

Household and Death in Ba`ja, III.

Short report on the Field Season 2019a.

Site Location, Research Questions and Cultural Frameworks

The 13th field season at the Pre-Pottery Neolithic site of Ba`ja (c. 7250 BCE) was devoted again to field research for the special research topic on *Household and Death in Ba`ja*, carried out at Free University of Berlin by a grant of the German Research Foundation. A second season in 2019 (Ba`ja 19b) will concentrate on the study of topic-related samples and finds stored in Beidha and Petra.

This season resulted in an unexpected abundance of findings and finds in the lower strata of Areas C and D, especially related to the intramural burial ground of Area C with at least 11 children and 3 adults in a collective burial and additionally, at least ten children and baby inhumations in single and double burials.

The Ba`ja Neolithic Project continued under the co-directorships of Dr. Hans Georg K. Gebel, Dr. Marion Benz and Dr. Christoph Purschwitz from Free University of Berlin, coordinating the three different subject lines which unite the project (Neolithic ethos, the dead and death, household production); some 15+ specialist researchers work in this transdisciplinary enterprise. In addition, during this season 3 conservators devoted their work to the extraction of the burial cist with rich grave goods of a young LPPNB girl encountered in the 2018 season (C1:46), in order to prepare its exhibition in a Jordanian museum. A special research unit of this season concentrated on the seismic and tectonic conditions of the site location, and on OSL potentials to date these; architectural and depositional records provided definite insight into two earthquake events affecting life at Ba`ja. For all excavation areas seismic damage mapping took place, concentrating on all major impacts at walls.

This third phase of the long-term Neolithic projects in the Greater Petra Area is devoted to deep-knowledge research on *Household and Death in Jordan's* late 8th millennium BCE. Sedentary village life at that time already testifies problems resulting from wealth, e.g. acceleration, agglomeration and heterogeneity processes in architecture, crafts, social structures, and value systems. The site of Ba`ja belongs to the so-called Mega-Site Phenomenon, characterised by a rather sudden enlargement of settlement sizes and of social differentiation during the 2nd half of the 8th millennium. While the earthquakes still required rebuilding of some parts of the site, the main reason for the termination of Ba`ja's occupation must be seen in the breakdown of the mega-site networks. Any future project in Ba`ja needs to study these mechanisms of prosperity-collapse complexity, aiming also to understanding of such historic mechanisms for risks of our modern productive life modes. In that respect, this season's discovery of a latest formal architectural occupation in the site's highest topography (FPPNB/PPNC-related) is most important.

Significant General Results of the 2019 Spring Season

As stated in previous reports, early village life of that time is characterised by a spatial and ontological relationship between households and burials. Until this season, the Ba`ja evidence did not allow to conclude on a direct relationship between living households flourishing on floors with burials beneath, while we definitely found an intramural cemetery in contact with the natural soil. However, in this season the observed formal variability of burials, and 6 new burials – located in Area C – testify a room-wise and deliberate spatial organisation of the burials, ranging from individual burials to collective and rather "informal" collective depositions of (parts of) human remains (Figs. 1-3). Most of the new burials are baby and small child burials, often providing signals for empathy, wealth and symbolic behaviour. We started to think that basements – respectively basement rooms connected by window-like openings and passages – in the Ba`ja houses were reserved for the household's dead members; in that sense, we might deal with "sub-floor" burials and a continuing role of the dead in ongoing social life. Grave goods may not accompany burials, but outstanding persons including children (Fig. 2) may have received extraordinary rich grave goods. Grave goods of non-local raw materials give a strong hint to supra-regional contacts of the LPPNB community. New this season were two cases of adult human and animal body parts with child burials.

Specific Results of the 2019 Spring Season

1) In Room CR17 several depositional events of human bones could be distinguished (Figs. 3-4). At least eleven babies and children, 2 juveniles and 2 adults were deposited in the southern part of the room. Future excavations will have to prove whether there were more burials at the spot's deepest layers. In Rooms CR5 and 6, which built one room at the time of the burials, two double/triple(?) children burials and three single burials of young children and babies were discovered. The sequence of burials in the southwestern part of Room CR6 is extraordinary. A primary baby burial was associated with isolated adult and child bones, including the lower right arm of an adult with 10 bone beads still aligned *in situ*. On top of the grave cover two further children were

discovered. Beside the collective burials, this sequence represents the first example of a more recent burial that was related to a more ancient grave. Except for small mother-of-pearl objects and some beads, these burials contained only a few objects, among which – however – extraordinary pieces like a cross-shaped mother-of-pearl object (Fig. 4: third row left) and rings or some 33 turquoise beads were attested. In contrast to these rather “poor” burials, a lavishly decorated child tomb was discovered at the bottom of Room CR28.2. More than 1000 beads of various local and exotic materials, four small mother-of-pearl amulets/buttons and a small mother-of-pearl cross-shaped object were uncovered, possibly sewn on some kind of belt as well as a head gear.

2) Small scale excavations in Area D continued in Rooms DR19, DR22, DR25/26 and DR30, and aimed at clarifying the function and stratigraphy of the related architecture. A child burial was found below a mud floor in DR19, and isolated human bones were found below a sandstone slab in Room DR30. These findings let us expect to find a similar relation between basements and burials as testified in Area C. Other work included the mapping of wall damage which may relate to seismic and tectonic high energy events. Limited excavations in room DR36 below a huge sandstone boulder showed that this rockslide must have happened after the site’s occupation.

3) Further insights have been gained on the general room stratigraphy and space biography at Ba’ja. As has already been reported from previous seasons, individual houses, rooms and spaces at Ba’ja show own biographies: Their multiple modifications, the general tendency of horizontal and vertical densification lead to a structural hyper-complexity, the deposits of upper floor room fills, and other, make it almost impossible to identify the major stratigraphical units; relating rebuilding events after earthquakes might ease this. Open spaces became built and indoor space was more compartmentalized by adding new walls or storeys during occupation. As a major result, we are now able to present a general stratigraphic model for Area C which includes major Neolithic architectural building levels before and after at least one dramatic destruction event/earthquake(s). The lower ones are of LPPNB date and indicate a densely occupation of the entire plateau. The later levels are marked by a less dense reconstruction and reorganization of the built space involving only parts of the site.

4) Two connected test units (TU9a-c; Fig. 5) were opened in Area G, a secluded but commanding part of the site’s upper topography. Here, we expect LPPNB structures occupying even the rocky niches bordering the site, and possibly structures serving communal tasks (supra-household infrastructure). Barely buried by eroding wall stones, the first floors, room fills, a buttress-like reinforcement, and an upslope passage way was found along a curvilinear long wall leading downslope. The testimony of later arrowheads (FPPNB/PPNC related) may indicate that in terms of site stratigraphy we are in the latest site occupation in its topmost area for which we have less clear evidence in other parts of the site (eastern Area C, Area A); beneath it we expect the main occupation of the LPPNB.

5) Special findings were:

a. The wall painting encountered in 2001 in Area D11/12/21/22:32 definitely belongs to a use of the room prior to the insertion of the collective burial chamber. A test probe proved that the wall painting exhibited in the Jordan Museum in Amman does definitely not continue – except for a few patches – downwards behind the lower courses of the inserted chamber’s eastern wall, and was deliberately chopped from the room’s original wall before the space’s use for a collective burial.

b. Resumed work in a site’s garbage area (Sounding 1 of 1984 in Area A) again attested patchy deposits rich in arrowheads, bidirectional flint refuse and animal bones, with evidence for no or little downslope re-deposition. It became obvious that the dump contains the refuse of a bidirectional flint workshop with a focus on ‘Amuq point production, deposited here within a very limited time. However, the location of the dump in the main site access remains a miracle.

c. The trilith found in Room 6 of Area C, in 2018, seems to have marked a special location: Under its ashlar a burnt area with the sherds of an *in situ* destroyed/ collapsed plastic vessel installation was found under which a hoard (Fig. 6: one unused giant Byblos point, one perforated and decorated “clay” cuboid, one little phallus made from oil schist) was deposited. This hoard may have a connection with a deliberately fragmented figurine found in 2018, and rested above the sunken cover slabs of a double child burial inserted in the virgin soil.

d. The site becomes more and more interesting for very specific details, this year – among others – by attesting the existence of very elaborated bone toothpicks. (Fig. 7)

6) Intense backfilling of rooms with stones and sifted sediment continued also this season. However, the volumes of needed backfill material are beyond available on-site material. Backfilling and the conservation of wall tops is an ultimate need for the site and its security. Fortunately, the visit of the Chief Commissioner of Petra Development and Tourism Region Authority, Dr. Suleiman Farajat, revealed that no touristic development of the site is planned for the near future, and that running excavations are respected.

In summary, the 2019 season confirmed that Late PPNB Ba’ja had intramural burial grounds in its lower room stratigraphies (basements) and intramural deposits of buried – most likely terminated – households. Living households are to be expected in the upper floors, as evidenced by fallen household inventories in room fills.

The new evidence from Area G might provide first insights into a different type of architecture and a latest occupation with formal architecture, most likely FPPNB/PPNC-related. Intra-site expert research and recordings of high-energy wall damage proofed that two quakes affected the site during its later occupations while suggesting that earlier wall rebuilding and engineering at Ba'ja had much to do with slope dynamics and a constant danger of earthquakes.

Ba'ja offers a unique opportunity to gain deep knowledge about the beginnings of sedentary and the consequences of productive life modes, how (re-) productive value systems may cause a wealth-to-collapse trajectories and “cultural and socio-economic resettings” in human development, and how much the Neolithic legacy is an ingredient of our modern ethos.

Hans Georg K. Gebel, Marion Benz, and Christoph Purschwitz
Ba'ja Neolithic Project, co-directors

Project Information

Project Name: Ba'ja Neolithic Project in cooperation with the Department of Antiquities, Amman

Duration: April 1st – April 28th, 2019

Co-Directors: Dr. Hans Georg K. Gebel, Dr. Marion Benz, Dr. Christoph Purschwitz

Team Members: 10 (plus 5 part-time members) / *Number of Workmen:* 8-16

Visiting Specialists: Martin Bader and Julia Graf (Swiss National Museum: conservation), Dr. Sahar Khasswneh (Yarmouk University: OSL-sampling), Dr. Bilal Khrisat (Hashemite University: seismic studies), Dr. Hussein al-Sababha (Yarmouk University: conservation)

Sponsoring Institutions: German Research Foundation, ex oriente at Free University of Berlin, and Franz-and-Eva-Rutzen-Foundation.

DoA Representative: Abdallah Rawashdeh, Ma'an Office of DoA



Fig. 1. Ba'ja 2019a: Besides at least eleven children in a collective tomb, nine inhumations of children in single or double burials were uncovered in the basements of rooms in Area C during the 2019 spring excavations.
(Photo: M. Benz, Ba'ja N.P.)



Fig. 2. Ba'ja 2019 a: An outstanding double child burial was decorated with more than 1000 coloured beads and shells of various local and exotic materials. The beads were possibly sewn on some kind of cloth. (Photo: M. Benz Ba'ja N.P.)

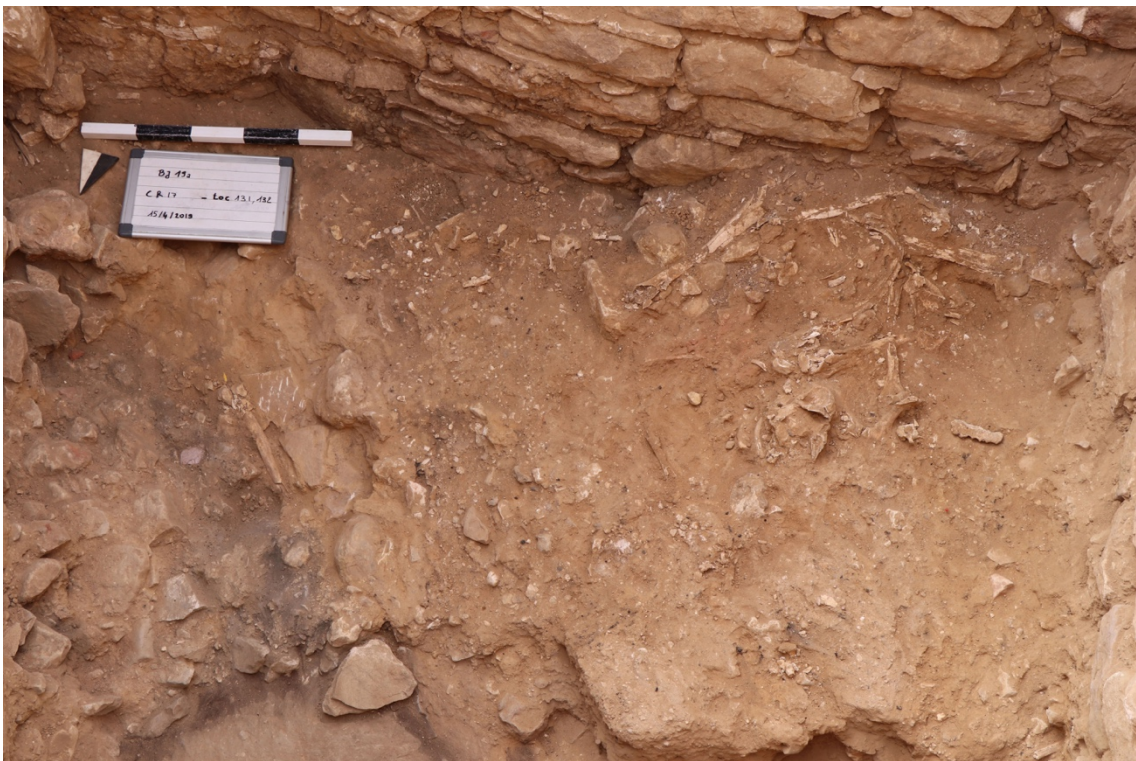


Fig. 3. Ba'ja 2019a: At least two adults, two juveniles and 11 children were deposited in a collective burial in the basement of Room CR17. (Photo: M. Benz, Ba'ja N.P.)



Fig. 4. Ba'ja 2019a: Remains of grave goods attested in the basement room's CR17 collective burials.
 (Photo: H.G.K. Gebel, Ba'ja N.P.)



Fig. 5. Ba'ja 2019a: Bird's-eye view of Area G's Test Units 9a-c showing the downslope curvilinear wall with an upslope lane, room fills and stone-paved room with *in situ* items (FPPNB/PPNC). (Photo: H.G.K. Gebel, Ba'ja N.P.)



Fig. 6. Ba'ja 2019a: Hoard items from beneath a trilith and crashed vessel installation and above a child burial: large Byblos Point, small phallus, and a decorated clay cuboid. (Photo: H.G.K. Gebel, Ba'ja N.P.)

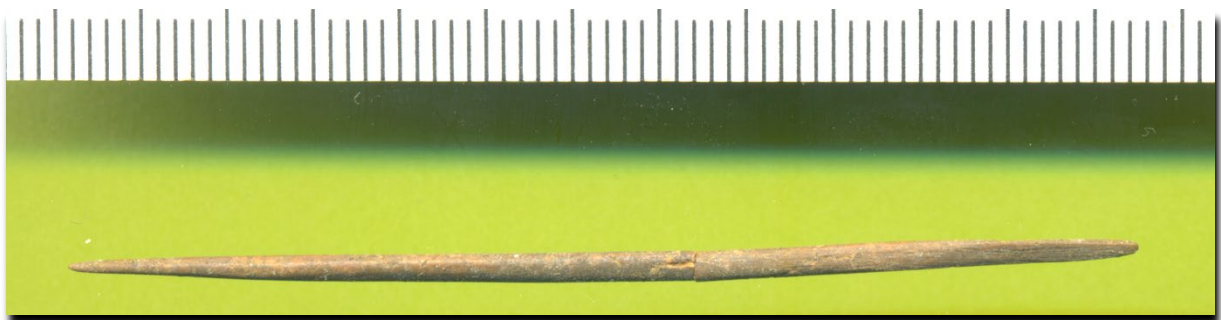


Fig. 7. Ba'ja 2019a: A LPPNB interdenal stick (faceted: "anatomic" tool morphology). (Photo: H.G.K. Gebel, Ba'ja N.P.)