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FUJAIRAH, UNITED ARAB EMIRATES

Archaeological investigations at multiple tomb sites in Dibba



Season 2019

Orient Department

by Kristina Pfeiffer in collaboration with Christoph Forster, Mechthild Ladurner, Sebastiano Lora, Emmanuele Petiti and Silvio Reichmuth



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In Kooperation mit der Fujairah Tourism & Antiquities Authority wurden die Forschungs- und Rettungsmaßnahmen an zwei bronze- und eisenzeitlichen Fundstellen in Dibba fortgesetzt. Im Areal von Dibba Murba befinden sich mehr als fünf Kollektivgräber mit reicher Fundausstattung. Dieser durch Raubgrabungen und Kiesabbau stark bedrohte Fundplatz wurde weiter ausgegraben und in Vorbereitung weiterer Maßnahmen konsolidiert. Im Rahmen der übergeordneten Fragestellung zu Veränderungen der Lebensweise und Ernährung der Bevölkerung während einer kulturellen und klimatischen Umbruchphase im 2. Jahrtausend v. Chr. wurden zudem die archäo-anthropologischen Ausgrabungen der eisenzeitlichen Schichten am Langgrab in Dibba 76 fortgesetzt.

In cooperation with the Fujairah Tourism & Antiquities Authority, research and rescue activities were continued at two Bronze and Iron Age sites in Dibba. In the area of Dibba Murba there are more than five collective tombs with rich find assemblages. This site, which has heavily been threatened by looting and



Cooperation: Fujairah Tourism & Antiquities Authority.

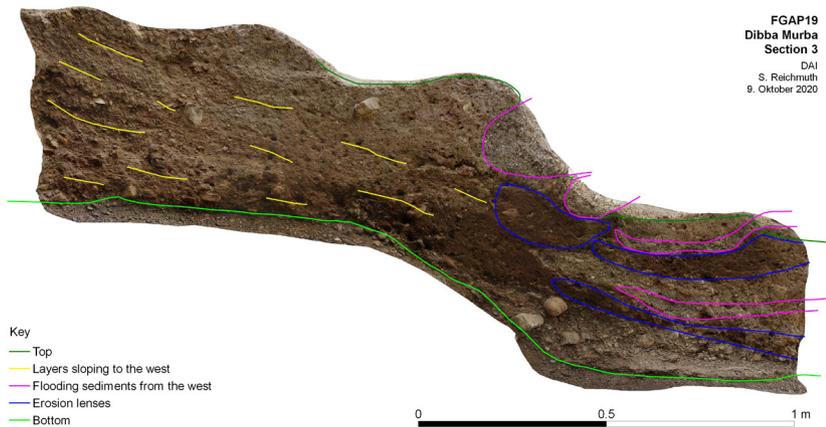
Financial support: Fujairah Tourism & Antiquities Authority.

Head of project: K. Pfeiffer.

Team: C. Forster, M. Ladurner, S. Lora, E. Petiti, S. Reichmuth.



1



2

- 1 Dibba Murba, Fujairah, UAE. Overview of the location Trench 1 within the quarry area of Dibba Murba, consolidation for flooding. (Photo: C. Forster)
- 2 Dibba Murba, Fujairah, UAE. Section with a sketch of the alluvial layers that washed inside the depot, sketch of top and bottom level of the depot, layering and erosion lenses. (Photo: S. Reichmuth)

gravel mining, was further excavated and consolidated in preparation for further measures. In the context of the superordinate question of changes in the lifestyle and nutrition of the population during cultural and climatic upheavals in the 2nd millennium BCE, the archaeo-anthropological excavations of the Iron Age layers at the multiple tomb of Dibba 76 were also continued.

Dibba Murba

- 1 Dibba Murba is an area measuring c. 500 m by 300 m and it is located at the border to Oman. A large Wadi drains into this area which leads to frequent flooding events (Fig. 1). Bulldozer activities in the 1990s revealed a number of Late Bronze and Iron Age multiple tombs. Despite of the protection by the local Antiquities Authorities, looting has been repeatedly carried out. Rescue activities were continued at an extended pit containing a deposit of secondary filling of tomb contents that was preliminary documented during the 2018 season. The main aims were studies of the definition, the dimensions and the stratigraphic relation to the neighbouring tomb. The excavations revealed a thick package of diverse sediment layers. Thin layers of dark soft soil with inclusions of highly fragmented bones, charcoal, pottery fragments and a high amount of grave goods are mixed with gravel and alluvial sediments from the Wadi. The sedimentation processes in the pit were also subject to geological and hydrological processes. Four large sections revealed that the original pit suffered from flood events in prehistory and in modern times which finally have led to a complicated stratigraphy (Fig. 2).
- 2 Both the colour and consistency of the filling layers differ from the surrounding Wadi layers, it can be concluded that there is a high proportion of organic residues. In the upper part of the pit, a boundary of wood is indicated; however, botanical studies are still pending. The stratification of the layers reveals that the pit had been used several times. It is presumed that it served as a repository for burial contents that occurred in multiple tombs when they were fully occupied and intentionally emptied for further use. Although this hypothesis still needs to be consolidated with appropriate

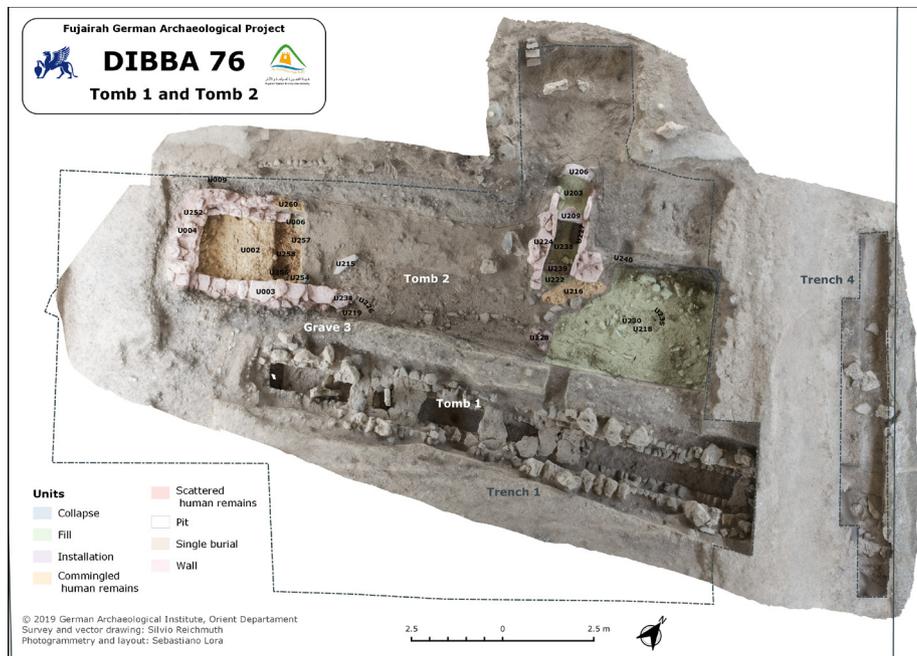


3 Dibba Murba, Fujairah, UAE. Selection of grave goods: bronze arrowheads with incisions that probably marked the identity of the blacksmith. (Photos: C. Forster)

data, both the quantity of 299 artefacts (Fig. 3), types and diversity of the grave goods artefacts in the filling layers can be understood as an indicator for this. Studies on the dating of the finds suggest closed periods per layer, dating within the second half of the 2nd millenium BCE.

Dibba 76 – Archaeology

- 3 At the site of Dibba 76, the archaeological investigations were continued in Trench 1 (Fig. 4) which contains two long tombs, Tomb 1 and Tomb 2 [1]. Tomb 1 reveals the characteristics of Bronze Age long tombs well known from other parts in the Gulf region. It consists of a more than 20 m long narrow two-floor chamber built of and covered with large flat stone slabs. Tomb 2 which runs parallel to it in a WNW-ESE orientation, preserved some similarities with the long tomb type (e.g. the length and width, an entrance staircase at the central fringe of the tomb), but still revealed unique features: First, the tomb's outer walls are either missing or not preserved anymore. The only walled part of the tomb is its western end, where two walls define on three sides (North, West, and South) a 5.5 m long 2 m wide area. The eastern side of this part is not walled and connects with the rest of the tomb apparently without continuity. The entrance staircase, made of three long steps flanked by vertical slabs, stands alone on the northern side of the tomb and it is not connected to any wall anymore. The area of the tomb, which is clearly defined by a foundation trench cut into the natural ground, is filled by commingled human remains. These appear to be organized in clusters – sometimes delimited by stones – in the not-walled area of the tomb but they fill completely the walled area.
- 4 The current working hypothesis is that Tomb 2 may have originally been a standard long grave, which was later partially removed while keeping the central staircase in place. It was then enlarged in its western part with the construction of new walls. Absolute dates of both the original structure and of the hypothesized enlargement remains unclear, the grave goods though indicate phases of usage that can be dated between the 1st millenium BCE and 2nd century CE. The investigation aimed at reaching a better understanding of the general structure of Tomb 2; at defining the sequence of



4 Dibba 76, Fujairah, UAE. Plan of Trench 1, 3D photogrammetric model of the excavated areas at the end of the season. (Rendering and photogrammetry: S. Lora)

construction of its eastern walled area; at gathering data on the use of the walled area as secondary burial area and at collecting dating evidence.

- 5 The investigation of the tomb's structure and of its inner fills led to the definition of a 10-phases preliminary stratigraphic sequence covering the whole history of Tomb 2. For the original construction of Tomb 2, a more than 20 m long and 3 m wide foundation trench was excavated in to a at least 1.5 m thick natural alluvial accumulation of the gravel soil. As a next step, the perimeter walls were built in the foundation trench and the entrance staircase was constructed at the central fringe of the structure. Afterwards, Tomb 2 was used for an unknown period of time with this layout. In the following phase the tomb was substantially modified with the removal of larger parts of the perimeter walls. Nowadays, only in the southwestern part of the tomb, remains of this wall are preserved. The subsequent construction of a L-shaped low wall at the very western end of Tomb 2 defined a 4,5 x 2 m large walled area, which was then used as secondary burial area. Human remains from individuals of all sex and age-classes were placed here in secondary deposition, as attested by the absence of anatomical joints between the bones, and apparently without a specific organisation. The location of the original burials of these individuals remains unclear. During the excavation it was possible to differentiate at least two main superimposed deposits (an earlier and a later fill layer). Based on the available data, it is not possible yet to define whether these fills origin in one single event, or rather represent two events of continuous use of the tomb. This phase ended with a probable deposit of a flattening layer, a composition of fine sand and gravel. This flattening layer covers only tangentially the earlier deposits and it may represent a moment of reorganization of the central part of the tomb in an area not yet investigated. In the following phase, two mains operations were carried out, firstly, the construction of renewed L-shaped wall was erected; secondly, a new fill of commingled human remains was deposited directly on top of the earlier deposits. A direct archaeological connection between these two operations is yet lacking, hence, it is not possible to determine the relative order of these two events.



5 Dibba 76, Fujairah, UAE. Distribution of finds in the investigated grids in the western part of Tomb 2, Trench 1. (Photo: S. Lora – E. Petiti)

- 6 At some point, the walled area was sealed with a layer of fine sand which seems to conclude the large-scale use of the tomb as secondary burial area. Three small pits filled with human remains have been documented at the border of the investigated area, probably representing a moment of occasional use of limited duration. Tomb 2 was later abandoned and its walls partially collapsed internally and remained probably undisturbed until its discovery and subsequent first excavation happened in 1994.
- 7 In summary, the stratigraphic observations it can be stated that the preserved part of Tomb 2 is not the original layout of this tomb but it represents a large-scale reconfiguration of the tomb. In fact, the original tomb of the long-grave type was partially removed, leaving in place only the central entrance staircase and part of its southern side. The construction of a new L-shaped against the remaining southern side defined a new burial area, which was used as secondary burial area. Any relocation of the human remains from their yet unknown original burials into the ›new‹ walled part of Tomb 2 did not happen in a single event, but it is rather the result of subsequent operations in different phases. It seems also possible to reconstruct that, at least during one of this operation, a large number of buried individuals were relocated at the same moment inside the walled part of Tomb 2 placing different types of bones in dedicated parts inside this area. The relocation of the individuals inside Tomb 2 did not affect only the bones but included also parts of the artefact assemblages that were most probably originally buried with these individuals.
- 8 Due to the relatively small amount of pottery coming from the 2019 excavation at Dibba 76 (Fig. 5), Trench 1 (in total 131 fragments/vessels from 11 units) the following statements concerning dating should be considered preliminary and must still be backed up (or altered) by the result of the small finds-analyses. According to a preliminary evaluation, the material from Tomb 2 can be dated to the Iron Age II, Iron Age III (?) and the 1st and 2nd century CE (Fig. 6). While the attribution of some fragments to the Iron Age III is possible but not absolutely necessary (due to the fact that certain shapes are produced over centuries), there seem to be no examples of pottery from the last three centuries BCE.



6 Dibba 76, Fujairah, UAE. An *in situ*-deposit of vessels in Tomb 2: two bronze bowls, one soft-stone vessel and one Balsamarium. (Photo: S. Lora)

Dibba 76 – Bioarchaeology

- 9 Anthropological analysis of the human remains in the field has been aimed at the assessment of preliminary taphonomic and biological profiles. The former includes position and distribution patterns and post-depositional changes of bone surfaces, while the latter includes preliminary data on age at death, sex and pathological alterations. A preliminary inventory of human remains (approximately 1500 fragments) has been completed for one excavated area recording type, side, and sex (preliminary) for each fragment.
- 10 As preliminary assessment of taphonomic profiles it can be stated, that all human bones were commingled throughout the entire deposits. Articulations between two or more bones were preserved only sporadically and exclusively for bones belonging to the vertebral column and feet. In-field preliminary analyses suggested that frequently bones from opposite sides (physiological right and left) found in close proximity to each other likely belonged to the same individual, as they shared the same dimensional, morphological and pathological features.
- 11 Gnawing marks caused by rodents have been sporadically attested and only for the bone fragments from the upper layers. The archaeological teams active at the site in the last forty years may have caused fragmentation and flaking, which is limited to upper layers, mostly already investigated during the 2017 excavation season. Nonetheless, the bones from the earlier layers excavated during this season showed outstandingly high fragmentation and erosion and an overall poor state of preservation. While water and roots have surely played an important role, it seems probable that the re-use of the tomb for later burials might have increased the fragmentation of the human bones in the lowest layers.

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Endnotes

[1] Pfeiffer – Petiti – Reichmuth – Ruben 2018.



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