228 and SSU1229 leaning against the (pillaged) baked bricks section SSU1213 (©Iranian-Italian Joint Archaeological Mission, elaboration A. Tare);
Pl. 6b. Tol-e Ajori and Firuzi 5 in their topographical relationships (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia).

7a.



Firuzi 5 General Plan

7b.

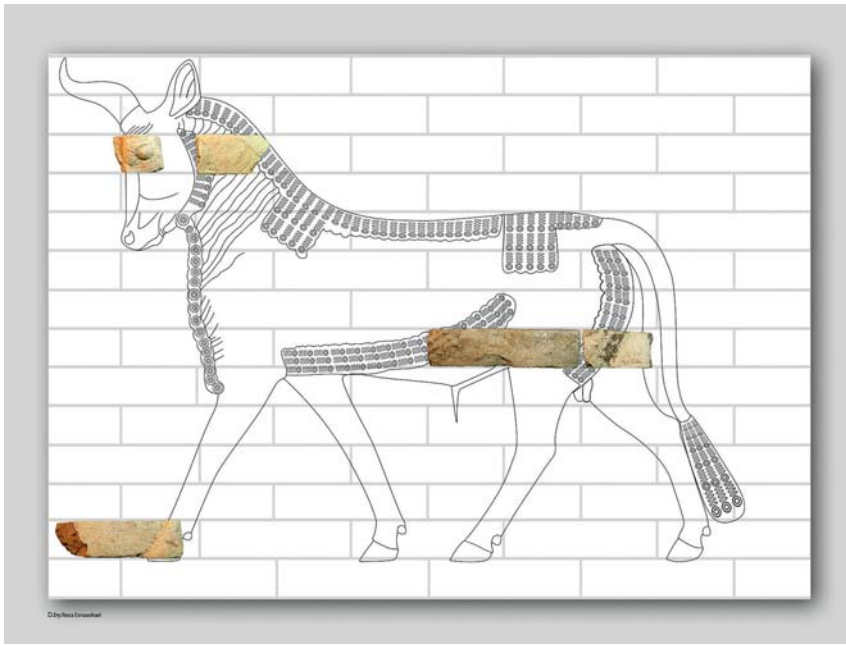
Pl. 7a. Firuzi 5: general plan (©Iranian-Italian Joint Archaeological Mission, drawing S. Tilia);
Pl. 7b. Tol-e Ajori: Trench Tr. 11, wall SSU1120 with fracture NSU1134 of possible seismic origin (©Iranian-Italian Joint Archaeological Mission).

8a.

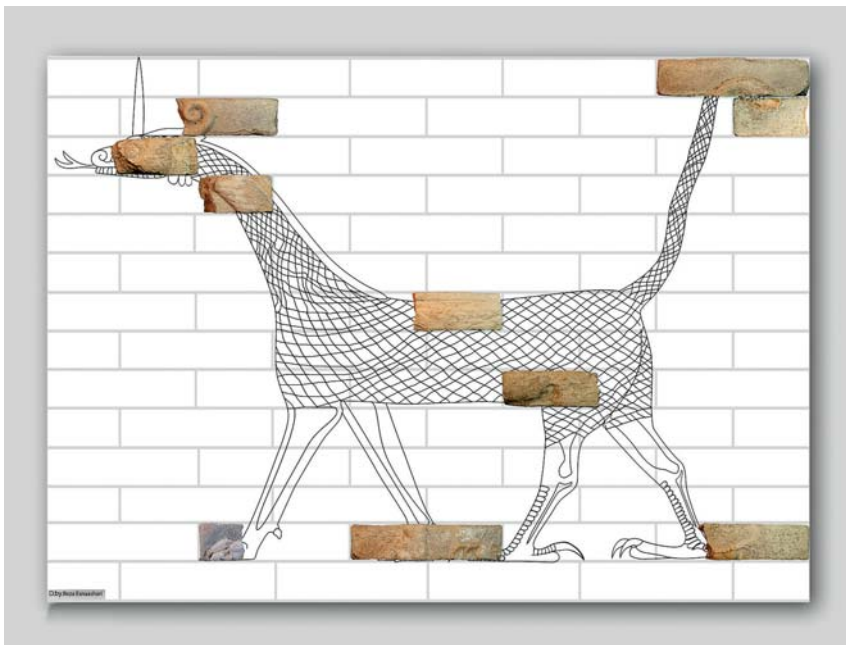
8b.

Pl. 8a. Tol-e Ajori: Trench Tr. 11, collapse layer SU1124
(©Iranian-Italian Joint Archaeological Mission);
Pl. 8b. Tol-e Ajori: a flat polychrome glazed brick fragment, Reg. No. GB00695
(©Iranian-Italian Joint Archaeological Mission, photo N. Ibnoerrida).

Pl. 9. Berlin, Vorderasiatisches Museum: reconstruction of the Ishtar Gate (©Staatliche Museen zu Berlin-Vorderasiatisches Museum, photo O.M. Teßmer).



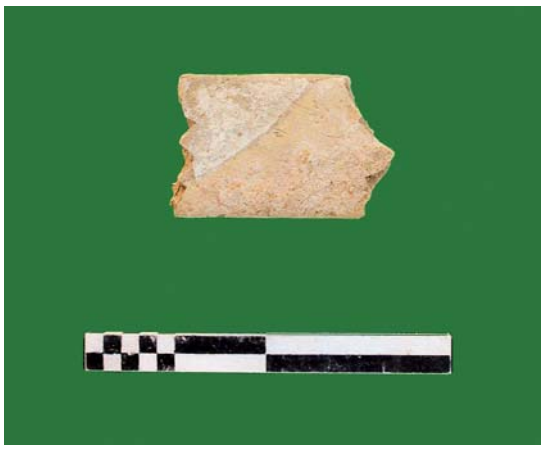
10a.



10b.

Pl. 10a. Reconstructive panel of a bull to left prepared by placing some of the 2015 photos of the Tol-e Ajori decorated bricks in the Ishtar Gate graphic scheme (© Iranian-Italian Joint Archaeological Mission, drawing A. Esnaashari);
Pl. 10b. Reconstructive panel of a *mushkhushshu* to left prepared by placing some of the 2015 photos of the Tol-e Ajori decorated bricks in the Ishtar Gate graphic scheme (© Iranian-Italian Joint Archaeological Mission, drawing A. Esnaashari).

Pl. 11. Berlin, Vorderasiatisches Museum: part of reconstruction of the façade of Southern Throne (©Staatliche Museen zu Berlin-Vorderasiatisches Museum, photo O.M. Teßmer).



12a.

12b.

Pl. 12a. Tol-e Ajori: a flat polychrome glazed brick fragment, Reg. No. GB00838 (©Iranian-Italian Joint Archaeological Mission, photo N. Ibnoerrida);
Pl. 12b. Tol-e Ajori: a flat polychrome glazed brick fragment, Reg. No. GB00796 (©Iranian-Italian Joint Archaeological Mission, photo N. Ibnoerrida).

Pl. 13. Tol-e Ajori, Trench Tr. 9: part of the NW corridor and the inner room found *in situ* (©Iranian-Italian Joint Archaeological Mission, photo D.M. Meucci).

14a.

14b.

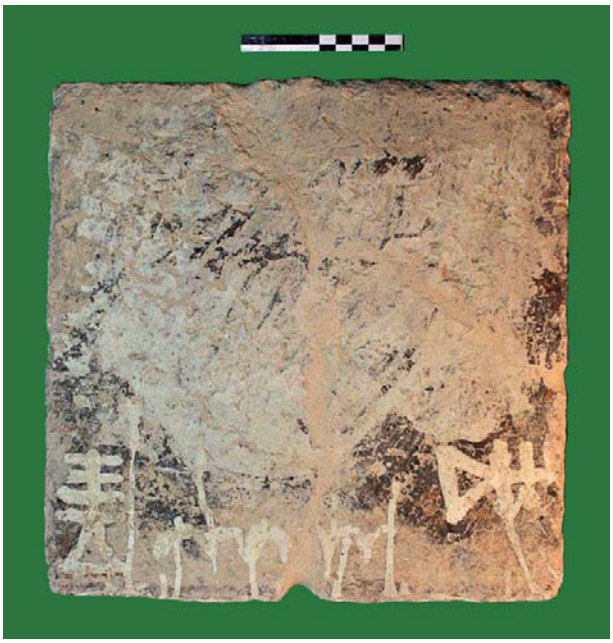
Pl. 14a. Tol-e Ajori, Trench Tr. 1: part of the monument wall found *in situ*. The fitters' marks are visible on upper surface of the bricks (©Iranian-Italian Joint Archaeological Mission, photo A. Mercuriali);
Pl. 14b. Tol-e Ajori, Trench Tr. 11: part of the monument wall found *in situ*. The central fitters' marks is visible on upper surface of the brick (©Iranian-Italian Joint Archaeological Mission, photo D.M. Meucci).

15a.

15b.

Pl. 15a. Tol-e Ajori, Trench Tr. 11: part of the monument wall found *in situ*. The fitters' marks are visible on upper surface of the bricks (©Iranian-Italian Joint Archaeological Mission, photo D.M. Meucci);
Pl. 15b. Tol-e Ajori: the upper part of a monochrome brick fragment, Reg. No. GB00312 (©Iranian-Italian Joint Archaeological Mission, photo N. Ibnoerrida).

16a.



16b.

Pl. 16a. Tol-e Ajori, Trench Tr. 1: part of the monument wall found *in situ*. The fitters' marks are visible on upper surface of the bricks (©Iranian-Italian Joint Archaeological Mission, photo A. Mercuriali);
Pl. 16b. Tol-e Ajori: the upper surface of a flat polychrome brick fragment with fitters' marks, Reg. No. GB01743 (©Iranian-Italian Joint Archaeological Mission, photo P. Severi).

17a.

17b.

Pl. 17a. Tol-e Ajori: a relief glazed brick fragment showing fitters' marks, Reg. No. GB00273 (©Iranian-Italian Joint Archaeological Mission, photo L. Tortella);
Pl. 17b. Tol-e Ajori: a relief glazed brick fragment showing fitters' marks, Reg. No. GB00274 (©Iranian-Italian Joint Archaeological Mission, photo L. Tortella).