Household and Death in Ba'ja, II. Short report on the Field Season 2018.

Site Location, Research Questions and Cultural Frameworks

The 12th field season at the Pre-Pottery Neolithic site of Ba'ja (c. 7250 BCE) was devoted to the continuation of the special research topic on *Household and Death in Ba'ja*. The main aims were to enlarge the body of findings and data for the subject, both from excavations in the deeper strata of the site's Areas C and D as well as by "shelf research" on relevant finds and samples of previous seasons.

The Ba'ja Neolithic project continues 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 approach lines the research subject unites (Neolithic ethos, the dead and death, household production) for which some 15 specialist researchers work in this transdisciplinary enterprise.

Ba'ja is located in the remote and rugged sandstone mountains north of Beidha village near Wadi Musa. The site is accessible only by climbing through a narrow *siq*; excavations request a lot of logistical investment, physical strength by the team, and acceptance of technical limits.

By the 2016 season, the third phase of the long-term project had started: to test the site's potential for a deep-knowledge research on *Household and Death* in Jordan's late 8th millennium BCE. Sedentary village life at that time was still at its early stages while already exhibiting 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, characterized by a sudden enlargement of settlement sizes and social differentiation during the 2nd half of the 8th millennium. All Ba'ja research is now oriented on the ethos of Neolithic life at the village, including its neurobiological frameworks, reflecting also the foundations of our modern life as producing societies.

Village life of that time is characterized by a spatial and ontological relationship between households and burials, often understood by archaeological research as sub-floor burials in inhabited houses. Excavations at Ba'ja and nearby Basta, however, hardly support a direct living household - burial relationship. Rather we deal with intramural burials, or an intramural cemetery, in Ba'ja in contact with the natural soil. These burials show a formal variability, ranging from individual cist burials to collective room burials and rather "informal" depositions of human remains; grave goods are common. Resting above these burials, a series of household depositions testify the formal or ritual termination of household inventories, often connected with evidence of burning, as well as remains of living households.

Significant Results of the 2018 Season

1) The presence of an intramural cemetery in contact with the natural deposits was confirmed for Area C; two more burials were excavated: An elaborate and massive burial cist - inserted in Room CR 36.1 - contained the burial of a 6-10 years old child (Loc. C1:46; Fig. 1). The red-stained skeleton was endowed with a complex, presumably multi-string necklace with about 2600 beads (Fig. 2) in the neck area; it was held together by a mother-of-pearl divider and a haematite closure. Crumbles as well as a larger piece of red pigment were also found in the loose sandy and homogeneous grave fill. The graves vertical side slabs were covered by 3 (!) layers of carefully placed, but deliberately smashed prior to placement, oval stone slabs and one large complete oval stone plate. The other inhumation (Room CR17, Loc. 117; Fig. 3) represents a less formal and defined child burial (4-6 years) in a pit, deepened into the natural layers and covered by fist-size stones. The headless skeleton (lower mandible attested) seems to be related to a yet unexcavated adult burial. Additional finds in the pit comprise

animal and other human bones (including a red-stained finger part; some bones are heat-affected), two limestone celts with polished edges, few red pigment crumbles, a fragment of a marl ring, a possible basal "blade dagger" fragment, and another small flint blade (Fig. 4). The stratigraphical contexts of the Area C cemetery are related to an earlier occupation in this part of the site.

- 2) Excavations in Room CR5 revealed the remains of a burnt household. Large pieces of charred timber covered ashy layers containing a variety of household materials: extensive in situ scatters of the thick walled ware representing *tabun*-like installations, a plate, and a globular large vessel; bone tools; handstones and grinding slab fragments; an in situ oval sandstone basin or vessel (c. 48 x 70 cm; Fig. 5); and a trilith-type arrangement of ashlars (Fig. 5). The continued excavation of Room 22.2 uncovered more material from a terminated (buried) household, including more fragments of a low-fired grit-tempered thin-walled ware which technologically is not yet pottery. Both rooms are considered extremely important sources of information for the Ba'ja's inhabitants behaviour related to *Household and Death*.
- 3) Resumed excavations in Area D aimed to locate findings relevant for the project's *Household and Death* topic which are to be addressed in the next season. A number of findings from this season exhibit/indicate relevance to the topic. South of the collective burial excavated in 2001, the remains of a celt and blade workshop were found in a fill constituted also of material fallen from an upper floor (Fig. 7). Two new loci in Area D confirmed the practice of inserting celts in walls (Fig. 6), possibly representing a magic practice to "enforce" walls. Rooms DR32 gave evidence of *in situ* food processing while the room fills of DR19 contained the refuse of a sandstone ring workshop deposed in the room's fills.
- 4) In light of the project's topic, a basic revision of our previous understanding of houses in Ba'ja is needed, both in terms of building stratigraphy and socially. The general identification of room groups or building units representing social groups, over periods of complex restructuring of spaces, appears not to reflect existing social ontologies. Both the horizontal and vertical alterations of room networks, or the interactive biography of living and sepulchral spaces (*e.g.* by the insertion of smaller rooms or vertical extension of walls), deserve a more detailed, holistic, and room/space-oriented consideration of all functional and stratigraphical features. In that respect, this season's findings increased testimony for a FPPNB/ PPNC presence or occupation. In addition, Ba'ja's architectural heterogeneity and variability has to be evaluated to a greater extent, especially regarding potential supra-household facilities.
- 5) For the protection of the site's excavated layers and walls, an intense backfilling with stones and sediment sacks started this season. The logistically difficult and costly task of backfilling, in order to conserve the remote site's open excavation areas, remains a tremendous challenge due to the dangerous and exhausting site access, as well as the waterless environment.

In summary, the 2018 season revealed/confirmed that Late PPNB Ba'ja is characterised by intramural cemeteries and intramural deposits of buried – most likely terminated – households, primary household contexts, and dumped materials of household production in room fills. More evidence was found for a later occupation in Ba'ja during the FPPNB/ PPNC, attested also by a unifacially pressure-flaked pre-Yarmoukian arrowhead. Early vessel making is attested in both the LPPNB and potential FPPNB/ PPNC layers of Ba'ja. The well-preserved site of Ba'ja offers a unique opportunity to reach deep knowledge about the beginnings of sedentary and producing life modes, how their (re-) productive value systems emerged and developed under these conditions, and what of the Neolithic legacy became ingredient of modern producing societies.

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: June 23rd – July 20th, 2018

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

Team Members: 12 / Number of Workmen: 10-14

Sponsoring Institutions: German Research Foundation and ex oriente at Free University of Berlin

DoA Representative: Abdallah Mahmoud Bawareed, Madaba Office of DoA



Fig. 1. Ba'ja: LPPNB child burial (C1:46) in Room CR36.1, in a stone cist with red pigment colouring also the skeleton. (Photo: Benz, Ba'ja N.P.)



Fig. 2. Ba'ja: Necklace of LPPNB child burial (C1:46): bead types, mother-of-pearl divider, haematite closure, red pigment sample. (Photo: Gebel, Ba'ja N.P.)



Fig. 3. Ba'ja: Headless LPPNB child burial (CR17:117) in a pit with other human bones. (Photo: Benz, Ba'ja N.P.)



Fig. 4. Ba'ja: Grave goods of LPPNB collective burial (CR17:117): two limestone celts with polished edges, cowrie fragment, few red pigment crumbles, potential basal "blade dagger" fragment, retouched blade, and marl ring fragment. (Photo: Gebel, Ba'ja N.P.)



Fig. 5. Baʻja: Large sandstone basin/vessel (CR5:40) and small ashlars arranged trilith-type in LPPNB household layers. (Photo: Benz, Baʻja N.P.)



Fig. 6. Ba'ja: Example of celt inserted in a LPPNB wall of Area D, exposed by the past years' rains. (photo: Benz, Ba'ja N.P.)



Fig. 7. Ba'ja: Example of a LPPNB celt workshop in Area D with celt raw forms, raw material chunks and hammering stones, re-deposited from an upper floor. (Photo: Gebel, Ba'ja N.P.)