# BĀLIS - First Preliminary Report on the Campaigns 1996, 1998 

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After a hiatus of more than twenty years, work has been resumed in Emar-Bālis. As guests of the German expedition to Emar directed by Dr. Uwe Finkbeiner, Altorientalisches Institut der Universität Tübingen, a team from Princeton University undertook excavations in July-August 1996 and again in July-August 1998.

The staff assembled to conduct the work included in 1996 Susanne Wilhelm, MA, Universität Tübingen, and myself. In 1998 we came back with a much larger staff: Ms. Susanne Wilhelm, as Assistant Director and Dr. Lorenz Korn, Tübingen University, as specialist in Near Eastern Studies and Islamic art. Ms. Stephennie Mulder, Princeton University, supervised the ceramic finds and organized the typology; Mr. Lennart Sundelin, Princeton University; archaeologist and specialist in early Islamic history took charge of the excavation at the Qaṣr together with Mr. Omar Mahmoud of the Aleppo National Museum. Mr. David Lineberry joined us from the University of Atlanta as archaeologist. Ms. Blair I. Fowlkes, working in the field of Classical archaeology and Ms. Jacqueline R. Maxwell, Late Antiquity, both from Princeton University, worked as trench assistants. Ms. Rosy Treschl (Dipl. Ing.), architect, divided her time between Bālis and Emar, as did Martin Wille, MA, university of Mainz, drawing objects from both Bālis and Emar. Ms. Sigrid Pohl (Dipl. Biol.), botanist, collected and identified specimens of the flora and fauna in and around Bālis and Emar.

## 1. The Ruin of Bālis Today

Bālis and - to a lesser degree - the site of Emar have changed due to the rising level of the Buḥairat al-Asad after the closing of the Tabqa-dam in the early 1970s. Bālis has suffered in the process by losing most of its area to the water of the reservoir. What is left of the ruin today is an irregular triangle of terrain of about $150 \mathrm{~m}(\mathrm{~N}-\mathrm{S}) \times 100 \mathrm{~m}(\mathrm{E}-\mathrm{W}) \mathrm{x}$ 170 m . The two shorter sides of this tract in the west and the south are formed by remnants of the Byzantine/Islamic city-wall with a praetorium and a bastion as its corners (fig. 1 and pls. 1, 2). The longest side is marked by the coastline which forms a ridge about $3-4 \mathrm{~m}$ high in the north and in the south. Between these points the terrain slopes gently down to the water and has been transformed into a marshy bay covered with reeds.

Still standing upright are parts of the praetorium on the northwestern and a square bastion on the southwestern side of the wall. Unfortunately, the deterioration of both structures has accelerated dramatically during this century. When the site was visited by Friedrich Sarre and Ernst Herzfeld during their travels in 1907, ${ }^{1}$ three of the building's sides were extant together with the central pier inside that supported its upper story. ${ }^{2}$ Of this impressive structure, nothing but remnants of the outer shell has been preserved. On the southern side, the base of the bastion in proximity to Site A is constantly being washed by the lake, and the winter storms of the last two decades have weakened its foundation considerably. In the winter of 1997, one of its corners finally fell; and there is concern that the larger one - which is also constantly exposed to the water - will soon follow. ${ }^{3}$

The formation described above as a triangle, which constitutes the ruin of Bālis today, was once situated at the extreme western part of the city and simultaneously formed its

[^0]most elevated tract. ${ }^{4}$ Given the surrounding topography, a strong fortification in this place was absolutely essential. ${ }^{5}$ About 100 m to the west, the mound of Emar rises to a height of 325 m , while the western wall of Bālis is built to a level of only 305m. As a potential enemy could use the mound of Emar for putting up an observation post or even for positioning mangonels, the necessity for protecting the city especially on its western side through massive defensive structures becomes clear. As a result, no gates existed on this side while each of the other segments of the city-wall had entrances. ${ }^{6}$

As can be seen in photos taken prior to controlled excavations at Bālis, ${ }^{7}$ the western quarter of Bālis along with the rest of the ruin was thoroughly burrowed through by robbers. Funnel shaped holes, some of them 2-3m deep, mark the surface. The backdirt around these holes has been dispersed equally in the meantime and might explain the occurrence of Byzantine coins and early Islamic pottery right on the surface together with Aiyūbid material.

## 2. Purpose of the Excavation in 1996 and 1998

The French expedition of the late 1920s and 1970s examined the central city-area of Bālis, but never included its westernmost part, i.e. exactly the part that is extant today. ${ }^{8}$ Our excavations at Bālis during the years 1996 and 1998 concentrated on two sites (fig. 1: sites A and B) that directly abutted the western city-wall and the western part of the southern city-wall in an attempt to study the relationship between the Byzantine wall and the later Islamic settlement. A third site (site C) in the northeastern corner of what is left of the ruin was opened to obtain additional stratigraphic information.

[^1]In conjunction with this latter project, a second goal of both campaigns was to find remains of pre-Aiyūbid Bālis. That the city flourished in the Umayyad and in the ‘Abbāsid period has been made clear by André Raymond’s recent historical study on the city of Bālis. ${ }^{9}$ Yet, no significant traces or monuments related to these periods have been identified or sufficiently published. ${ }^{10}$

These goals were pursued by following operations:
Site A included a conglomeration of small houses and possibly shops arranged on both sides of a narrow street and stretching along the city-wall directly northeast of the Byzantine bastion in squares 100/049, 100/050, 101/49 and 101/050.

The architectural remains of Site B in squares 100/050 and 100/051 belonged to a house of larger dimensions with courtyards and rooms that had been built directly on top of the city-wall. Unfortunately, robbers in their quest for valuable materials had dug deep holes into the ground and so made it impossible to identify the extension of this house.

Finally, a single square (102/062) ca. 25m east of the praetorium on the ridge above the water was chosen as Site C. At this particular spot, the rising water had created a bulk measuring about 4m high above lake level. Remnants of walls made of both, fired brick and mudbrick as well as a series of floors were visible in this artificial bulk and offered the opportunity to obtain stratigraphical information for this area.

Simultaneously with the research in Bālis proper, excavations were started at a distance of about 2 km south of Bālis, high up on the ridge overlooking the former

[^2]Euphrates valley. A building of the castrum-type ca. $77 \mathrm{~m} \times 77 \mathrm{~m}$ was found and given the preliminary designation "Qaṣr."

## 3. Results of the 1996 and 1998 Campaigns at Bālis

3.1 Site A (Fig. 1, pl. 3): General Description

Site A covers an area of ca. 14m x 12m in squares 100/049, 100/050, 101/049 and 101/050. It is bisected by a narrow street (darb) which enters the site from the north and turns southwest after 6m, ending at the eastern side of the Byzantine bastion. Buildings that once belonged to houses and single-room structures were found on either side of the street. When the bastion collapsed, parts of its walls fell towards the east, burying these structures underneath with its debris. The fact that the top layer in this area as far as 15 m east from the former tower's wall consisted of compact rubble (ca. 1m thick), most of which was shattered Byzantine bricks (original size: $0.5 \mathrm{~m} \times 0.5 \mathrm{~m}$ ), mixed with large chunks of mortar, must have prevented robbers from looting this area.

### 3.2 The Byzantine Wall and Post-Byzantine Settlement in Site A

In the course of our work it became obvious that all post-Byzantine forms of settlement in this area were strongly influenced in terms of both orientation and dimension by the structure of the city-wall built originally by Justinian in the middle of the $6^{\text {th }}$ century AD after Byzantine Barbalissos had been sacked by the Sasanians under Khusrou II Anushirvān. ${ }^{11}$ A trench in 102/049, dug perpendicular from the outside towards the wall in order to expose its extant remains and to assess the height of the wall,

[^3]revealed the following construction technique: the Byzantine wall consisted of large masonry blocks set in staggered courses of locally quarried material (pl. 3). ${ }^{12}$ They rested - at least in this area - directly on leveled bedrock. While the lower courses were made exclusively of oblong limestone blocks, square brecchie or limestone masonry was used for the upper courses. Generally, the width of the Byzantine wall measured ca. 2m. At a height of approximately 2 m , the wall was heavily restored with various other materials: undressed limestone and fired bricks of various dimensions ( $0.3 \mathrm{~m} \times 0.3 \mathrm{~m} ; 0.2 \mathrm{~m} \times 0.2 \mathrm{~m}$ ) suggesting that these repairs were carried out in the Islamic period.

Inside, the city-wall was supported by pillar buttresses projecting $1.5 \mathrm{~m} \times 1.5 \mathrm{~m}$, set at a distance of ca. 3m apart from each other (fig. 2, pls. 5, 8). ${ }^{13}$ This formula was also applied to the city's fortification on the western side as well as to those parts of the northern wall that can be traced under water. ${ }^{14}$ It is unlikely, however, that these "buttresses" represent the original condition of the wall in the Byzantine period, as it would not have offered any space for a defensive platform or balustrade.

What then was the function of these buttresses? It is possible that they originally served as the basis for arches supporting battlement parapets on top of the wall. ${ }^{15}$ The fact that none of these arches has survived or was observed by either Sarre, Herzfeld or the French expedition must not mean that they never existed: it appears, in fact, as if these battlements - if they ever existed in this form -- were deliberately removed at a certain moment in time during the Middle Ages. Large portions of the wall also show repairs of differing extent, originating from the post-Byzantine period, ${ }^{16}$ obviously made with the intention of bringing the crown of the wall up to an even level after it had been partially

[^4]destroyed or fallen into disrepair. ${ }^{17}$ It does not appear, however, that these repairs represent an attempt to restore the city wall after one of the numerous destructions Bālis suffered either from earthquakes or sieges ${ }^{18}$ in order to put it in defensible condition. Rather, the partial mending must be interpreted as an attempt to make use of the wall's solid construction by building houses right on top of the former Byzantine city-wall and its buttresses. These new houses were built on top of the city-wall's crown after the surface level of this neighborhood had been raised considerably by heaping up soil and other loose materials. Fillings were recorded at Site A and B and in both cases, earlier, had covered destroyed levels. ${ }^{19}$

While the ultimate goal in such a measure must have been to regain new ground for building houses, the immediate effect was to render the city indefensible. ${ }^{20}$ That the wall was not functioning as a defensive city-wall for some time before Bālis was abandoned by its population in $1260 \mathrm{AD}^{21}$ is also corrobated by high mounds of debris and garbage ${ }^{22}$ outside of the city wall which grew until they had buried the city-wall from the outside and reached the houses now riding right on top of it. ${ }^{23}$ In fact, substructures of undressed stones reinforcing these buildings projected from the city-wall towards the outside and must be interpreted as having been built on the garbage mounds.

In the final period of Bālis, i.e. probably the end of the $12^{\text {th }}$ and the first half of the $13^{\text {th }}$ century AD , the southern Byzantine city-wall and its buttresses were put to use as either parts of rooms or courtyards - so that the only new wall that had to be built was the one on the northern side. Their composition is strikingly different from the Byzantine one as they were made largely from undressed stones or boulders set in mud or mortar,

[^5]fragments of Byzantine bricks, and from newly made fired bricks and mudbricks. In either case, the 3m-segments in between the buttresses almost invariably pre-determined the dimensions of most of the buildings close to the city wall as a unit of measurement. Simultaneously, the inclusion of the city wall into civil architecture left no room for battlement parapets or other defensive architecture, which might also explain to a certain extent why the population of Bālis abandoned the city and fled without even attempting to resist the advancing Mongol army in the summer of 1260 AD .

The following paragraphs will provide a first description of the structures excavated at Site A.

### 3.3 Courtyard A (100/049)

Situated in the angle between the tower's eastern side and the city-wall, the trapezoidal form of its enclosure was created by the Byzantine city-wall which ran strictly east-west on one hand, and by the first buttress east of the tower on the other. Finally, a street leading to a gate in the eastern side of the Byzantine bastion confined Courtyard A on its northern side. In the south, the Byzantine wall with its partially crumbling blocks of brecchie had been covered with broken Byzantine building material that obviously was recovered from debris. Occasionally, fired bricks with a format ( $0.25 \mathrm{~m} \times 0.25 \mathrm{~cm} \times 0.05 \mathrm{~m}$ ) that betray their Islamic origin were used as well. Sitting on the stone, the new wall was not more than five or six courses high (ca. $0.40-0.45 \mathrm{~m}$ ) so that one should rather speak of a balustrade (pl. 6). The gap between the Byzantine and Islamic structure was coarsely filled with stone slabs set in mud rather than mortar. For the eastern enclosure of Courtyard A , riding on top of the Byzantine buttress, similarly mixed and rough materials were used: a foundation of rocks and boulders in mortar formed the basis for a wall (thickness ca. 0.5 m ) made of bricks, brick fragments and fieldstones laid in mud and topped by an additional layer of pisé. In opposition to this, the
wall on the northern side, the one that faced the street, was of made of smooth and carefully laid mudbricks - again with a pisé top layer.

In the case of the northern wall of courtyard A, a foundation of very roughly dressed limestone blocks was added where no other basis was available. The foundation walls for the Islamic building - whether of Byzantine or later origin together with the filling material were carefully covered by a $0.10-0.15 \mathrm{~m}$ thick layer of packed, yellowish clay serving as a floor.

Immediately next to the tower's eastern side we found that instead of using clay, the builders had covered the surface with large but relatively thin (0.04m), irregularly cut flagstones. The slabs were part of the corbelled opening of a pit with an ellipsoid section ( $0.9 \mathrm{~m} \mathrm{~S}-\mathrm{N} ; 0.62 \mathrm{~m}$ E-W) situated exactly in the corner between the tower and the citywall. The bottom of the pit reached a depth of $2.4 \mathrm{~m} ; 1.4 \mathrm{~m}$ had been cut into the brecchie bedrock, as we learned from chisel traces. The rest of the pit's wall up to the surface had been built up against the Byzantine limestone wall in the south using the mix of material familiar from other spots at this site: rubble, brick fragments of Byzantine origin, and whole bricks of an Islamic format laid in mortar. The fact that the lower part of the pit would hold water rules out the possibility that we are dealing with a drain. To interpret it as a cistern is possible but it is also likely to have been used as a storage. Whatever the original purpose of the pit might have been, it certainly was used for garbage disposal before the site was abandoned. Large numbers of bones were recovered from the pit throughout all layers but complete ceramic bowls, shards of different luxury wares and a metal vessel were also found.

Built against the northern wall, a stair of three steps made of bricks indicated that access to a building existed at an elevated level (pl. 7). Three postholes in the back of the stair's substructure suggest that the stairs continued as a wooden construction with their angles pointing further up. The conclusion would be that the stairs led up to higher storey located in the Byzantine tower. A tann $\bar{u} r^{24}$ built against the steps of the staircase suggests an uncovered space. In he same vein, the profound difference in the levels taken from

[^6]both, the southern and the northern wall, indicate its function as a courtyard. ${ }^{25}$ The stairs were not the only way to enter the courtyard: a door in the eastern part of the northern wall opened on to the street.

### 3.4 The Byzantine Bastion and its Relation to Site A (pl. 8)

The stairs leading to the Byzantine bastion indicate that it was part of the Islamic settlement and possibly served during the latest phase of Bālis as a residential rather than a defensive structure. The mere fact that fired bricks of a smaller size ( $0.25 \mathrm{~m} \times 0.25 \mathrm{~m}$ ) than the one used in the Byzantine period, with mudbricks and fragments of Islamic pottery added can still be seen on the surface as part of wall structures, indicates that the tower was in full use in the Islamic period. Investigation in a future campaign may clarify the time range of this usage. The fact that the former entrance from the street was blocked at a certain time suggests either a change in the way the tower was entered or that it was no longer accessible due to its state of preservation.

### 3.5 Room B (100/049, 101/049)

As described above, room B occupied the space between two buttresses of the Byzantine wall. As in Courtyard A, the site had been filled with loose earth and stones up to a certain height of the wall and given a clay surface. The foundation of undressed limestone for the rising wall (made of mudbricks) was not only set in alignment with the northern wall of Room A but was also bonded and therefore must have been built simultaneously. Its only entrance was located to the east leading to the large tiled courtyard C. Here, the southern wall was of much flimsier construction than the rest of the former city-wall in this square. While this room was not distinguished by any other architectural features, it yielded a number of complete vessels, among them a specimen of $13^{\text {th }}$ century Raqqa-ware with underglaze painting, a monochromatic glazed spice-

[^7]dish, an unglazed large amphora and a jar. Curiously enough, none of these items were found directly on the floor but in the very soft, loose soil, that had filled these rooms. Pieces of wood, partially charcoaled, indicate a wooden rack on which these ceramics might originally have been put.

### 3.6 Courtyard C and Room E (101/049; 101/50)

Both structures belonged to one house of which only Courtyard C with a central drain and an adjacent semi-open hall have been excavated. The main entrance to the courtyard was at the point where the street, coming from the north, bent west towards the bastion. Diagonally across the courtyard was a door to room D (not excavated). Its southern doorjamb had been carved out of the limestone and plastered to form a recessed profile. The doorjamb on the opposite side was missing but had later been replaced by a simple brick wall.

Besides the door to room D, another existed between Courtyard C and room B to the west. Both doors were blocked in a later phase by either a thin wall of bricks and rubble or, as in the case of the door leading to room B, by a massive mudbrick bench. Courtyard C possessed a tiled floor with a drain in its center. Strewn in its corners and within the drain were large amounts of pottery fragments belonging the group of $13^{\text {th }}$ century AD molded wares.

The tiling of the courtyard was achieved with reused Byzantine bricks -- with the exception of the courtyard's southern part with its small rectangular alcove in the wall, where the floor pavement was repaired with bricks of an Islamic format.

To the north, room E was accessible through a wide opening, slightly elevated, that might have been an $\bar{l} w a \bar{a}$. Its irregular form originates from the fact that its western and northern wall were not erected simultaneously with the tiling of the floor (again, reused Byzantine floor tiles) as they were built clearly on top of it, using it as a foundation and cutting off some of the space that had been covered by the floor in an earlier phase. We
northern wall.
could not avoid the impression that, at an earlier phase, Room E might have had an extension further to the north, because it ends in a very flimsy wall made of mudbrick which is plastered only on its southern side. The space behind the backside of Room E, i.e, "Room F", turned out to be a an empty pit with some remnants of structures which showed no connection with the building to the south. Thus, the northern wall of Room E might actually have been built against a mound of rubble in medieval times.

Having said this, it should have become clear that both C and E were part of a remodelling project probably in the late Aiyūbid period and that they represent at least a secondary state of a building that had existed at this spot prior to the present structure. As in the case of Room B, the southern half of Courtyard C was delineated by lateral walls ( 2.75 m apart) aligned with the underlying Byzantine substructures. Here, the walls consisted of large limestone blocks that already had lost some definition when they were included in the Islamic building. Accordingly, the later builders "mended" those portions that had broken away by adding fired bricks. At this stage, it is impossible to conclude whether these blocks were part of the original Byzantine construction and in place when they were included in a new building, or whether they were brought from somewhere else.

With the exception of the limestone blocks, the material used is of varying quality: reused Byzantine and Islamic bricks laid in regular and orderly courses appear especially in the lower courses of walls, while broken material combined with stones ${ }^{26}$ laid either in mortar or in mud created patchy looking upper courses. A conglomerate of rubble laid in mud (but coated with plaster) used only for building a pillar south of the door to the street, conveys the picture of a house that had to be rebuilt with very simple means available, after the preceding structure had fallen into disrepair.

[^8]4. Site B (pls. 11-13)

Insgesamt 3 Schreibmaschinenseiten
5. Site C (pls. 14-17)

## 6. The Excavation at the "Qaṣr" ${ }^{27}$

Besides the sites in Bālis proper, excavations were carried out approximately 2km to the south at an exposed place on the edge of the Euphrates valley, overlooking Emar and Bālis. After the Syrian Department of Antiquities had exposed wall structures here in 1993, consisting of large limestone blocks, our examination concentrated on establishing a basic idea concerning the kind of building and its dimensions.

Curiously, the site had been chosen in the 1970s as the place to re-erect the minaret of the Great Mosque of Bālis, excavated by G. Salles and G. de Lorey in 1929 (pl. 18). ${ }^{28}$ No information could be obtained regarding the question of why the minaret was rebuilt in such proximity to an ancient site and not elsewhere, even though it must have been obvious that this project took place on an archaeological site. As a result of the efforts to relocate the minaret, some damage was inflicted to the architectural remains of the structure we began to excavate during the summer of 1998. More recently, the drilling and terracing of a government tree-planting and forestation operation, as well as continued traffic on the road across the area have contributed more damage.

By the end of the campaign, the areas we had uncovered suggested an almost square structure of the castrum-type, measuring 77m x 77m (fig.3).

The castrum occupied a strategic position on the edge between the Syrian steppe and the river valley with a commanding view towards the east over Bālis and the Euphrates flood plains and the plain of the Syrian steppe towards the west.

Its walls with a rubble core were made of large, dressed limestone blocks, some of which measured 1.5 m in length and were preserved in some spots to a height of up to

[^9]1.5 m . Gaps between blocks were carefully mortared. It appears that the walls were built directly on the hard clay surface without using foundation trenches (pl. 19). ${ }^{29}$

Each of the four corners had a projecting square tower made of the same large limestone blocks. The northern wall, built at the edge of a steep wadi, was supported by two additional square buttresses. ${ }^{30}$

Gates were found in the center of the western and the eastern side, ${ }^{31}$ situated opposite each other. Both were flanked by semicircular towers or buttresses, but while the eastern, narrower entrance was aligned with the wall, its western counterpart was further recessed for a more dramatic effect (fig. 4; pls. 20). This main gate must have faced the road that led down the slopes of the Euphrates valley to the city of Barbalissos/Bālis. Large basalt slabs were used as thresholds ${ }^{32}$ and doorpost rests - those of the western gate showing deep traces from opening the gates over a long time (pl.21). In both gate areas, mudbrick structures of an unusual greenish color that differed considerably from the material found in the rest of the building indicate a possible remodelling of the gates at some period.

The fact that the limestone wall's elevation was more or less equal throughout the building and no larger quantities of dressed blocks were found out of context, suggest that it functioned as the lower level for a wall that once rose on top of it but has not been preserved. The assumption that this superstructure consisted of a mudbrick wall is confirmed by fallen mudbricks found singly and in clusters on both sides of the walls.

[^10]Three trenches (1990/2000; 1980/2010 and 1990/2010) which were opened inside the castrum's southeastern corner revealed architectural remains of a series of two or three large rooms (figs. 6, 7; pl. 22). Using limestone blocks topped with mudbrick, their walls were built in a fashion similar to the surrounding curtain wall. They were plastered on both sides and the floors consisted of concrete. In all of these rooms, coarse installations of mudbricks and undressed stones combined with fired bricks ${ }^{33}$ indicate a second phase of settlement within the building (pl. 23). Simultaneously, however, the debris contained fragments of marble plaques, painted wall plaster and roof tiles. One large piece of carved stucco decoration was found south of the western gate (pl. 26).

The Qaṣr stood not as an isolated building on the ridge of the Euphrates valley: situated 20 m to the south, an "outbuilding" on a podium, surrounded by a solid stone wall with steps leading up from a courtyard was found (figs. 3, 6; pl. 24) while within a radius of 1 km , three smaller buildings were mapped that appear to have been built in connection with the castrum.

Only small amounts of pottery or artefacts were recovered from the trenches inside and outside the "Qaṣ" that can be used to determine its date. ${ }^{34}$ The ceramic types represented suggest a limited period of occupation in the pre-modern period, concentrated in the Late Roman/Byzantine and/or Early Islamic periods (pl. 25). ${ }^{35}$

A fragment of carved stucco, probably part of a corner wall-decoration confirms that timeframe (pl. 26). On one side a series of incised, concentric "V"s has been preserved, bordered by a zig-zag pattern and attached at an angle of $90^{\circ}$ is a frieze consisting of a continous three-leaf pattern surrounded by a pearl border. The "three-leaf" motive as part of a repetitive pattern plays an important role in the carved stucco decoration of the late Sasanian ${ }^{36}$ and Umayyad ${ }^{37}$ period. Together with the building's

[^11]characteristic form, this additional evidence indicates a tentative dating of the Qaṣr in the Umayyad period.

Several probes dug inside and outside the castrum below the foundation level of the walls or the floor level of the rooms have so far produced no evidence of any earlier settlement there. The single coin found was too corroded to provide datable evidence.

## 7. The Ceramics ${ }^{38}$

The pottery assemblages from sites $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and the Qaṣr recovered during the 1996 and 1998 campaigns includes ca. 16,000 shards and indicate a range from the $9^{\text {th }} / 10^{\text {th }}$ to the $12^{\text {th }} / 13^{\text {th }}$ centuries. In the case of the excavation at Site B and especially Site C - the results of which are currently being evaluated and will be published in a separate report - we hope to be able to assign specific wares to the various levels found.

Most wares from Bālis are typical for northern Syria and offer direct comparisons to sites such as Ḥamā, Raqqa, Qaṣr al-Ḥayr al-Sharqī, Qal'at Ja‘bar, and recently surveyed sites in the Balīkh-valley.

The following preliminary distinction between ware groups can be established:

### 7.1 Ware A: Buff-colored unglazed Wares

Unglazed wares (cf. ware D) constituted about $70 \%$ of all ceramic specimens found at Bālis during both campaigns. Among them, buff-colored wares with mineral or chaff temper formed the largest group. Naturally, a large variety of forms occurred: among them large, thick- and straight-walled basins with a ledge or club rim, often

[^12]decorated with wavy comb or incised patterns and/or crosshatchings. This type is known
 common in the Balīkh valley during the medieval period. ${ }^{41}$ A date between the 9 th $/ 10^{\text {th }}$ and the $13^{\text {th }}$ century for this type in Bālis is suggested by stratified finds. Other types of this waregroup were large storage vessels and amphoras with two or three handles. Smaller types included bowls with straight or curved walls and ringbases. Finally, a significantly large number of shards were identified as "eggshell"-ware, from small pitchers, and possibly jars, with a high ringbase and tall open necks, some of them showing remnants of strainers. The form of this type, though not of the same fine quality can be compared with finds from Hamā. ${ }^{42}$ The version of these vessels with their strainers is surprisingly close to Ṭūlūnid and Fāṭimid examples found in $9^{\text {th }}-11^{\text {th }}$ century levels at Fustật. ${ }^{43}$

### 7.2 Ware B: Molded Ware

Nearly 600 shards of molded wares were excavated at sites A, B, and C or were recovered from the debris in the two trenches dug perpendicular to the city wall. The overwhelming majority of the shards belonging to this group, along with a substantial number of complete molds or fragments of molds, came from site A and comprised both bottles and pitchers as well as "pilgrim flasks." Decorative motives on these vessels covered a wide range beginning with simple tear-shaped patterns similar to the ones found on medieval Iranian metal ware ${ }^{44}$ to the representation of various animals and calligraphic themes (pl. 27).

[^13]One of the molds that could be reconstructed from a number of fragments bore in its center the incised inscription naqsh Ibrāhīm al-Ḥalabī "design of Ibrāhīm al-Ḥalabī" (pl. 28). As this portion of the molded design would have been removed and replaced in the process of assembling the vessel by the neck, the incised name could be interpreted either as a potter's mark ensuring the compensation of the artisan or the signature of the mold's actual designer. While we have to assume that original molds were made from different materials, for instance wood, the existence of "authorized" copies of such a mold raises a number of interesting questions in regard to dissemination of both these objects and their patterns in medieval Syria. The combined evidence of a large number of molds together with molded wares in a specific area suggests the existence of a workshop or storage facility.

A sequence of at least two phases $\left(8^{\text {th }}-10^{\text {th }}\right.$ century $\mathrm{AD}^{45}$ and $12^{\text {th }} / 13^{\text {th }}$ century AD) during which molded wares were used or produced at Bālis could be established from the stratified context.

### 7.3 Ware C: Barbotine Ceramics

Sites A and B yielded fragments of barbotine ware, even though their number was insignificant in comparison with most other wares recorded from theses sites. Barbotine ware occurred in the form of tall, voluminous three-handled amphoras with large open rims. In addition to barbotine, the rich decoration of these vessels included incised patterns, molded medallions inlaid with fragments of green or turquoise-glazed wares or broken blue glass beads. The same vessel was provided with "turban"-thumbrests (pl. 29, 30).

### 7.4 Ware D: Common Red Ware

Ware D designated bowls and pitchers of forms similar to ware A. However, it was characterized by a red-bodied or red-faced ware.

### 7.5 Ware E: Cooking-pot Ware (brittle-ware)

So-called cooking-pot or "brittle-ware," with a hard, coarse, mineral-tempered, dark-red to black body was produced in Greater Syria from the Roman period. At Bālis it was found in all Islamic levels, especially in squares $100 / 50$ and 102/62, comprising about $5 \%$ of the total ceramic count. This ware is represented predominantly by a roundbodied pot with a flat base and inward-bent, neckless rims. Its triangular and flat handles or - as in a few cases -- looped handles attached vertically combined with rocker patterns have been recorded as early as in $9^{\text {th }} / 10^{\text {th }}$ century 'Abbāsid contexts but continue in Bālis much later. ${ }^{46}$ Several shards were found featuring a semi-transparent, green glaze at the inside close to the base.

### 7.6 Ware F: Fine Red Ware

A group of medium-sized bowls with rounded or straight body, flat turned-out rims and flattened ring bases was designated ware F. Its fabric is composed of a fine clay lacking the coarse sand temper of ware E. Rather infrequently, the majority of its fragments had a transparent glaze with an underglaze slip-painted pattern of geometric designs in white or yellow. While shards belonging to this ware were collected on the surface, others were recovered simultaneously from the lowest levels of the trench in $102 / 60$ (site C) possibly to be associated with the $9^{\text {th }} / 10^{\text {th }}$ centuries. The shards from this particular site exhibited bright yellow and green inglaze-painted designs.

### 7.7 Ware G and H: Monochrome Turquoise and Green-Glazed Wares

Both groups of wares used clay-based and mineral-tempered material resulting in buff-colored bodies similar to ware A, even though reddish bodies reminiscent of ware D

[^14]were found as well. As a rule of thumb, smaller vessels such as bowls and pitchers were made of finer clay and received a brilliant semi-transparent glaze with colors ranging from turquoise blue to deep green. Larger bowls and storage jars on the other hand generally had a rougher fabric, inclusions of sand and small pebbles and a glaze that often exhibited a greyish-opaque quality with a rough, bubbly surface due to an unsuccessful firing process.

### 7.8 Ware I: Polychrome Glazed Wares (Splash-and Sgraffito-Wares)

Polychrome glazed wares accounted for nearly 8\% of the total ceramic count of the 1998 campaign. Using red or buff-colored bodies for bowls and dishes, splash-wares with yellow-green-brown or yellow-green-aubergine coloring -- known from the Samarra horizon ${ }^{47}$-- were found along with fragments belonging to the later group of sgraffitowares. ${ }^{48}$ The patterns of sgraffito-wares can be divided into two groups: the first included simple series of loops or curling lines incised in the cavetto while the second consisted of floriated $K u \bar{f} f \bar{i}$ or imitative varieties thereof. Sgraffito technique occurs almost exclusively in conjunction with smaller or medium-sized bowls with curving walls, straight rims, and high ring bases.

### 7.9 Ware J: Luxury Wares (Polychrome Glazed Frit Wares) (pls. 31-35)

As less than $5 \%$ of the ceramic finds at Bālis, ware J comprised monochrome turquoise, cobalt-blue, purplish-black, and aubergine glazed wares, as well as blackunderglaze (semi-transparent turquoise) painted and lustre-painted wares with a quartz frit or stone-paste body.

While the center of production responsible for this kind of ceramics was situated in Raqqa after the $12^{\text {th }}$ century, ${ }^{49}$ our collections yielded wasters, slacks, and potters

[^15]triangles suggesting that Bālis functioned during this period as a minor production site of luxury (and molded) wares as well. ${ }^{50}$ A number of forms were identified, the most common being bowls with straight, thin walls. Curved and carinated walls were also frequent forms, as was a variety with out-turned and flat rims. Nearly all examples had high ring bases, and several could be identified as "Tall Minis Ware," as their foot was cut sharply so that the bowl rested on the sharp edge of the base.

Additional forms included condiment dishes with seven round compartments, ${ }^{51}$ and part of a ceramic tray or stove with a rabbit painted in coppery brown lustre on a cobalt-blue glaze. Other examples with lustre-painting ranged from gold and copperbrown to red.

Three shards of Chinese imports were also identified: a small shard of celadon from area 101/50 and three larger shards of opacified white and green glazed porcelain, possibly datable to the Song dynasty.

## 8. Coins and Metal Objects

Approximately forty bronze coins were recovered during the excavation from
Sites A, B, C, and the Qaṣr. The overwhelming majority of them was in an advanced state of corrosion, and their images and legends were effaced, which made any identification at first sight problematic or impossible. Further examination of the coins will require cleaning, a task which will be undertaken in the near future. However, there is no indication that the canon of coins established for the Roman/Byzantine and Islamic period of Barbalissos/Bālis more than twenty years ago ${ }^{52}$ will receive significant additions.

A large percentage of coins found at Sites A and B (14) can be dated to the Byzantine period, with one possible match with type 127 in the catalogue of Gilles

[^16]Hennequin and Abū l-Faraj al-‘Ūsh. ${ }^{53}$ All of these coins were found in either filling material or debris. As indicated above, moving large amounts of soil for the terracing project at the western and southern city-wall in the later phase of Bālis might be responsible for this kind of evidence. When traces were distinguishable on Islamic coins, they could be compared to the Aiyūbid star-pattern on the obverse - which also formed the majority of coins recorded by Hennequin/al-‘Ūsh. A fals of the Rūmsaljuq sultan ‘Izz al-Dīn Arslan II b. Mas‘ūd (551/1156-588/1192) was found on the floor of Room F in Site $\mathrm{A} .{ }^{54}$ This space had been used as a dumping ground and filled with debris possibly prior to the rebuilding of Courtyard C and Room E and therefore might provide $a$ terminus post quem for this latest level of building activites in the southwest of Bālis.

Among the metal objects found, most -- literally dozens of them -- were nails and bolts. Some were still in pieces of wood which, however, was too brittle to be preserved. To judge from this evidence, it seems likely that the buildings of Site A and B had flat roofs supported by beams, for which these nails were used. Other metal objects included domestic items as spatulas, a pair of scissors, a belt buckle, stirrups, knife blades, some arrow tips, and a bronze bucket.

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## Captions of Figures and Plates

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[^0]:    ${ }^{1}$ Sarre/Herzfeld 1911, vol. I, 123.
    ${ }^{2}$ Sarre/Herzfeld 1911, vol. III, pl. XXIII.
    ${ }^{3}$ Compare with the view in Sarre/Herzfeld 1911, vol. III, pl. XXIV upper right photo.

[^1]:    ${ }^{4}$ While the highest elevation at the base of the bastions is about 310 m above sea level, the rest of the city's level was at about 305 m and at its eastern wall about 297 m above sea level; cf. Raymond/Paillet 1995, fig. 1.
    ${ }^{5}$ Sarre/Herzfeld 1911, vol. I, 123.
    ${ }^{6}$ Raymon/Paillet 1995, fig.1.
    ${ }^{7}$ Raymond/Paillet 1995, pls. 1, 9, 11.
    ${ }^{8}$ Cf. Raymond/ Paillet 1995, fig. 1 for the topography of French archaeological activities at Bālis.

[^2]:    ${ }^{9}$ Raymond, A. and J.-L. Paillet 1995, 23, $25 f f$.
    ${ }^{10}$ L. Golvin and A. Raymond (Golvin/Raymond 1974, 111) only mention objets de céramique abbaside recovered from deeper soundings. An exception are two articles dealing with the carved stucco-decorations from a mashhad found in the surroundings of Bālis, dated to the mid $11^{\text {th }}$ century AD (Raymond/Paillet 1995, pl. 8). Today, the stucco wall is part of the exhibit in the National Museum at Damascus, cf. G. Salles, "Les décors en stuc de Bālis," Mémoirs du IIIe Congrès International d'Art et Archéologie Iraniens (Moskow-Leningrad (Leningrad, 1935), 211-216 and D. Sourdel, and J. Sourdel-Thomine, "Un sanctuaire chiite de l'ancienne Bālis," Mélanges d’Islamologie à la mémoire de Armand Abel (Leiden, 1974), 247-253. A. Raymond (Raymond/Paillet 1995,35 ) claims that it is the decoration of a shrine of al-Khiḍr excavated by L. Cavro in 1929, a building he locates north of Bālis. It appears to me that the mashhad must be identified as a structure situated ca. 2km south of Bālis. Neither of them has been published so far.

[^3]:    ${ }^{11}$ J. Sourdel-Thomine, "Bālis" EI ${ }^{2}$ I, 1026; Raymond/Paillet 1995, 21 with bibliography. In the preface of Bālis II, A. Raymond, L. Golvin and J.-L. Paillet announced a separate study of the Byzantine/Islamic ramparts in the series dealing with the results of the French excavation (Raymon/Paillet 1995, 15). For this reason, I will give here only basic informations on the Byzantine city wall.

[^4]:    ${ }^{12}$ While the ancient quarries have not been identified, the limestone as well as the brecchie is identical to the material found in the environment of Emar and Bālis. ${ }^{13}$ The best opportunity to observe the structure of the Byzantine wall today is on the northern side of the ruin. Here a segment of approximately 25 m running northeast right below the surface of the water has survived. Here, the water has cleared away all later. ${ }^{14}$ It can be assumed that this was also the case for the rest of the city's enclosure.
    ${ }^{15}$ I thank Prof. S. Čurcic for this valuable suggestion. Even though it was built by the Byzantine emperor Justinian as well, the city-wall of Bālis probably did not possess a fortification sophisticated as that of Ruṣāfa-Sergiopolis, cf. Karnapp 1976, 14-16. ${ }^{16}$ These repairs are executed in small bricks, typical medieval Islamic material.

[^5]:    ${ }^{17}$ Large patches of fired brick and undressed stones used in an effort to mend the Byzantine wall could be observed in 102/049.
    ${ }^{18}$ Raymond/Paillet 1995, 24, 25, 29, 30, 32.
    ${ }^{19}$ A sounding in Room B (the gap between the buttresses) which led down almost to the level of the water-table, did not reveal anything than relatively loose filling material mixed with some pottery fragments.
    ${ }^{20}$ This measure might have been inflicted on the city as part of the conditions of a peace treaty.
    ${ }^{21}$ Raymond/Paillet 1995, 45ff.
    ${ }^{22}$ They contained filling material, ashes, bones and pottery fragments.
    ${ }^{23}$ This is also true for the western city-fortification.

[^6]:    ${ }^{24}$ A simple oil lamp was found put on the floor next to the tannūr.

[^7]:    ${ }^{25}$ On its entire length the southern wall of Courtyard A was more than 1 m lower than the

[^8]:    ${ }^{26}$ Even some fragments of $10^{\text {th }} / 11^{\text {th }}$ century funerary stelae were included.

[^9]:    ${ }^{27}$ For this portion of the report an abstract submitted to me by Lennart Sundelin has been used.
    ${ }^{28}$ Golvin/Raymond 1974, 108.

[^10]:    ${ }^{29}$ That these limestone courses are not the foundation but the lower portion of the rising wall can be seen in the gate areas in which the threshold with its traces of usage is on the same level with the first course of the wall on both of its sides.
    ${ }^{30}$ Some cleaning of the southern wall suggests that its center area might have been reinforced by smaller buttresses as well.
    ${ }^{31}$ It is highly unlikely that gates also existed at the northern, inaccessible side of the fort. In the south, on the other hand, work has not proceeded so far that the possibility of finding a third gate can be ruled out completely.
    ${ }^{32}$ The eastern gate has unfortunately been vandalized sometime between 1996 and 1998. The basalt threshold was ripped from its original position and broken.

[^11]:    ${ }^{33}$ These large bricks of oblong format can be compared to those found at Emar exclusively in conjunction with Byzantine tomb covers. The occurrence of this kind of bricks at the "Qaṣr" points to their secondary use.
    ${ }^{34}$ Relatively large amounts of glass fragments were found in the so-called "outbuilding" mentioned above.
    ${ }^{35}$ Among them fragments of red wares with white engobe, typical for the early Byzantine period. A complete bowl of a greyish buff with incisions on its flat rim can be compared with a ware dated by K. Bartl as Late Roman/Early Byzantine (Bartl 1996, fig.2, no. 7).
    ${ }^{36}$ Kröger 1982, pls. 65, 3; 85, 4; 89,7; 9, 4.

[^12]:    ${ }^{37}$ Hamilton 1959, pls. XXXIV, 3; L, 1; LIX, 14 (1); LXVIII, 1,2. The concentric "V" appears in late Sasanian borders (Kröger 1982, pls. 63,1-2; 64, 1; 65, 2; 85, 3) but might also represent the abstract form of the heart-shaped motif so commonly used as a border decoration in Sasanian and Umayyad stuccos alike; for example Kröger 1982, pls. 36, 6; 46, 5; 51, 2; 65, 5-7 and Hamilton 1959, pl. XXXII-XXXIII; XXXIX, 5; XLVII; XLVIII.
    ${ }^{38}$ This part of the report is based on a summary submitted by Stephennie Mulder who also prepares the final publication of our ceramic finds.

[^13]:    ${ }^{39}$ Grabar, 1978, typs A-3, A-5.
    ${ }^{40}$ Northedge/Falkner 1987, 12.55.
    ${ }^{41}$ Bartl 1994, pls. 1-4, 13.9.
    ${ }^{42}$ Poulsen 1957, figs. 991, 993.
    ${ }^{43}$ Scanlon 1974, pls. XVIIIb, c; XXVI, c, d; XXVII, a, b and Scanlon 1986, figs. 147152. None of the strainers from Bālis, however, can be compared with the artistic examples from Fusṭāt decorated with animals, calligraphy or geometric patterns.
    ${ }^{44}$ Similar molds were also found by the French expedition (Bernus-Taylor 1993, 482, nos. 446, 447).

[^14]:    ${ }^{45}$ A large number of shards with impressed lozenges and concentric circles were found in levels I and II of Site C. For similar material cf. Scanlon 1974, pl. XVIIc.
    ${ }^{46}$ Tell Sheikh Ḥasan (Bartl 1994, fig.2) and Samarra (Northedge 1987, fig.44).

[^15]:    ${ }^{47}$ Sarre 1925, 68ff.; pls. 29-30).
    ${ }^{48}$ Northedge 1985, 124.
    ${ }^{49}$ For a more recent discussion of Syrian fine wares, cf. Tonghini 1994, 249ff.

[^16]:    ${ }^{50}$ More detailed information about the Bālis as a place of pottery production can be expected from the forthcoming final reports of the French expedition. A "quartier des fours de poterie" is mentioned in Raymond/Golvin 1974, 112.
    ${ }^{51}$ An almost complete dish of that kind with a type of finish characteristic of ware H had been found earlier in 1996 in Room B at Site A.

[^17]:    ${ }^{52}$ Hennequin /al-‘Ūsh 1978.
    ${ }^{53}$ Ibid., 13.
    ${ }^{54}$ Mitchiner 1977, type 954.

