THE COMPLEX SYSTEM OF THE FORTIFICATIONS OF HATRA: DEFENCE, CHRONOLOGY AND SECONDARY FUNCTIONS

ENRICO FOIETTA
(University of Torino)

Abstract
This paper regards a general revaluation of the complex system of fortifications of Hatra. Published and unpublished data have been used to achieve the goal, the latter belonging to the Italian expedition at Hatra. This integrated methodology has given the possibility to propose a new chronology of the defences but also to better understand the role of the city gates and their main and secondary functions.

INTRODUCTION
The fortifications of Hatra consist of a line of multiple defences including watchtowers, a ditch, an antemural, a towered main wall, massive structures including towers and walls and an inner wall.

The four main gates, from which principal avenues lead to the core city Temenos (Fig.1.1), correspond approximately to the four cardinal points.

W. Andrae was the first archaeologist to study the defences in detail, at the beginning of the twentieth century. A long chapter in his book published in 1912 is dedicated to this topic. During the 50s Iraqi archaeologists opened preliminary trenches in the North Gate. W. Al-Salih investigated it in 1970-1971. The excavation, published in the journal Sumer, involved the gate comprising the Main and Secondary Entrances and a large part of the nearby Main and Inner Wall. In 1979 M.S. Abdallah directed the investigation of the East Gate, reported by J. Ibrahim in his volume Pre-Islamic Settlements of Jazirah and in a short paper. After that, excavations focused mainly on the external eastern part of the Main Curtain over a wide area extending from the north-east to the south-east corners (Fig.1). Heavy restoration works followed, especially in the East Gate area.

In 1990 a Polish expedition directed by M. Gawlikowski investigated and mapped the south-east corner of the defences, producing a detailed analysis of this sector, published in two articles.

1 Many sculptures discovered at the city gates of Hatra have been destroyed in 2015 by the so-called ‘Islamic State’. These specimens were part of the collections of the Mosul Museum, which is the second most important museum of Iraq. The building and its objects have been looted and ravaged in spring 2015, as a terrible video published by IS militants has shown. In the captions of this paper, the statues subjected to this brutality are marked as ‘destroyed by IS in 2015’ with the purpose of taking account of this ignominious fact. All the statues marked in this way were original and not copy, as some newspapers and internet sites have written. We can only face this attack taking care of the memory of these sculptures and sharing our research with the hope that the territory both in Iraq and Syria, dominated by this cruel joke, will soon be free.

I would like to thank for the advices in the redaction of this paper R. Ricciardi Venco (Director of the Italian expedition at Hatra). All the images, which are not mentioned in other ways, are courtesy of the Italian Archaeological Expedition. For the interesting discussions and their suggestions concerning Hatra I would like to mention also the colleagues and friends F. Dorna Metzger, I. Bucci and J. Bruno.

6 The unpublished restorations, probably accomplished in 1989, are clearly detectable in the Italian photographic documentation.
Moreover, by opening some trenches, an ancient defensive curtain was brought to light in the urban area\(^8\) (Fig.1.2).

These different archaeological investigations have produced a large but variable amount of information. All has been collected in a GIS-database, resulting from Italian topography and containing both published and unpublished data, the latter belonging to the Italian expedition (fig.1). This huge corpus, including 2500 images, notes and commented plans, has proved to be important from a qualitative and quantitative point of view. 3D models have been designed for the South-East Corner and the North Gate, a truly useful tool for checking some working hypotheses. This integrated system allows for a general review of the defences, which is discussed in this paper.

THE DEFENCES: DIFFERENT PARTS OF A COMPLEX SYSTEM

MAIN PSEUDO-CIRCULAR CURTAIN

The main pseudo-circular curtain has colossal dimensions, being approx. 2 km in diam. and 6 km in circumference (Fig.1). The investigated areas are limited to the East and North Gates and to the east front of the curtain, representing only 29 per cent. of the total. In these zones, the wall is in mud-brick with a stone socle of two or three courses with a constant width of 3-3.5 m (Fig.2a). The best-preserved and excavated parts are up to 2-3 m high and display traces of plaster shown on the surface.

According to M. Gawlikowski, it has been estimated that the original height of the curtain was approx. 8-9 m, judging by an analysis of eight stairways set against it\(^9\). The top walkway, which perhaps had a crenelated parapet, was 2.5 m wide\(^10\). The top of the towers, located at intervals of approx. 30 m, was presumably an enlargement of the walkway, which was completely in mud-bricks\(^11\) (Fig.3a). Another walkway enlargement has been supposed by W. Andrae for the area nearby the North-West Corner, according to the discovery of several stone basements along the wall-street, which were probably used as support for a setting of wooden columns, maybe with an upper floor\(^12\).

An attempt to explain the use of the walkway can be made for the North Gate area, where four stairways are set against the Main Curtain\(^13\) (Fig.3b). They are placed at a distance of approx. 30 m, allowing rapid transit without the need for building stairways within the towers.

TOWERS

There are approx. 120 preserved square towers\(^14\). The 28 surveyed, placed in the east and north sections of the curtain, correspond to 23 per cent. of the total. The protruding structures are hollow,

---

\(^8\) Gawlikowski ‘Fortress Hatra. New Evidences on Ramparts and their History’, 162-178.

\(^9\) The eight stairways are placed close to the East and North Gates. The original height is valued making the rapport between the ramp or arches length of the stairways and the tread. The result is multiplied for the value of the raiser. This methodology was originally employed by M. Gawlikowski for a stairway placed northern of the East gate, between Tower 2 and Tower 3, and used also for the Inner Wall, Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 153-155.

\(^10\) No trace of the parapet has been discovered because the wall was preserved only to 2-3 m high and the construction was entirely made in mud-bricks.

\(^11\) The suggestion of a baked brick walkway must be rejected (Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 158).

\(^12\) See Andrae, Hatra. II, 45, fig. 44.

\(^13\) For the general plan of the Iraqi expedition: Al-Salihi, ‘The Excavation of the Northern Gate’, 185.

\(^14\) The number of towers has been obtained checking the data of the Italian documentation and Andrae’s plan. Six towers belonging to three of the main gates are not included. The number of 163 towers, supposed by J. Ibrahim and W. Al-Salihi must be rejected as preserved towers (Ibrahim, Pre-Islamic Settlement in Jazirah, 119; W. Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, Mesopotamia 26 (1991), 190) H. Bagain, employing a different methodology, suggests a number of ‘hollow towers’ (121) similar to the one proposed in this paper (Bagain, ‘Fortifications of Hatra. The Gate of Sanatruq II and the Theory of the Second Wall’, Sumer 53 (2005-2006), 17.
with an internal chamber investigated in only 10 cases\(^\text{15}\) (Fig.2b). We have little information about the digging especially on the towers located near the North Gate, because the Iraqi archaeologists have not published a complete report with either images or drawings of the inner chamber. The towers were built at the same time as the curtain sharing the same construction technique. The majority of the outer faces of the towers are 5-7 m wide\(^\text{16}\). Splayed arrow-slits are visible in a limited number of cases and are placed at a height of 50-100 cm from the present day external ground level probably permitting, in ancient times, only a low shot to the bowman\(^\text{17}\) (Fig.2b). For this reason, we can suggest they were mainly used as small windows for giving light and air to these chambers. The upper floors were probably used as placement for bowmen, guards and small artillery machines.

The ruined condition of the towers prevents an assessment of their original height, but it can be assumed that it was approx. 8-9 m and that the top corresponded to the battlements, as was supposed graphically and textually by W. Andrae and M. Gawlikowski\(^\text{18}\). Therefore, it is likely that each tower had two upper floors or one high first floor and the available walkway corresponding to the roof (Fig.3). The floors, as it is possible to understand from the Iraqi documentation, did not have permanent stairways and were linked by ladders. The entrance at the ground floor was built with door jambs and arches in stone. The few investigated rooms measure 3 m in length and 4 m in width. Inside the excavated towers only few findings have been discovered and reported by the Iraqi expeditions: inside tower 38, located nearby the North Gate, some pottery sherds of storage jars were found mixed with the rubbles of the upper floors\(^\text{19}\).

**Massive Towers**

W. Andrae listed the stone structures of the defences comprehending the massive towers, the massive walls and the tower-tombs, using roman numbers; this system, being commonly used by Scholars, is also employed in this paper\(^\text{20}\). The massive towers are 26 rectangular structures measuring about 6.5 x 8.5 m\(^\text{21}\) (Figs.4a, 6a). Seven towers are even bigger with a roughly square plan (9 x 9 m), built in ashlar masonry with a core of rubble and mortar\(^\text{22}\). There are engraved marks on the ashlars, measuring approximately 40 x 40 x 50 cm. Scholars proposed that these marks have the function of mason marks, assembly signs or apotropaic value symbols. The theory of mason marks seems, in my opinion, the most plausible, agreeing in principle with M. Gawlikowski’s affirmation\(^\text{23}\). However, it cannot be excluded that these signs could also own some apotropaic values, as stated for the first time by W. Ainsworth\(^\text{24}\). The suggestion of assembly marks has to be rejected, because no regularity of signs can be recognized on the unrestored towers\(^\text{25}\). All the structures are added to the Main Curtain and for this reason they are later in date.

---

\(^{15}\) Towers: 3, 9, 38bis, 67, 106, 111, 115, 122, 123 and 124. Six of these towers are described by H. Bagain: Bagain, ‘Fortifications of Hatra. The Gate of Sanatruq II and the Theory of the Second Wall’, 16.

\(^{16}\) Towers 12, 13, 17, 33, 37, 93, 112, 121-123 show an external face a little larger than 7 m.

\(^{17}\) Towers: 7, 10, 12, 18, 115, 123. In Towers 5, 38bis, 121 the arrow-slits are located at 100-150 cm high.


\(^{19}\) Al-Salih, ‘The Excavation of the Northern Gate’, 163-164. For the pottery sherds discovered at the North Gate area see the list of findings at the end of the same article: Al-Salih, ‘The Excavation of the Northern Gate’.

\(^{20}\) The only Scholar who propose a different numeration is M. Gawlikowski in the detailed description of a portion of the east front (Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’).

\(^{21}\) The massive towers are listed by W. Andrae as 25: 20 completely massive and 5 defined as partially massive (Andrae *Hatra. II*, 26). In this list, however, the Massive Tower XXI was forgotten, bringing the corpus to 26 buildings. The suggestion proposed by J. Ibrahim of 28 massive towers must be probably rejected (Ibrahim, *Pre-Islamic Settlement in Jazirah*, 119).

\(^{22}\) Massive Towers I, XVIII, XIX, XXIX, XXXIX, TMXLII, and XLIII.

\(^{23}\) Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 158.


The massive towers are particularly well preserved and stand more than 7-8 m high. W. Andrae thought these structures must have had an original height of 15 m, judging by the amount of debris found close to one of them (Massive Tower I)²⁶. M. Gawlikowski assumes a top higher than 8.6 m, which he suggests to be the value for the walkway curtain, due to the discovery of a mortared floor interpreted as the original one placed in correspondence to the chamber of the Massive Tower XXXIX, added to the east Main Curtain²⁷. A total height of 10-11 m, including the massive tower core and the top room, appears plausible (Fig.4b). An artillery chamber, probably in mud-brick, must have existed for protecting soldiers and artillery machines from projectiles, humidity and rain²⁸. The strings used for the machines were generally made from animal sinew or horsehair, materials sensitive to humidity. The interesting remains of a ballista were discovered near the massive tower XIX, close to the North Gate²⁹ (Fig.5a). Similar machines were probably placed on each massive tower, showing a ballistic range of maximum 200 m³⁰. It is not by chance that the external ‘circular’ enclosure, probably built by the Sasanians and recently studied by S. Hauser and D. Tucker is exactly outside this range³¹ (Fig.5b). Nowadays, the restored ballista is kept at the Baghdad Iraq Museum.

All the massive towers were added after the Main Curtain construction, in some cases incorporating the remains and rubble of ancient towers³².

**MASSIVE WALLS**

The massive walls are 16 in total and show the same construction technique as the massive towers (i.e. dimensions and setting of blocks)³³. The length of these walls is about 19 m, although 4 structures defined by W. Andrae as ‘conduits’ (ausblass) are longer, approximately 40 m in length³⁴ (Fig.6b). The thickness of the constructions is about 4 m³⁵. A particular case concerns the southeast corner where a structure displays a triangular shape protruding 3.5 m from the line of the main wall³⁶. This building, whose purpose was to increase the defensive control of this area, is linked to the antemural with a wall of 1.40 m in length and a door with a preserved threshold.

---

²⁷ ‘On top of the battery, an even, mortared surface bears two sets of hollow for tric-trac, being a proof that this was the floor of the artillery chamber, necessarily level with the chemin de ronde. A stump of a wall of this room still subsists at a corner’ (Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 180). However, it must be taken in account that this massive tower could also have been restored after the 80s investigations of the Iraqi archaeologists of this part of the curtain.
²⁸ A part of the mud-bricks wall was maybe still preserved at the Massive Tower XXXIX, see the previous note.
³¹ The ballistic maximum range is about 200 m, but shot with a low angle were surely more effective, as demonstrate by D. Baatz for a stone-projector of 30 minas (Campbell, *Greek and Roman Artillery: 399 BC–363 AD*, 21). It is possible to suggest for this reason a good effective range between 100-200 m.
³³ W. Andrae already detected five of them.
³⁴ W. Andrae discovered 11 of these structures (Andrae, *Hatra. II*, 26), but also the 4 structures defined ausblass (Conduits) must be listed in this group.
³⁵ Conduit East (Massive Wall III); Conduit South; Conduit South-East; Conduit North. Also the Massive Wall XXXVIII must be included.
The majority of the massive towers and walls are located in the north and east part of the curtain (Fig.1), probably because they were built on the principal enemy attack front.\textsuperscript{37}

**TOWERS TOMBS**

The tower tombs incorporated in the main wall are 8 in total.\textsuperscript{38} According to F. Dorna Metzger, they are similar in typology to several of those tombs placed inside the city.\textsuperscript{39} These structures, containing multiple rooms and floors, are made in ashlars with mason marks\textsuperscript{40} (Fig.7).

The Main Curtain is set against these tower tombs. It proves that the main wall was constructed later than them. None of these constructions contains dated inscriptions on the masonry; hence, it is impossible to determine their absolute chronology. An inscribed block, H416, was found near the Tower Tomb II. Unfortunately, the badly preserved engraved date, according to R. Bertolino, is extremely disputable.\textsuperscript{41}

As proposed by W. Andrae, given their state of preservation and the amount of debris, it can be assumed that the tower tombs could have interrupted the walkway by reaching a height of approx. 15 m\textsuperscript{42} (Fig.7b). This proposal is probably correct, although it seems difficult to reconstruct a constant height for these impressive and well preserved constructions. The roof of the upper chamber of these buildings was probably covered by blue glazed tiles, discovered in some points of the circuit. M. Gawlikowski thought that all the massive towers and the stepped parapets showed the occurrence of these particular tiles.\textsuperscript{43} However, the few sherds discovered along the main-wall during the Italian topographical mapping suggest a more limited use.\textsuperscript{44}

An interesting aspect is the adaptation of some of the windows of these buildings to a new defensive function, for instance as seen in Tower Tomb XXVII.\textsuperscript{45} A similar change of function can also be ascribed to two tower tombs (Buildings N and O) which are located in front of the North and East Gates and reused probably as watchtowers.\textsuperscript{46}

Some tower tombs placed on the east side of the city were investigated during the 80s by Iraqi expeditions and some coffins and related funerary goods were found\textsuperscript{47} (Fig.7a). This proves that even if their primary function changed, the structures retained their original purpose until probably the destruction of the city. It was suggested by W. Al-Salihi that the custom of including mausolea in the curtain wall was a Greek tradition, quoting Philo of Byzantium.\textsuperscript{48} This statement is uncertain because there is no reference to the precise location of this kind of mausoleum-tower in the relevant passage.\textsuperscript{49} Furthermore, no Greek or Hellenistic city in either the east or the west shows the insertion of monumental tombs within the curtain. The only possible comparison, which is unfortunately of a later date, is Palmyra where some monumental tombs were incorporated into the fortifications built by

\textsuperscript{38} Tower Tombs II, VII, IX, XXII (?), XXVII, XXXVII, XLI, 120 (?).
\textsuperscript{40} The ashlar layout is different in comparison to the stone blocks used for the massive towers (personal communication R. Ricciardi Venco).
\textsuperscript{42} Andrae, *Hatra. II*, 50. The evaluation was proposed by the A. for a Tower Tomb incorporated in the so-called ‘South Bastion’, which is a main wall huge rectangular protrusion see fig.1.
\textsuperscript{43} Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 181.
\textsuperscript{44} Personal communication R. Ricciardi Venco.
\textsuperscript{45} Andrae, *Hatra. II*, 47, fig. 46.
\textsuperscript{46} The East Tower was investigated by an archaeological excavation, which has however not yet published any report (W. Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, *Mesopotamia* 26 (1991), 188). For these two structures see: R. Killick, M. Roaf, ‘Excavations in Iraq 1981-1982’, *Iraq* 45/2 (1983), 212; Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, 188.
\textsuperscript{47} For the findings discovered in Tower Tombs II and IX (east main curtain) see: Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, 190-191.
\textsuperscript{48} Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, 191.
\textsuperscript{49} Philo of Byzantium, V, 1, 86.
Diocletian\(^50\). A reasonable hypothesis, which is relevant in both cases, is that the tower-tombs were only incorporated for practical reasons, probably to prevent enemies from using them to gain strategic elevation and allowing a good visibility between the high points of the curtain, as previously stated by J. Ibrahim\(^51\).

**DITCH AND ANTEMURAL**

Evidences for a ditch, detectable from the ground morphology in the unexplored areas and for an antemural are extremely restricted. The information mainly comes from the North Gate and the east curtain. The distance between the Main Wall and the ditch seems almost constant, c. 10 m, allowing for good troop transit (Fig.2a). The moat is lined with two walls, a retaining one on the side of the city, which is preserved up to 4 m high in the North Gate zone\(^52\), and an outer wall which is unfortunately badly preserved (Fig.8).

The width of the ditch at the North Gate was approximately 8m\(^53\), as confirmed by the general measurement plan of W. Andrae. In the South-East Corner, there was probably an enlargement of the ditch, here reaching 35 m in width\(^54\).

The retaining inside wall was discovered at the North Gate and was composed of different materials, including alabaster or gypsum and limestones as well as different sources, such as ashlars and re-used column drums\(^55\). The ditch follows the layout of the massive towers in several parts, which is clear evidence that it was constructed afterwards, either totally or in part (Fig.4a).

Information on the antemural comes mainly from the South-East Corner. There, it follows the same line of the counter city wall of the ditch. It is built from a core of rubble and mortar, covered with ashlar courses with mason marks. Almost the total length of the external facing fell into the moat, thus revealing the core of the structure. M. Gawlikowski reasonably calculated using the blocks found in the area that the antemural was approximately 2.5 m high\(^56\) (Fig.9). It is unknown if a complete antemural originally surrounded the city. However, it can be affirmed that some parts were missing in certain periods, for instance at the North Gate\(^57\).

**INNER WALL**

The Inner Wall appears in the unexcavated parts like a slight embankment, which follows the Main Wall at a distance of 10 m (Fig.2a). In the investigated areas, it shows a construction similar to that of the Main Curtain. Scholars think this wall had a defensive function, shown by M. Gawlikowski with an evaluation of its original height based on a stairway ramp set against it, located near the East Gate\(^58\). It must be noted, however, that in the uninvestigated parts the Inner Wall embankment seems usually lower than the Main Wall unearthed remains. Moreover, in the few excavated parts the Inner Wall is preserved only to the socle or to the first or second course of mud-bricks\(^59\).

---


\(^{51}\) Ibrahim, *Pre-Islamic Settlement in Jazirah*, 119-120.

\(^{52}\) Al-Salihi, ‘The Excavation of the Northern Gate’, 165.

\(^{53}\) Al-Salihi, ‘The Excavation of the Northern Gate’, 165. The outer limit of the ditch are not clearly detectable in the Italian documentation.

\(^{54}\) Measured from the Polish plan: Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 148, fig. 1.

\(^{55}\) See: Al-Salihi, ‘The Excavation of the Northern Gate’, 167, fig. 18.

\(^{56}\) Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 152, 179. In this area an ‘exedra’ of the antemural protruding to the moat was revealed (fig.9).

\(^{57}\) Al-Salihi, ‘The Excavation of the Northern Gate’.

\(^{58}\) Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 153. The method employed is the same used for the Main Curtain evaluation of the heights.

\(^{59}\) See for example: Gawlikowski ‘Fortress Hatra. New Evidences on Ramparts and their History’, fig. 6. For the information about the excavated Inner Wall at the North Gate: Al-Salihi, ‘The Excavation of the Northern Gate’, 9.
ANCIENT DEFENSIVE CURTAIN

Another defensive curtain, mentioned in the introduction, was partially explored by the Polish expedition in 199060. Five trenches uncovered parts of the walls and an angular bastion (Fig.10). The towered wall, built probably with the same technique as the Main Curtain, was subsequently dismantled and incorporated into the urban layout, according to the reemployment of the material for the building of some private houses61. The ruined towers discovered protrude less than the others excavated along the Main-Wall62. The angular bastion is different in shape from the towers discovered in two soundings, showing particular features. The ashlars, employed as socle for this structure, show the occurrence of engraved marks, similarly to others of the Main Curtain. M. Gawlikowski suggests that this defensive wall belongs to the period of Trajan63 since it corresponds better to the passage in Dio Cassius where the city during the siege is described as ‘neither big nor prosperous’64. The limits of this curtain, especially the west and north sides, are uncertain. M. Gawlikowski suggested that the mud-brick wall (MC) discovered in trenches by the Italian expedition behind the Great Iwans in the Temenos belonged to this ancient defensive system65. The proposal must be probably discarded because of the different features of the two walls66.

FOUR MAIN GATES (Fig.11)

The four main gates are placed almost in correspondence to the cardinal points of the Main Wall system (Fig.1). Only the North and the East ones were archaeologically investigated and are partially published. These buildings are extremely important because they reveal inscriptions allowing the dating of the entire curtain wall. In the early 90s, an Iraqi expedition started to investigate the inner portion of the West Gate, without publishing any report67.

The East, North and South Gates are composed of two rectangular towers, projecting further than the others in the curtain do. These towers, built in mud-brick on a stone socle as the Main Curtain, flank the main doorway and enclose an open courtyard. The West Gate shows particular features, which shall be later discussed in detail. All the gates have an added bent structure, constructed in mud-brick on a stone socle, which gives a barbican appearance to the whole (Fig.11). This part ended with another entrance, here referred to as the external doorway. In this way, there were two courtyards in each gate complex, the first one delineated by the bent wall and the second bigger one enclosed by the towers. To arrive at the external doorway the incomers had to cross a small bridge defended by some rooms and then do a 90° turn, giving a significant defensive advantage.

62 See sounding 4 of the Polish Expedition. The tower protrudes 1.50 m and is 5.30 m large (Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 164-165, figs. 20, 22).
64 Dio Cassius XLVIII, 31, 1.
66 This is the description of MC proposed by the Italian archaeologists: ‘The construction of MP obliterated and cut through an earlier mudbrick wall (MC) which ran parallel to it but that, to the north and just after a solid square buttress 3.75 m wide, siltly changed direction toward north/east’ (R. Venco Ricciardi, A. Peruzzetto, ‘The Ancient Phases of the Great Sanctuary at Hatra’ in L. Dirven (ed.), *Hatra. Politics, Culture and Religion between Parthia and Rome* (Orients et Occidens 21, 2013), 85). The Italian archaeologists suggest that this wall was the remains of an ancient temenos for the existence of buttress and irregular inner rooms (Venco Ricciardi, Peruzzetto, ‘The Ancient Phases of the Great Sanctuary at Hatra’, 86).
EAST GATE

The East Gate presents two niches added to the bent wall just inside the external doorway\(^{68}\) (Fig.12a). In the North Niche a statue of Heracles, similar to another one discovered in the North Gate, was found\(^{69}\). A statue representing a priest, 1.86 m high, on an irregularly shaped base was recovered in front of the same niche\(^{70}\) (Fig.13). The sculpture, showing a particular hairdo and interpreted for this reason by some scholars as Nasru marya, hold a bejeweled eagle, representing a well attested god in Hatra\(^{71}\). On the south wall of the main courtyard a niche built with stone blocks bonded with mortar and covered by a semi-dome was discovered. The entire niche is set against the wall of the tower. Inside of it a relief dating back to AD 150/151 was found representing an eagle with closed wings, richly bejeweled and bearing a long and well-known legal inscription H343, usually called the Eagle Inscription, in which thieves are warned\(^{72}\) (Fig.12b). Also another legal inscription H344, regarding the sale of raw material belonging to the temples, was found inside it\(^{73}\).

The first inscription gives an *ante quem* limit to the towers and, by extension, to the whole gate enabling us to establish that the entrance was built before this date (AD 150/151). On the lintel of the main doorway, which was found broken, an important inscription H461\(^{74}\) was engraved in which Nasru, probably the *marya* (Lord) (AD 128/129-137/138), according to his titles, is named as builder of the entire gate\(^{75}\). In the south area of the gate complex there is a house constructed against the main wall. According to J. Ibrahim it can be supposed that, given its location, the house served a military purpose\(^{76}\). Unfortunately, the few published findings cannot confirm or deny this suggestion.

NORTH GATE

The North Gate presents the same architectural elements as the East one\(^{77}\) (figs.11, 14). A large niche was discovered in correspondence with the first part of the inner bent-wall. It was covered at the back by a partially preserved stone semi-dome, now restored (Fig.15). A Heracles statue high 1.84 m and

---

\(^{68}\) The niches are 2.90 m large and protrude 0.90 m from the bent wall. See: Ibrahim, *Pre-Islamic Settlement in Jazirah*, Pl. 2. The measures are from the sketches of the Italian Expedition and confirm the results proposed by J. Ibrahim.

\(^{69}\) There are scanty information about this statue, which is preserved at the Baghdad Museum. For a photograph of the statue *in situ*: Ibrahim, ‘Al Hadr- The Excavation of the Eastern Gate’, 27, fig. 4.


\(^{71}\) W. Al-Salih, ‘A Statue of the Chief Priest from Hatra’.


Regarding the correspondence of Nasru as *marya* in this inscription: Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 182.


\(^{77}\) The only difference is the bent wall orientation (barbican), which allow, arriving from outside the city, a bend to the left for the North Gate and to the right for the East Gate.
some inscriptions including one mentioning the name of Nergal (H295) were found in this closed space\textsuperscript{78} (Fig.17a).

A stairway and a double niche, composed of three pillars, were located on the east wall of the main courtyard (Fig.16). All of these structures were added later, as it is possible to understand from the wall relationships. In the First Niche, placed at the north limit, an Eagle Relief and a dated inscription H336 (AD 150/151), very similar in the topic to that of the East Gate, were found\textsuperscript{79} (Fig.17b). The Iraqi archaeologists supposed that two altars\textsuperscript{80} and a little statue of Hercules \textit{gnd}\textsuperscript{81} (Fig.17d) which were found in the main courtyard, were originally within this niche. In the South Niche a statue of a king, possibly representing Sanatruq II (AD 200-240/241)\textsuperscript{82}, may have been originally located\textsuperscript{83} (Fig.17c). Behind the middle pillar, which divides the two niches, there was a little alcove built at the same time as the towers (Fig.16a). Many religious inscriptions, unfortunately without date, are scratched on the blocks and on the plaster of the gate walls, all placed in a plan published by R. Bertolino\textsuperscript{84}.

The Iraqi archaeologists found an inscription, H335, on a stone block in the rubble of the main doorway in which a man named Nasru is mentioned, without specific titles, that could correspond as in the East Gate to the city Lord\textsuperscript{85}.

\textbf{SECONDARY NORTH GATE}

The North Gate is more complex than the other entrances, showing a Secondary Gate on the same axis as the main one (figs.14, 18). A doorway is placed between two almost square towers, built entirely in stone with engraved mason marks. The Secondary Gate shows traces of two destroyed stone-walls on the eastern and western sides, which belong to the same phase as the gate\textsuperscript{86} (figs.14, 18). The preserved inner wall is set here against the two towers, proving that it is late in construction. Each tower has 4 arrow-slits of different shapes allowing different bowmen’s shots\textsuperscript{87}.

In the Secondary Gate within the rubble two blocks and a lintel with inscriptions were found. They probably mentioned Sanatruq II (AD 200-240/241), the last king of the city, as the builder or maybe the restorer of the gate\textsuperscript{88}. M. Gawlikowski and W. Al-Salihī affirm that the Secondary Gate was constructed during Sanatruq II’s reign (AD 200-240/241)\textsuperscript{89} at the same time as the engraving of the

\textsuperscript{78} Nergal in this inscription as in H81, 145, 279, 295 and in the \textit{Sa’diya} Inscription, hold the Iranian title \textit{dhşpt} ‘chief of the guard’. For the inscription H295: F. Vattioni, \textit{Le iscrizioni di Hatra} (Naples 1981), 95-96; Aggoula, \textit{Inventaire des inscriptions hatréennes}, 144; Beyer 1998: 85. For the Iranian word \textit{dhşpt} see note 100.


\textsuperscript{81} For the small statue in gypsum-alabaster (32.5 x 12.5 x 10 cm) see: W. Al-Salihī, ‘Hercules Gnd’’, \textit{Sumer} 29 (1973); Al-Salihī, ‘Further Notes on the Ercules-Genda at Hatra’, \textit{Sumer} 38 (1982).

\textsuperscript{82} According to M. Sommer chronology: M. Sommer, ‘The Desert and the Sown. Imperial Supremacy and Local Culture in Partho-Roman Mesopotamia’, \textit{Parthica} 6 (2004), 244.

\textsuperscript{83} It was supposed by W. Al-Salihī that this statue was located at the top of the Secondary North Gate. From the information gained by the catalogue of the statues at the end of the same article (1980) and by an image taken during the excavation, it seems that the sculpture was found near the South Niche (Al-Salihī, ‘The Excavation of the Northern Gate’, 179, fig. 9a). See the reconstruction Fig.16b.

\textsuperscript{84} Bertolino, \textit{La cronologia di Hatra: Interazione di archeologia e di epigrafia}, tav. XV.

\textsuperscript{85} Aggoula, \textit{Inventaire des inscriptions hatréennes}, 154-155.

\textsuperscript{86} Al-Salihī, ‘The Excavation of the Northern Gate’, 162.

\textsuperscript{87} Ibrahim, \textit{Pre-Islamic Settlement in Jazirah}, 121, Pl. 144a.

\textsuperscript{88} The inscriptions engraved on the blocks are: H333, H334. The one engraved on the lintel is H341. All of them have been discovered out of the masonry.

\textsuperscript{89} According to M. Sommer chronology: Sommer ‘The Desert and the Sown. Imperial Supremacy and Local Culture in Partho-Roman Mesopotamia’, 244.
inscriptions\textsuperscript{90}. J. Ibrahim disagrees as the text mentions a Sanatruq with the title of ‘pious’, which might not correspond to the last king of Hatra\textsuperscript{91}.

**WEST GATE**

The West Gate was already considered different from the others by W. Andrae because its towers were placed inside the main wall in the general and detailed plans, whereas the other main gates show protruding towers beside the doorway\textsuperscript{92} (Fig.11). Unfortunately, the German expedition did not archaeologically investigate the Main Wall, and our understanding of the structure and its stratigraphic relations remain very hypothetical. An Iraqi expedition started to uncover part of the West Gate at the beginning of the 90s. The excavation, as can be seen from the Italian documentation, was limited to a small part of the main courtyard and to the chamber of the north tower (Fig.19). The walls of the gate were all in ashlars in the preserved parts, unlike the other main entrances, but similar to the North Secondary Gate. The two chambers show the occurrence of arrow-slits, revealing a clear defensive function. There are four arrow-slits in the north unearthed tower, two of which point directly to the main court space. The inner face of a stone-wall with buttresses, which seems damaged or incomplete at the north end is visible to the north of the gate in several Italian images (Fig.19).

If W. Andrae’s understanding of the relationship between the West Gate and the Main Wall is correct (Fig.11), then this gate may be earlier in chronology than the Main Curtain, which seems set against it. To sum up, the Main Curtain dating would furnish an ante quem limit to the construction of the West Gate.

**SOUTH GATE**

The South Gate is the only entrance, which has not been archaeologically investigated. The few available data are from the description made by W. Andrae, W. Bachman’s drawing\textsuperscript{93} and the images in the Italian Archive. This gate appears to be similar in shape to the north and east ones, even if the remains seem very ruined (Fig.11). The gate was under the control of two massive towers (Massive Towers XXXV and XXXVI) located east and west of the entrance\textsuperscript{94}. Moreover, the gate is quite near the South ‘Bastion’, a rectangular protrusion of the main wall, built with the purpose of englobing the Tower Tomb XXXVII (Fig.1).

**THE CHRONOLOGY OF THE DEFENCES**\textsuperscript{95} (Fig.20)

The Quadrangular Ancient Curtain Wall, discovered by the Polish expedition, seems to be earlier than the main curtain owing to the fact that it does not maintain its function and was used as a source of building material and foundation for later houses (Fig.1.2). This defensive wall was probably

\textsuperscript{90} Al-Salihi, ‘The Excavation of the Northern Gate’, 111; Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 160.

\textsuperscript{91} Ibrahim, *Pre-Islamic Settlement in Jazirah*, 121. The A. suggests also that the Inner Wall and the Secondary Gate were older than the Main Curtain, according to their preservation (Ibrahim, *Pre-Islamic Settlement in Jazirah*, 122).

\textsuperscript{92} See Andrae’s plan and the description of the West Gate: Andrae, *Hatra. II*, 32-33.

\textsuperscript{93} Andrae, *Hatra. II*, 33.

\textsuperscript{94} Andrae, *Hatra. II*, 33. See also the general plan of the city made by the A.

\textsuperscript{95} Various chronologies for the defences have been previously suggested by W. Al-Salihi, J. Ibrahim, and M. Gawlikowski. The proposal made in this paper is close to Gawlikowski’s one except for the chronological interpretation of the West Gate and for the North Secondary Gate. Recently H. Bagain (2005-2006) has proposed a new chronology, which however does not take in account the data of the Polish expedition about the Ancient Defensive Curtain. Moreover, H. Bagain suggests also, against all the evidences coming from the inscriptions discovered at the main gates, that the Main Curtain was constructed at the end of the 1st cent. AD or during the first years of the 2nd cent. AD. The A. proposes also that Hatra inhabitants built the ‘circular’ enclosure, located out of the city, against the Sasanians (Bagain, ‘Fortifications of Hatra. The Gate of Sanatruq II and the Theory of the Second Wall’, 22).
constructed, in agreement with M. Gawlikowski, before the Trajan siege (ante AD 117) as Dio Cassius description of the city might suggest. The West Gate, which is preserved in its stone parts, is different in construction from the East and North Gates, which are built in mud-brick on a stone socle. This is unusual because they are all generally considered as belonging to a unitary main curtain project, which includes the principal gates and dated, with a fair degree of certainty, to the reign of Nasru marya (AD 128/129-137/138). If the stratigraphic relationships and the chronology proposed for the West Gate are correct, this gate would have been built before the main curtain and successively reemployed in it.

The comparisons between the West Gate and the Secondary North Gate, including the stone masonry and the presence of particular arrow-slits and their setting, with respect to the main wall, might suggest the contemporaneity of these two gates.

The ruins of stone walls beginning from these stone gates may be interpreted as the remains of a whole project with, now, unclear limits (Figs. 18-19).

The construction of the vast main curtain with the four main gates was probably carried out during the reign of Nasru marya (AD 128/129-137/138) according to the inscriptions discovered at the North and East Gates. The main gates were originally designed with one direct entrance, without the barbican, as it is possible to understand both from the relationship of the walls and the presence of less important blocked entrances constructed in this way, located at east curtain front.

After that, a long period of peace followed, corresponding to the stability of Hadrian’s reign, when it is almost certain that the house, placed to the south of the East Gate, was built, blocking any rapid transit along the wall-street.

In AD 197-199 twice Septimius Severus besieged the city. Before this event, the defences were reinforced and the barbicans were probably added.

During the reign of Sanatruq II (AD 200-240/241), the last king of Hatra, massive towers and walls were built with the purpose of repairing and reinforcing the defences.

After this project, the Inner Wall, which is stratigraphically later than the house close to the East Gate and for this reason of the main wall, was built as a final barrier against the Sasanians.

If the assumptions proposed for the West and the Secondary North Gates are correct, Sanatruq II (AD 200-240/241) would have engraved the inscriptions with his name at the Secondary North Gate in order to claim credit for a point of access probably built by an older city Lord. Despite the strengthening of the defences and a new alliance with the Romans, the city of Hatra fell into Sasanian hands in AD 241, probably after a long siege, according to Arabic sources.

Many sub-phases, several of which with an uncertain chronology detectable, for instance, by the restorations along the Main Wall and the Gates, are not detailed here for clarity and shortness, yet they exist and show the complex life of these interesting structures.

Only new trenches in particular areas could give new answer to some of the problems that the study of the fortifications and this new chronology pose, but unfortunately, this solution is at present impracticable.

**PRIMARY AND SECONDARY FUNCTIONS AT THE GATES**

Some detailed remarks regarding the decoration and function of the gates of Hatra will now be briefly discussed. According to N.N. May, the gate spaces in the Near East during the first half of the 1

---

96 Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 162-178. The tower tombs location could be interpreted as another clue for its antiquity. In fact, these structures are all placed outside the supposed limits of the Ancient Curtain Wall (Gawlikowski, ‘Fortress Hatra. New Evidences on Ramparts and their History’, 163).

97 According to M. Sommer chronology: Sommer ‘The Desert and the Sown. Imperial Supremacy and Local Culture in Partho-Roman Mesopotamia’, 244.

98 Two posterns have been discovered at the east front of the main wall, located nearby Towers 11 and 17 (Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, fig. 96). They were built with a direct entrance with two buttresses made in stone blocks.
millennium could have had other functions besides the defensive one. The A. identifies almost nine interconnected functions:

1. Gates as a sacred space. Temples, chapels, cult ceremonies and sacrifices at the gates.
2. Gates as a place for the installation of the royal monuments.
4. Gates as a place for the public appearance of the king.
5. Gates as a place for public assemblies.
6. Gates as a place for judicial activities: judgment, litigation, legal agreements, publication of court decisions and legal documents.
7. Gates as a place for public executions (not only of legal character).
8. Gates as a market place.
9. Gates as a place of control.99

During the 2nd and 3rd cent. AD several of these functions can be detected also at the city gates of Hatra.

It is possible, for instance, to identify the city gates as sacred spaces because of the discovery of several statues of gods100 and scratched dedications101 (figs. 17a, b, d; 21a, b, c).

---


100 The statues and reliefs of gods discovered at the North Gate area are nine: two Heracles/Nergal, two Allat, a gnd’, a Bar-Maren, one-warrior gods, a Martian relief and the Eagle of the well-known relief. For a report of the findings discovered at the gate see: Al-Salihi ‘The Excavation of the Northern Gate’. Another god is brought in the hands of a king statue (fig. 17c), maybe identifiable as Sanatruq II (?), and can be reasonably interpreted as another gnd’, a ‘fortune’ god related in this case to the king or as an undefined protective warrior god according to its weapons and garments. In Hatra existed different type of gnd’, probably characterised with typical features, as it has been demonstrated by T. Kaizer researches regarding various Near East cities (T. Kaizer, ‘De Dea Syria et Aliis Diis Deabusque. A Study of the Variety of Appearances of Gad in Aramaic Inscriptions and on Sculptures from the Near East in the First Three Centuries AD’ (Part 1), OLP 28 (1997); T. Kaizer, ‘De Dea Syria et Aliis Diis Deabusque. A Study of the Variety of Appearances of Gad in Aramaic Inscriptions and on Sculptures from the Near East in the First Three Centuries AD’ (Part 2), OLP 29 (1998)).

In the Near East gnd’ represents usually a local-apotropaic city god, showing different iconographies from one site to another, as it is clearly understandable if we compare for instance some representation of genda at Hatra and Europos-Dura. Inside the same city, moreover, different gnd’ could co-exist, characterised by some attributes or specification in the inscription title, showing probably also the occurrence of different powers and possibly iconographies. The gnd’ ‘of the gate’, named in H297, H1031, can be for this reason conceptually different to the attested gnd’ ‘of the king’ (i.e. H79: inscription engraved on a flat plaque discovered in Small Shrine XI, where is mentioned the gnd’ of Sanatruq II, the king). In the same inscription it is mentioned also another kind of gnd’: the gnd’ of the Arabs. Another one is named in the inscription H58 followed by the name kṣrj’ translated by F. Vattioni as a personal name, by B. Aggoula as ‘woolmen’ and by K. Beyer as ‘soldiers’. The inscriptions discovered in the Small Shrine XIII are also interesting because here they mentioned a gnd’ referred specifically to the local tribe of the ḏDemgū (i.e. H406, 408). All these epigraphic data clearly demonstrate the existence at Hatra of differentgnd’ related for example to spacial group (tribes), city buildings or aregnd’ (of the gate) or important people (gnd’ of the king). These distinct apotropaeic figures shares sometimes a common iconography, as it is understandable from the statues of the gnd’ of the gate and the representation of thegnd’ of the ḏDemgū, which show the appearance of a local variant of the classic Heracles with garments and jewels typical of Hatra. According to our hypothetical attribution of genda for the god in the hands of the king statue (fig. 17d), however, it is possible also to propose that the iconographical appearance of this ‘group of tutelary gods’ was not homogeneous in Hatra. Thgnd’ of the king could have for this reason the appearance of a young beardless god bringing weapons, while the gnd’ of the gate and the gnd’ of the ḏDemgū were represented as Heracles with local garments and jewels.


According to J. Ibrahim, at the East Gate only the Heracles, the Priest statues, and the Relief of the Eagle were discovered (Ibrahim, ‘Al Hadr- The Excavation of the Eastern Gate’). This is strange in comparison to the huge number of findings discovered and published for the North Gate.

101 Many inscriptions were scratched on the plaster of the walls of the main court of the North Gate see H301-332. Several dedications show the name of the dedicatory and the name of the god, frequently ‘Our Lord’ i.e. H301, H311, H324,
The most important god, both in the East and North Gates, was undoubtedly Nergal, an ancient Mesopotamian god represented in Hatra with the iconography of the classic Heracles. Huge statues of this god were found in the two niches of the gates, as we have seen (Fig.17a). Moreover, an inscribed masonry block H295 mentioning Nergal with the title dḥṣpt’ was found in the masonry of the Heracles Niche in the North Gate102.

Scholars have proposed different definitions for the word dḥṣpt’: B. Aggoula and F. Vattioni translate it as ‘chief of the soldiers’, F. Pennacchietti suggests a translation as ‘chief of the decury’ specifically referring to Nergal as ‘chief of the army’ or ‘chief of the guard’, corresponding probably to a title of the Parthian army.103 J. Greenfield and T. Kaizer suggests also the translation as ‘executioner’, maybe connecting him to the yet unknown ‘death of the god’ mentioned, for example, in the famous Eagle Inscription104.

Another Heracles statue was found in the filling of the moat close to the North Gate, probably fallen in this place during the Sasanian pillage of the city105.

Nergal was very popular at Hatra, as many inscriptions and findings discovered in the Small Shrines seems to demonstrate, and was probably worshipped in the gates for the apotropaic values and for the power in battle. These characteristics were shared and belonged both to the Ancient Mesopotamian God Nergal and to the semi-god Heracles.

An inscribed statue of gnd’, a protective god represented with an iconography similar to the classic Heracles but with local garments and jewels, was discovered in the North Gate courtyard (Fig.17d). The small statue was probably originally located within the niche of the Eagle Relief and before that in the little niche discovered behind the middle pillar of the niche107 (Fig.16a). On one of the eastern ashlers of the main entrance was discovered an inscription H297, where a gnd’ of the gate is mentioned, which must be referred to the recovered statue108. A red painted inscription in which is mentioned always gnd’ has been recovered also inside the Eagle niche of the East Gate (H462)109. For this reason, it is possible to suggest the original presence also in this place of a little statue, probably similar to the one discovered inside the North Gate court110.

Two statues of Allat111 (Fig.21b), a relief of Bar-Maren with an offerer112, a warrior god113 (Fig.21c) and an inscribed relief with Martan, represented with an offerer114, (Fig.21a) were also found in the

---

102 See the description of the North Gate in this paper.
105 Al-Salihih, ‘The Excavation of the Northern Gate’, 171 fig. 23.
106 The statue shows an inscription H296 in which is named the dedicatory ‘g’ for the statue of the god. See for this statue: Al-Salihih, ‘A Note on a Statuette from Hatra’, Sumer 29 (1972). For the iconography of gnd’ in Hatra: Downey, ‘Clothed statues of Herakles from Hatra’, in L. Dirven (ed.), Hatra. Politics, Culture and Religion between Parthia and Rome (Orients et Occidens 21 2013). See also for gnd’ footnote 100.
110 Another dedicatory inscription at the East Gate complex (room 5 -house-) quotes the name of gnd’: Al-Jubouri, ‘Nouvelles Inscriptions de Hatra’, 138, n. 444.
111 The better preserved statue was found in the filling of the moat. It is 90 cm high and 42 wide. The iconography is similar to the classic Athena with shield, helmet and spear but with local garments: Al-Salihih, ‘The Excavation of the Northern Gate’, 174, fig. 27. Another fragmentary sculpture (13.5 cm h., 8.5 cm w.) representing this deity was found nearby the ‘Heracles Niche’ (Al-Salihih, ‘The Excavation of the Northern Gate’, 174).
North Gate area. Several of these gods seem related to apotropaic and defensive features, clearly understandable in a gate setting. Enclosures in the ancient Mesopotamian tradition demarked the boundary between the city and the fearful outside and were usually put under the control of specific guardian gods. Since gates were considered as weak points, which could be easily attacked by both real and spiritual enemies, they had to be strengthened. In Hatra we probably encounter the same belief, reinforced by the fact that the entire city was probably considered as a holy city\textsuperscript{115}. The sense of boundary in this case must have been stronger than in other Near East cities, as it can be understood from some legal inscriptions found at the gates\textsuperscript{116}.

The relief plaque representing a gorgon (Fig.21d) located on the outer face of a massive wall on the east curtain (Massive Wall VI) can be interpreted as part of a general project which included different gods and monsters, ascribing a supernatural protective power to the gates and to the whole curtain, as confirmed in the later Arabic sources\textsuperscript{117}.

It is unknown if ceremonies or sacrifices were made at the gates. The presence of altars and burners\textsuperscript{118} provides little evidence in support of this idea, as their presence would not have hindered transit through it.

A lesser function, as an exhibition place for the ruling powers, can also be detected at the gates. At the North Gate a statue, generally interpreted as Sanatruq II (AD 200-240), was found in the main courtyard\textsuperscript{119}. Statues, made in different blocks, of the king Sanatruq II (AD 200-240) and his son Abd Samya (Fig.22a), according to B. Aggoula, were originally located above a corbel on the Massive Tower XIX, close to the North Gate\textsuperscript{120} (Fig.22b).

\textsuperscript{112} This relief bring an inscription with the name of Bar-Maren, engraved nearby the head of the god, which is represented as a ‘warrior god’ with a staff and a sword as attributes. According to W. Al-Salihi, it is possible to detect a ruined crescent-shape behind his head (Al-Salihi, ‘The Excavation of the Northern Gate’, 173, fig. 26).

\textsuperscript{114} The relief is 1 m high and 0.92 m large and it was found nearby the Massive Tower XIX, place where it was found also the ballista of Hatra and where was located two huge statues in stone blocks (see further in the text). The goddess Martan is in throne, while the offerer, Abd Samya, maybe the King (AD 180-197/199) son of Sanatruq I, is in front. Both of them are mentioned in the inscriptions H1004. The sculpture of the king is ruined and headless. The goddess shows an elaborated hairdo with a veil and wears rich jewels (Al-Salihi, ‘The Excavation of the Northern Gate’, 173, fig. 25).


\textsuperscript{116} For the legal inscriptions, see Kaizer, ‘Capital Punishment at Hatra. Gods, Magistrates and Laws in the Roman-Parthian Period’.

\textsuperscript{117} For an account of the Arabic sources testifying that the wall was ‘talismaned’ (Dodgeon, Lieu, The Roman Eastern Frontier and the Persian Wars AD 226-363. A Documentary History, 284). For a published image of the gorgon, which has been looted and later recovered in the Baghdad Museum see: Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, fig. 90.

\textsuperscript{118} A burner, which had also the function of moneybox, has been found nearby the ‘Hercules Niche’. This object is 67 cm high and 23 cm large. A cup in stone is on the upper face used for burning probably incense. The upper corners are decorated with acanthus leaves. On the main lateral faces a two handled cup is carved in which there is a hole for the offered coins (W. Al-Salihi, ‘Hercules-Nergal at Hatra (II)’, Iraq 35 (1973), 66). Two small altars were located probably inside the Niche of the Eagle or the Second Niche, located to the south. Al-Salihi does not furnish the dimensions of them, but B. Aggoula describes them, writing that the first one is 29 cm high, 15 cm large and 15 cm wide. The second altar is bigger: 58 cm high, 30.5 cm large, and 5.0 cm large. Both are inscribed H337, H340 (Aggoula, Inventaire des inscriptions hatréennes, 165-157).

\textsuperscript{119} The statue is 1.87 m high and 60 cm large, while the square basement is 54 cm large. The king is represented standing with a god in the hands, interpreted possibly as a gnu\textsuperscript{th} of the king (see footnote 100). The dress of the king is elaborated with embroideries and bractae. He wears a ‘Phrygian hat’ decorated with a crescent-shape and star designs. He brings two scabbards instead of the long sword. The king shows compact beard and moustaches, comparable with a unknown sovereign, according to W. Al-Salihi, discovered in Small Shrine III (Al-Salihi, ‘The Excavation of the Northern Gate’, 175-176).

\textsuperscript{120} The stone blocks belonging to four statues were discovered in the filling of the moat. W. Al-Salihi suggests that two statues of Sanatruq I (AD 140-176/177) and two of Abd Samya (AD 180-197/199), his son can be reconstructed (Al-Salihi, ‘The Excavation of the Northern Gate’, 167). B. Aggoula proposes that, instead of Sanatruq I, the king must be considered as Sanatruq II (Aggoula, Inventaire des inscriptions hatréennes, 170). The occurrence of the title ‘crown prince’ and znpt
At the East Gate a statue of a priest was found, interpreted usually for the hairdo and other features, as Nasru marya (AD 128/129-137/138), builder of the main curtain wall.\textsuperscript{121} If this attribution is correct, it can be possibly linked to the choice of representing the Lord in religious dress in this particular place. The same religious custom can also be related to the representation of Sanatruq II (AD 128/129-137/138) at the North Gate carrying a protective god, probably a gnd’ of the king, in his hands. All these data seem to show the intention of mixing regal and religious powers, in a combination quite common at Hatra. The building inscriptions mentioning the Lords and the Kings can also be interpreted as the intention of the ruling powers to take real ownership of the gates.

A judicial function, related to the publication of legal documents, is corroborated by the existence of the inscriptions of the Eagle - H336 and H343 -, the re-employment of a law text placed in reverse within the masonry of the North Gate H342 and the presence of another legal text, H344, related to temple thieves, found in the niche of the Eagle in the East Gate. We have no data to suggest the presence of legal trials, judgement or executions at the city gates of Hatra: the space was probably not sufficient for these actions, which involved many people.

The gates, however, were surely places used for the publication of legal decisions and laws, as it is clear from the exposed texts and the essential transit purpose of these places. The understanding of the legal authorities in Hatra is a complex matter. On the so-called Eagle inscriptions, for example, the rbjt’, usually considered the ‘main city officer’\textsuperscript{122}, and the ‘assembly of the Elders and Young Men’ are mentioned, as issued authorities. The Lord, marya, or the King, malek, are not named. In H344 we encounter the same situation: the law is issued by the rbjt’ and also the qšš, translated by B. Aggoula as the ‘symposiarque’. Only in the reemployed inscription H342 the law is issued by the king Sanatruq, together with the rbjt’ and the qšš.

To conclude, it is clear that the main function of the gates was primarily defensive, despite what happened, for instance, in several ancient Assyrian capitals where the gates were built as representational structures in honour of the kings. The fear of sieges multiplied the efforts of the local architects in military engineering and maybe the use of added barbic can be also interpreted in this way. Less important functions, however, are even clearly detectable, as it is possible to understand from the findings discovered at the gates disclosing the complexity of these spaces.

\textsuperscript{121} Al-Salih, ‘A Statue of the Chief Priest from Hatra’, 39.

Fig.1 General city plan and detail of the eastern section of the fortifications. In Arabic: numbers of the towers, in Roman: numbers of the massive towers, walls and tower tombs (Elaboration HatraGIS)
Fig. 2 a) Eastern Curtain. In foreground Tower 121. In background the Tower Tomb 120, Tower 119 and the Massive Tower MTXLIII. It is also visible the unexcavated inner wall (right picture part); b) Tower room T123 (placed south of the East Gate), showing arrowslits.

Fig. 3 a) Reconstruction of the main wall and tower placed nearby the North Gate; b) 3d reconstruction of the Tower 38bis and its stairway ramp located west of the North Gate. View from the city.
THE COMPLEX SYSTEM OF THE FORTIFICATIONS OF HATRA

Fig. 4 a) Massive tower MTXLIII placed in the eastern section of the main curtain, south of the East Gate. The moat follows here the layout of the massive tower; b) 3d reconstruction merged with the image of the Massive Tower MTXIX, located west of the North Gate.

Fig. 5 a) Ballista of Hatra, discovered nearby the Massive Tower MTXIX and preserved in the Baghdad Iraq Museum; b) maximum range of the Hatra ballista.
Fig. 6. a) In background: West ‘Bastion’ of the main wall; in foreground: Massive Tower MTXXIX, west sector of the city (archaeologically unexplored area); b) North Conduit. View from the city

Fig. 7 a) Tower Tomb TTIX from south-east, north-east corner of the main wall); b) Tower Tomb TTXXXVI from south, set inside the South ‘Bastion’, south sector of the city

Fig. 8 Explored area of the moat, placed nearby the North Gate. View from north-east
THE COMPLEX SYSTEM OF THE FORTIFICATIONS OF HATRA

Fig. 9 3d Reconstruction of the antemural with the exedra, located nearby the south-east corner of the main fortification (from Polish expedition plan)

Fig. 10 Placement of five trenches (including the SE tower), opened by the Polish Expedition on the Ancient Curtain. Trenches georeferenced on the satellite image Ikonos 2004 (HatraGIS)
Fig. 11 Main gates plans: East (from HatraGIS and Andrae, *Hatra. II*, 30, fig. 25), North (from HatraGIS and Andrae, *Hatra. II*, 34, fig. 32), West (from Andrae *Hatra. II*, 32, fig. 27) and South Gates (from Andrae, *Hatra. II*, 34, fig. 31).
Fig. 12  a) East Gate court and ruins of the destroyed ‘Eagle Niche’ from north; b) the ‘Eagle Niche’ at the end of the Iraqi excavation (Ibrahim, ‘Al Hadr- The Excavation of the Eastern Gate’, pl. 92b)

Fig. 13 Priest, Nasru (?), destroyed by ‘IS’ in 2015 (M. Sommer, Hatra. Geschichte und Kultur einer Karawanenstadt im Römisch-Partischen Mesopotamien, (2003), 75, fig. 106)
Fig. 14 North Gate and the Secondary gate from west

Fig. 15 North Gate court from south with in front the restored Niche of Heracles
Fig. 16 a) Court of the main North Gate (view from south-west) with fallen on the ground the rubbles of the pillars of the two niches (‘Eagle Niche’ and Second Niche) b) 3d reconstruction of the two niches. In the first one are placed the Eagle Stele, a burner and a little statue of $gnd'$, while in the second one, is located the statue of a king, probably Sanatruq II (?)

Fig. 17 a) Heracles Niche and statue, Iraqi Excavation (Al-Salihi, ‘The Excavation of the Northern Gate’, 161, fig. 5); b) Eagle Niche and Stele, Iraqi Excavation, destroyed by ‘IS’ in 2015 (?) (Al-Salihi, ‘The Excavation of the Northern Gate’, 160, fig. 3); c) Sanatruq II (?) statue, placed probably inside the Second Niche; d) little statue of $gnd'$ (Al-Salihi, ‘The Excavation of the Northern Gate’, 172, fig. 24)
Fig. 18 Secondary North Gate from south-west with the inner wall set against it

Fig. 19 West Gate from north-east. Partially excavated by an Iraqi Expedition
Chronological hypothesis

<table>
<thead>
<tr>
<th>Before Trajan’s siege AD 117</th>
<th>Quadrangular curtain project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the main curtain</td>
<td>Stone project interrupted</td>
</tr>
<tr>
<td>Nasru’s reign AD 128/129-138/139</td>
<td>Main curtain project</td>
</tr>
<tr>
<td>Before Septimius Severus’ siege AD 197-199</td>
<td>Gate bent structures</td>
</tr>
<tr>
<td>After Septimius Severus’ siege AD 197-199</td>
<td>Massive structures</td>
</tr>
<tr>
<td>Before the Sasanian’s siege AD 241</td>
<td>Inner wall project Unfinished</td>
</tr>
</tbody>
</table>

Fig. 20 Chronological hypothesis

Fig. 21 a) Relief of Martan with Abd Smya (?) (Al-Salihi, ‘The Excavation of the Northern Gate’, 173, fig. 25); b) Plaque in stone of Allat (Al-Salihi, ‘The Excavation of the Northern Gate’, 174, fig. 27); c) Warrior God (Al-Salihi, ‘The Excavation of the Northern Gate’, 177, fig. 32); d) Plaque of Gorgon (Al-Salihi, ‘Military Considerations in the Defenses of Hatra’, fig. 90)
Fig. 22 a) Sculpture in stone-blocks of Abd Samya (Al-Salhi, ‘The Excavation of the Northern Gate’, 178, fig. 34); b) 3d reconstruction of the Massive Tower TMXIX from north-east with the emplacement of the two statues