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## **A First Insight into the *Intra Muros* Settlement Dynamics of the Gadara Hilltop, from the Hellenistic Period to Modern Times**

### **Introduction**

The German Archaeological Institute (DAI) relaunched excavations at the site of ancient Gadara in northwestern Jordan in 2018<sup>1</sup>, focusing on the hilltop *intra muros*. The aim is to understand the settlement dynamics inside the fortification ring at this site, beginning with the Hellenistic Period (FIG. 1).

While DAI research activities have targeted urban development dynamics of ancient Gadara on a larger scale over the last 35 years<sup>2</sup>, the project pre-

sented by this paper focuses on how these changes happened on a smaller scale. That means in the southeastern part of the fortification, between the southeastern pentagonal tower with a gate of the Hellenistic enclosure and the hypogeum located just to its north (FIG. 2). By studying these changes as indicators of expansion, integration and appropriation, retraction and fragmentation, and eventually destruction and/or abandonment processes, it is possible to comprehend the use of space in each settlement phase. This dataset is complemented by the information on land and resource use of the ancient hinterland, collected by the DAI's Gadara/Umm Qays Hinterland Survey since 2010 (Bührig 2015a; Bührig 2016). A further project analyses the recent settlement history and building techniques of the late 19<sup>th</sup>/early 20<sup>th</sup> century (see paper by Zenker and Bührig in this volume).

<sup>1</sup> The project is being carried out in cooperation with the Department of Antiquities of Jordan (DoA), having been preceded in 2015 by a *sondage* in the same area. We would like to thank H. E. Dr. Fadi Bala'awi, director general of the DoA, and our colleagues from the DoA in Umm Qays, especially Moussa Almelkawi and Ibrahim Alroussan, for all their support.

<sup>2</sup> The DAI has been conducting research in Gadara since 1987 on topics such as large-scale urbanization and planning processes as well as building construction (for further reading, see Bührig 2008a; Hoffmann and Bührig 2013; and Weber 2002).

Ancient Gadara is located close to the modern town of Umm Qays, in a fertile region in the extreme northwest of Jordan. The site is a popular destination, having been recently heralded as one of the “Best Tourism Villages of 2022” by the World Tourism Organization.<sup>3</sup> Criteria are, among others, the cultural and natural resources of the village and their conservation and promotion.

Gadara developed gradually over the course of five centuries from a fortified settlement in the Hellenistic Period to an open linearly organised Roman city, expanding the urban area far west to the fertile plateau of *Ard al’Ala* (for a detailed account, see Bührig 2008b; Bührig 2015b). The main axis paved with basalt ran from the east to the west of the city, connecting Gadara supra-regionally and enabling the city to become part of the Decapolis. It is along this axis that most public buildings were located, while the residential quarters were built in a second row behind (Bührig 2015b). This urban organisation was maintained also in the Byzantine period, extended, among other things, by numerous church complexes. In the Umayyad Period, the settlement started shifting its focus to the western side with no large building activities visible in the archaeological record. A major earthquake in the middle of the 8<sup>th</sup> century destroyed large parts of the city’s buildings. In the aftermath, under Abbasid and Ayyubid-Mamluk rule, Gadara remained a small settlement with a more rural character (Mershen and Knauf 1988: 135–137; Weber 2002: 83–87; Bührig 2008b: 102–107).

<sup>3</sup> [http://unwto.org/news/best-tourism-villages-of-2022-named-by-unwto?utm\\_source=ssmm&utm\\_medium=ssmm&utm\\_campaign=ssmm](http://unwto.org/news/best-tourism-villages-of-2022-named-by-unwto?utm_source=ssmm&utm_medium=ssmm&utm_campaign=ssmm)

### Settlement Dynamics Intra Muros: Excavations in the Southeastern Part inside of the Fortification Ring

The excavation area is located at the highest point of the ancient settlement mound, *intra muros* of the southeastern part of the hill and fortification ring. The area was chosen because of its particular potential of having been left open after the Umayyad Period and not resettled until more than a thousand years later, when families, such as the Melkawis and Rousans, built their houses and cultivated their fields there. Aerial photographs taken by the German-Turkish Monument Protection Command (Deutsch-Türkisches Denkmalschutzkommando) in 1917 show that the inhabitants of the upper village of Umm Qays, so-called Hara Foqa, still had a field there that year. In contrast, in the southwestern part *intra muros*, investigated by Günther Schauerte in the 1990s (Hoffmann and Bührig 2000: 202–204), the inhabitants had partially cleared the area down to the bedrock at the end of the 19<sup>th</sup> century and reused parts of the ancient building masonry into their new buildings (so-called *Bait Melkawi*).

Extensive excavations outside and on the Hellenistic-Roman fortification were carried out by the DAI under the direction of Adolf Hoffmann between 1991 and 1997 (Hoffmann and Bührig 2000). Together with the summarized results on the Hellenistic fortification by Brita Jansen in her PhD thesis (Jansen 2020), this *extra muros* research adds valuable insight to the current investigations carried out *intra muros*.

Three trenches (S1, S2, and S3) have been opened since 2018 by the project presented in this paper (FIG. 3). Trench S1 lies adjacent to the gate and entrance of the fortification, while trenches S2 and S3 are located further north, sur-

rounding an already opened hypogeum/ tomb and a *sondage* opened in 1999 by Taher Bataime on behalf of the DoA on its eastern side. The material excavated so far ranges from the beginnings of the settlement, with the construction of the Hellenistic fortification around 200 BC, through the earthquake in the middle of the 8<sup>th</sup> century and its aftermath, to the new settlement of the hilltop from the second half of the 19<sup>th</sup> century onwards.

#### *Settlement Phases, Trench S2 and Trench S3*

This article focuses on the contextualisation of the hypogeum complex, *i.e.*, on the analysis of the Trenches S2 and S3. The five settlement phases and the stratigraphy described in the following section are based on the results of the excavations surrounding the hypogeum (FIG. 4), which, as the first building analysis shows, has had numerous building phases with structural changes. Trench S2 was first opened in 2018 and was extended substantially, integrating now also Trench S3, first opened in 2021 (Bühlig, Hamel, Möller, and Watkins 2021). Phasing of these two trenches is more advanced than of Trench S1, which will be joined at a later point. The archaeological evidence spans from the Late Roman/Byzantine Period (or earlier) until the Late Ottoman/Modern Period (late 19<sup>th</sup>/early 20<sup>th</sup> century AD).

#### Phase 5: Possibly Late Roman Period/ Byzantine Period or Earlier

Phase 5 (FIG. 5) is, so far, the oldest known occupation in Trench S2 and Trench S3, possibly dating to the Late Roman/Byzantine Periods or earlier. The building structure of a hypogeum has been identified north of the Hellenistic-Roman fortification, dating to this oldest phase. It is at the moment unclear whether it was already subterranean

or a free-standing building in the first construction phase, which could have been part of a larger building complex. The structure is founded on bedrock in the northwest, while the rest of the foundation has not yet been unearthed. A wall running almost parallel to the outer wall has been identified, but its function remains still unclear. The fill layers covering the northern outer wall of the hypogeum have been deposited in a much later period, including the Umayyad, Ottoman, and Modern Periods. This indicates that there has been a major remodelling of the northern area.

#### Phase 4: Late Roman Period/Byzantine Period or Earlier

Phase 4 (FIG. 6) dates to the Late Roman/Byzantine Periods or earlier. A room was located south of the hypogeum, of which the eastern walls were built during this phase, as were the still standing foundations of the northern and western walls. It is unclear how the room was used at that time; possibly it was covered by a trodden floor. Different phases of use at a later phase could be identified, which will be described in more detail below. In this phase, the room had an opening to the north, leading in the direction of the hypogeum, but it is not clear how it connects to it or if there might have been a second room on a higher level on the barrel vault of the hypogeum.

#### Phase 3: Late Roman Period/Byzantine Period

In Phase 3 (FIG. 7), a fill or leveling layer was deposited against the outer eastern wall of the room, which also provides the dating for this phase and a *terminus ad* or *ante quem* indicator for the previous phase.

Phase 2: Late Byzantine Period/  
Umayyad Period

Phase 2 (FIG. 8) is divided into three sub-phases. Phase 2c is the second use of the room, in which a flagstone floor made of carefully crafted large limestones was set. The clay layer under the floor contained pottery that date it to the Late Byzantine/Early Umayyad Period. A third use of the room is when the opening in the northern wall was closed and a table, platform, and a step were set in front of it. This is the last occupation of the room. Probably it is also during this time that a second fill or leveling was deposited east of the room.

Phase 2b is when there was a collapse into the room. The pottery that the collapse contained is from the Byzantine/Umayyad Period. A theory at the moment is that it might have been caused by an earthquake. There have been several identified in the area, of which the one in mid-8<sup>th</sup> century AD seems to be the most likely, since pottery of the next sub-phase dates to that period. On top of the table, a jug (oinochoe) was found *in situ*, depicting a snapshot of the moment of the collapse. The collapse contained large slabs, storage pottery, and tableware crushed by the weight.

Phase 2a shows evidence of salvage and/or looting activities, especially in the south, southeast, and west parts of the room. Part of the walls were dismantled, leaving the foundation walls in the west. This is also probably when dry walls were built in the area holding backfill from the salvage/looting activities and collapse. In the whole area of the tomb, various levelling layers surrounding the hypogeum were identified in this phase.

Phase 1: Late Ottoman/Modern

The area has an occupation hiatus until the late Ottoman and modern

Phase 1 (FIG. 9). An interesting structure from this phase is a water channel, running southwards down the slope. The channel was connected to the upper village, the so-called *Hara Foqa* (late 19<sup>th</sup>/early 20<sup>th</sup> century). The area was used as a refuse deposit in this phase. This is shown by micro-deposits of modern material, burned material, and pits that cut up to 1.5 m deep into the ground.

**Results and Further Perspectives**

Modern use of the area for refuse deposits and burning, together with ancient looting and salvage activities, make it difficult at times to understand the above-described archaeological record. Nevertheless, the results of the excavation activities have enabled a first phasing of the northern part of the excavation area.

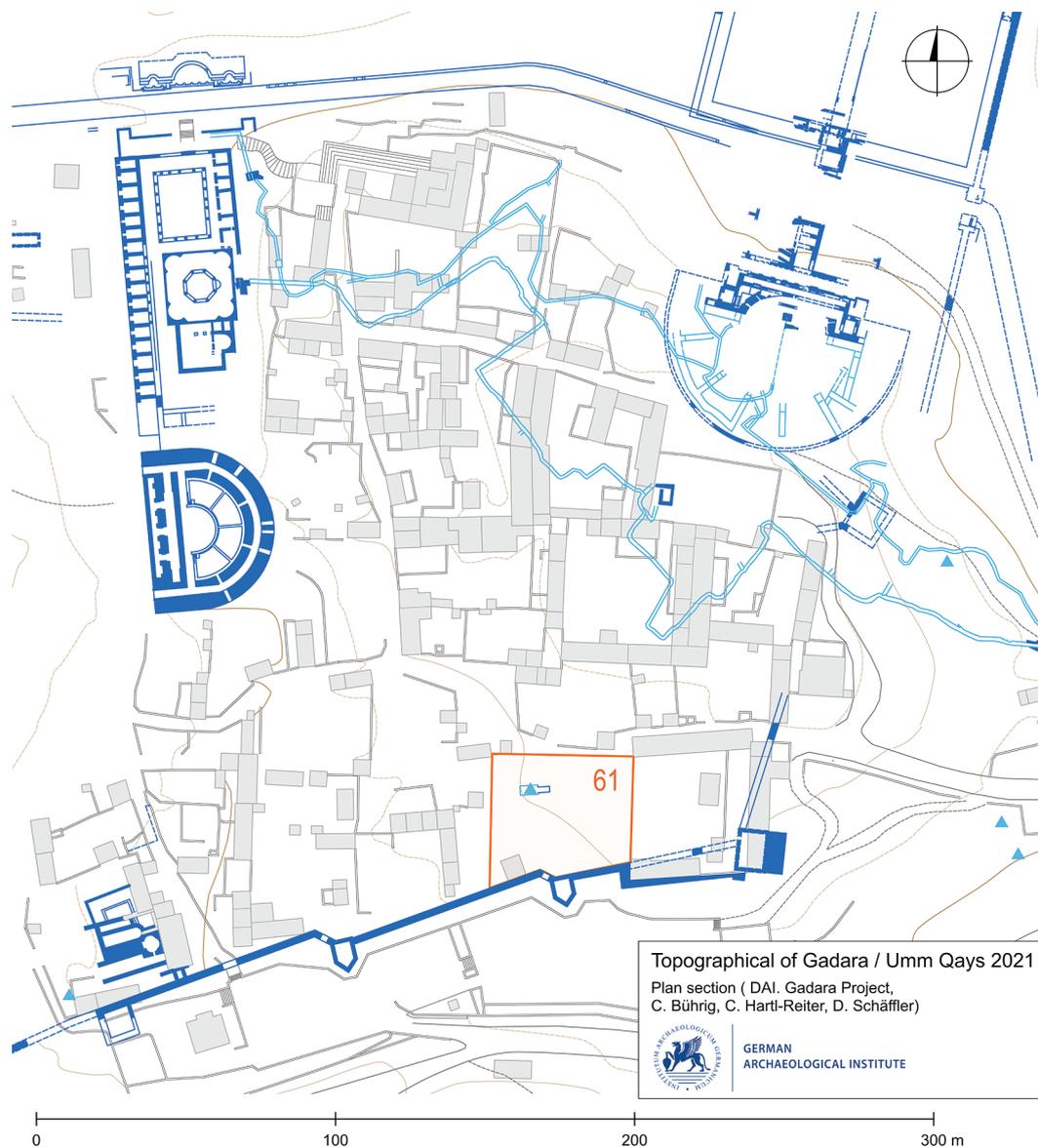
It is clear that the hypogeum and its adjacent structure underwent various changes over the centuries, well visible in the archaeological record of the room to the south and the building phases of the structure itself. However, there are still questions that remain open and we will seek to answer them over the course of the next excavation seasons. What is the outline of the hypogeum to the west and to the south? The assumption is that to the west more structures will be found pertaining to the hypogeum, while to the southwest and south it will be more difficult to get viable results due to a modern slope running steeply to the west. What are the single building phases of the hypogeum? This will require an in-depth building analysis combined with the results of its stratigraphic context. How are the structures excavated so far connected to the fortification? For this, Trenches S2 and S3 shall be joined with Trench S1 in the south. This can give answers as to how the larger spatial context of

the hypogeum, including its access from the fortification entrance, would have changed over the course of its use and later abandonment. Considering the entire excavation area *intra muros*, the facility outlined here must be integrated and analysed in its context: Up to what point was the fortification wall effective as a boundary for the area? Further, how do the structures in Trench S2 and

Trench S3 relate to Trench S1 bordering the outer fortification wall to the south? These connections will be specifically analysed in the season planned for 2022. The examination and comparison with the findings from the excavations in the southwestern settlement area (already mentioned at the beginning) also allow us to expect further conclusions about the settlement dynamics on the hilltop.



1. Gadara/Umm Qays. Ancient settlement area, overview to the northwest (photo courtesy of DAI, C. Hartl-Reiter).



2. Gadara/Umm Qays. Topographical map 2021. Plan section of the settlement hill with the excavation Area 61 (image courtesy of DAI, C. Bührig, C. Hartl-Reiter, and D. Schäffler).



3. Gadara/Umm Qays. Orthophoto of the excavation area with the Trenches S1–S3. Season 2021, based on a 3-D model (image courtesy of DAI, D. Schäffler, C. Hartl-Reiter, and C. Bührig).



4. Orthophoto of trenches S2 and S3. Season 2021, based on a 3D model (image courtesy of DAI, D. Schäffler, C. Hartl-Reiter, and C. Bührig).



5. Excavation area with the Trenches S2–S3. Phase 5, external edge of the hypogeum highlighted (dashed: presumed/unexcavated) (image courtesy of DAI; orthophoto based on D. Schäffler and C. Hartl-Reiter; mapping by C. Bührig and L. Watkins).



6. Excavation area with the Trenches S2–S3. Phase 4, hypogeum with room to the south highlighted (dashed: presumed) (image courtesy of DAI; orthophoto based on D. Schäffler and C. Hartl-Reiter; mapping by C. Bührig and L. Watkins).



7. Excavation area with the Trenches S2–S3. Phase 3, leveling layers shaded (image courtesy of DAI; orthophoto based on D. Schäffler and C. Hartl-Reiter; mapping by C. Bührig and L. Watkins).



8. Excavation area with the Trenches S2–S3. Phase 2, room south of hypogeum covered in flagstones, second use of room with installations highlighted, leveling layer to the east shaded (image courtesy of DAI; orthophoto based on D. Schäffler and C. Hartl-Reiter; mapping by C. Bührig and L. Watkins).



9. Excavation area with the Trenches S2–S3. Phase 1, water channel highlighted (dashed: presumed/unexcavated) (image courtesy of DAI; orthophoto based on D. Schäffler and C. Hartl-Reiter; mapping by C. Bührig and L. Watkins).

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