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# FUJAIRAH, UNITED ARAB EMIRATES

## Archaeological investigations at the site of Dibba 76: Late Bronze Age – Iron Age multiple tombs and their buried individuals

Season 2017

**Orient Department of the German Archaeological Institute**
by Kristina Pfeiffer (Berlin Head Office), in collaboration with Emmanuele Petiti, Silvio Reichmuth, Isabelle Ruben und Julia Schönicke

**e**-FORSCHUNGSBERICHTE DES DAI **2018** · Faszikel 1

*In spring 2017 a second field season at the Emirate of Fujairah was carried out in the frame of the continuation of the cooperation between the Fujairah Tourism & Antiquities Authority and the Orient Department of the DAI. The field season focused on excavations of two Late Bronze – Iron Age multiple burials at the site of Dibba 76.*

Due to its geographical position and good environmental conditionsduring periods of climate changes in the 3rd and 2nd millennia BC, the region – which is today the Emirate of Fujairah – displays a high number of archaeological sites. A large number of elaborately built tombs especially from the 2nd millennium and their material culture reveal local developments but also frequent trade and exchange of a wide range of goods. The natural landscape and environment in the region were probably more fruitful than today; people in prehistory relied on the sea and rich oases for their subsistence. Sweet water was available, which might have enabled agricultural activities and made the region a naturally favored zone.

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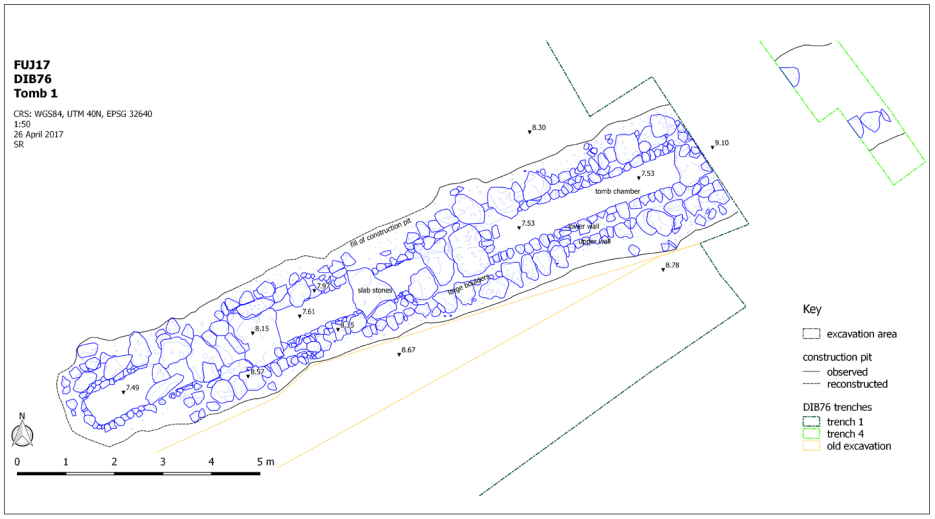
1 Overview of the two parallel long tombs at the site of Dibba 76. View towards SW (© DAI, photo: K. Pfeiffer)




2 Plan of the final state of excavation in Tomb 1 (fig.: © DAI, S. Reichmuth).

The coastal town of Dibba is located in the north-east of the Emirate Fujairah and it is a border town to Oman. The history of the town reaches back into the thirties of the 7th century AD, when Dibba was the location for one battle of the ridda wars (*ḥurūb ar-ridda*). During the middle of the 17th century AD – probably – the Portugese have built a Fort in Dibba and the ongoing history was strongly influenced by the colonial politics of western Empires, until in the 1970s the United Arab Emirates were founded. Today the town belongs to Fujairah, Schardscha and Oman.

An intense usage of the Dibba region in prehistoric times is represented by burial sites and settlement sites that date back into the 4th millennium BC and span until the 1970s. The town and its vicinity display a rich archaeological landscape, which is dominated by a high amount of burial sites. At the site of Dibba 76 the characteristic types are long tombs whose length can reach up to 40 m and these were used for a long time ranging between several hundred years and cover individuals from every age and both sexes. Dibba 76 was partly excavated in 1993 and 1994 by the local authorities and due to the complicated bioarchaeological findings interrupted. In 2017 the excavations were continued by the team of the Orient department (Fig. 1).

In order to preserve the fragile archaeological contexts and to accelerate long-term anthropological studies in Fujairah, the German team and the FTAA agreed to carry out excavations at the tombs. The aim was to study the structures, understand the layout of the tombs, their dimensions and their usage in terms of primary or secondary burials and, most importantly, it was hoped that the date of the tombs could be established. The site was documented by drawings, descriptions as well as by 3D photography. Due to the complexity of the site, only some parts were studied during the season, at least two to three years of further excavations are needed to gain a full understanding of the two tombs and the surrounding smaller tombs.

In addition to three smaller trenches the previous excavators dug one large trench (Trench 1) that contains two long tombs that are oriented parallel to each other and measure lengths of at least 17 m each; the one in the south-east part was designated as Tomb 1, and the other, on the north-west


**3** Ditch-like depression in the NE section above the collapsed tomb construction (© DAI, photo: S. Reichmuth).


**4** Lower and upper tomb chamber, divided by large beach rock slabs (© DAI, photo: S. Reichmuth).

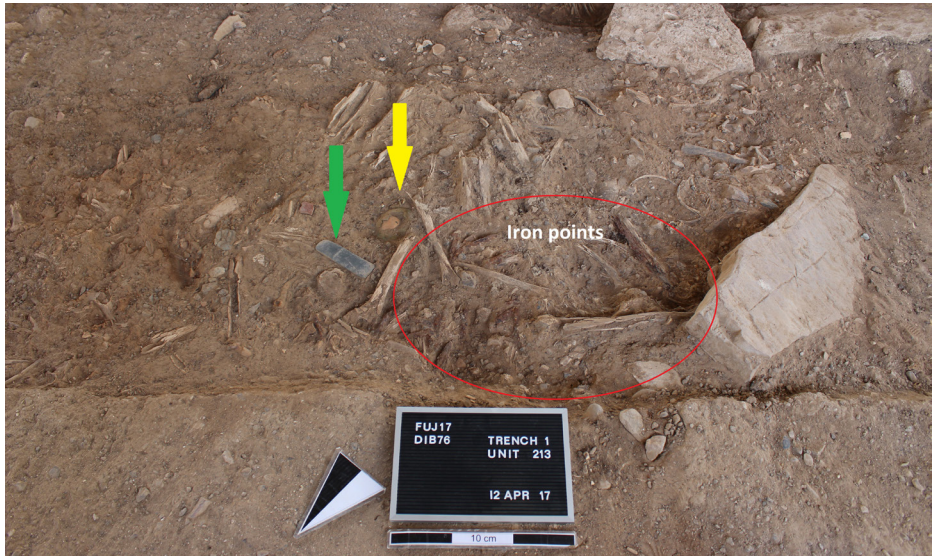
side, as Tomb 2. The cut for the construction of Tomb 2 is very clearly visible both in the north-eastern section of the trench and in plan along the sides of the previously excavated trench whereas the cut of Tomb 1 is hard to distinguish from the surrounding soil.

Tomb 1 is located in the south-eastern half of Trench 1; parts of it were excavated during the 1994 excavations. The tomb runs into the north-eastern trench section (Fig. 2) and the uncovered narrow structure of a long tomb reveals a shallow lower chamber and an upper chamber, divided by beach rock slabs. The slabs for the roof-like cover consist of beach rock as well. Tomb 1 is separated from Tomb 2 by a natural baulk of approximately 1.0 m width. The 1994 trench was extended by excavating the section towards the north-east which enabled us to create a complete section across the end of Trench 1 and to study an unexcavated part of the tomb.

Underneath the top soil was a layer in which there was a ditch-like depression (Fig. 3) along the axis of the tomb (ENE-WSW). The ditch slopes WSW-wards and showed clear traces of water erosion and flooding. The soil layers underneath that are situated directly above the tomb architecture consisted of coarse gravel and sand. Below and in the erosion layers large beach-rock slabs were found that had fallen down inside the tomb from the outside. They resembled the cover slabs above the lower and narrow tomb chamber and consisted of large slab fragments (Fig. 4). The interpretation of the north-eastern section indicated that the tomb had most probably been looted in prehistory and parts of the structure collapsed mostly due to post-depositional dynamics that were triggered by the lootings. It was then left open and sediments had accumulatedh. In addition, the fallen debris at the sides implies Aeolian processes. The section clearly shows that the long ENE-WSW axis of the tomb provided a canal for flooding and water erosion, which took away remaining bones, soil and finds.

The excavated situation of Tomb 1 clearly suggests that the tomb was looted several times during prehistory and also in a minor way during modern times. The reason why Tomb 1 was completely robbed out while Tomb 2, directly beside it, was found mostly intact is, although showing traces of looting as well, of great interest. One hypothesis is based on chronology and

5 Division of the central part of Tomb 2 due to a complicated mixture of soil, stone settings and human bone accumulations (© DAI, photo: I. Ruben).




6 Concentration of iron points marked in red, the upside-down bronze bowl with the bottle-necked jar (yellow arrow) and the stone adze (green arrow) (© DAI, photo: J. Schönicke).

implies that Tomb 1 was looted before Tomb 2 was built. Another would be that Tomb 2 existed already but was left untouched since the robbers belonged to the community that used Tomb 2 to bury their dead. Since evidence for these hypotheses is absent, explanations must remain unclear.

Tomb 2 runs parallel to Tomb 1 and displays a completely different building method and building style. Large stone slabs were not used at all, Tomb 2 is rather dominated by cuts in the ground and narrow walls made of flat stones. The 1994 excavations revealed a dense mixture of human bones from primary and secondary contexts, grave goods and soil (Fig. 5). However, the tomb is divided into different compartments that show different types of burials and perhaps even modifications and enlargements. Overall, it seems that Tomb 2, at least in the later stages which were partially excavated during the 2017 season, can be broadly divided into different areas. The area to the north-east displays single installations that can perhaps be connected to single buried individuals. The central area near the entrance has few bones and (relatively) many pot sherds. Moving south-west from there, the number of bones increases until reaching the south-westernmost end, which consists of a high and dense amount of bones but no sherds or finds.

During the excavations in the central area, a dense mixture of grave goods, compressed soil and bones appeared. The area revealed both primary and secondary burials and a high amount of disturbed bones in a poor state of preservation. This mixture contained in the central part a tight scatter of 37 iron points (some being in clusters, as if they had originally be laid in a bundle) (Fig. 6), a bronze bowl laying upside down with a small, bottle-necked jar inside and a what may be an unfinished stone adze. Several stratigraphic units contained articulated vertebrae, suggesting that some not fully decomposed body parts were moved around in order to make space for other or later burials.

One area in the SE was partly excavated during the 1994 season and revealed an entrance into Tomb 2. The architectural features of the entry are 3.20 m long by c. 1.00 m wide. It is composed of a narrow aisle about


**7** Overview of the entry flanked by large upright standing stone slabs; area with the aisle and the steps, view towards NW (©DAI, photo: K. Pfeiffer).


**8** Stepstone or threshold stone at the south-eastern most end of the aisle (© DAI, photo: K. Pfeiffer).

80 cm wide flanked by large, upright beach-rock slabs with two (to three) steps, between 28 and 48 cm in height, leading down into the tomb (Fig. 7).

Each step consists of several courses (three to five) of flat stone slabs set in silty-sandy mortar, the steps are located about 1.20 m to each other. While the uppermost rectangular-elongated stone slabs are of high quality and their size covers the entire width of the aisle, the two courses underneath consist of smaller slabs that were placed side by side. On both sides of each step, against the upright flanking stones smaller stones were inserted – these are interpreted as gusset-filler stones to fix and stabilize the horizontal step construction.

The third, lowermost step is located at the southernmost end of the entry aisle, since it has not been fully excavated yet due to depth and bone layers on top, it is still unclear whether the slab uncovered marks the uppermost stone of another step or a threshold stone. This area was densely covered by human bones and might therefore mark the last phases of usage (Fig. 8).

While the homogenous soil layers at the base of the steps can clearly be defined as parts of the construction and building processes, heterogeneous layers rich in finds and pottery sherds mark intentional fill that can presumably be connected to the burial processes and a closure of the tomb. The clear stratigraphic sequence of these layers, together with several *in situ* finds indicate that at least three layers of intentional fill were created. Interestingly, several steatite artefacts, including a bowl fragment and a steatite lid, were also deposited *in situ* on the south-western side of the aisle, leaning against the upright standing stones (Fig. 9). These finds were accompanied by human long bones and a high density of pottery sherds. The entrance aisle was southwestwards delimited by the stone setting that was built in a late phase, dividing the large eastern chamber from the long western chamber in Tomb 2 that ends in a sub-area with a high amount of anthropological material.

The south-western sub-area of Tomb 2 has a rectangular layout (2.90 × 1.90 m) and is defined on three sides by stone walls, while the limit for the fourth side (north-eastern side) is presently defined by a temporary baulk.


**9** Two round steatite lids found *in situ* on top of a dense pottery-soil fill layer; located at the edge of the aisle at the foot of the upright standing flanking stones (© DAI, photo: K. Pfeiffer).


**10** Overview of the south-western subarea of Tomb 2 and bones distribution pattern which points to an organisation of the burial space inside the tomb (© DAI, fig. and photo: E. Petiti).

At the northern corner a small sounding was cut during 1994 and re-cleaned in 2017. The bottom of the pit reaches the bedrock, giving evidence for the presence of about 40 cm of dense human bone deposit, at least in this part of the tomb. This area contains a concentration of human bones spread across the entire area enclosed by the walls. The space around the bones is filled up by a layer of brown sandy silt with very frequent small stones. The texture and content of this soil suggest that it might have resulted from one or more alluvial events, alternated with Aeolian depositional processes. Hence, the inner volume of this area would not originally have been filled up with soil and its structure defined a proper tomb chamber, which was accessible in order to perform burial rites presumably over a long period of time.

As a consequence, the tomb is likely to have had a covering system, although no evidence of it was found *in situ*. The human bones were densely scattered all over and, with a few exceptions, they did not show any preserved joint connections. As a whole, most of the long bones and the calvaria were fairly well preserved, although many small fragments of diaphyses and cranial vault were brought to light. Preliminary in-field analyses assessed a Minimum Number of 24 Individuals, estimated on the calvaria consistently with the femurs. The assemblage attests different age classes from early childhood to late adulthood and both male and female individuals are represented.

A preliminary analysis of the bone scattering according to the different anatomic districts detected the following patterns (Fig. 10): a) Almost all of the attested calvaria were found concentrated along the north-western and the north-eastern walls; b) The post-cranial bones were mostly distributed in the central part of the tomb and partially also along the south-western wall. Here, small bones are under-represented, possibly pointing to an intentional selection of long bones from upper as well as lower limbs and, less frequently, some of the flat bones, such as scapulae and hip bones; c) small bones and fragments of diaphyses are more frequent along the south-eastern border of the excavated area.

Finally, if confirmed by further investigation, the distribution pattern described above may be evidence for a division of the tomb into at least three functional areas. Large parts of this area of the tomb was used for secondary burials. Nonetheless, the south-eastern part of the area, towards the probable entrance to the tomb, may also contain primary burials together with secondary burials.

The studies at the site of Dibba 76 are to be continued since the site provides us with a clear stratigraphic anthropological material of the Late Bronze Age to Hellenistic times revealing burial customs, patterns of long tomb usage and re-usage. The cross-sections of the buried population as displayed enable us to do a pilot study on life-style and palaeodemography over a large range of time in one geographical zone.