THE HOUSE B/E. A CONTEXTUAL ANALYSIS OF A WORKSHOP INSIDE THE “MARKET SQUARE” IN TAMNA’

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Introduction

The process of data analysis from the excavation of domestic buildings presents rather problematic and complex aspects concerning the interpretation phase. The theoretical assumption on which this paper is based is the reciprocal relationship between the architecture of the houses and the materials therein (Allison 2006). We want to undertake the analysis of the domestic architectonic space by means of an approach that emphasizes the peculiar features of the residential reality. Thus, this study aims to outline a model of systematic analysis for every aspect of domestic life. With this object in view, it is necessary to organize the study of the domestic spaces into the following phases:

- analysis of the architecture of the house;
- analysis of the objects therein.

The usage of the spaces and, therefore, the attitudes and the cultural values of the individuals who lived in there can be revealed by the informational complementarities of architectonic data and artifacts contained therein, both discriminative attributes for the identification of areas of activity inside the house.

Building on the results achieved through this model of analysis with a VII century BC Sabean residential building, House A in Yala/al Durayb (Loreto 2009), we would try to apply this methodology to the so-called House B/E in Tamna’. This is one of the buildings that are part of the “Market Square” of the ancient Qatabanite capital, dating back to between the 3rd century BC (construction date) and the 2nd century AD (destruction date) (de Maigret 2003a, 2003b, 2004, 2005a, 2005b, 2005c, in press.; de Maigret-Robin 2006).
First phase: the architecture of the house

The House B/E is located near the south-east corner of the “Market Square”\(^1\). Together with the excavation of the House B/G and of the so-called “sacellum”, it allowed to determine the south-east corner of the perimeter of houses bounding the square (Fig. 1)

House B/E presents architectonical features and proportions that are different from the building standards of the houses around the public square, but in spite of that, it was constructed in close proximity to the main and most prominent public area of the city (Fig. 2).

The construction standard for residential buildings in the ancient capital involves a rectangular plan basement in granite stone, 10 × 7 m on average, and a height from 2 to 4 m. That was subdivided into a series of storerooms by orthogonal partition walls, supporting a complex timber framework, which is the upright of the first, of the second and of any other possible storey (Fig. 3) (de Maigret - Robin 2006).

The building called House B/E represents a unicum among the houses bounding the public square. Unlike the houses in the “Market Square” and, more generally, differently from the typical south-Arabic intra muros bayt “on a basement” (Breton 1997, 1998; Breton - Badre - Audouin - Seigne 1982; Breton - McMahon - Warburton 1998; Darles 1998), House B/E is structured in such a manner that the entire foundation basement is accessible and used for everyday activities.

The basement (ground floor)

The basement of the building presents a roughly rectangular plan, 10 × 8 m on average (Figs. 4-5). The building is oriented in the north-south direction and, differently from the other houses on the square, has an irregular rectangular plan. Indeed, the north and east sides do not form a right angle, but an acute one, in order to follow the layout of the square.

Originally the house had two entrances, both hidden from view from the “Market Square” (Figs. 6-8); one was level with the external street on the western side (it was later walled up) and another was on a higher level

\(^1\) The excavation of House B/E took place during the 2002 September-October campaign of the Italian-French archaeological Mission at Tamna’.
on the southern external wall, with a staircase descending into the ground floor. Both entrances lead to a transitory room (L601) from which, through a passage (door A), a large room (L604) can be reached, which divides the house into north and south wings. To the south of L604, two approximately rectangular plan rooms are present, L602 and L603.

The rooms

L602, 1.50 × 1.70 m wide, is the most peculiar room. It is 1 m. deeper than the level of L604 and is accessible from the corridor itself through a low wall, which bounded the locus on the north (Figs. 9-10). Besides, the eastern, southern and western divisory walls present, on the inner façade, a scarcement or recess of about 10 cm, probably ascribable to the presence of a covering plane in timber (no covering slabs in stone were found).

L603, 1.25 × 1.70 m wide, is a small room, about 1 m deep, whose entrance was from above (Fig. 11).

To the north of the central room L604, two rooms of different proportions are present, L605 and L606, whose entrance was through a passageway, door B, in the northeastern corner of L604 (Fig. 12). From there L606, 4 × 2 m. wide, was accessible.

Locus L606 presents two levels of occupation, which feature two different construction phases:

Phase 1: the older one. The locus presents a wall, M609, of which only two rows are preserved, which divides the space into two halves: L606, 1.50 × 2.15 m, and L607, 1.5 × 1.80 m; in this phase the level of the walking surface was a fairly lowered floor in tin (clay), -0.70 m. below the walking surface of L604.

Phase 2: a later one. In this phase, the divisory (boundary?) wall M609 was demolished(?) and a new floor in tin was put in its place, which obliterated both M609 and the older floor. Thus, the locus, comes to be bounded by M608 on the north, by M607 on the west, by M603 on the south and by M604 on the east, covers a 4 × 2.15 m surface and presents a floor in tin placed -0.30 m below the walking surface of L605. Finally, Room B has a raised stone threshold (a unique slab). All the materials examined in this
study of the distribution and those related to L606 come from the later phase of L606.

From there L605 could be reached, which was entirely similar to L603. Differently from the rest of the loci in the house, L603 and L605 were completely filled when the house collapsed. A unique layer of dark soil was found, from which a small quantity of ceramic fragments was collected.

_Walls and foundations_

Overall, every wall of the basement was built in double curtain (80 cm thick on average) with an inside compacted filling of soil and stone chippings (Figs. 13-14). The foundations present two base rows, about 1 m thick and in pseudo-isodomic masonry, made of un-squared blocks and a rough-hewn facing of an average height of 40-50 cm and an average length of 50-60 cm long. The rows of the facing upright walls, on the contrary, present blocks of smaller proportion, on average 30 × 40-50 cm, arranged in isodomic masonry and with a higher degree of regularity.

The rows of the inner curtain, on the contrary, present smaller blocks on average, with a higher degree of irregularity in the definition of the courses.

In general, we can notice a lower quality in the definition of the facing blocks compared with the other houses bounding the square.

_Paved floors_

The presence of a fairly irregular stone pavement on the landing L601, a flooring in slabs in L605 and the utilization of a massive threshold in the Room B are recorded.

The walking surface of the entrance landing (L600) consists of a level of irregular blocks with levelled surfaces whose dimensions vary from a minimum of 0.15 × 0.18 m to a maximum of 0.35 × 0.80 m.

The slabs in L604, instead, present an average thickness of 0.10 m and variable forms and proportions. The biggest slabs present average dimensions of 0.60 x 0.70 m (up to 0.55 × 1.45 m).
A massive stone threshold forms the “crossing level” of Room B. It is a 0.25-0.30 m thick block, 1.80 × 0.60 m wide.

The superstructure

The collapse of the superstructures of timber and mud-bricks occurred mostly in the central corridor and in the eastern outdoor area of the house, which makes us think that the upright collapsed from west to east (Figs. 15-16). The remaining rooms display traces of the collapse in smaller quantities.

It was also possible to determine the dimensions in cross section of some charred beams surveyed among the layers of collapse to the east of the building. These measured from a minimum of 3 cm to a maximum of only 9 cm.

If we examine the dimensions of the beams (up to 16 cm thick) that were found among the layers of collapse of House B/H (Loreto 2005/6), it can be noticed that we are dealing with relatively small beams, which cannot be used to support a particularly imposing upright.

The collapse of the superstructures yielded qadad and tin fragments, used as a system of covering: a bunch of beams for ceilings was compacted by means of a layer of tin, on which a second layer of insulating qadad was placed. It was a system also in use in House B/G.

Interpretative proposal based on architectonic data

Drawing only on the architectonic data emerged from the excavation, it is possible to articulate a proposal to explain the architecture of the house and its functions.

The building presents rooms with heterogeneous features, which are differentiated both by their systems of access and by their proportions. The smallest rooms, L603 and L605, were accessible only from above and present a shallow base, which can be reached from L604 and L606 without any staircase. Their form makes us think of stockpiling or storage areas.

L602 is the most peculiar room, with a supporting plane and/or an upper transitory room and a lower level accessible from L604. In this case
as well, the lower level of L602 makes us think of a storage area, rather than of an area for food consumption or processing.

L604 and L606 clearly appear to be the most frequented rooms, because of their dimensions and systems of passage. Apart from being transitory rooms, they present proportions that make us think of the possibility to perform several activities therein: storage, processing and consumption of food.

In view of the architectonic data, for instance the absence of a staircase making possible the access to an hypothetical upper storey and the quantity and the dimensions of the timber found among the layers of the collapse, it would seem that the building was comprised within the basement spaces, with walls built partly in stone and partly in wood and mud-bricks (Fig. 17).

Considering the average depth of the walking surfaces inside the basement (-1.50 m from the coping of the walls) and a likely height of at least 1.60/1.80 m from the entrance door on the southern side we can affirm that the house, apart from the presence or the absence of one or more additional floors, presented an upright constructed according to the typical technique in wood and mud-bricks, which raised the walls of the house and provided it with a ceiling of timber beams and an insulating facing in qadad.

**Results and reliability of the interpretative proposal**

Nevertheless, when we analyze the layers of collapse in beams and bricks, we find a large quantity of ceramic containers and objects placed much higher than the walking surface level of the basement rooms. This may be explained only with the existence of an upper storey where these materials were preserved (Fig. 19).

Let us consider the walls around locus L602. The presence of a scarcement or recess on the eastern, southern and western walls makes us think of the presence of a wooden plank or a stone slab placed as a loft. Thus, this intermediate storey can be a valid base for an access to the upper floor of the house.

Therefore, in order to be able to understand more clearly the arrangement of the activities occurring in the house and the structure of the building, we have to analyze the spatial distribution of the ceramic ware and
of the objects found, with a particular attention to distinguish the materials from the ground floor from those from the possible additional floor, which were mixed with the levels of collapse of timber and bricks. Through the exact knowledge of the actual distribution of the artifacts on the ground floor, we may try to define the activities taking place inside the basement and, at the same time, identify the activities taking place on a possible additional storey.

Second phase: the distribution of the artifacts inside the house
The ceramic ware from the rooms of the basement and from the collapse of the superstructures

The architectonic study of House B/E has shown that the basement of the building was arranged as a “living space" structured into a series of rooms around a central corridor and attested the presence of wooden elements or an entire raised storey, whose collapses were found both along the outer sides of the basement and on the inside of it. Within the various rooms on the ground floor and along the level of collapse of the superstructures numerous ceramic containers were found. The ceramic material coming from the basement of House B/E was preserved in situ. Thus, it was possible to study the quantitative and functional distribution of the pottery that was found, determining both the shapes and the quantities of pottery present in the various rooms when the superstructures collapsed.

As regards the material coming from the level of collapse on the additional floor, instead, it was not possible to establish the exact number of the surviving items, but only the number of the known ceramic shapes.

The study of the ceramic ware from House B/E took place in the context of a wider work project of the Italian-French Archaeological Mission in Tamna’, aimed at identifying a formal and functional typology of the ceramic ware, drawing on the whole of the pottery found into the buildings excavated by the Mission between 1999 and 2005.

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2 This work is about to be published by Dr. Sabina Antonini, who has kindly allowed me to place, among the images of the ceramic ware from House B/E, the pictures of the pottery from the houses A, B and C (which she studied. Signed as: T.00.B/), when they were of the same type and better preserved than the typologically equivalent material from House B/E.
Based on the fabric and shapes of the ceramic items we can distinguish three functional groups of ware: dining ware; cooking pots and storage jar.

*Ceramic items coming from the basement*

In the basement, we can observe a maximum concentration of elements for the storage of liquid and solid (65 items); a lower number of elements for the consumption of food (49 items) and a minimum number of elements for cooking (only 5 items) (Fig. 20).

L602, rather peculiar from an architectonic point of view, presents mostly ceramic ware for storage purposes (15 elements), and to a lesser extent ceramic ware for the consumption of food (11 elements). We find only three elements for the cooking of food. Considering the locus architecture, we are entitled to consider it a stockpiling or storage area for the pottery itself.

L603 and L605 have yielded a very low number of elements, which are preserved in very few rather worn out fragments.

L604, the largest room and the only one to be paved in granite slabs, presents the largest concentration of pottery in the house, especially for storage solid and liquid items (24 containers) and, to a lesser extent, for the consumption of food (15 containers). We find only a single item for the cooking of food.

L606 presents a large concentration of ceramic ware: 17 items for food consumption and 19 items for the stockpiling of liquids and solid.

Here as well we find only an element for the cooking of food.

The activities connected with the usage of ceramic pottery are concentrated in L602, L604 and L606. Rooms L603 and L605, very small and shallow, seem to be designed as areas for gathering wastes.

If we compare the ceramic sets with the pottery from the other houses on the “Market Square”, we can observe how the ceramic ware for food consumption related to House B/E is lower in number and very little varied in the forms. For sure, activities connected with the consumption of food took place therein, but a specific area for this purpose, which maybe took place between L604 and L606, does not seem to exist.
The containers for stockpiling purposes, on the contrary, present numerous forms and are preserved in a huge number distributed among the three main rooms, which makes us think of a stockpiling function for the entire basement of the building, that is in L602, L604 and L606.

Finally, the ceramic ware for the cooking is very scarce (5 elements), which seems to prove that the basement did not host any cooking activity or transformation of food.

_Ceramic items coming from the levels of collapse_

From the levels of collapse of the superstructures, a number of ceramic shapes emerged, especially related to the stockpiling of solids and dry items (at least 47 containers) and a concentration of ceramic ware for food consumption (at least 25 containers).

The ceramic ware for cooking food is in a rather short supply (at least 6 containers) (Fig. 21).

The largest quantity of ceramic elements comes from the collapse to the east of the basement (10 items for food consumption, 3 cooking pots and 25 storage jar) and to a lesser extent from the collapse on the northern side (9 items for food consumption, 2 cooking pots and 11 storage jar), while it is barely present on the southern (4 items for food consumption, 3 storage jar), western sides and on the surface of the basement (2 items for food consumption, 1 cooking pots and 8 storage jar).

The quantity of materials emerged allows us to attribute a first storey to the building, although no systems of access leading to an upper storey are preserved. We can only presume the presence of a timber staircase, reaching the floor of the first storey from L602.

The analysis of the ceramic ware coming from the first storey of the house corroborates what can be seen inside the basement. The main attested activity is related to the stockpiling, which thus appears to be common to the whole of the building (Fig. 22). Of smaller importance is the consumption of food, attested by a lower number of ceramic elements and a scarcer variety of shapes (Fig. 23). The ceramic ware for the cooking of food was rather scarce, which confirms that inside House B/E the consumption of food was not a frequently performed daily activity (Fig. 24).
Given the high concentration of containers for stockpiling, the low number of ceramic elements for the cooking of food, the small dimensions of the basement and the peculiar architecture of the house, it may seem that this building was more related to specific working activities instead of having an actual residential function. We will see then how the found objects can help us define the activities taking place inside the building.

The objects

The objects found inside the basement and among the levels of collapse of the superstructures allow to determine various daily activities taking place inside the house.

Distribution of the objects found inside the basement (ground floor)

L602 presents various small blocks of unprocessed obsidian. Being in a raw state, it was likely processed therein (Fig. 25).

L603 yielded only a few particularly worn out ceramic fragments and waste materials from the fusion process (Fig. 26). All data, thus, make us think that we are dealing with a room used to store wastes.

L605 is completely similar to L603. The small proportions, the few ceramic fragments found and the absence of objects make us think that L605 is a second room for waste storage.

L604 is the most extensive room in the basement and, as we have seen, presents the largest concentration of pottery in the house. Similarly, various objects indicating some performed daily activities are present. The most numerous objects are 8 pestles of different forms and dimensions and a millstone (Figs. 27-29). It is not clear whether we are dealing with tools for food processing or with what was produced and sold therein. Besides, we find 3 hone, or sharpening stone, of granite used to sharpen iron tools (Fig. 30). Among the decorative elements, we find some shells and, above all, some decorative ivory plugs of various forms and dimensions used as a coating (maybe of wooden containers) (Fig. 31):

- Rectangular shape. Decorated by an incised geometrical motif. Both front and back surface are smooth. Length 1.75 cm; width 1.15 cm, thickness 0.3 cm.
• Square shape. Decorated by an incised geometrical motif. Both front and back surface are smooth. Length 1.7 cm; width 1.6 cm, thickness 0.3 cm.
• Letter mim (?). Both front and back surface are smooth. Length 1.35 cm; width 0.55 cm; thickness 0.3 cm.
• Almost square shape, slightly curved. Hole in the middle. Both front and back surface are smooth. Max. length 1.2 cm; min. length 1 cm; med. width 0.7 cm; hole diameter: 0.15 cm.
• Rectangular shape. Incised guilloche decorative elements. Both front and back surface are smooth. Max. length 2.3 cm; med. width 0.95 cm; thickness 0.3 cm.
• Rectangular shape, slightly curved. Incised guilloche decorative elements. Both front and back surface are smooth. Max. length 2.3 cm; med. width 0.9 cm; thickness 0.3 cm)

L606, the second room for extension inside the basement, presents a few but meaningful objects. Two weights (maybe from a loom?) (Figs. 32-33) emerged and a bony writing stilo (Fig. 34). Thus, we are probably dealing with a room in which some measurement and registration activities took place.

Distribution of the objects found in the levels of collapse of the superstructures

As it is not possible to reconstruct the subdivision of the rooms in the first storey, we consider every object found among the levels of collapse without any subdivision based on the rooms (we point out the origin from the lower storey on which the collapse deposited itself or from the outer side of the basement) to identify any activity taking place on the raised storey.

Among the levels of collapse from the upper floor we find, as in the ground floor, 3 hone (or sharpening stone) of micascisto to sharpen iron objects (Fig. 35), 7 pestles of various shapes and dimensions (Figs. 36-37) and a millstone (Fig. 38). Finally, a crucible in bronze, with clear signs of its use (Fig. 39) and some decorative items.

It holds validity what was presumed for the tools in the basement: we might be dealing with tools of daily use or objects produced or sold therein.
Activities and functions

House B/E in Tamna’ appears to be a building used much more for working activities rather than for residential purposes. Both the ceramic ware and the objects attest activities connected with the presence of goods of different typologies.

The relevant number of stockpiling containers found both inside the basement and on the first storey shows that the main activity was the preservation and the stockpiling of food (solid and liquids), probably intended for sale. The low number of pottery for food consumption and the even lower number of containers for cooking shows a very limited activity connected with the consumption of food. It cannot be ruled out that the pottery was intended for sale.

Among the found objects the tools for work stand out (perhaps in loco products, such as pestles, millstones and coti), as well as imported ornaments which attest exchange activities (shells and obsidian).

Given the peculiar house architecture, the presence of only one additional storey and considered the related materials, it is possible to state that this building, more than having an actual residential function, was a sort of workshop, or a commercial building, which performed its activities just close to the “Market Square” in Tamna’.

Methodological perspective

Complex interactions exist between the domestic structures and the spatial organization. Generally speaking, the architectonic partitions are very carefully manipulated by humans; and it is the cultural factor that largely influences the relationship between architecture and space utilization. Therefore, the organization of areas of activities inside the living space are culturally conditioned and reflect the cognitive plots of the inhabitants. Although it has not been possible, in our case for objective gaps, to fully reconstruct these plots, it has been possible to depict some aspects of the daily life of the ancient Qatabanites, thanks to a convenient theoretical approach and to correct methodologies of analysis and acquisition of data.
REFERENCES


FIGURES
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Fig. 32 - Weight from L606. Ovoid shape. Fragmentary, broken above the hole. Max. length 9.4 cm; width 5.7 cm; max. thickness 3.8 cm; hole diameter 1.5 cm

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6 Cf. van Beek 1969.
Fig. 33 - Weight from L606. Ovoid shape. Fragmentary, broken above the hole. Max. length 9.35 cm; width 5.3 cm; max. thickness 4.8 cm; hole diameter 1.5 cm

Fig. 34 - Stilo from L606. Bone. Complete. The surface is highly polished. The two tips are rounded from use. Length 11.1 cm; max. thickness 0.55 cm; min. thickness 0.45 cm

7 Cf. van Beek 1969.
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