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Architectural glazed decorations in the Iron Age Northern Levant: Two case studies from Tell Afis (Syria) and Zincirli (Turkey)

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Abstract. The aim of this paper is to discuss the issue of the employment of coloured glazed devices in architecture in the Iron Age Northern Levant, in light of current researches and archaeological evidence from old and recent excavations in Northern Syria and Southern Anatolia. Glazed ceramics from Tell Afis (Syria) and Zincirli (Turkey) are discussed in light of their provenance contexts, comparing such artefacts with a wide spectrum of visual sources both from the Northern Levant and North Mesopotamia. This analysis aims at understanding the possible function of these glazed ceramics, hypothesizing their possible employment in the architectural decorations of ancient buildings.

Keywords. Glaze, Iron Age, Syria, Levant, Architecture.

INTRODUCTION

In one of her recent articles on glazed artefacts, Annie Caubet summarizes the state of the art asserting: “Very little, if anything at all, is known of the use of vitreous materials in the architecture of the Levant. During the Bronze Age, the wall paintings in Minoan tradition at palaces such as Alalakh, Qatna or Tel Kabri may have sufficiently answered the demand for colorful decoration. At Ugarit, no artefact from the large repertoire of vitreous material seems to indicate a specific use for decorating buildings. The situation appears to have been the same during the Iron Age in the Levant” (Caubet 2012: 159).

This general statement, which excludes the employment of glazed architectural decoration in the Levant is absolutely correct, nevertheless we would like to bring into the discussion a few observations on items from older and recent excavations that can provide some evidence of glazed architectural features in the ancient buildings of the Iron Age northern Levant.

The starting point for these observations is the archaeological evidence from two sites not very far from each other, located in the inner northern

Levant: Tell Afis, in northern Syria, situated in the fertile plain of the Jazr some 45 km south of Aleppo, and Zincirli Höyük, in southern Turkey, located in the Işlahye Valley, on the eastern side of the Amanus Mountains. Afis is likely to be identified with the Aramaean city of Hazrek, capital of the kingdom of Lu'ash during the reign of King Zakkur around 800 BC (Mazzoni 2008: 8-11; Lipiński 2000: 256-257), and Zincirli was the ancient city of Sam'al, capital of the Luwio-Aramaean kingdom of the same name (Schloen, Fink 2009). Both these sites passed from a condition of political independence to paying tribute as vassals to the Assyrian king, and finally were directly controlled by the Assyrians when kings Tiglath-Pileser III (744-727 BC) and later Sargon II (721-705 BC) established a new provincial system through the presence of Assyrian governors ruling over the conquered land (Liverani 1988: 792-800; Fales 2001: 218-232).

THE GLAZED OBJECTS FROM THE GERMAN EXCAVATIONS IN ZINCIRLI

Zincirli, which was excavated by the early German Orient-Comité expedition directed by Felix von Luschan between 1888 and 1902 (Wartke 2005), provided a small lot of blue glazed ceramics that von Luschan and Walter Andrae labelled within the *Baukeramik*, implying their use in buildings construction, in the 1943 publication of the small finds (von Luschan, Andrae 1943: 60-61). This group included a series of so-called rings (*Robr-Ringe*; Fig. 1a), glazed fists (*Handkonsolen*; Fig. 1b) and stepped pinnacles (Fig. 1c; von Luschan, Andrae 1943: Taf. 31).¹ Unfortunately we cannot speculate much about the stratigraphic provenance of these items, but the detailed study carried out by Marina Pucci on Zincirli architecture has proven that some of these objects have been found together.² In particular, a group of hands and rings were found in a pit south of the Hilani III, to be likely dated in the 8th century BC. Not many details are given about the stratigraphic position of the pit which contained the artefacts and its relationship with the building's foundation, so that it is impossible to state if these objects had previously been employed in the building and dismissed and buried after the end of use of the Hilani, or if they belong to a phase preceding the construction of the fabric.

THE GLAZED FUNNELS FROM TELL AFIS

In Tell Afis the Italian expedition directed by Stefania Mazzoni found several fragments belonging to clay "funnels" in Area A. Here the main building was correctly identified with a temple, typologically belonging to the Syrian *in antis* longitudinal plan with towers framing the façade (Mazzoni 2012: 30-32; Mazzoni 2014: 44-47). All around the area of the temple, which was largely reused as a quarry for raw materials in the following centuries, the Italian team could excavate the collapsed brickwork of the imposing walls of the building. In the debris of the fallen mudbricks, and, specifically, mainly on the outer side of the building and very close to the floor level, several fragments of clay sherds were collected, belonging to a morphology not attested among those already known from the local Iron Age II-III ceramic assemblage.³ Reconstruction of the fragments gave shape to a tubular form with holes at both extremities: these pipe-like shapes present a simple plain rim on one side and a flat outward rim on the opposite side. Some of them have an interior green glazed surface, in some cases tending to a whitish colour because of deterioration of the glaze. In many cases a short horn-like vertical projection, circular or oval in section, is attached to the upper flat rim. The glazed surface is attested only on the interior of the flat side until the edge of the rim, and never extends onto the simple (lower) rim. The length of the funnels is about 20-25 cm and the diameter is about 10-15 cm (Fig. 2-4). The projections are quite different

¹ The only items which have been fully discussed in later literature are the glazed hands, which were analyzed in comparison to the Assyrian clay hands by Edgar Peltenburg (1968) and Grant Frame (1991).

² Pucci 2008: 72-73: "it remains unclear why these objects were moved and buried outside the buildings and to which building they really belonged".

³ On the Iron Age II and III ceramic assemblage from the Afis acropolis, cf. Cecchini 1998; Soldi 2013.

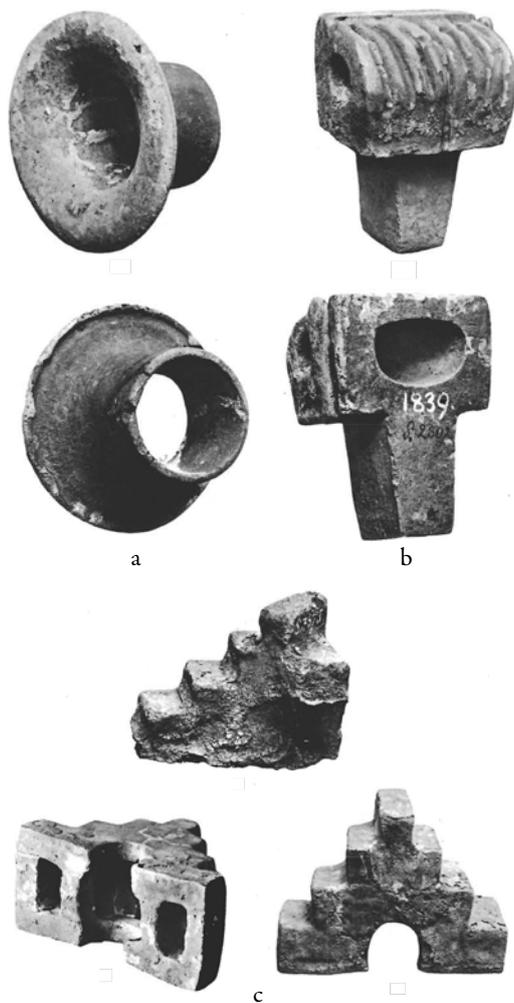


Fig. 1: Glazed *Baukeramik* from Zincirli: a. Rings (*Robr-Ringe*); b. Clay hands (*Handkonsolen*); c. Stepped pinnacles. From von Luschan, Andrae 1943: Taf. 31



Fig. 2: Fully preserved exemplars of funnels from Tell Afis. Courtesy Missione Archeologica a Tell Afis; photo by M. Necci



Fig. 3: View of funnel TA05A50/1 from Tell Afis Temple AI. Courtesy Missione Archeologica a Tell Afis; photo by S. Soldi

from one another: some are longer and thicker whereas others are shorter and larger (Fig. 5). The body of the funnel was thrown on a potter's wheel, and the projecting part was attached before firing and was roughly polished. No other surface treatment, apart from the glazing, is recorded on any item. The fabric is just slightly different from the Afis common ware, presenting more whitish grits in the paste and a general lighter colour, tending to light pink. Petrographic analysis conducted in 2005 on a sample of the materials from the 2003 campaign confirmed that the clay used for the funnels was the same as that employed for local common ware.⁴ It is remarkable how these materials are attested only in the temple area, except for a very few specimens found in the Area G square court.⁵ Among the Area G ceramics from the fill of the large courtyard L.1344, only a few fragments can be clearly linked to this class of objects: this record is very scarce in comparison with the high number of items found in Area A.

The stratigraphic location and the archaeological context are essential for detecting possible functions of the items. The temple area presented some difficulties for the stratigraphic reliability because of later robbing of the building (Mazzoni 2010; Soldi 2005), but most of these materials have been found from a specific context, which is the mudbrick debris of the outer walls. Almost no items have been found within the temple, and the great majority comes from the plastered floor on the western and southern sides of the building covered by mudbrick debris, or within the broken mudbricks of the walls.⁶

⁴ For analysis on Tell Afis Iron Age pottery, cf. Falcone, Lazzarini 1998; the analysis on the samples of funnels are discussed in Paola Bressanin's MA dissertation at the Faculty of Mathematical, Physical and Natural Sciences of the University of Padua (Bressanin 2006).

⁵ As a general presentation of the Area G square building, cf. Cecchini 2000.

⁶ A remarkable detail is the one provided in a note by Felix von Luschan on Zincirli findspots for some of the *Robr-Ringe*, which can be compared with the Afis case: "Da sämtliche Stücke dieser Art nahe am Fußboden der betreffenden Gebäude gefunden wurden, liegt der Schluß nahe, daß sie ursprünglich hoch oben in der Mauer schon in der Nähe der Decke angebracht waren und deshalb bei der Zerstörung der betreffenden Gebäude in die tieferen Schuttschichten gelangten und allmählich von den unteren Teilen des Mauerwerks mehr und mehr verschüttet wurden" (von Luschan, Andrae 1943: 155).

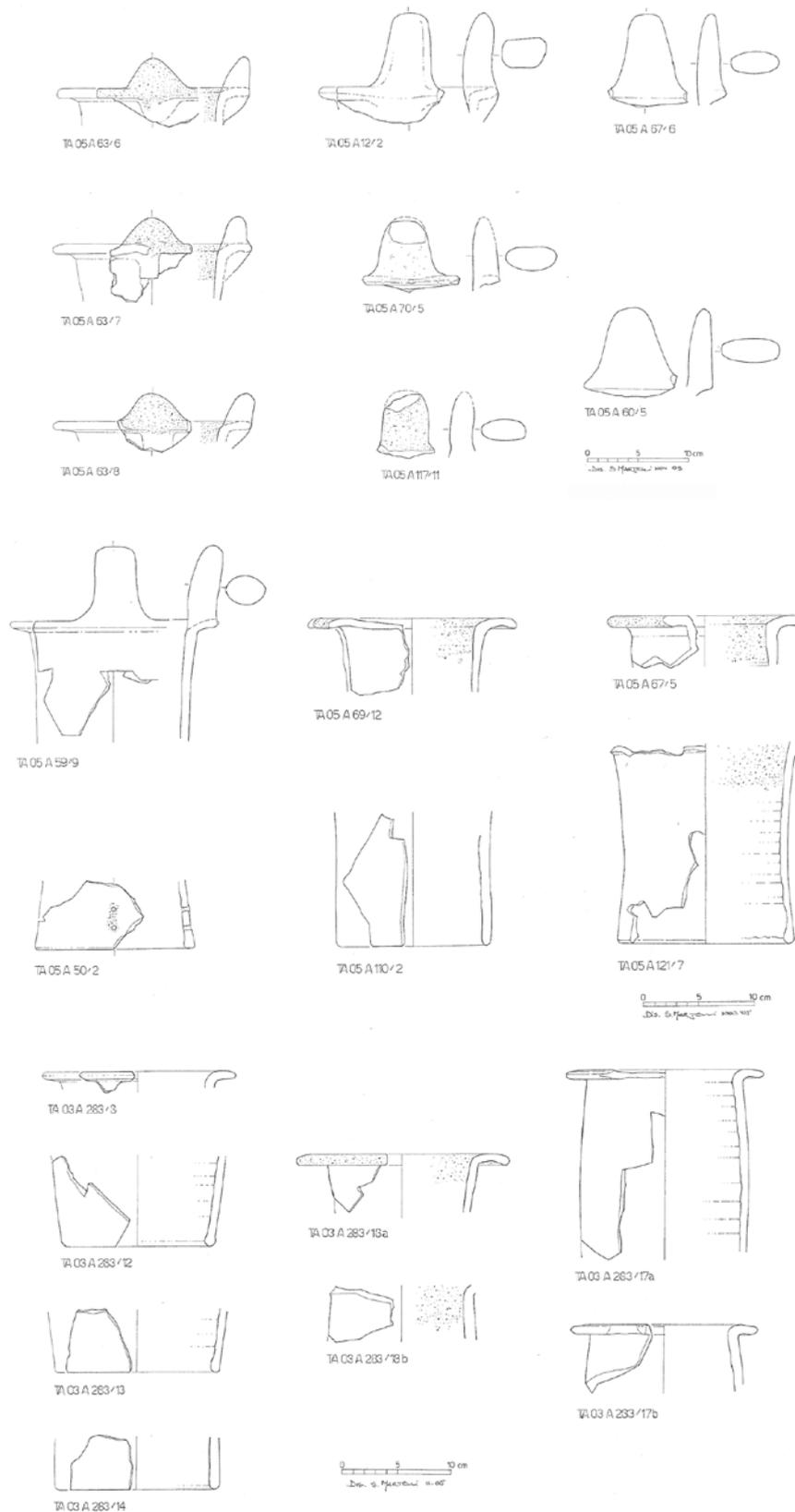


Fig. 4: Profiles of funnels from Tell Afis Temple AI. Courtesy Missione Archeologica a Tell Afis; drawing by S. Martelli

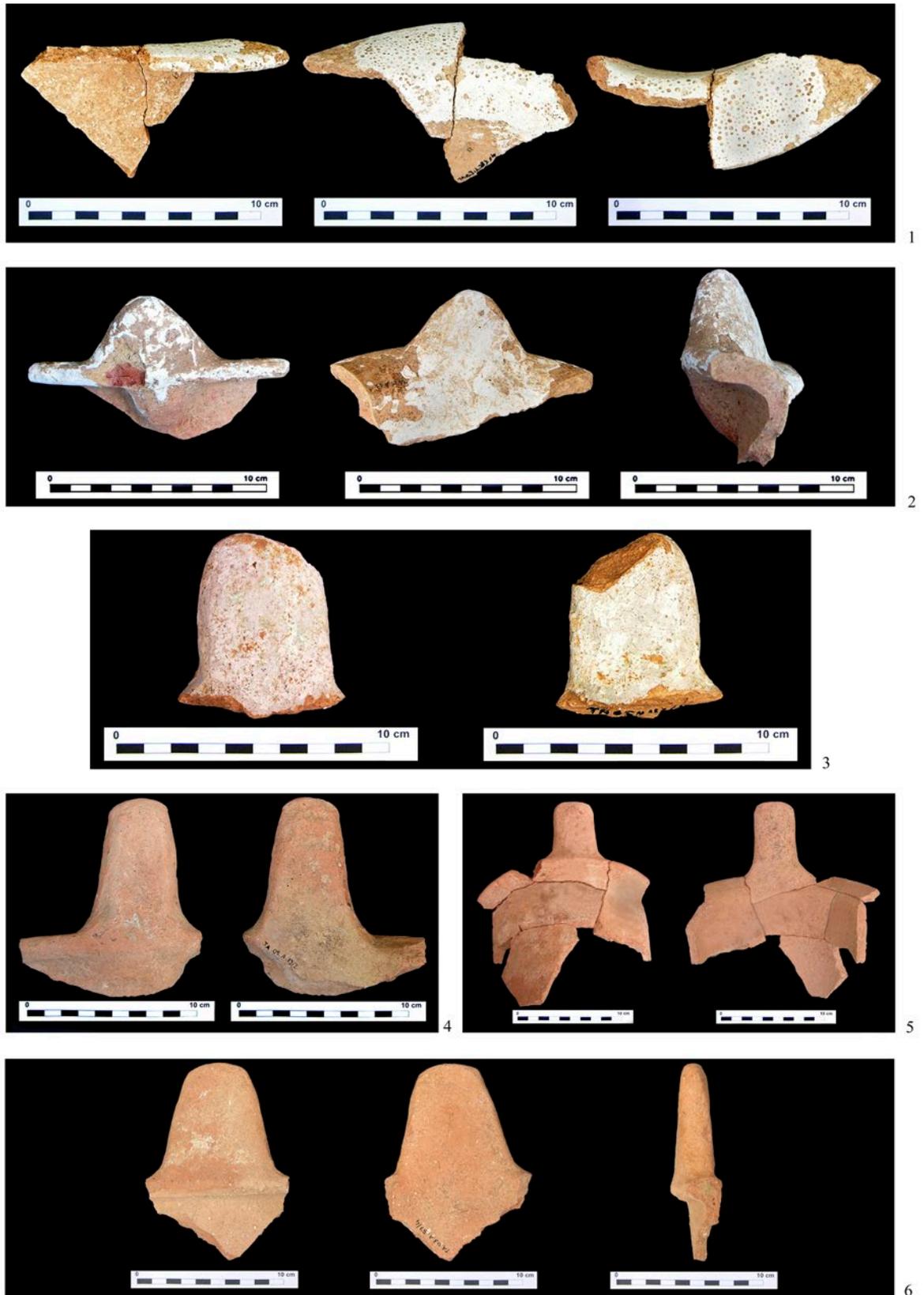


Fig. 5: Selection of protruding “horns” from Tell Afis Temple AI. Courtesy Missione Archeologica a Tell Afis; photo by S. Soldi

Unfortunately only few items can be reconstructed in their entire profile; these objects can be clearly divided into two different types, one smaller with a narrower diameter, and one taller and with a more flat everted rim. Only the second type presents the glazed surface on the rim; moreover this second typology sometimes presents the horn-like protrusion. The funnel with horn-like protrusion only finds to our knowledge very limited parallels, unglazed, in the Iron Age II Stratum VII or VIII from Tell Hazor, in the casemate wall debris of Area A.⁷ At Hazor only one whole exemplar and three missing the horn-like projection were found by the excavators, who interpreted them as stands (Yadin *et al.* 1960: 14; Pl. LXII:5-9; Zukerman 2014: 310; Fig. 1:3).

Most recently three more fragments of “horned stands” have been found in the Iron Age IIA and IIB levels of Area Q in Megiddo (Kleinman *et al.* 2017: 32-33; Fig. 2:1-3). The three examples come from the area close to Building 12/Q/99, where several elements related to cultic activities have been found, two of them labelled among “unstratified material” and one as possibly “associated with architecture” as found in the removal of a wall (Kleinman *et al.* 2017: 28; Table 2). Noteworthy in the same area of Building 12/Q/99 in Megiddo a number of fragments of painted chalices and stands, also with drooping petals, have been found, with close parallels with Tell Afis temple cultic paraphernalia (Soldi 2009: Fig. 12).

In the first publications of the examples from the Tell Afis Temple A1 (Soldi 2009: 108; Soldi 2012: 464-465), I suggested that their original location could have been inserted in the highest part or on top of the temple walls, since their stratigraphic provenance was in connection with the fallen mudbricks of the western enclosure wall: on this side, facing the western limit of the acropolis, the archaeological layers were much better preserved than in other parts of the temple areas, so that it was possible to excavate the fallen mudbricks for more than 5 meters westwards. Some exemplars of the clay funnels were found in the debris, very close to the edge of the wall and a few centimetres above the white plastered floor which was lying below the fallen mudbricks, suggesting as the most plausible hypothesis that they were either fallen from the highest part of the wall, where they were inserted, thus crumbling down with the uppermost bricks of the wall, or that they were lying all around the base of the temple used as cultic stands. Other hypotheses were being considered: either used as cultic stands on the top of the building or with the function of dovecots or birds nests, with the horned protrusion used as perch for the birds (Soldi 2012: 465).

Alexander Zukerman (2014) recently replied to the hypothesis of the function of the horned funnels, sustaining the idea of the cultic horned stand rather than the use of architectural device. Adding the useful comparisons from Hazor, found in a stratigraphically uncertain level of Area A casemate walls, he suggests that the horned stands could have stood on top of cultic buildings such as the Afis temple symbolizing the power of religious and political structures as recognizable from the surrounding area (Zukerman 2014: 310). Even if this hypothesis cannot be excluded and it is indeed intriguing for the symbolic explanation of the horns, I believe that a 4 or 5 cms maximum long horned protrusion on the rim of a standing vessel high above the temple floor could not really be perceived as such from around the temple building: it shall be stressed that Afis temple was really outstanding in dimensions given the thickness of the walls and the deep and massive boulders foundations, supporting a structure which should have been very tall (Mazzoni 2012: 30).⁸ Also, if the meaning of the horned protrusion should directly recall the horn as divine symbol, it would make more sense having more than one single horn on each object: both Afis and Hazor exemplars only bear one single protrusion, as completely preserved items clearly show.⁹

One interesting observation on the matter of the position of the Afis funnels is suggested by Giuseppe Minunno (2017: 20), who reconsiders the possible function of these items affirming that it would not be very logical to

⁷ Yadin *et al.* 1960: 8-9; Pl. LXII: 5-8 (exemplars 6-7-8 once presented the vertical projection, which was found broken by the excavators).

⁸ On the western side of the temple, the debris of the western enclosure wall (wall 5139) was excavated alongside the extension of the nearby 5 m grid square, without reaching the end of the fallen mudbricks (see detailed report in Soldi 2005: 25-26).

⁹ All the comparable examples suggested by Zukerman (2014: 312-313) always bear two or more horns (either on altars, figurines or the Nahal Mishmar “crowns”), and to our knowledge no divine representation in the ancient Near East is ever depicted with a single horn.

have the funnels glazed only in the upper part (the flat outer rim and the horned protrusion), a part hardly visible from below the temple if we suppose that the objects were free standing in a vertical position on the top of the ceiling of the temple; in addition, as suggested by Minunno, their position in the wall debris would imply that the walls of the temple had been falling in the moment when a cultic function was being performed or that they had been leftover on the top of the building for a long time. Minunno thus excludes a removable installation and agrees on the hypothesis of a stationary architectonic device on the basis of these considerations and the location of the findings. He also brings into the discussion the evidence of faunal remains from around the area of the Temple AI, with a significant presence of dove bones, and literary sources which recall the importance of birds within temple areas in ancient Syria (Carenti, Minunno 2013: 120), implicitly keeping an open possibility of the funnels to be interpreted as pigeon-holes (Minunno 2017: 19; Soldi 2012: 464-465).

Since the archaeological provenance is still the most reliable element in our analysis, we are still led to believe that these objects might have been directly related to the walls brickwork structures, their only primary context being the debris of the standing walls.¹⁰ A brief analysis of visual and iconographical sources will provide further elements to try to locate more precisely the rings or funnels within their original location of the ancient buildings.

THE “CLOUS ARCHITECTURAUX” AT EMAR

A possible comparison for similar devices in Late Bronze Age Syria was found by the French expedition in Meskene/Emar, in the middle Euphrates area. They are the so-called *clous architecturaux* that Jean-Claude Margueron and his team found in the so called Fourth Temple, or *Temple M2* in the vicinity of the *Temple du Devin*. As suggested by Margueron (1980: 305), the Emar nails seem to be likely connected with the Mesopotamian tradition of temple decorations, such as the *siqqatu* nails from Nuzi and from Elam, nevertheless they can give an idea of a possible use of similar devices in 13th century BC Syria. Margueron records that clay nails should have decorated, in a way which is impossible to reconstruct, the façades of Emar buildings (Fig. 6; Margueron 1982: 32; Fig. 9): “Devant la façade gisaient sur le sol des «clous» de terre cuite en grand nombre: ils avaient formé certainement un décor qu’il ne nous est plus possible de connaître avec précision dans son organisation”. These Emar nails are slightly different in shape and proportions from those in Afis, as they are much longer and narrow (Margueron 1982: Figs 9-10; Margueron 1993: 467 nos 352-353), or have a trumpet-like shape; the elongated ones have one long flaring opening and are either open or closed on the opposite side (Fig. 7). The French archaeologists suggest a purely decorative function on the façades of the temples, probably designing a motif which is impossible to reconstruct; nevertheless we can argue that a comparison between Emar and Afis temple could be among the possible explanation for the use of the mysterious Afis devices.¹¹

THE EXAMPLE OF CLAY ARCHITECTURAL MODELS

More insights on the rings and funnels possible use in the architecture can be suggested by a close observation of the architectural models or “maquettes architecturales”, especially those from the Middle Euphrates area in the Late Bronze Age and the exemplars from the Levant and Cyprus in the Iron Age.

The models of the Emar “Tour” A and from Tell Mumbaqa provide interesting examples of tiny little circular holes all around the facades and around the window ledges, and in close vicinity with the reproduction of the wooden protruding beams supporting the various levels of the roof (Fig. 8a-b). Both Beatrice Muller (1998)

¹⁰ Also one of the new Megiddo finds appears to be possibly related with architecture, since is found among the wall debris (Kleinman *et al.* 2017: Table 2: no. 13).

¹¹ Stefania Mazzoni (2015: 119-122) recently noted the similarity between Afis and Emar objects, approaching the issue that Afis devices were found all around the temple area and not only on the frontal façade, stressing on the performance of cultic activity in the open areas surrounding the main structure.

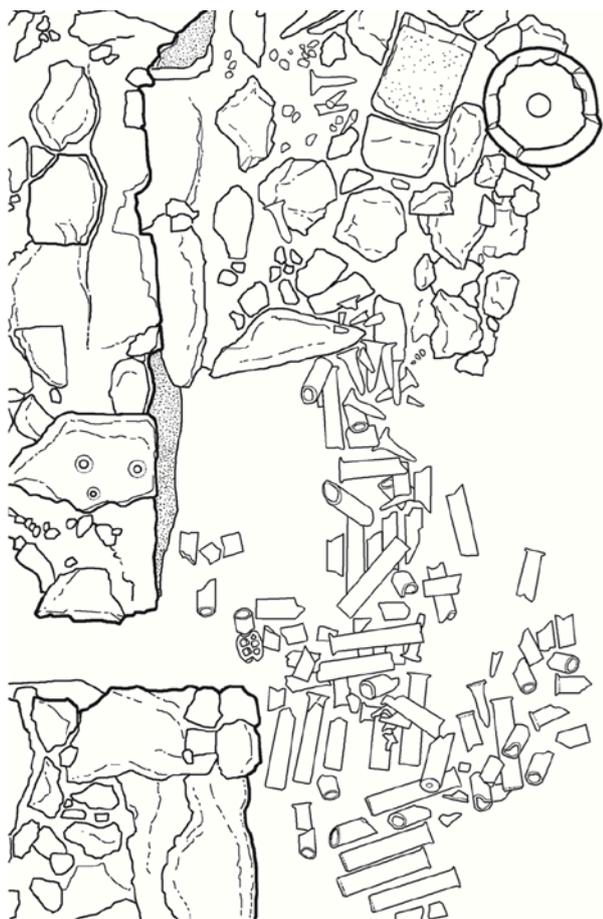


Fig. 6: *Clous architecturaux* in front of the façade of Temple M2, Emar (after Mazzoni 2015, Fig. 10.5 and Margueron 1980, Fig. 9)

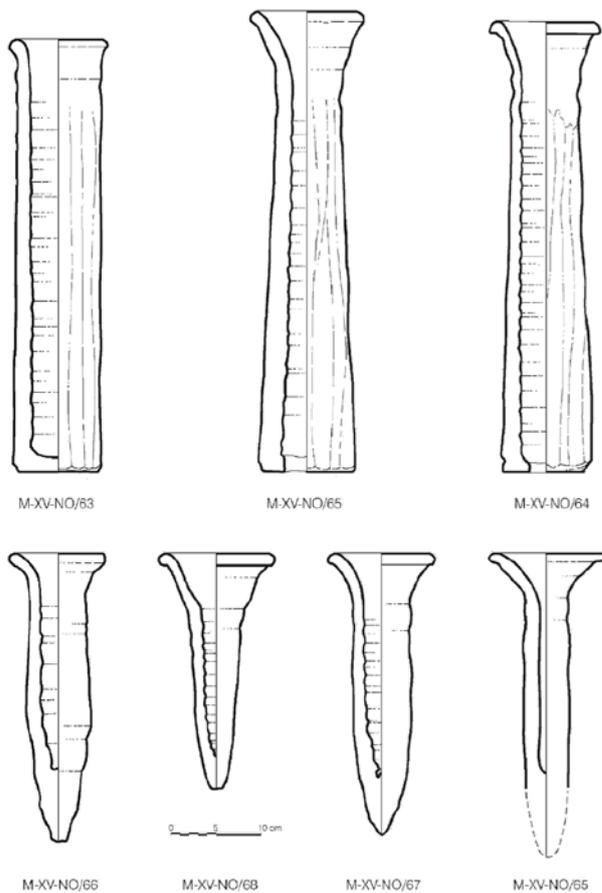


Fig. 7: *Clous architecturaux*, Emar (after Mazzoni 2015, Fig. 10.6 and Margueron 1980, Fig. 10)



Fig. 8: *Tour A* from Emar: a. General view; b. Detail of architectural details between window and ceiling (after Muller 2002)



Fig. 9: Temple model Louvre N 3294 from Idalion, Cyprus (after Caubet 1979, pl. VIII: 1-2). Courtesy Musée du Louvre, Paris



Fig. 10: Temple model Louvre N 3293 from Idalion, Cyprus (after Caubet 1979, pl. VIII: 4). Courtesy Musée du Louvre, Paris

and Jean-Claude Margueron (2006: 194) have warned about the not exact correspondence of “maquettes architecturales” with the real appearance of ancient buildings, especially regarding the organization and distribution of space, but in this case we can follow Muller, in her full reconsideration of the architectural models, hypothesizing this feature to be a possible representation of the *clous*, or nails inserted into the plaster of the walls, like those known from Uruk or Emar¹². The same architectural models from the Syrian middle Euphrates also could bear the first visual representation of the later so-called “Assyrian clay hands”, which could find their very first attestation in Late Bronze Age Syria¹³.

During the Iron Age more models can give further indications on this issue, mainly from the Southern Levant and Cyprus: many of them display interesting architectural elements in the higher part of the models, which might be interpreted in light of the findings we have illustrated so far.

Striking parallels come from Cyprus, such as two shrine models from Idalion acquired by Georges Colonna-Ceccaldi in 1869 and now in the Louvre Museum (Fig. 9; Caubet 1979: 94, n. 1; pl. VIII: 1-3; 95, n. 2, pl. VIII: 4). They lack a secure archaeological context but probably come from a grave. They belong to the local Iron Age, most likely the Cypro-Archaic period, as suggested by Annie Caubet in her study on these two objects (Caubet 1979). The two Idalion shrines (Figs 9-10) present a series of circular holes on top of the façades and in one exemplar the ribbed edges really appear as the flat outward rim of the Afis funnels. They look like a good example of a possible way for Afis funnels to be employed in the façade of Temple AI, with the flat green-glazed rim clearly visible in the white plaster.

Annie Caubet, in considering another clay find from Idalion interpreted as a “pigeonnier”, suggests an interpretation for these holes as pigeon-holes, as niches for the birds sacred to the cult of Astarte (Caubet 1979: 97-98,

¹² Muller 2002: 98: “Cependant, comme pour les protubérances striées, on peut se demander s’il ne s’agit pas de clous décoratifs comme on en a trouvé sur de nombreux sites mésopotamiens et syriens, de l’époque d’Uruk à l’Empire néo-assyrien. Il n’est pas exclu d’ailleurs qu’un élément architectonique à l’origine ait été exploité à des fins décoratives, puis soit devenu purement décoratif”.

¹³ On this issue see discussion between Edgar Peltenburg and Olivier Callot in Callot 2001: 279; a general reassessment of the topic in Soldi 2017.

fig. 1:a, pl. IX: 2). The question is still much debated among scholars: other possible interpretations as holes for light and ventilation, or holes supporting the wooden beams for the roofs, remain possible. In her study on the architectural models from Syria and the Levant, Béatrice Muller is very cautious in connecting the circular holes with pigeon-holes and the Astarte cult, as birds and other animals are also present on other 3rd and 2nd millennium clay shrines from Syria and Mesopotamia (Muller 1998: 186-188; 2002, 164-165).¹⁴ Further clay shrines dated to the Iron Age are documented from the southern Levant. The model in the Moussaeiff Collection which was recently studied by Aren Maeir and Michael Dayagi-Mendels show numerous circles probably made with a reed on the walls and the façade of the shrine (Maeir, Dayagi-Mendels 2007). One example from Megiddo presents a series of circular holes in the upper part of the model (May 1935: pl. XIII), similar to the Idalion items, whereas another from Tell el Far'ah North has tiny holes in the façade between two stylised proto-aolic columns (Caubet 1979: pl. VIII: 5). A very interesting item comes from early Iron Age Megiddo, where a fragmentary corner of a model displays circular items on one face and triangular crenellations on the other preserved face (Muller 2002: Fig. 148:b;f-g).

REPRESENTATION OF RINGS IN ASSYRIAN SOURCES.

The Assyrian reliefs, especially those from the period of Ashurnasirpal II (884-859 BC), provide interesting data that can give more insights to this issue.

In one of her articles on Assyrian art, Pauline Albenda (1972) interprets one single panel of an Assyrian relief from Nimrud, now in the British Museum, as a siege of a Syro-Palestinian town (Fig. 11a).¹⁵ In her analysis, which is mainly focused on the peculiar aspect of Assyrian soldiers cutting water sources at the besieged town, Albenda notes that two details of the representation can give some hints on a possible identification with a city of the Levant:¹⁶ the first is the costume of the subjugated people taken away by the Assyrian army, and the second is “the unusual decoration shown on the walls of the city, consisting of the band of discs with a central dot, a detail which recurs on several other fortified cities represented on the reliefs of Ashurnasirpal II” (Albenda 1972: 47) (Fig. 11b). On a comment on the same slab, the geographical attribution is still maintained by Julian Reade, who rules out an exact identification based on the garments representation, but he suggests anyway that the city “may have been somewhere in Syria” (Reade 1995: 47); Reade notes as well that “the architecture of the fortress, with lines of rosettes below the crenellations and pairs of windows in the towers, suggests a place of some distinction; in Assyria such rosettes would have been made of glazed bricks”.

Whereas Reade suggests a comparison for the circles with something similar to the rosettes depicted on glazed bricks of Assyrian buildings, Albenda identifies the circular dots with bossed bronze shields, similar to those represented in the Lachish siege scene by king Sennacherib (705-681 BC) in the South-West Palace in Nineveh. Albenda notes that the discs in Sennacherib's relief are more carefully elaborated and with a central boss, and that they stand on top of the stepped pinnacle battlements and not below, as it was in Nimrud Ashurnasirpal II's representation. According to the study on warfare representations by Yigael Yadin, the Lachish discs should be identified

¹⁴ Muller 2002: 164–165, but in note 19 on p. 165, Muller quotes Caubet's study and the Idalion shrine as a possible example of relationship between pigeons and circular holes. Another shrine model to be considered is the one from Sélémiyé, on the Syrian middle Euphrates dated to the Late Bronze Age, with birds represented on the sides of the building leaning on top of circular elements (Muller 2002: Fig. 171; cf. also Figs 168 and 173 in a private collection and in the Archaeological Museum in Leiden).

¹⁵ The relief is BM 118906, found by Sir Henry Austen Layard in the South-West Palace of Nimrud; this building was built at the times of Esarhaddon (681-669 BC), but some reliefs were definitely in a secondary context, as scholars realized that they were moved there from their original location, the North-West Palace, as testified by the presence of Ashurnasirpal II's “standard inscription” (Grayson 1991: 268-276; A.O.101.23.24; Reade 1995: 47); the original position in Ashurnasirpal II's North-West palace could have probably been in the West Wing (cf. relief WLF-22 in Paley, Sobolewsky 1987: 79; Pl. 5:29).

¹⁶ The “standard inscription” partially conserved on the slab does not provide any indication useful for identifying a specific location for the scene.



Fig. 11: a. Fragment of a relief with the scene of a siege and cut of water sources; b. Detail showing architectural details of the fortress; Nimrud, South-West Palace, WLF-22. London, British Museum, BM 118906. Courtesy The Trustees of the British Museum.

with large bronze shields mounted on wooden structures on the top of towers' battlements with the clear intent of protecting the soldiers who are defending the town by shooting arrows from their bows or throwing stones to the assault troops below them (Yadin 1963: 326-327). We can therefore exclude that the circles on the Nimrud relief are the same items as those on the Nineveh relief, the former being part of the structure of the city walls and towers and the latter appearing as a defensive addition in case of siege above the battlements.¹⁷

A closer look at other Assyrian reliefs of the period of Ashurnasirpal II will reveal that more circular elements, similar to the ones described by Albenda and Reade, are represented on other besieged cities. In the case of a relief originally placed in the so-called Throne Room B of North-Western Palace of Ashurnasirpal II in Nimrud,¹⁸ the besieged settlement, likely to be identified with the city of Udu or Madara in the North-Mesopotamian Aramaean kingdom of Bit Zamani (in the area of modern Diyarbakir),¹⁹ displays four city walls on top of which rounded elements are represented below the crenellations (Fig. 12a-b). Beside these elements, the citadel gate, which encloses the inner walls, also displays the peculiar stepped pinnacles, which are different from the battlements crenellations of towers and walls, represented as triangular (Fig. 12c). The latter is another element of interest, which we will consider below.

In all of these cases it would seem appropriate to consider the circular elements below the crenellations as the visible section of protruding timbers supporting the roofs and walkaways of the battlements, as represented also on the siege of the city identified by Irene Winter with Damdammusa, in the northern Tigris region (Fig. 13a-b).²⁰ Nevertheless, two more representations in the same program of reliefs deserve to be mentioned, since they present different characteristics.

¹⁷ It shall be stressed that even though Albenda's hypothesis of identifying the besieged settlement with a Palestinian or Syrian town on the basis of the comparison with the Lachish discs cannot be supported by this specific evidence, the rounded shields in Sennacherib's palace reliefs (as attested by drawings in the British Museum) can be associated with scenes representing the king's third campaign in the west (cf. Russel 1991: 161; Jacoby 1991: 120).

¹⁸ Relief BM 124554, labelled as B-4b in Meuszyński 1981: 20; pl. 2:4.

¹⁹ Matthiae 1988: 361; Irene Winter suggests the identification with Urartian town in the regions of Mount Kashiari (Winter 1981: 15; Winter 1983: 22), whereas Julian Reade (1985: 212) connects the scenes of the lower register with the upper one, suggesting the representation of a siege along the Euphrates, probably the town of Kipinu.

²⁰ The identification is based on parallels with Ashurnasirpal II's Annals, and the specific mention of the cutting by Assyrian army of the city orchards, which is depicted on Nimrud slabs B-4a and B-3a (Winter 1981: 15; Matthiae 1988: 357-360; Thomason 2001: 70, note 17). Another option is to identify the city with Amedu, capital of the kingdom of Bit Zamani (Matthiae 1988: 357-360; Cole 1997: 31-32).



Fig. 12: a. Relief with siege to a city of the North (likely Udu or Madara); b-c. Detail showing architectural details of the fortress; Nimrud, North-West Palace, relief B-4b. London, British Museum, BM 124554. Courtesy The Trustees of the British Museum



Fig. 13: a. Relief with the siege of Damdamussa; b. Detail showing architectural details of the fortress; Nimrud, North-West Palace, relief B-3a. London, British Museum, BM 124555. Courtesy The Trustees of the British Museum

The first are the peculiar circles on the Throne-room slab B-8b (Fig. 14a).²¹ This relief represents a walled city, probably Kunulua, behind a parade of Assyrian horse chariots: in this scene no war or siege is described, but the peaceful surrendering and subjugation of a western town to the Assyrian king.²² On top of the city walls five women are depicted, which could probably be the singers mentioned in the Assyrian Annals²³ (Fig. 14b). It shall be stressed that the circular elements below the crenellations in this case are not represented as simple circles like in

²¹ Meuszyński 1981: 21; Taf. 2:3.

²² Kunulua corresponds to modern Tell Tayinat, in the southern Turkey province of Hatay, where recent excavations carried out by the University of Toronto's expedition have revealed a new temple dated to the Neo-Assyrian period and displaying a group of texts dated to the times of king Esarhaddon: this find corroborates the identification of the site with Pattina/Unqi/Kunulua, named in later Assyrian times as Kunalia (Lauinger 2011: 9; Harrison, Osborne 2012)

²³ Female singers and a large cattle (as represented on the reliefs B-8b and B-5b) are among the tributes for the Assyrian king from Lubarna, king of Kunulua, and constitute the key element for the identification of the walled town with Kunulua (Matthiae 1988: 363-365).



Fig. 14. a. Assyrian chariots in parade in front of the walls of Kunulua; b. Details showing architectural details of the fortress; Nimrud, North-West Palace, relief B-8b. London, The Trustees of the British Museum, BM 124547

the previous cases, but are represented as two concentric circles, resembling more ribbed discs or rings with a rim; moreover the same elements on the top of the towers are displayed in a double row.

The last circular elements to be considered are those depicted on the rounded fortifications in slab B10-a, where the schematic rounded representation has been usually interpreted as the Assyrian military camp, return goal of the Assyrian king and his troops after the siege of the towns in the north (Fig. 15a);²⁴ Paolo Matthiae (1988: 361-363), without ruling out the hypothesis of the identification with the Assyrian military camp, suggests that the city so carefully represented as a circular walled settlement could be identified with Tushkha, a city of the north within the Bit Zamani kingdom, where the Assyrian king received a massive tribute of horses and where he stored barley and straw and recovered enfeebled Assyrian soldiers;²⁵ in Tushkha Ashurnasirpal II also claims to

²⁴ Winter 1981: 11; Winter 1983: 21; Meuszyński 1981: pl. 2:3.

²⁵ Matthiae (1988: 363) also argues that the identification with Tushkha would be geographically consistent with other scenes represented in the adjacent reliefs with Damdammusa/Amedu and Udu/Madara, all to be located in Bit Zamani; this feature would be coherent with the principle of a compositional unity on a topographical level, with events from different campaigns associated within Ashurnasirpal's decorative program as belonging to the same geographical area (Matthiae 1988: 355).



Fig. 15. a. Schematic representation of the Assyrian camp or of the city of Tushkha; b-c. Details showing architectural details of the camp or city; Nimrud, North-West Palace, relief B-7a. London, The Trustees of the British Museum, BM 124547

have operated a vast program of restoration and refurbishment of the city itself, with the complete rebuilding of the city wall, the erection of a palace and of an image in white limestone of the king himself (Grayson 1991: 202).

The circles in this specific scene are extremely interesting, as they are represented as hollow and ridged, with the clear intention to show them concave, lowering the limestone surface and marking the external diameter with an incised line (Fig. 15b-c); furthermore they are represented in two different locations, along the circular walls and on top of the protruding towers, below the stepped crenellations, which appear on the top of towers. In this specific case, the circles properly give the idea of rings within the brickwork of walls and towers, and the most appropriate parallel in the material culture seem to correspond to the glazed funnels and rings from Afis and Zincirli.

One final example coming from the Assyrian milieu is the small ivory pyxis from Nimrud's Private Houses in the collections of the Metropolitan Museum of Art (Fig. 16).²⁶ The fragmentary pyxis displays musicians on the top of a towered city, with walls and towers crowned by stepped crenellations: just below the line of the battlements along the walls runs a row of tiny circular elements, which in one case are repeated also below the pinnacles of one of the towers. Also in this case of an ivory belonging to the Assyrian production group, the architectural features represented can be interpreted such as those on the monumental wall reliefs.

²⁶ Cf. illustration in Aruz 2014: 141, Fig. 3.23. I thank Dr. Yelena Rakic in the Ancient Near Eastern Art Department at the Metropolitan Museum of Art, New York, for pointing out to me this comparison.



Fig. 16. Ivory pyxis from Nimrud with women playing drums and cymbals standing behind the crenellations of a walled city, 9th century BC. The Metropolitan Museum of Art, New York, Inv. no. 54.117.11a. Courtesy The Metropolitan Museum of Art, New York

GLAZED STEPPED PINNACLES AND “ASSYRIAN CLAY HANDS”

Stepped pinnacles such as those represented on the citadel gates of Assyrian reliefs (Fig. 12c) have been found in Zincirli excavations too (Fig. 1c). Felix von Luschan and Walter Andrae mention in the catalogue three of these items, one of them shaped as a corner battlement and coming from Room 2 of Building J (also named as Kalamu Palace).²⁷ These architectural elements were covered by a glazed coating exactly as the outer part of the rings, presenting the same bluish-green colour (Fig. 1c). Their reduced size, not exceeding 20 cm in height (von Luschan and Andrae 1943: 155), has led scholars to interpret them as decorative elements for interior of buildings or for altars rather than for the proper use as fortification battlements (Porada 1967: 2). In Iron Age northern Syria similar stepped crenellations are known both from Karkemish and the Yunus cemetery, where they are represented on stone reliefs associated to rosettes (Woolley 1921: 151; Figs 56-57), and from Tell Halaf, where glazed bricks moulded in different geometrical shapes were part of a standing altar structure, labelled as *Postament* by the German archaeologists (Naumann, Langenegger, Müller 1950: 71-78; Beilage I-III; Pls 13-14).²⁸

Stepped crenellations are therefore attested in Iron Age northern Levant in two different ways: shaped in glazed bricks or represented on basalt funerary stele or altars. Whereas the first exemplars are known in the area only from Zincirli and Tell Halaf,²⁹ the latter are more widely attested. Among the most significant examples we recall the Karkemish and Yunus altar fragments published by Leonard Woolley, one funerary stele with Luwian inscription from the Turkish village of Tilsevet (Hawkins 2000: 178-180; Payne 2012: 45-46), a fragment of altar from the old town of Karamanmaraş (Garbini 1959; Orthmann 1971: Taf. 46-g) and a funerary stele or altar also from the region of Marash now in the Antakya museum (Schachner, Schachner 1996; Bonatz 2000). It seems likely that in the area of Northern Syria and southern Anatolia such items were associated with cultic functions rather than with defensive properties, being employed in altars and stelae shaped as architectural models: more

²⁷ von Luschan and Andrae 1943: 155; pl. 31:a-c.; Pucci 2008: 61-62; Tab. 31.

²⁸ Probably a similar altar in glazed bricks was attested in the Nabu Temple at Khorsabad, but the bad preservation state does not allow to infer whether glazed stepped pinnacles were present in this installation (Loud, Altman 1938: 42).

²⁹ More glazed pinnacles are attested in the same span of time, 9th-8th century BC, in Northern Mesopotamia: cf. Assur examples from the city fortifications in Garbini 1958: 85-86, Fig. 1.



Fig. 17. Funerary stele or altar from Marash. Antakya, Archaeological Museum, 17915 (photo by S. Soldi)



Fig. 18. Fragment of glazed clay hand, Zincirli, Area 5, Building A/II. Courtesy The Chicago-Tübingen Expedition to Zincirli (photo by S. Soldi)

specifically the few preserved documents seem to indicate a close relationship of stepped crenellations with funerary cult.

The funerary stele from Marash in the Antakya Museum is extremely interesting, since it depicts a woman seated on a bed within the frame of an architectural structure (Fig. 17):³⁰ without any doubt, this image represents the deceased woman to which the stele is dedicated. The peculiar squared shape of the monument, engraved on all the four sides, with two rows of four stepped pinnacles on the frontal and rear sides and three pinnacles on the shorter sides (for a total of ten stepped pinnacles), seems to point toward the identification of the monument as a funerary altar, that could have been used in antiquity to perform cultic rituals in memory of the deceased person. One further antiquarian element makes the analysis of this monument noteworthy for the present study: the frontal side of the stele, where the deceased is represented seated on a bed with two smaller human figures at both sides, is shaped as an architectonic framework, with a timber running over the head of the personages and a series of four protruding hands carved in between the timber and the ceiling terminating in the stepped pinnacles. As I pointed out in a recent article (Soldi 2017), this is one of the most exact representations of how a specific class of object denominated among scholars as “Assyrian clay hands” should have actually been employed in ancient architecture.³¹ The associated representation in the same monument of the stepped pinnacles and the

³⁰ Detailed analysis of this artifact in Schachner, Schachner 1996 and Bonatz 2000.

³¹ On the Assyrian clay hands cf. the detailed studies in: Peltenburg 1968, Moorey 1985: 180, Frame 1991 (with the most complete catalogue of finds and full discussion), Hausleiter 1999, and recently Soldi 2017. It shall be stressed that another possible representation of the hands in an architectural frame is the one suggested by Edgar Peltenburg in a basaltic stone architectural element from Hama Level E, that he interprets as a window ledge (Peltenburg 1968: 58-60). In the original reconstruction proposed by Danish archaeologists this frame was presented vertical, interpreted as a doorjamb (Fugmann 1958: 203-205; Fig. 257-258), but Peltenburg’s interpretation is indeed extremely suggestive: noteworthy this architectural element also presents circular holes together with triangle-shaped fenestrated elements (well known in Hittite and Syro-Hittite architecture: cf. at Ain Dara, Kohlmeyer 2012 and 2013;

hands is extremely interesting since they have both been found, in glazed ware, in Zincirli excavations (Fig. 1b-c; von Luschan, Andrae 1943: pl. 31: a-c;d-e); as I mentioned above, the glazed hands (*Handkonsolen*) were found together in the same pit with the glazed rings (*Rohr-Ringe*), arguing for a close connection of these different artefacts in their architectural employment in Zincirli.³²

New interesting results on this issue are provided by the renewed excavations of the Universities of Chicago and Tübingen directed by David Schloen: in Lower Town Area 5, two fragments of small glazed hands and one fragment of a ring have been found, attributed to levels 2d and 2c, in the area where the cella of KTMW's stele was found³³: one of the hand fragments (Fig. 18) in particular belonged to the same building A/II where the stele was found, in the adjacent room to the KTMW shrine. It comes from the fill above the floor of the phase below KTMW stele, but it cannot be completely ruled out that it may have belonged to the decoration of the building during the period of KTMW funerary shrine. In terms of absolute chronology these finds can be dated between the first and second half of the 8th century, possibly under the reign of king Panamuwa II, who is quoted in KTMW's stele and who reigned between 743/740 and 732/730 BC as a loyal client of king Tiglath-Pileser III, or slightly earlier (Herrmann 2014: 74; Herrmann, Schloen 2016).

More fragments of glazed rings were found in trenches on the acropolis but from very disturbed contexts, whereas other similar items come from Area 0, located out of the city northern gate, where probably an *extra moenia* structure could be identified (Herrmann, Schloen 2016: Fig. 24.1). It seems therefore that glazed hands and rings in Zincirli might have been related to peculiar areas, where cultic activities took place, as already suggested by the burial of these items within the area of the Hilani III.

Though this hypothesis is still tentative and needs to be confirmed by further studies and more archaeological results, we are led to believe that the integration of glazed ceramics in architecture, also employing different kinds of enamelled artefacts such as the hands and stepped pinnacles as represented on the Marash altar or as the rings and the hands found together in the area of Hilani III, should be connected with distinctive functions of peculiar areas or specific buildings, such as temples or funerary shrines.

CONCLUSIONS

To conclude, we believe that these few elements from the Northern Levant both from old and new excavations are providing stimulating data to enforce our knowledge and to reconstruct not only the actual appearance of ancient building but also the symbolic representation displayed within sacred buildings.

The Iron Age temple on the Afis acropolis, with its massive free standing *in antis* structure, should have been the major sacred building on the acropolis and its white plastered walls could have been enriched and emphasised by the green circular elements all along its perimeter, where cultic activities could have been performed (Mazzoni 2015). At Zincirli a more rich variety of glazed elements were part of the decorative complex used for specific buildings, probably also connected to religious or funerary rituals. The diffusion of glazed ceramics both at Zincirli

on clay models at Hattusha, Neve 2001: 288-292; Abb. 2c-3; Pl. XI), and the "hands" represented on both sides of the element. A horizontal display within the brickwork would allow this element to let air and light filter through the inside and the outside of the building, with the hands, the rosettes and the guilloche motif on display on both sides. This element, found in the "place centrale" in Hama Level E, would infer for an association of hands and rounded openings in the Northern Levant already in the Syro-Hittite period, before the Assyrians conquered the city under Sargon II's reign.

³² Walter Andrae stresses that the reduced dimensions of Zincirli hands and pinnacles (especially compared to those that Andrae himself excavated in Assur) prevents from interpreting them as major architectural features of walls and buildings, but with a purely decorative function (von Luschan, Andrae 1943: 60-61). We may infer from the reduced dimension of the stepped pinnacles a similar decorative function as in Tell Halaf's *Postament*, which was topped by the stepped glazed pinnacles, as reconstructed by the German archaeologists (Naumann *et al.* 1950: 73, Abb. 36; Taf. 13:2). As observed by Marina Pucci, Zincirli glazed pinnacles were hollow on the inside, suggesting that they might have been connected to an underlying structure by a peg (cf. also Peltenburg 1968: 60-61).

³³ On the archaeological context of KTMW's stele and the interpretation of the adjoining building as a small temple, cf. Herrmann 2014.

and at Afis could be in relation with a stronger Assyrian influence in western Syria, since no attestation of this employment seems to pre-date the first half of the 8th century BC, a time when Assyrian control over the region and over the disputes among local ruling elites became more effective with some influence partially reflected in art and material culture.

We can finally still agree with Annie Caubert's initial statement that glazed coloured elements did not play any major role in the architecture of the Iron Age Levant, especially if we compare this situation with Mesopotamia and Iran, but we now have a few new elements to consider, resulting in a more complex picture, where the employment of the glazing technique, though reduced in scale and in archaeological attestations, should have been present on some specific buildings of two major cities of northern Syria, probably as a consequence of the diffusion of Assyrian habits towards the West.

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Bibliography

- Albenda P. 1972, A Syro-Palestinian (?) City on a Ninth Century BC Assyrian Relief, *Bulletin of the American Schools of Oriental Research* 206: 42-48.
- Aruz J. 2014, Nimrud Ivories, in J. Aruz, S. Graff, Y. Rakic (eds), *Assyria to Iberia at the Dawn of the Classical Age*, New York: 141-151.
- Bonatz D. 2000, *Das syro-hethitische Grabdenkmal: Untersuchungen zur Entstehung einer neuen Bildgattung in der Eisenzeit im nordsyrisch südostanatolischen Raum*. Mainz.
- Bressanin P. 2006, *Studio archeometrico di ceramiche del Ferro Recente da Tell Afis (Siria Settentrionale)*, unpublished M.A. thesis, Faculty of Mathematical, Physical and Natural Sciences, University of Padua.
- Callot O. 2001, De l'architecture à la maquette: Usage et représentation du bois en Syrie au Bronze récent, in B. Muller (ed.), *"Maquettes architecturales" de l'Antiquité: Regards croisés (Proche-Orient, Égypte, Chypre, bassin égéen et Grèce, du Néolithique à l'époque hellénistique); Actes du colloque de Strasbourg, 3-5 décembre 1998*, Strasbourg – Paris: 273-283.
- Carenti G., Minunno G. 2013, The Role of Birds in Tell Afis (Syria): Sacrifices and Rituals in a Temple Area during the Iron Age, in L. Bombardieri, A. D'Agostino, G. Guarducci, V. Orsi, S. Valentini (eds), *Identity and Connectivity. Proceedings of the 16th Symposium on Mediterranean Archaeology, Florence, Italy, 1-3 March 2012, I*, Oxford: 119-126.
- Caubert A. 1979, Les maquettes architecturales d'Idalion, in V. Karageorghis, H.W. Catling, K. Nicolaou, A. Papa-georghiou, M. Loulloupis, D. Christou, I. Nicolaou (eds), *Studies Presented in Memory of Porphyrios Dikaios*, Nicosia: 94-118.
- Caubert A. 2012, A Matter of Strategy, Taste or Choice? Glazed Clay Versus Siliceous Faience, in M. Gruber, S. Ahituv, G. Lehmann, Z. Talshir (eds), *All the Wisdom of the East: Studies in Near Eastern Archaeology and History in Honor of Eliezer D. Oren*, Orbis Biblicus et Orientalis 255, Fribourg: 157-166.
- Cecchini S.M. 1998, Area G. The Iron I-III Levels. Architecture, Pottery and Finds, in S.M. Cecchini, S. Mazzoni (eds), *Tell Afis (Siria). Scavi sull'Acropoli 1988-1992. The 1988-1992 Excavations on the Acropolis*, Pisa: 273-365

- Cecchini S.M. 2000, Un bâtiment mystérieux sur l'acropole de Tell Afis, in P. Matthiae, A. Enea, L. Peyronel, F. Pinnock (eds), *Proceedings of the First International Congress on the Archaeology of the Ancient Near East. Rome, May 18th–23rd 1998*, 2 vols, Roma: 199–212
- Cole S. 1997, The destruction of orchards in Assyrian warfare, in S. Parpola, R.M. Whiting (eds), *Assyria 1995: Proceedings of the 10th Anniversary Symposium of the Neo-Assyrian Text Corpus Project, Helsinki, September 7-11, 1995*, Helsinki: 29-40.
- Falcone R., Lazzarini L. 1998, Analisi minero-petrografiche e chimiche su campioni di ceramica, in S.M. Cecchini, S. Mazzoni (eds), *Tell Afis (Siria). Scavi sull'Acropoli 1988-1992. The 1988-1992 Excavations on the Acropolis*, Pisa: 481-500.
- Fales F.M. 2000, *L'impero assiro. Storia e amministrazione (IX-VII secolo a.C.)*, Roma-Bari 2001.
- Frame G. 1991, Assyrian Clay Hands, *Baghdader Mitteilungen* 22: 335–381.
- Fugmann E. 1958, *L'architecture des périodes pré-hellénistiques. Hama. Fouilles et recherches de la Fondation Carlsberg 1931-1938*. II.1, Nationalmuseets Skrifter SB 4, København.
- Garbini G. 1958, The stepped pinnacle in the ancient Near East, *East and West* 9: 85-91.
- Garbini G. 1959, A New Altar from Marash, *Orientalia N.S.* 28: 206-208.
- Grayson A.K. 1991, *Assyrian Rulers of the Early First Millennium BC. I (1114-859 BC)*, The Royal Inscriptions of Mesopotamia, Assyrian periods; v. 2, Toronto – Buffalo – London.
- Harrison T.P., Osborne J.F. 2012, Building XVI and the Neo-Assyrian Sacred Precinct At Tell Tayinat, *Journal of Cuneiform Studies* 64: 125-143.
- Hausleiter A. 1999, Neuassyrische Kunstperiode. VI. Keramik, *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 9, no. 3/4: 274-77.
- Hawkins J.D. 2000, *Corpus of hieroglyphic Luwian inscriptions 1. Inscriptions of the Iron Age*, Studies in Indo-European Language and Culture N.S. 8.1, Berlin.
- Herrmann V.R. 2014, The Architectural Context of the KTMW Stele from Zincirli and the Mediation of Syro-Hittite Mortuary Cult by the Gods, in P. Pfälzner, H. Niehr, E. Pernicka, S. Lange, T. Köster (eds), *Contextualising Grave Inventories in the Ancient Near East. Proceedings of a Workshop at the London 7th ICAANE in April 2010 and an International Symposium in Tübingen in November 2010, both Organised by the Tübingen Post-Graduate School "Symbols of the Dead"*, Qatna Studien Supplementa 3, Wiesbaden: 73-87.
- Herrmann V.R., Schloen D.J. 2016, "Assyrian impact on the kingdom of Sam'al: the view from Zincirli", in J. MacGinnis, D. Wicke, T. Greenfield (eds), *The Provincial Archaeology of the Assyrian Empire*, Cambridge: 265-274
- Jacoby R. 1991, The Representation and Identification of Cities on Assyrian Reliefs, *Israel Exploration Journal* 41 (1/3): 112-131.
- Kleinman A., Cohen M.E., Hall E., Homsher R.S., Finkelstein I. 2017, Cultic Activity at Megiddo in the Iron Age. New Evidence and a Long-Term Perspective, *Zeitschrift des Deutschen Palästina-Vereins* 133/1: 24-52.
- Kohlmeyer K. 2012, Der Tempel des Wettergottes von Aleppo. Baugeschichte und Bautyp, räumliche Bezüge, Inventar und bildliche Ausstattung, in J. Kamlah (ed.), *Temple Building and Temple Cult. Architecture and Cultic Paraphernalia of Temples in the Levant (2.-1. Mill. B.C.E.)*. *Proceedings of a Conference on the Occasion of the 50th Anniversary of the Institute of Biblical Archaeology at the University of Tübingen (28 – 30 May 2010)*, Abhandlungen des Deutschen Palästina-Vereins 41, Wiesbaden: 55-78.
- Kohlmeyer K. 2013, Der Tempel des Wettergottes von Aleppo, in K. Kaniuth, A. Löhnert, J.L. Miller, A. Otto, M. Roaf, W. Sallaberger (eds), *Tempel im Alten Orient. 7. Internationales Colloquium der Deutschen Orient-Gesellschaft 11.13. Oktober 2009, München*, Colloquien der Deutschen Orient-Gesellschaft 7, Wiesbaden: 179-218.
- Lauinger J. 2011, Some Preliminary Thoughts on the Tablet Collection in Building XVI from Tell Tayinat, *The Canadian Society for Mesopotamian Studies Journal* 6: 5-14
- Lipiński E. 2000, *The Aramaeans. Their Ancient History, Culture, Religion*, Orientalia Lovaniensia Analecta 100, Leuven.
- Liverani M. 1988, *Antico Oriente. Storia società economia*, Roma-Bari.

- Loud G., Altman C.B. 1938, *Khorsabad. Pt. II: The Citadel and the Town*, Oriental Institute Publications 40, Chicago.
- Luschan F. von, Andrae W. 1943, *Ausgrabungen in Sendschirli*. Vol. 5, *Die Kleinfunde von Sendschirli*, Mitteilungen aus den orientalischen Sammlungen 15, Berlin.
- Maeir A.M., Dayagi-Mendels M. 2007, An elaborately decorated clay model shrine from the Moussaeiff Collection, in S. Bickel, S. Schroer, R. Schurte, C. Uehlinger (eds), *Bilder als Quellen. Images as Sources. Studies on ancient Near Eastern artefacts and the Bible inspired by the work of Othmar Keel*, Orbis Biblicus et Orientalis special volume), Fribourg – Göttingen: 110–123.
- Margueron J.-Cl. 1980, Emar: un exemple d'implantation hittite en terre syrienne, in J.-Cl. Margueron (ed.), *Le Moyen Euphrate. Zone de contacts e d'échanges. Actes du Colloque de Strasbourg 10-12 Mars 1977*, Strasbourg: 282-312.
- Margueron J.-Cl. 1982, Architecture et urbanisme, in D. Beyer (ed.), *Meskéné – Emar. Dix ans de travaux*, Paris: 23-39.
- Margueron J.-Cl. 1993, Chiodi decorativi (Cat. No. 352–353), in O. Rouault, M.G. Masetti-Rouault (eds), *L'Euphrate e il tempo. Le civiltà del medio Euphrate e della Gezira siriana*, Milano: 467.
- Margueron J.-Cl. 2006, Architecture et modélisme au Proche Orient, in A.M. Maeir, P. de Miroschedji (eds), “*I Will Speak the Riddles of Ancient Times*”. *Archaeological and Historical Studies in Honor of Amihai Mazar on the Occasion of His Sixtieth Birthday*, 2 vols, Winona Lake (Indiana): 193-216.
- Matthiae P. 1988, Realtà storica e livelli di lettura nei rilievi di Assurnasirpal II, *Scienze dell'Antichità* 2: 347-376.
- Mazzoni S. 2008, *The Italian Excavations of Tell Afis (Syria): from chieftdom to an Aramaean state*, Pisa.
- Mazzoni S. 2010, Syro-Hittite temples and the traditional *in antis* plan, in J. Becker, R. Hempelmann, E. Rehm (eds), *Kulturlandschaft Syrien. Zentrum und Peripherie. Festschrift für Jan-Waalke Meyer*, Alter Orient und Altes Testament 371, Münster: 359–376.
- Mazzoni S. 2012, Temples at Tell Afis in the Iron Age I – III, in J. Kamlah (ed.), *Temple Building and Temple Cult. Architecture and Temple Paraphernalia of Temples in The Levant (2.-1. Mill. B.C.E.). Proceedings of a Conference on the Occasion of the 50th Anniversary of the Institute of Biblical Archaeology at the University of Tübingen (28 – 30 May 2010)*, Wiesbaden: 23-40.
- Mazzoni S. 2014, Tell Afis in the Iron Age. The Temple on the Acropolis, *Near Eastern Archaeology* 77/1: 44-52
- Mazzoni S. 2015, Open spaces around the temples and their ritual use: archaeological evidence from Bronze and Iron Age Levant, in N. Laneri (ed.), *Defining the Sacred. Approaches to the Archaeology of Religion in the Near East*, Oxford: 118-133.
- May H.G. 1935, *Material Remains of the Megiddo Cult*, Oriental Institute Publications 26, Chicago.
- Meuszyński J. 1981, *Die Rekonstruktion der Reliefdarstellungen und ihrer Anordnung im Nordwestpalast von Kalhu (Nimrūd): Räume B.C.D.E.F.G.H.L.N.P*, Baghdader Forschungen 2, Mainz am Rhein.
- Minunno G. 2017, Some Considerations on the Funnels from Tell Afis, *Ash-sharq* 1/1: 18-21.
- Moorey P.R.S. 1985, *Materials and Manufacture in Ancient Mesopotamia: The Evidence of Archaeology and Art; Metals and Metalwork, Glazed Materials and Glass*, British Archaeological Reports International Series 237, Oxford.
- Muller B. 1998, Espace réel, espace symbolique: les “maquettes architecturales” de Syrie, in M. Fortin, O. Aurenche (eds), *Espace naturel, espace habité en Syrie du Nord (10^e – 2^e millénaires av. J.-C.). Natural space, inhabited space in Northern Syria (10th – 2nd millennium BC). Actes du colloque tenu à l'Université Laval (Québec) du 5 au 7 mai 1997 (BCSMS 33 – TMO 28)*, Quebec – Lyon : 179–190.
- Muller B. 2002, *Les “maquettes architecturales” du Proche-Orient ancien: Mésopotamie, Syrie, Palestine du III^e au milieu du I^{er} millénaire av. J.-C.*, 2 vols., Bibliothèque Archéologique et Historique 160, Beirut.
- Naumann R., Langenegger F., Müller K. 1950, *Tell Halaf II – Die Bauwerke*, Berlin.
- Neve P. 2001, Hethitische Architekturdarstellungen und –Modelle aus Boghazköy-Hattusha und ihr Bezug zur realen hethitischen Architektur, in B. Muller (ed.), “*Maquettes architecturales*” de l'Antiquité: Regards croisés (Proche-Orient, Égypte, Chypre, bassin égéen et Grèce, du Néolithique à l'époque hellénistique); Actes du colloque de Strasbourg, 3–5 décembre 1998, Strasbourg – Paris: 285-301.

- Orthmann W. 1971, *Untersuchungen zur späthethitischen Kunst*, Bonn.
- Payne A. 2012, *Iron Age Hieroglyphic Luwian Inscriptions*, Writings from the ancient world 29, Atlanta.
- Paley S.M., Sobolewski R.P. 1987, *The reconstruction of the relief representations and their positions in the northwest-palace at Kalhu (Nimrud) 2., Rooms: I.S.T.Z, West-Wing*, Baghdader Forschungen 10, Mainz am Rhein.
- Peltenburg E.J. 1968, Assyrian clay fists, *Oriens Antiquus* 7: 57–62
- Porada E. 1967, Battlements in the Military Architecture and in the Symbolism of the Ancient Near East, in D. Fraser, H. Hibbard, M.J. Lewine (eds), *Essays in the History of Architecture Presented to Rudolph Wittkower*, London: 1-12
- Pucci M. 2008, *Functional analysis of space in Syro-Hittite architecture*, British Archaeological Reports International Series 1738, Oxford.
- Reade J.E. 1985, Texts and Sculptures from the North-West Palace, Nimrud, *Iraq* 47: 203-214.
- Reade J.E. 1995, Episode from a siege, in J.E. Curtis, J.E. Reade (eds), *Art and Empire. Treasures from Assyria in the British Museum*, New York: 47.
- Russell J.M. 1991, *Sennacherib's palace without rival at Nineveh*, Chicago.
- Schachner Ş., Schachner A. 1996, Eine späthethitische Grabstele aus Maraş im Museum von Antakya, *Anatolica* 22: 203–26.
- Schloen D.J., Fink A.S. 2009, Searching for ancient Sam'al: New excavations at Zincirli in Turkey, *Near Eastern Archaeology* 74/2: 2013-219.
- Soldi S. 2005, Area A1: il settore occidentale, in S. Mazzoni *et al.*, *Tell Afis. Siria 2002-2004, Egitto e Vicino Oriente XXVIII*: 24-29.
- Soldi S. 2009, Aramaeans and Assyrians in North-Western Syria: Material Evidence from Tell Afis, *Syria* 86: 97-118.
- Soldi S. 2012, Notes on Green Glazed Funnels from the Iron Age Temple AI at Tell Afis, in R. Matthews, J. Curtis (eds), *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East. 12 April-16 April 2010, the British Museum and UCL, London, II*, Wiesbaden: 459-477.
- Soldi S. 2013, *Red Slip Ware* from the Acropolis of Tell Afis: the evidence of Area G, in S. Mazzoni, S. Soldi (eds), *Perspectives on Syrian Archaeology. Celebrating Twenty Years of Excavations in Tell Afis*, Pisa: 199-217.
- Soldi S. 2017, "Assyrian clay hands" in the architecture of the ancient Near East, *Metropolitan Museum Journal* 52: 8-23.
- Thomason A.K. 2001, Representations of North Syrian Landscape in Neo-Assyrian Art, *Bulletin of the American Schools of Oriental Research* 323: 63-96.
- Wartke R.-B. 2005, *Sam'al. Ein aramäischer Stadtstaat des 10. bis 8. Jhs. v. Chr. und die Geschichte seiner Erforschung*, Berlin – Mainz an Rhein.
- Winter I.J. 1981, Royal Rhetoric and the Development of Historical Narrative in Neo-Assyrian Reliefs, *Studies in Visual Communication* 7/2: 2-38.
- Winter I.J. 1983, The Program of the Throneroom of Assurnasirpal II, in P.O Harper, H. Pittmann (eds), *Essays on Near Eastern Art and Archaeology in Honor of Charles Kyrle Wilkinson*, New York: 15-31.
- Woolley C.L. 1921, *Carchemish: Report on the Excavations at Jerablus on Behalf of the British Museum*. Part 2, *The Town Defences*, London – Oxford.
- Yadin Y. 1963, *The art of warfare in Biblical lands: in the light of archaeological study*, New York.
- Yadin Y., Aharoni Y., Amiran R., Dothan T., Dunayevsky I., Perrot J. 1960, *Hazor II: An Account of the Second Season of Excavations, 1956*, Jerusalem.
- Zukerman A. 2014, The Horned Stands from Tell Afis and Hazor and the 'Crowns' from Nahal Mishmar, in J.R. Spencer, R.A. Mullins and A.J. Brody (eds), *Material Culture Matters. Essays on the Archaeology of the Southern Levant in Honor of Seymour Gitin*, Winona Lake (Indiana): 309-321.