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**with Ahmad Lash,
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Pierre-Louis Gatier,
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Bayt Rās Workshop

Overview of the Workshop

The Bayt Rās Tomb Project, based in Irbid, is one of nine projects supported by the USAID Sustainable Cultural Heritage Through Engagement of Local Communities Project (SCHEP) throughout Jordan and implemented by the American Center of Oriental Research (ACOR, now the American Center of Research). USAID SCHEP has been working at the site of the Roman hypogeum in Bayt Rās since April 2017 (FIG. 1), under the leadership of the Department of Antiquities (DoA) and was able to formulate a distinguished

consortium of scholars from Jordan, France, and Italy to help in managing the necessary complex interventions in the tomb. SCHEP was successful in bringing together a group of professional international and national institutes renowned on their remarkable work in heritage preservation in Jordan and the region. The consortium members were subsequently expanded to include new institutes to cover different components of the project. Specifically, the consortium includes the DoA, USAID SCHEP, ISCR (Istituto Superiore per la Conservazione ed il Restauro), ISPRA (Istituto Superiore



1. Site location (Google Maps).

per la Protezione e la Ricerca Ambientale), CNRS (Le Centre National de la Recherche Scientifique), and Ifpo (Institut français du Proche-Orient).

Through the Bayt Rās Tomb Project, USAID SCHEP offered financial and technical support for excavation, conservation, and documentation efforts within the tomb, as well as training for DoA employees, graduate students, and local community members in relevant skills.

History (Jehad Haron and Ahmad Lash)

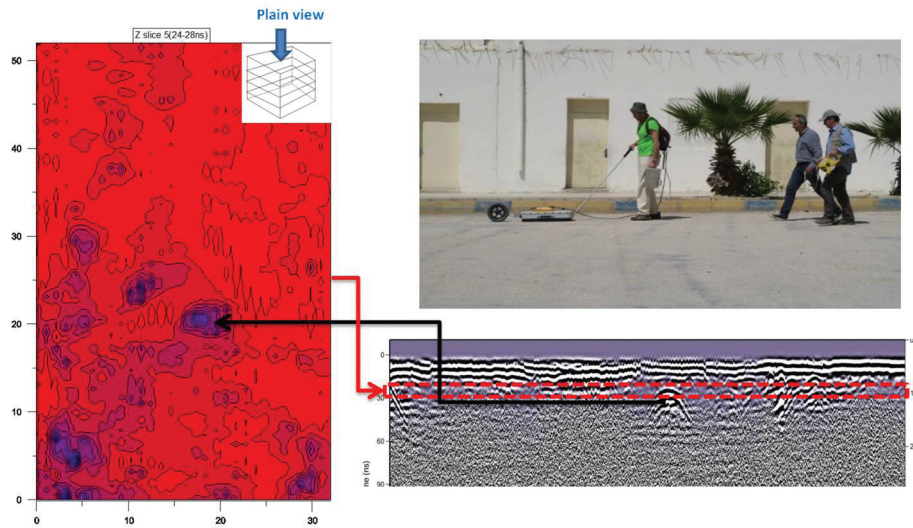
The town of Bayt Rās, located in northern Jordan, stands atop ancient Capitolias, one of the ten cities of the Decapolis League listed by Pliny the Elder. Many explorers and travelers have documented Bayt Rās over the years, including Seetzen (1806), Burckhardt (1812), Merrill (1885), Buckingham (1816), Schumacher (1878–79), and Glueck (1951). Salvage excavations were conducted by the Jordanian Department of Antiquities in 1960 (Bowsheer 2011). The name of Bayt Rās is mentioned in many early Arabic sources; especially in pre-Islamic and early Islamic periods, likely due to its reputation in producing wine (Al Bakri 1983). The Umayyad period Caliph Yazid II even lived in Bayt Rās (Lenzen 1992).

Project Protection and Management (Amajd Al Batayneh)

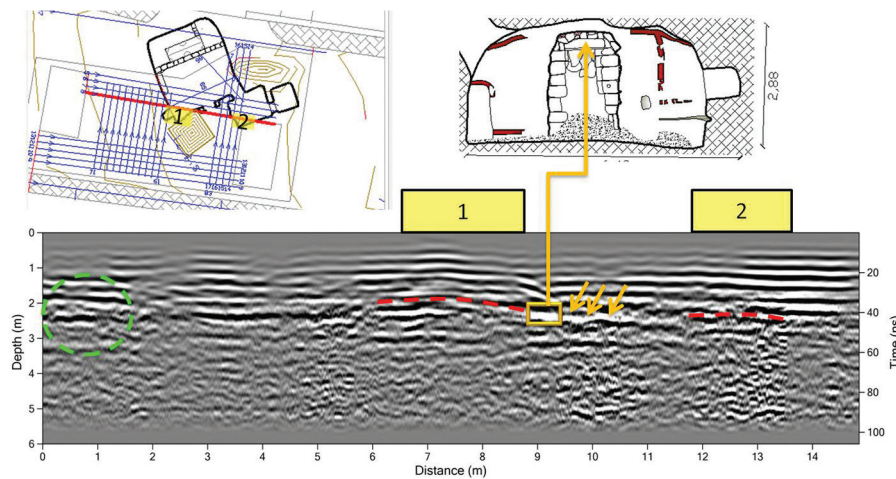
The nature of this rare discovery indicated to everyone the necessity of protecting it and presenting it in an appropriate scientific manner. For this reason, the tomb was completely closed until the formation of the project consortium, and even when the work began, policies related to the management and protection of this discovery imposed limited entry into the tomb. Moreover, we took steps to protect it from the movement of cars, because the tomb is located in the middle of a main street and adjacent to a public school. For protection from rainfall and flash floods, special soil barriers were installed to divert water flow away from the entrance of the tomb. A metal fence with a gate was installed at beginning of the project to prevent vandalism at the site and special guards were hired.

Geophysics (Giuseppe Delmonaco)

Geophysical and geotechnical surveys were conducted in two distinct campaigns: 27–29 April 2017 and 30 July–2 August 2017. These surveys mainly focused on the hypogeum (inside and outside) and the surrounding area such as the elementary school and the Roman theatre as areas of great potential archaeological interest. The geophysical investigation coupled with a Ground-Penetrating Radar (GPR) and geotechnical non-destructive techniques were applied to: (a) detect potential underground structures around the recently discovered cavity and in the neighbouring areas; (b) reconstruct the geological and geotechnical characteristics of the site; (c) set up a stability modeling of the tomb structure; and (d) provide recommendations and advice to local authorities for the safe conservation of the tomb with possible future tourism also in mind. A geotechnical analysis of a set of potential trenches and



2. The geophysics field work (ISPRA) and the data analysis results (ISPRA).

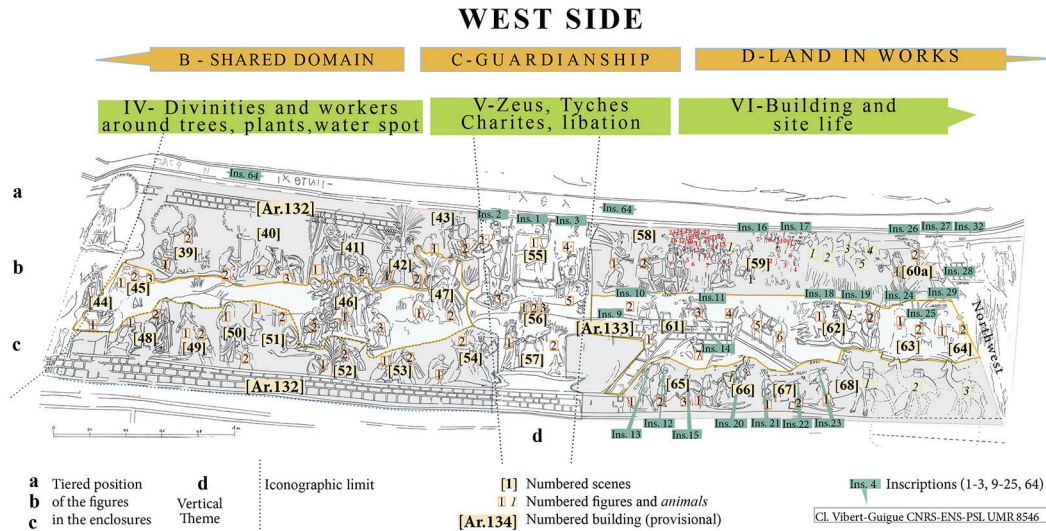


3. The data analysis results (ISPRA).

design plans was carried out in support of archaeologists for further excavation of the entrance area of the tomb. (FIG. 2).

The main recommendations suggested urgent and long-term actions such as: (i) provide a temporary support to the ceiling in the eastern sector with reinforcement of the door lintel; (ii) install a monitoring system to assess displacement of the largest

cracks; (iii) execute backfilling and impermeabilization of the tomb area; (iv) divert superficial waters flowing from the northern side of the road; (v) design and implement structural reinforcement of the top soils and limestone ceiling and E side of the tomb; and (vi) carry out further indirect and direct investigation of the underground structures found in the surrounding areas (FIG. 3).



4. Iconographical mapping of the composition, numbering, and hypothetical thematic (Cl. Vibert-Guigue, CNRS-ENS, PSL).

Documentation (Claude Vibert-Guigue)

More than 3,000 photographs of the tomb have been collected, as well as many drawings, in order to prepare an iconographic inventory and catalogue. The wall paintings within the tomb contain 15 main topics and 127 scenes, including almost 270 figures dominated by an image of Zeus flanked by Tyche of Capitolas and Tyche of Caesarea Maritima. The ceiling depicts signs of the zodiac and planets in a circular composition surrounded by Nereids on sea monsters and figures on a boat or amphora. A long uninterrupted narrative runs on the three walls facing the entrance: 152 figures, 66 divinities, and 24 animals make the long frieze very lively. Enclosure walls, segments of walls, and three standing facades give a building character to the narrative where trees and plants appear.

The first goal was to map and number the surfaces to be sure nothing was missed. Hand line drawings were completed to show both the state of conservation of the plaster and all the decorative details and the inscriptions (FIG. 4). This approach helped

to prepare for the description and analyses of the paintings. The building scene [60], for example, reveals the painter's way of representing workers in action (FIG. 5). Unfortunately, with careful observation of the activity of each figure, what they are actually building remains unclear because of the fading of the wall and the colors of the background.

Epigraphy (Julien Aliquot and Pierre-Louis Gatier)

The epigraphic survey was conducted by Julien Aliquot, Pierre-Louis Gatier, and Jean-Baptiste Yon (IGLS¹ Project, CNRS/Lyon University, HiSoMA,² Ifpo). The work focused on the 65 Greek and Aramaic painted inscriptions in the tomb and attempted to understand their relationship to the images and to propose an overall historical interpretation of the entire program. The paintings running on three of the walls compose a unique narrative.

¹ Greek and Latin Inscriptions in Jordan.

² Histoire et Sources des Mondes Antiques.



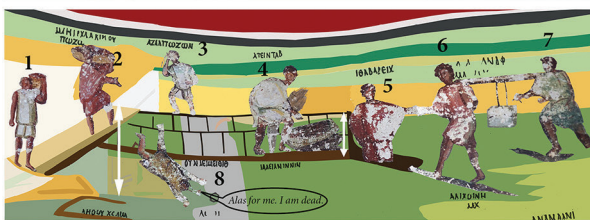
1 - North-west corner. Scene [60]. Photograph.



2 - Hand line drawing as a first sketch of understanding of the components (figures, structure, tools, colors, etc.).



3 - The wall under construction appears in transparency on the background which is treated as a patchwork of colours. From left to right, we see: a ramp reaching the extremity of a wall which begins below by a kind of masonry (viewed in perspective?); the surface of the wall (confusion with the joints of the stones?); a construction trench.



4 - Two arrows suggest a difference in height between the ends of the wall, hence the deadly falls on the left (8) (while on the right a man stands in a trench (5)).

5. North-west corner, building scene and attempt of reading. The drawings of the inscriptions just remind their presence, not for a reading (the one in 8 is translated, thanks to the epigraphists; Cl. Vibert-Guigue, CNRS-ENS, PSL).

In six panels, they trace the foundation of the Greek city of Capitolias on the site of modern Bayt Rās (on the history of the city, see the overview by Bader and Yon 2018 and, for the dating of its foundation, Aliquot and Gatier 2018: 679). The gods of Olympus, who preside over this process, come to help mere mortals. The two panels on the south wall show (i) the gods at a banquet and then (ii) a series of images of rural life that evoke the appearance of an estate that preceded the city. In the following panel, on the west wall, the gods help men to cut down trees in order to clear the site of

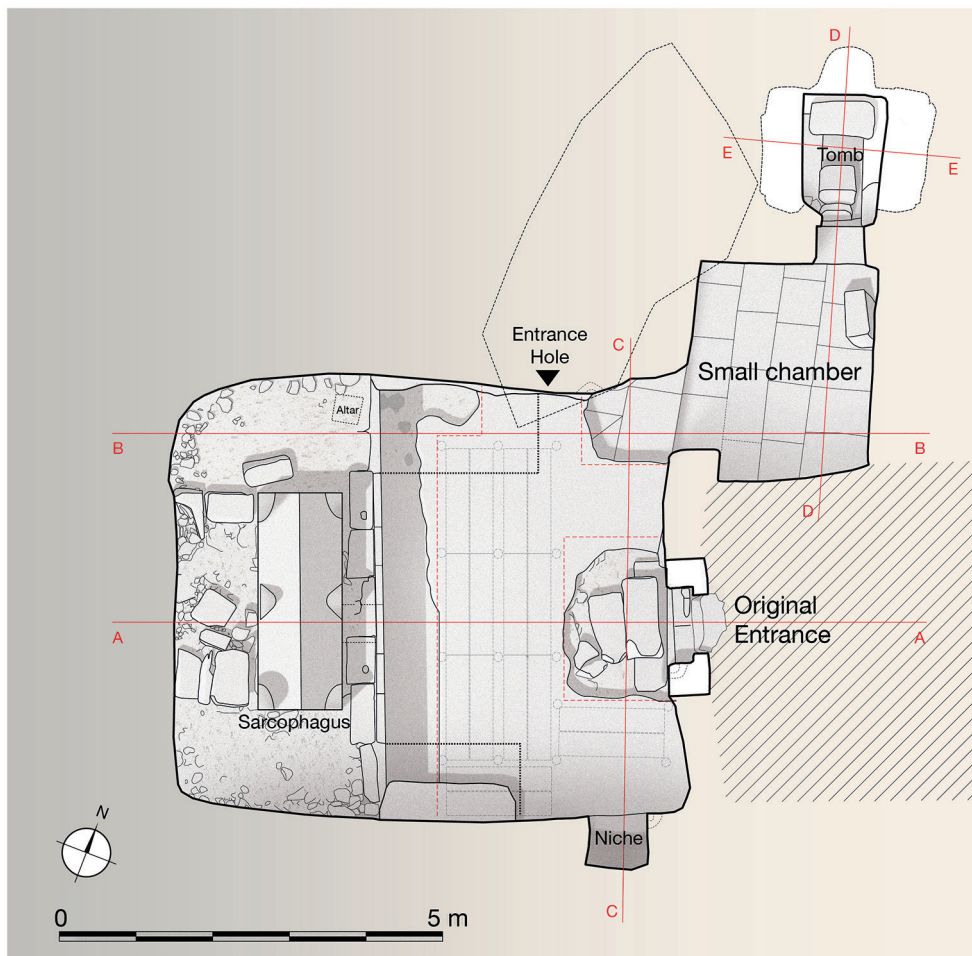
the future city. Three deities are highlighted and identified by Greek inscriptions in the middle of the same wall (iv): Zeus Kapitoliος (Jupiter Capitolinus), who gave his name to Capitolias, is enthroned in majesty between the great Tyche (Fortune) of Capitolias, or guardian goddess of the city to the right and the specific Tyche of Caesarea Maritima, capital city of the Roman province of Judaea, standing to his left. Below this group, the character who offers a sacrifice in the Roman way must have the status of a Roman citizen. On the northwest corner and the adjacent walls, the construction of



6. Zeus Kapitoliος enthroned between the civic Fortunes of Capitolas and Caesarea Maritima above a scene of sacrifice (CNRS HiSoMA 2019).

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7. The hypogeum top plan (Ifpo).

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of stones, transport of materials on camels and mules, architects and foremen at work, but also scenes of fights, accidents, and even the payment of workers. The narrative ends (vi) with an assembly of the gods and goddesses of the city.

The epigraphic material is organized in three groups: three Greek labels describing the gods of the cities of Capitolias and Caesarea Maritima (FIG. 6); 61 sentences written in the Aramaic language, but transcribed in Greek letters, pertaining to the activities of workers and remarks

spoken by the characters; and a later Greek inscription on the red band along the top of the wall.

Excavation (Soizik Bechetoille)

The tomb is composed of two rooms. Room 1, the biggest, bears the paintings. It contains a colossal sarcophagus of basalt and a niche has been set in the south wall. Room 2 is covered with white plaster and includes, in its north wall, a pit tomb with three loci. The archaeological study is based on a systematic observation of the apparent features and completed by excavations in both rooms. Chiara Fornace excavated Room 2, and Jean-Sylvain Caillou, head of the archaeological mission, conducted trench excavations in Room 1, in front of the main entrance and between the scaffolding and the wall in front of the sarcophagus. Soizik Bechetoille completed an architectural survey. In the main entrance to the tomb, a doorframe of local limestone ashlar was added in antiquity to close the doorway with a large monolithic stone panel. A lead pipe brought water to a basin (missing), fixed between the entrance and the niche. On the wall a river God depicted is handling an amphora from which water flows precisely where the basin used to

stand.

Lucie Duvignac (Ph.D. candidate) studied the basalt sarcophagus in detail. The sarcophagus is unique in terms of its dimensions and the quality of its decoration. The excavation of the sarcophagus was led by Joyce Nassar who found that the deposits were disturbed and displaced several times in the recent past. The general overview and documentation were completed after the cover of the sarcophagus was moved slightly. The deposit was found composed almost exclusively of broken, scattered, and commingled human remains. Due to the breakage of the bones, the anthropological team used a specific methodology to study them. The observation of the bones inside the sarcophagus and inside the small tomb did not lead to the identification of skeletons that could be dispersed inside the two contexts.

The excavation work done in the two arcosoli chambers and inside the sarcophagus helped us to understand the use and reuse of the space. The first phase of excavation gives us clues to understand different visible periods of occupation inside the burial chamber. The first results lead to new questions, and so far five phases of use have been identified. The second



8. First aid conservation for the mural painting (ISCR).

campaign of excavation, planned for 2019, and the results of C14 study of the collected bones should help us to better understand the varied usage and occupation of the Bayt Rās tomb (FIG. 7).

Conservation (Giorgio Sobra' and Marie Jose Mano)

Due to the rarity and fragility of the mural paintings, the need for a rapid condition assessment was essential to evaluate the situation of the paintings. Based on the results of this assessment a responsive action plan was designed. Controlling the environment inside the hypogeum prior to any intervention presented a challenge. As of July 2017, two missions were carried out by ISCR³ with the aim of preserving the mural paintings. The aim of the first intervention was to save and stabilize the paintings, in order to allow subsequent operations to take place inside the hypogeum according to schedule. For this reason, the mechanic cleaning of the painted surface was completed only where necessary to ensure the cohesion and adhesion of the materials (without fixing the salts). The cleaning of the surface has therefore been limited to cases of necessity, and aesthetic preservation has not performed yet. During the first phase of graphic documentation, a detailed photographic campaign was conducted, aimed at the definition of the specific themes to make them recognizable and uniquely identified. Conservation data sheets were used and the graphic documentation allowed for the immediate visualization and localization of technical data and conservation status, especially to assess the extent and location of conservation problems and intervention. The methods of intervention and the materials to be used in the restoration were carefully selected

³ The name of the institute name was changed in late 2019 to Istituto Centrale per il Restauro (ICR).

according to the particular conditions of temperature and humidity in the hypogeum. The use of organic substances (alcohols, natural resins, etc.) has been restricted because they could encourage the growth of biodeteriogens, and they are a source of carbon which can be metabolized (FIG. 8).

Conclusion

Three peculiarities make this Bayt Rās tomb exceptional: the narrative centered on the sacrifice offered by a priest to the deities of a city and of a provincial capital; the combination of Greek and Aramaic, the main languages of the Roman Near East (Yon 2007, on this topic); and the historical connotation of the programme illustrating the foundation myth of Capitolias in AD 98. The person who ordered the decoration of the tomb before being buried there is very likely depicted within the paintings as the one who is officiating in the scene of the foundational sacrifice. He can be identified as a Roman citizen who was responsible for the founding of the city, under the orders of the Roman authorities.

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