

Zalabiyeh on the Euphrates: The Historical Evidence and the 2010 Archaeological Discoveries

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1. Introduction

In 2010 the Syro-British Mission to Zalabiyeh was founded at the request of the Directorate General of Antiquities and Museums (DGAM) in Damascus to conduct a salvage excavation of the citadel of Zalabiyeh on the east bank of the Euphrates. The fortress stands upstream of Deir Ez Zor and across the river from the much larger and more famous site of Halabiyeh, which has long been the focus of a Syro-French Mission. The unstable nature of the cliff on which the castle stands meant that a proposed hydro-electric dam downstream of the site seriously threatened the survival of the remaining archaeology at this location and, since Zalabiyeh has never been excavated, it was important to record as much information as possible before the data was lost for good.

Zalabiyeh has been severely damaged over a period of centuries as the meander of the river has shifted eastwards as it snakes through the Khanuqa gap, and this has undermined the cliff on which the monument stands; to the extent that today only the eastern sector of the fortress remains. It is therefore difficult to be certain of the original size of the enclosure. The rate of erosion is difficult to gauge precisely, but a photograph taken by Gertude Bell in March 1909 indicates that the southern section of wall has changed little in the intervening hundred years, although her description does suggest substantial changes in other respects (see below). This may be a by-product of the late twentieth century/early twenty first century drought in Syria as it is clear that the site is most at risk when the Euphrates swells due to seasonal rainfall.

The first field season was conducted for a month spanning late July until late August in 2010. During this period the priorities were to open three trenches and establish a *terminus ante quem* for the occupation of the citadel as well as to attempt an understanding as to why the site fell into disuse. This approach was taken because Zalabiyeh was/is located in a heavily militarised zone and field-walking and survey outside the castle walls were not

permitted. Therefore, a strategy was formulated that concentrated on the interior, with a view to conducting a full survey of the standing architecture from the inside in the second season. Given that this was a salvage excavation, the ultimate aim was to excavate as much of the site as possible because the projected accelerated erosion of the citadel meant that there would be no future opportunity for Zalabiyeh to be revisited by scholars and ours would be the only comprehensive record of the castle.

The mission was suspended in 2011 as a result of the unrest in Syria. As at the time of writing (February 2014) there is still no indication when we will be able to return, this article is intended as a comprehensive account of the work carried out to date, both in the field and by consulting with experts in the UK, and it is to be hoped that it will enable us to pick up our research where we left off should we eventually be able to return to Zalabiyeh.

2. Historical Overview of Zalabiyeh

2.1. Primary sources

Tracing Zalabiyeh through the historical sources is complicated due to the fact that the site is referred to by a variety of names in a relatively short window of time. This suggests that the citadel was constructed and used for a limited timespan; although we have some ideas about the date occupation ceased (see below), the date that human occupation commenced at the site remains somewhat mysterious.

The first mention of buildings at this place in the written sources appears to be a reference in Isidore of Charax' first century BCE/CE work on the Roman-Parthian stations along the Antioch-India trade route. The link is by no means certain, but Isidore talks of a "royal place" which he designates with the word *Basileia*.¹ In turn *Basileia*, as the name of a settlement, has been used in conjunction with the toponym *Annoucas*; we also know that *Annoucas* is the older name for Zalabiyeh in the same way that Halabiyeh was called *Zenobia*. Procopius is clear that *Annoucas* benefitted from the largesse of Justinian:

Beyond Circesium is an ancient fort, *Annoucas* by name, whose wall, which he found a ruin, the Emperor Justinian rebuilt in such a magnificent style that thereafter it took second place in point of strength to no single one of those most notable cities.²

The fact that Zalabiyeh was built at the narrowing of the Euphrates across from Halabiyeh means that historically the sites are viewed as twin buttresses on the Romano-Byzantine frontier holding the line between the Sassanian and Byzantine Empires with the river acting as a physical barrier between the two sides. However, the evidence, both archaeological and textual, emphatically contradicts this simplistic view with Procopius recounting how Khosrau simply bypassed Halabiyeh (*Zenobia*) in his campaign of 540:

¹ See section 2.2 below for an alternate translation and reading of the toponym.

² Procopius, *Buildings* II, 12.

Chosroes then came near to Zenobia, but upon learning that the place was not important and observing that the land was untenanted and destitute of all good things, he feared lest any time spent by him there would be wasted on an affair of no consequence and would be a hindrance to great undertakings, and he attempted to force the place to surrender. But meeting with no success, he hastened his march forward.³

It must be noted here that on an earlier campaign commanded by Azarethes, the Sassanians had bypassed the region altogether by taking the army to the north and moving south against an unsuspecting Mesopotamia (Procopius, *History of the Wars*, I. xiii. 1ff) so the whole idea that the Euphrates provided a formidable obstacle to invaders is misplaced. If further proof be needed, then it is to be found in the discovery that the Roman *limes* continues east of the Euphrates and was punctuated by a string of Romano-Byzantine settlements, like that at Al Kasra approximately 13 km downstream of Zalabiyeh. The growing field of Frontier Studies discussed by Elizabeth Key Fowden in her work on the cult of St. Sergius, indicates that we must dismiss the traditional view of relatively fixed frontiers and instead accept that sovereignty of the Syrian steppe and desert remained nominal in the Romano-Byzantine period. It is extremely likely that the real power in the region was held in the hands of tribal confederations and that the formal recognition of this situation in the early Islamic era was really an acceptance of the status quo rather than a paradigm shift in regional governance.

2.2. Twentieth century survey and interpretation of the sources

Zalabiyeh does not appear in later records, a situation that is explained by the archaeology (see below), but the one enigmatic element of the literary sources is the question of the foundation of Basileia/Annoucas/Zalabiyeh. So far no evidence has been discovered to suggest a Roman (or earlier) building at the site of the extant standing remains and this raises a number of possibilities; the first is that Isidore made a mistake in ascribing a building to this location or that he mistook the purpose of the building by calling it a palace, when it is more likely to have been a more modest military outpost. The second possibility is that this earlier complex was built further to the west and has been destroyed by the meandering of the Euphrates; if this is the case then the question can never be adequately solved as the evidence has been erased.

Finally, there is the possibility that a future excavation at Zalabiyeh could reveal evidence of a pre-Byzantine structure under the citadel showing a longer period of occupation. If Isidore was mistaken as to the function of the complex he recorded then the chances are that the whole building was subsumed by the fortress, but if it was a palace or a settlement

³ Procopius, *History of the Wars* II, 7.

that comprised more than merely a Roman watchtower, then outbuildings could have been present to the east of the current extant remains.

This final suggestion is the most intriguing and brings us to issues relating to the modern history of the site.

It is clear that there was a much wider-ranging settlement at Zalabiyeh before and/or during the Byzantine and early Islamic occupation of the citadel. The earliest detailed consideration of the full extent of the site in the modern era comes from Gertrude Bell in her book *Amurath to Amurath* published in 1911. She discusses the remains in some depth, and it is worth quoting her at length:

Twenty minutes lower down [from Halabiyeh], the Mesopotamian bank is crowned by the sister fortress of Zelebîyeh. It is a much less important building. The walls, set with rectangular towers, enclose three sides of an oblong court; the fourth side - that towards the river - must also have been walled, and it is probable that the castle approached more nearly to a square than at present appears, for the current has undermined the precipitous bank and the western part of the fortifications has fallen away. The masonry is of large blocks of stone, faced on the interior and on the exterior of the walls, while the core is mainly of rubble and mortar. There are six towers, including the corner bastions, in the length of the east wall, and between the two central towers is an arched gate. On the north and south sides there is now but one tower beyond the corner. Each tower contains a small rectangular chamber approached by an arched doorway. The court is covered with ruins, and on either side of the gate there is a deep arched recess. Under the north side of the castle hill there are the foundations of buildings in hewn stone, but the area of these ruins is not large.

The name Zelebîyeh carries with it the memory of an older title; in the heyday of Palmyrene prosperity a fortress called after Zenobia guarded the trade route from her capital into Persia, and all authorities are agreed that the fortress of Zenobia described by Procopius is identical with Halebîyeh. Procopius states further that Justinian, who rebuilt Zenobia and Circesium, refortified the next castle to Circesium, which he calls Annouca. The Arab geographers make mention of a small town, Khânûḩah, midway between Ẓarkîsîyâ (Circesium) and Raḩḩah, and the probable identity of Annouca and Khânûḩah has already been observed by Moritz. But I think it likely that the flourishing mediaeval Arab town was situated not in the confined valley below Zelebîyeh but at Abu 'Atîḩ, where the ruin field is much larger. It may be that there was a yet older settlement at Abu 'Atîḩ, and that the stone foundations there belonged to the town of Annouca which stood at the head of the defile, while the castle of the same name guarded the lower end.⁴

This information from Bell's visit in 1909 tells us that not only were there clearly extant remains to the north of the citadel, precisely that area that is now occupied by concrete buildings of late twentieth century construction, but that structures were still clearly visible in the courtyard of the fortress at this time. Both these observations support the

⁴ Bell 1911, 67-68.

supposition that the castle and its hinterland suffered substantial natural erosion as well the encroachment of modern occupation throughout the twentieth century.

This unravelling of the twentieth century history of the site is aided by Poidebard's aerial images from the 1920s and 1930s that show obvious evidence of ancient occupation east and north of Zalabiyeh right down to the edge of the Euphrates. Of course, without excavation we cannot be sure of either the function or the date of these structures, although the buildings along the Euphrates almost certainly fulfilled functions relating to riverine trade and the levying of customs duties. In attempting to tie the sites he had surveyed to the Parthian stations, Poidebard linked Zalabiyeh to *Regia-Dianae fanum* and by logical extension of this Al Kasra was identified as Allan and As-Sinn as Beonan. This interpretation was refuted by Clark Hopkins as a case of distorting the data to fit it to the ancient literary sources, asserting that:

...it must be remembered that the walls at Zelebiyé are of the fifth century, that there is, as yet, no indication of previous occupation, and that much digging must be done both at Al Kasra and at As Sinn before we can assign either with certainty to the Parthians.⁵

A further consideration of the possible function of Zalabiyeh is found in Calvet and Geyer's work on ancient Syrian dams. They comment that toponym al-Khanouqa means "the strangler"⁶ and that this narrowing of the Euphrates made it an obvious place for a dam to be constructed. Although a canal linked to the dam is historically linked to Semiramis they did not propose an exact date for the construction of the dam and canal⁷ but they did consider the issue of how Isidore of Charax' information was to be understood. Their interpretation rests upon the premise that Basileia is a proper name rather than designating a 'royal place' and they translate the relevant passage as⁸:

...puis Basileia, sanctuaire d'Artémis, fondation de Darius, petite ville; c'est là que se trouve le canal de Sémiramis; l'Euphrate est barré par des pierres, afin que, une fois rétréci, il inonde la plaine; mais en été les bateaux y font naufrage.⁹

This reading of Isidore suggests that the archaeology photographed by Poidebard was an entire town, complete with an important temple and maritime facilities around the first century BCE/CE, but the later occupation of the site remains a mystery as only the walls of the citadel of Zalabiyeh are still extant. As Hopkins rightly observed, the mystery of the earliest occupation at the site can be clarified only by excavation and it is to be hoped that, in the event of a return to Zalabiyeh, permission will be granted to carry out a survey and test trenches to try and answer these questions.

⁵ Hopkins 1935, 162.

⁶ Calvet and Geyer 1992, 19.

⁷ Calvet and Geyer 1992, 24.

⁸ Charax *Stations*, 5.

⁹ Calvet and Geyer 1992, 20.

3. Summary of the Standing Architecture

The only standing remains at Zalabiyeh are stretches of the eastern and south walls, their associated defensive towers and a single gateway set into the eastern wall. Sections of the defences have been significantly damaged by, or lost completely to, the river Euphrates due to the river undercutting the site, which sits above an outer meander of the river where it flows more swiftly. This undercutting has destabilised the cliff and caused significant areas to collapse. The region has also been subjected to seismic activity over the centuries, no doubt exacerbating the likelihood of significant damage and collapse to both the defences and the interior structures at Zalabiyeh. The primary building materials of the defences are rectangular dressed stone blocks (ashlars) of local gypsum, which is somewhat soluble in water. This property of gypsum has not helped to preserve the walls and areas left exposed to the elements show significant degradation of the blocks caused by rainfall, while newly exposed areas show the ashlar in a much better condition. The combination of the local geography, geology and choice of building materials has done little to help preserve the fortress.

At the time of our expedition in 2010 the remains of eight towers were visible in total all of them along the east wall: all rectangular in plan and in varying states of preservation. It seems likely that when complete there would have been several additional towers on the sections of wall now lost to the river.

Those that remain vary in size with at least four larger towers and three smaller ones. The eighth tower is the most northerly one still partially extant; it is harder to discern the extent of this tower as it is in a very poor condition. Sadly, during the 2010 season due to the instability of the immediate area around this tower (which had experienced significant collapses into the river) and with our efforts concentrated on the excavation, we did not manage to get a good look at this tower's dimensions. The interiors of the towers are relatively similar to each other, being all rectangular or square in plan, with a single entrance from the interior of the fort. In the larger towers there is a vertical niche in each of the three outer walls to facilitate easy access to the arrow slits.

With our focus on excavating the interior of the fort (see below), a proper examination and documentation of the walls and towers was planned for subsequent seasons. As such a study would appear impossible at the time of writing, our understanding and interpretation of the walls has had to rely on the observations we made whilst there and the photographs that we took of the site. We believe the remains of the most northerly tower would have formed the most northern point of the defences along the east wall. While there is no visible evidence that the wall continued to run further north of this tower, it would appear that at this point the wall took a westward course toward the river cliff at ninety degrees to the east wall. At first glance there is no obvious evidence for the wall taking such a course as large sections of the area immediately west of the north tower have completely collapsed. However, looking up at the region to the west of the northern tower, left exposed by the collapse of the cliff, two large rectangular ashlar blocks of the same height lying at the same level as one another are revealed, pretty much horizontally on an east-west alignment

(Fig.1). We believe these two blocks to be the best possible remaining evidence for a northern wall at Zalabiyeh; how far this wall stretched is impossible to tell as we have no mechanism to gauge how far the cliff has eroded since antiquity.

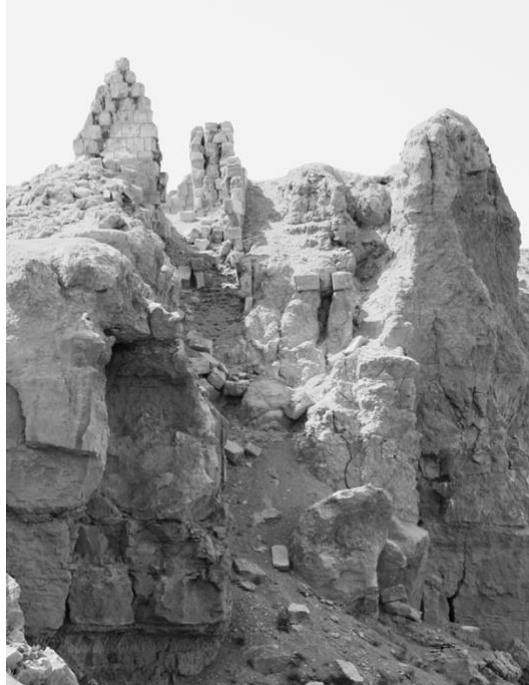


Fig. 1. Detail of construction technique of the northern wall
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As noted above from Gertrude Bell's interpretation of the site, the plateau at Zalabiyeh would have had a complete circuit wall surrounding it.¹⁰ The riverbank and cliff, whilst a significant obstacle to assailants is, in several places, possible to scale with not too much difficulty; this was potentially the case when the fort was constructed. While there is no evidence of the western range of defences there must have been a wall on this side, otherwise the defensive capability of the fort would have been severely compromised. If the northern tower was a corner tower at a junction between the east wall and a north wall then logically one would expect it to have been among the larger towers on the site so as to more adequately protect this point, further work is required to confirm this, but this seems a probable conclusion.

There are the remains of a single gate situated towards the northern end of the eastern wall flanked by a large tower on either side. On the inner face of the gate, either side of it, there are clearly visible two recessed blind arches of the same proportions as the gate itself; less obvious however are two further such arches (outside of those flanking the gate), these arches are significantly lower than the others and as a result are almost completely buried (Fig.2). Originally, we had assumed that the two blind arches either side of the central

¹⁰ Bell 1911, 67.

entrance had been additional portals and had been blocked at a later date. However, it soon became clear that these arches behind the entrance are actually supports for flights of steps leading up to the battlements. Identical examples of such arched steps in a comparable late antique Byzantine fortification can be found on the inner faces of the defences at the cities of Resafa/Sergiopolis and Dara in Asia Minor (Fig.3).¹¹ At Zalabiyeh the evidence of two further such staircases are visible on the most western end of the south wall and also just south of the large tower on the southern section of the east wall.



Fig. 2. Interior of only extant gate
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The wall itself does not exceed c.1.5 metres in thickness; this suggests that it was unlikely to be exceptionally tall as this would cause it to be unstable. Other Byzantine fortifications can be drawn upon as potential indicators of the height of Zalabiyeh's walls. At Dara the Justinianic additions atop the Anastasian defences are c.1.5 metres deep and the height of these defences has been put at c.8.5 metres.¹² The Anastasian phase at Dara was 4 metres thick and at least 10 metres tall, not including the battlements.¹³ The Anastasian Wall in Thrace varied in thickness between 3.3-3.5 metres. Based on comparisons with Resafa's walls which are 2.8-3.1 metres deep and 11.7 metres tall it was concluded that the Anastasian Wall being of similar thickness, it would likely have exceeded 10 metres in height.¹⁴ Whilst the walls at Zalabiyeh could have been 10 metres tall or more we deem this highly unlikely; firstly, if the wall was this tall then it would have compromised its stability and therefore the strength of the wall and secondly, if the walls of far more important and better built fortifications barely exceeded 10 metres in height why would those of Zalabiyeh been constructed any higher? An estimated height of no more than c.8.5 metres is preferred here as a likely height, in line with the Justinianic additions at Dara. However further

¹¹ Harrison 1984, 106.

¹² Whitby 1986, 753 and fig. 41.3.

¹³ Whitby 1986, 753 and 770.

¹⁴ Crow and Ricci 1997, 245, 252-253. Lawrence 1983, 199. Hof 2009, 815.

excavation and study at Zalabiyeh may give us a better idea of the walls likely height but such work will have to wait until a time that the work may recommence.



Fig. 3. Interior of northern gate at Resafa
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3.1 Dating the defences and testing Procopius

In terms of dating the fortifications we see at Zalabiyeh, scholars have traditionally relied on, perhaps rather lazily, the single sentence concerning the site to be found in Procopius' *Buildings*. Procopius would have us believe that the defences of Zalabiyeh are the sole work of the Emperor Justinian. Though he does acknowledge the presence of a fortification on the site prior to the reign of Justinian and that it was in a state of ruin.¹⁵ He informs us that Justinian had it “rebuilt in such a magnificent style that... it took second place in point of strength to no single one of the most notable cities”¹⁶. By saying that Zalabiyeh was “rebuilt” suggests that the whole fort was constructed anew, and it has been taken for granted that the fortress we see today is the one built completely during Justinian’s reign. However, Procopius’s work must be taken with significant caution as the *Buildings* was a panegyric work intended to show Justinian in the best possible light. In recent years the reliability of the *Buildings* has come under increased scrutiny, Procopius seems to have been prone to exaggerating the dilapidation of sites that he credits Justinian with restoring or rebuilding, as well as exaggerating the works that Justinian actually undertook at these sites. Just some of the examples of the questionable level of Procopius’ reliability include the fortifications of the cities of Dara, Resafa and Halabiyeh.¹⁷ In all three cities it has been shown that he was prone to exaggeration regarding either the state of disrepair of the sites prior to

¹⁵ Procopius, *Buildings* II, 12.

¹⁶ Procopius, *Buildings* II, 12.

¹⁷ Croke and Crow 1983, 153; Hof 2009; and Lauffray 1983.

Justinian's work, or to the extent of work carried out under Justinian - in the case of Resafa the evidence found in Procopius is potentially completely fabricated.¹⁸

Therefore, we believe Procopius' account of Zalabiyeh is also highly questionable. This belief is based on the remains of the defences and the observations made above regarding the masonry techniques visible; it is clear that the defences show at least two very distinctive techniques of wall building. The curtain wall, the gate, the southern tower of the gate, the remains of the most northerly tower and all the small towers have been built using walls composed of a mixed rubble and cement core with ashlar outer faces (Fig.4).



Fig. 4. Cross-section of eastern wall
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This is not an unusual wall building technique and had been favoured in the Western Roman Empire as well as being utilised by architects and masons in the early centuries of the Byzantine Empire.¹⁹ However, it would appear that Byzantine builders and engineers were unable to replicate the West Roman cement used in the core which, once dry, was supposed to be very hard, strong and stable enough to stand without outer the ashlar facing.²⁰ The Byzantine cement by comparison was apparently inferior and it was only the facing that held up the wall and gave it its strength.²¹ Once this outer skin was damaged the

¹⁸ Hof 2009.

¹⁹ Mango 1986, 10.

²⁰ *Ibidem*.

²¹ Mango 1986, 9-10. Hof 2009, 819.

rubble core and the rest of the wall lost its cohesion and became increasingly unstable and prone to collapse.²²

The remaining large towers are built differently; the walls of these towers are made up of smaller and more regularly cut ashlar throughout (Fig.5). The towers built in this manner are in significantly better condition than those built using the rubble and concrete core. This suggests that this type of construction was the more stable and sturdier of the two. It was certainly the more expensive of the two to build due to the need for more ashlar, which required more labour to fashion and transport the blocks. Based on Procopius' account one might assume that the rubble core phase which makes up the majority of the defences at Zalabiyeh is attributable to Justinian if he had "rebuilt" it and that the solid ashlar phase was a later repair. However, there are many factors that actually seem to suggest that it was the ashlar phase that is most likely to have been the work of Justinian.



Fig. 5. Ashlar-built tower on eastern wall
© Emma Loosley Leeming & Joshua Bryant

Archaeologists at Zalabiyeh's sister site, Halabiyeh, were faced with a similar problem as Procopius claimed that Justinian found Halabiyeh as a ruin and completely rebuilt it, as at Zalabiyeh.²³ However, he then went on to say that only the north wall was rebuilt.²⁴ A thorough investigation of the city's defences led Lauffray to conclude that the north facing wall and its towers were indeed dateable to the reign of Justinian (confirming Procopius'

²² Hof 2009, 819-820.

²³ Procopius *Buildings* II, 11.

²⁴ Procopius *Buildings* II, 19.

assertion) and that the southern defences and most of the eastern wall were built earlier.²⁵ It is the difference in wall building techniques between the northern phase and the southern and eastern phases at Halabiyeh that is of interest to us regarding the defences at Zalabiyeh; the walls of the Justinianic phase of Halabiyeh are built using the same technique found in some of the larger Zalabiyeh towers, being wholly constructed of regular cut ashlar. By comparison, the southern and eastern phases of Halabiyeh, which Lauffray deemed to predate Justinian,²⁶ were built using the ashlar faced, rubble and concrete core method seen in the majority of the defences at Zalabiyeh.

Due to the quality and cost that would have gone into building the solid ashlar phase at Zalabiyeh it also seems very likely that this expenditure cannot reasonably be attributed to any of Justinian's successors. This situation seems likely because Justinian, through his many and often lengthy wars, as well as his extensive building programmes, had completely depleted the treasury making it extremely unlikely that any of his successors would have committed scarce resources to the costly maintenance of a very minor and largely ineffective fortification.²⁷

During the 2010 excavation we found evidence that the site was occupied from the late fifth/early sixth century for a period of no more than 250 years and was abandoned at some point in the Umayyad or possibly very early Abbasid period (see below).²⁸ While it is possible that the solid ashlar phase at Zalabiyeh could have been due to repairs made in the early Islamic period, logic and the evidence from within Zalabiyeh makes this seem unlikely. The Islamic buildings found within the perimeter of the fortress seem relatively basic and those excavated so far have all been built from irregular chunks of local basalt and spolia from earlier buildings. If the early Islamic occupiers of the fort did carry out repairs one would expect these repairs to be similar in technique to those used on the interior buildings; however, the high quality and cost of the repairs make it unlikely that these later occupiers could have afforded such work.

When Zalabiyeh became part of the *Dar al-Islam* its previously limited strategic value became even more diminished as it now lay in the centre of a vast empire and was no necessary as part of a defence for a vulnerable frontier. It therefore would also seem incongruous that the Islamic rulers of Zalabiyeh would have gone to the effort of carrying out expensive high-quality repairs on a fort of little strategic value to them.

Regarding the date of the main phase of defences at Zalabiyeh, we hypothesise that there is some evidence for a potential candidate to be credited with their construction. As mentioned earlier, the main phase at Zalabiyeh bears a remarkable similarity, in terms of masonry, to the southern and eastern defence of Halabiyeh. Lauffray suggested that this

²⁵ Lauffray, 1983, 148.

²⁶ Lauffray, 1983, 34 and 148.

²⁷ Lawrence 1983, 200.

²⁸ Loosley 2011, 266.

phase of the town was probably built during the reign of the emperor Anastasius 491-518 CE.²⁹ Two major fortifications attributed to Anastasius, the primary phase of fortifications of the fortress of Dara and the eponymous Anastasian wall, both found in modern day Turkey, were constructed with ashlar faces around rubble and concrete cored walls.³⁰ This is by no means irrefutable evidence of Anastasius' potential role at Zalabiyeh but is merely a suggestion. If Justinian needed to rebuild significant sections of the Anastasian defences at Halabiyeh it would not seem ridiculous to suggest that Zalabiyeh would have required some work as well and being in relatively close proximity to the works being carried out at Halabiyeh it would have made sense to repair it at the same time. So far, no material predating the very late 5th/early 6th century has been recovered from the site.³¹ While this could support an Anastasian date for the primary phase of the fort it is by no means conclusive proof. With other ancient sources suggesting a much earlier occupation of the site there is potential for earlier material to be uncovered that could push back the date of the primary phase of occupation and/or construction.

Procopius' assertion that Justinian's work at Zalabiyeh meant the site took "second place in point of strength to no single one of those most notable cities"³² seems to be quite an exaggeration based on the remaining evidence. The potential instability of the primary phase of defences mentioned above and the relative thinness of the walls when compared to other fortifications of the period do not support Procopius' claim regarding the site's defensive capabilities. While the defences do sit atop a fairly steep hill, this slope is not very tall and would have been of little hindrance to a determined and well-equipped attacking force. The site does benefit from backing onto the river, making an attack from the west very tricky, but this means little if any of the other walls were breached. At Dura Europos, which also backed onto the river, the land walls were breached leading to the loss of the city. Therefore, it would appear that not only does Procopius' account of Zalabiyeh seem to exaggerate the level to which Justinian rebuilt the fortress, it also seems that he exaggerated the defensive capabilities of a fort that was clearly only repaired by Justinian rather than rebuilt. Significant further study is required regarding the standing remains at Zalabiyeh in order to understand them fully and it is to be hoped that we will be able to return at some point and continue this process.

4. Results of the 2010 Season of Excavation

4.1. The excavation strategy for the first season

Given the limitations on surveying mentioned above, it was decided that the work would commence with the opening of three exploratory trenches in the first instance with an initial aim to try and establish a *terminus post quem* for the occupation of the site. The plan

²⁹ Lauffray 1983, 34. Hof 2009, 819.

³⁰ Kinnier 1818, 440. Crow and Ricci 1997, 245.

³¹ Loosley 2011, 266.

³² Procopius, *Buildings* II, 12.

had been to excavate in the vicinity of the main entrance to the fortress in order to try and ascertain when the two side arches on either side of the central gate were closed³³, but a geological team conducting tests ahead of the dam construction had drilled a large crater in this region that reached a depth in excess of five metres. Due to the sandy, silty soil of the cliff this rendered that area of the site unstable and so a new strategy was formulated; this entailed opening three trenches across the site, each of them chosen for a particular research question and because all three had clear evidence of substantial basalt walls at the surface level.

Trench 1 was to the south of the site and close to the wall of the fortress in order to explore whether the site was developed right up to the fortifications and, if so, what the implications of this were for the defence of the citadel. Trench 2 was also towards the southern end of the site but was north and west of trench 1 and nearer to the Euphrates having been chosen as a possible site for the location of central administrative buildings. Finally, trench 3 was opened to the north against a substantial rise in the landscape in order to explore if this feature was natural or manmade and whether or not it served a particular defensive function within the castle. The final constraints on this work were that the unstable nature of the cliff meant that it was too dangerous to excavate within 2-3 metres of the cliff edge and, in addition, various sectors of the site had been damaged by antiquities thieves. Although we endeavoured to avoid the areas disturbed by looters, trench 2 did overlap with a thief's excavations on its north edge as the trench was expanded.

The stratigraphy was remarkably consistent throughout the site and, with the exception of one much later Islamic glazed ceramic fragment found on the surface south of the castle walls by a local worker, all finds were Byzantine to Umayyad in date leading to the supposition that we were dealing with a C5th/C6th – mid C8th CE window with only two phases of occupation (Byzantine and early Islamic) before the site was abandoned. The excavations in trenches 1 and 2 found evidence of the Umayyad era, whereas trench 3 yielded a higher volume of Byzantine material. This means that the northern sector around trench 3 may possibly have fallen out of popular use in the later phase at the site, but without further excavation we cannot be sure as to the extent of Byzantine era activity in the more southerly zone.

³³ See above why we discounted this interpretation.

4.2 The southern sector

Trench 1 was located in the south-eastern part of the site and quickly yielded a remarkably complex arrangements of walls and gypsum pavements. It was the smallest of the three trenches and was finally expanded to an area of 7x8 metres in all (Fig.6).

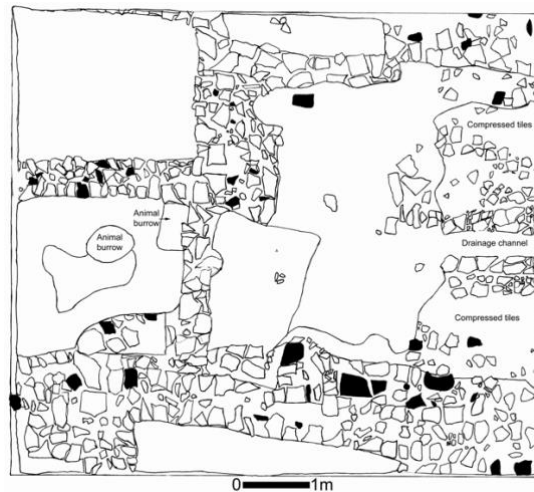


Fig. 6. Plan of trench 1 facing north
© Drawing by Emma Loosley Leeming & Joshua Bryant

To the east of the trench, abutting the citadel wall, was an open area paved in a mixture of gypsum tiles, gypsum, and pebble pavements and, in one case, a polished gypsum threshold. This was bisected by a drainage channel running east-west across the first half of a possible courtyard. This area was surrounded on the north, west and south sides by walls constructed of a basalt-rubble technique and on the south side the wall had the polished gypsum threshold mentioned above. To the west of the trench there were two small chambers with gypsum and pebble-plastered walls and to the north and south of the trench were two more partially exposed rooms. All these rooms possessed extensive evidence of burning and large amounts of charcoal were present. The finds from the trench suggested an Umayyad period occupation (Fig.7).



Fig. 7. Trench 1 looking east.
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Trench 2 was located to the north and west of trench 1 and measured 10x10m. It revealed two large chambers on the north side of the trench with south facing entrances leading onto a corridor/small road. There were also two chambers (partially excavated) on the S side of the corridor. The corridor was mainly covered with a gypsum and pebble rough flooring and had two *tannours*³⁴ at the western edge of the trench (Fig.8).

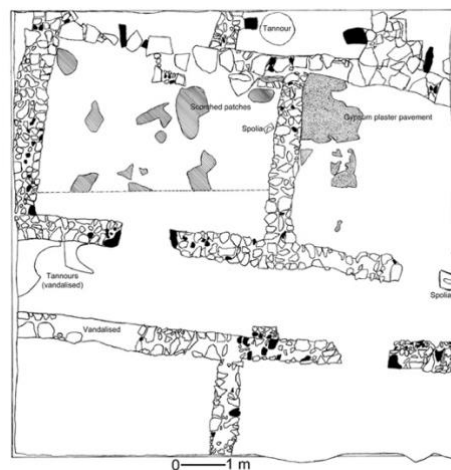


Fig. 8. Plan of trench 2 facing north
© Drawing by Emma Loosley Leeming and Joshua Bryant

³⁴ A *tannour* is a form of clay oven of a type still in use in the region today.

Of the two southern chambers, that further to the west yielded many finds, including a Byzantine bronze coin and a lot of bone, but the eastern chamber was empty except for a small patch of burnt brick. The eastern chamber and both chambers in the north of the trench had extensive evidence of burning throughout one particular context. The northwest chamber had a brick and stone threshold in its northeast corner, with some evidence of gypsum plaster around it. Behind this at the north end of the trench was a small chamber with a third *tannour*. The easternmost chamber had been partially paved with a fine gypsum and lime plaster and was bisected east-west by a gap that had raised gypsum on either side suggesting that it was perhaps following the path of a former water channel. This plaster appeared to have been truncated in antiquity and is now limited to the northwest quadrant of the chamber.

Therefore, in summary, this trench appeared to show two chambers north and two chambers south of a corridor running east-west and there is ample evidence of food preparation in this area, particularly around the two *tannours* in the corridor. The occupation appeared to have ended with an incidence of burning in the Umayyad era (see below for more discussion of this) as no finds were more recent than this period and the usage of Byzantine spolia in the walls suggested that we were dealing with an early Islamic phase. Finally, the only anomaly appeared to be the lack of usage of the chamber in the southeast corner of the trench, which appeared to be sterile and required further investigation (Fig.9).



Fig. 9. Trench 2 looking north.
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4.3 The northern sector

The trench opened in the north of the site was under the direction of personnel from the Directorate General of Antiquities and Museums (DGAM)³⁵ and, as mentioned above, it was opened in an attempt to understand the occupation of a natural rise in the landscape in this sector of the castle. Trench 3 was located south and west of the main gate and was expanded to an area covering 10x8 metres over the course of the excavation.

The trench clearly showed two chambers leading off of a raised lane to the south of the excavated area. The exterior lane was paved in the pebble and gypsum plaster mix observed in the other trenches and both rooms were two steps down from the road, suggesting that the buildings in this area of the site were terraced into the natural contours of the cliff. The western chamber had a test pit excavated on its eastern side, which confirmed that this is the only occupation level at this point in the site. The eastern room had a *tannour*, which was perfectly preserved, unlike the partial survival of the three *tannours* in trench 2, but this was sadly vandalised overnight during a break-in to the site. There was also clear evidence of food preparation and this area also had widespread charcoal and burnt inclusions as with the other trenches (Fig.10).



Fig. 10. Trench 3 looking east.
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The main difference in this region was that the majority of finds were Byzantine rather than Umayyad and suggested that this was a Byzantine occupation phase, rather than an Umayyad level as was the case with the other two trenches. This hypothesis was supported by the lack of spolia and the fact that elements such as a Byzantine limestone water channel were still in situ.

³⁵ Mr Yaarob Abdullah was the head of the Syrian side of the mission.

4.4 Conclusions drawn from the 2010 season of excavation

By the end of the season, we had built a provisional picture of site usage. The evidence pointed to a window of occupation of around 200-250 years approximately from the end of the 5th/early 6th century to the mid-8th century CE. This hypothesis appeared to be supported by the results of by the test pit in trench 3. Both sectors of excavation revealed dwellings compatible with barracks accommodation, which would fit in well with the usage of the site as a military outpost. This is also strengthened by the location of a secondary watchtower on the bank of the Euphrates directly north of the site.

Trench 3 gave evidence of Byzantine occupation as the finds from this area were overwhelmingly Byzantine with few Umayyad ceramics and all the walls of monumental construction with no evidence of spolia. On the other hand, trenches 1 and 2 produced mainly Umayyad material with some Byzantine artefacts – most notably a coin, a fragment of a gypsum mirror and some fragments of sigillata ware from North Africa. In addition, the varying pavement surfaces and the presence of well-dressed limestone blocks re-used in the cruder basalt walls, which in places show traces of gypsum and lime plastering, suggest an Umayyad phase of occupation.

4.4.1 Accident or design? Interpreting the evidence of fire

The widespread and significant presence of burning evidenced by the extensive charcoal inclusions and areas of burnt brick suggested that the site was abandoned due to a fire. The scattered burnt patches and distribution of scorched brick are consonant with a collapsing roof. We know that roofs in this region were constructed of bricks/tiles supported by wooden beams above stone or mud brick walls³⁶ and this scattered pattern of charcoal and burnt brick suggests that the roofs collapsed into the rooms leaving the walls largely unscathed, but nevertheless leading to the abandonment of the site.

It was unclear to the excavators whether this episode was the result of an accident, perhaps precipitated by an incident with one of the many *tannours* excavated, or a deliberate process of setting seats of fire in order to destroy the buildings. In order to understand this, process a forensic archaeologist was consulted to analyse the pattern of scorch marks mapped through drawings and photographs and to advise on the spread of the burning.³⁷ The opinion of Karl Harrison, a forensic archaeologist and specialist in archaeological fires,

³⁶ The reconstruction of the Dura Europos synagogue in the National Museum of Damascus gives an impression of how the roof structure of the buildings at Zalabiyeh may have looked. Although built 300 years earlier than the earliest phase at Zalabiyeh, evidence suggests that vernacular building types in the region were extremely conservative and the lack of building materials other than several varieties of stone narrowed the options available.

³⁷ The authors would like to thank Dr Karl Harrison of Cranfield University for kindly viewing the evidence and offering an interpretation of what happened at Zalabiyeh. The hypothesis presented is based on his analysis of the data and we fully acknowledge his expertise in unravelling the mystery. It goes without saying that any errors in this interpretation are the fault of the authors.

was that there was not enough fuel for the fire to have spread as a result of chance. The relative scarcity of wood on the site and the prevalence of brick and tile as roofing material meant that, even with hot winds blowing across the Syrian steppe, a naturally occurring fire would have collapsed the roof downwards and extinguished the fire. This suggests a “slighting” episode where a series of fires was set deliberately to put the fortress out of use and prevent a return to the site; the evidence of the excavation so far strongly indicates that this action was successful and that the fires did mark the end of occupation at Zalabiyeh.

4.4.2 Evidence of trade

Across the site a number of fragments of *Terra Sigillata* were excavated suggesting trade with North Africa, although the rest of the ceramic evidence discovered appeared to be of more local origin.³⁸ In addition the excavation yielded a significant number of glass fragments of both clear and coloured varieties in different stages of preservation. Intriguingly there was also a type of black glass that was far more stable than the other varieties and did not appear to suffer unduly from flaking and iridescence.³⁹

The dry conditions and lack of humidity on site meant that a number of iron artefacts were discovered, including a perfectly preserved nail that was 9cm long. Most notable amongst the metal finds though, was a small and decorative copper buckle with a diameter of 2.5cm and punched with a pattern of five holes, and a bronze coin. Both these finds came from trench 2 and the coin was clearly labelled M with a cross above the letter. Therefore, it could be identified as a Byzantine 40 nummi coin, but the obverse was more corroded and obscured by soil. This meant that it was impossible to tell the reign of the emperor the coin was minted in until conservation was undertaken in the laboratories of the National Museum in Damascus.

Finally other notable finds included a fragment of an alabaster mirror and a small core of obsidian, which does not occur naturally anywhere in the region and so must have been carried to the site from a significant distance. Therefore, there was evidence that the inhabitants of Zalabiyeh had access to objects from all over the Byzantine Empire, with items from North Africa and, probably, Anatolia being found in conjunction with those manufactured in the local vicinity.

³⁸ Diagnostic ceramic fragments were recorded and stored at Deir Ez Zor Museum to await a future study season so the authors cannot comment in depth on ceramic typologies at Zalabiyeh in this article.

³⁹ It was envisaged that samples of these fragments would be taken in the 2011 season and analyzed by Professor Ian Freestone at the Institute of Archaeology, University College London. We remain hopeful that this analysis may be conducted at some time in the future.

5. Conclusion

After only one season there is only so much that we can infer from the data, not least because the current situation in Syria has prevented the export of glass and carbon samples that we hoped would enable us to elucidate the date of the site and shed light on possible trading partners with Zalabiyeh. Nevertheless, we have made significant progress in understanding when and why the fortress fell out of usage; the evidence thus far has also given a strong indication that it was almost certainly founded in the early Byzantine era, rather than being established on the site of a much earlier citadel.

The nature of the occupation still remains unclear as the chambers excavated in all three trenches suggest that they were small units utilised for primarily domestic functions. This is illustrated by the presence of tannours in trenches 2 and 3, with those in trench 2 still having charred chicken bones *in situ*, and all three trenches bearing some evidence of drainage channels. The significant question is whether or not this represents barracks accommodation reflecting a primarily military usage of the site or, as Liebeschuetz posits, a series of fortified settlements spread along the Syrian *limes* that provided a safer environment for civilians than living in unprotected villages that might be easily looted by either nomadic Arabs or the Persian army. Persuasive as this argument may be, it is difficult to come to any firm conclusion as to whether we are dealing with a military, civilian or indeed mixed site, until any administrative or civic buildings are located.

Finally, the evidence thus far strongly points to a deliberate firing of Zalabiyeh in the 8th century. Who carried out this act and why it was necessary are the two most intriguing questions raised during our excavation and it is to be hoped that at some point in the future there will be a chance to try and answer them.

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