

EXCAVATIONS AT EZ-ZĀRA

by
August Strobel and Christa Clamer

The oasis of ez-Zāra is situated on the east shore of the Dead Sea (1:100,000 Palestine Sheet 13 Dead Sea 203 x 111), about 25 km south of Sweimeh and about 1.5 km south of the Zarqa Ma'in gorge. (Fig. 1). It extends and rises in a rough semicircle of about 2-2.5 km in diameter eastward towards the first plateau of the mountain range, and is provided with at least 40 hot springs, rich in minerals and with temperatures ranging from 31 to 53 degrees Celsius.

According to ancient literary sources, a famous thermal bath complex called Kallirrhoe ('beautiful springs') was situated in this area in Greco-Roman times. Among others, the Roman historian Plinius (*Nat. Hist.* V, 16) mentions the well-known mineral springs and according to Josephus (*War* I, 657; *Antiqu.* XVII, 171), Herod the Great was taken here, hoping to find relief from his pains several months before his death in 4 B.C. The bath complex obviously continued to be used in Byzantine times, since it is depicted on the mosaic map of Madaba, where it is labelled 'Therma Kallirrhoes'. It is shown in a vignette of three pool-like buildings or spring houses and palm trees, set between two gorges, which may represent Wadi Zerqa Mā'in and Wadi el-Mūjib.

Since the beginning of last century, the oasis of ez-Zāra has been a favourite candidate for ancient Kallirrhoe. Surface explorations were carried out by the German Protestant Institute for Archaeology of the Holy Land, especially by H. Donner (*ZDPV* 79, 1963, pp. 59-89), H. Schult (*ZDPV* 82, 1966, pp. 139-148) and A. Strobel (*ibid.*, pp. 149-162). Further surveys were conducted by A. Strobel in 1984 and 1985. Judging by the surface remains, the ancient settlement was concentrated on the western lower terraces, spreading to the shoreline of the Dead Sea, where foundations of ancient harbour establishments are still visible today. Until recently, the only

practicable way to reach the site was by boat from the western shore (e.g. Rujm el-Baḥr, the harbour of Jericho in Roman and Byzantine times). A Roman road with a steep ascent to the first plateau (about 50 m above sea level) connected ez-Zāra (Kallirrhoe) with inland Zerqa Mā'in and the fortress of Machaerus (el-Mashnaqa) near modern Mukāwir, situated on top of the mountain range at a relative altitude of 1.100 m. The road was linked with a main north-south route, later called 'Darb es-Sultān' (Musil, A., *Arabia Petraea*, Vol. I, 1907, p. 271 ff. Also: *ZDPV* 97, 1981, pp. 81-92).

A small-scale trial excavation was conducted at ez-Zāra from September 23rd to October 20th 1985 on behalf of the German Protestant Institute (Jerusalem/Amman) and in cooperation with the Department of Antiquities (Amman). It was directed by Prof. Dr. A. Strobel. Prof. Dr. W. Boeser (Karlsruhe) was responsible for the cartographic and geodesic assignments and for the chemical analysis of the thermal water. He was assisted by Ing. A. Rieger and K. Klehr. Dr. C. Clamer was in charge of the archaeological excavations and evaluations, assigned by G. Hahne and A. Lewerentz as surveyors, by theological and archaeological students from Germany, and local workmen. Representative of the Department of Antiquities was Em-saytef Suleiman.

The brief sounding was in part intended to expose the first stratigraphical evidence of occupation in the oasis of ez-Zāra, and was in part salvage-oriented. The site, which has already been severely affected by erosion and agricultural activity over hundreds of years, has recently been further damaged by the construction of the coastal road, while additional establishments, hotels and recreation facilities are planned. Near the Dead Sea shore, all surface structures, as e.g. 'Qasr el-Baḥr' (first described by H. Donner in *ZDPV*

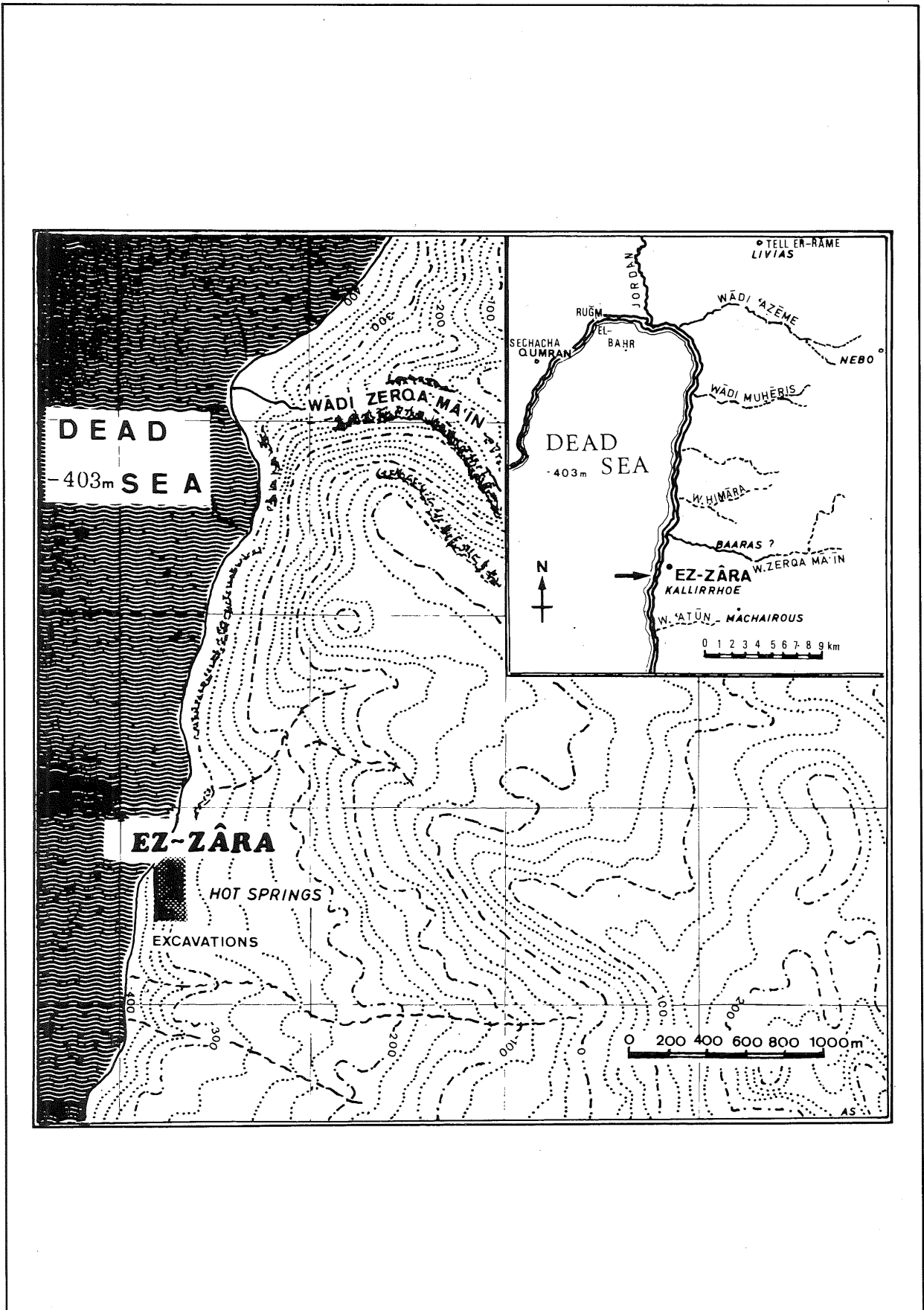


Fig. 1 Topographic Map of ez-Zāra (Kallirrhoe).

79, 1963, p.78f.), have been destroyed or covered up. It therefore seems most urgent, to recover as much information as possible about the ancient remains of the site, which is threatened with total destruction.

The area chosen for trial excavation was on the lowest terrace of the oasis, where a concentration of archaeological remains was visible on the surface, consisting of the outline of a large structure, as well as several terrace walls (Pl. LXXXVII, 1). The large structure, recognizable by the concentration of fallen building material, among them column bases and drums, occupied the centre of the terrace. It is aligned with the terrace walls, its western wall built in prolongation of the lowest wall. The building material is of local basaltic tuff, a porous and layered stone, which weathers easily and thus shows a poor state of preservation. While the western wall of the building is much eroded and seems partly missing due to the sloping terrace, the eastern hill-side wall is better preserved. Several column bases are still *in situ* on top of the wall (Pl. LXXXVII, 2), and its foundations of roughly-hewn stones go down more than 2.20 m; the lowest course has not yet been reached in the adjacent trial trench. The monumental character of the structure, which measures 35m × 29m, is most remarkable and probably indicates a public building.

After the establishment of a grid, based on 5m x 5m squares, and a determination of the absolute height below sea level, several trenches of 2m x 2m were sunk within and outside the building remains. Two trenches inside the columned building, one close to the south-east corner adjacent to the eastern wall (P 17/1), the other in the north-west corner (O 18/2) revealed a similar stratigraphic picture (Pl. LXXXVIII, 1). The top layer showed a heavy stone tumble and packing with larger boulders, several column drums and rectangular stone slabs, part of which seemed to be laid rather than fallen. In both trenches a wall built of roughly cut stone boulders appeared in the sections set at right angles to the outer wall of the large build-

ing. The walls seem to be part of an inner structure. No floor was discovered connected with the columned building, but pottery of the late Byzantine period was found within the stone fill.

Below the stone tumble, a thick geological deposit of whitish to yellowish/brown travertine grit or fine travertine gravel appeared, alternating with thin layers (up to 5 cm) of reddish-brown, greyish or blackish soil. The travertine deposits seem to be washed in perhaps by a spring, and the reddish-brown and blackish soil layers may also be washed in by spring water (similar soil occurs as swamp soil in the vicinity of some of the hot springs at ez-Zara). Weathered travertine is found superimposed on natural gravel deposits e.g. in a quarry south of the oasis, as a result of recent sedimentation.

Human occupation levels, on the other hand, seem to be connected with the greyish, very loose and powdery soil surfaces within the geological layers, containing many pebbles, some charcoal pieces, fragments of glass vessels and many pottery sherds. Most of the sherds are of a small size and belong to the Byzantine period, while in the lowest level all seem to come from the Roman period. In Trench O 18/2 we also reached a fragmented white plaster floor (Pl. LXXXVIII, 2), associated in the south section with a plaster covered wall one course high. The floor and the lower wall segment seem to belong to the Roman period, while the upper courses of the wall seem to have been re-built in a later phase (Pl. LXXXIX, 1).

Another trench, P 17/2, outside the large building and adjacent to its western wall, again revealed no floor connected with the surface structure, but the loose powdery surface soil contained Byzantine pottery sherds. A retaining wall was discovered *ca.* 40cm below the surface, with one row of larger pebbles and a stone packing laid against it (Pl. LXXXIX, 2). Connected with the retaining walls was a thick layer of ashy soil (up to 30cm), slanting down towards the west. This ashy layer contained a vast amount of partly restorable pottery, limestone mugs and bowls, as

well as some coins. The pottery is typical of the Early Roman period, with lamps and coins from the 1st century A.D. The pottery layer, which looks like a dump, as well as the retaining wall were cut by a foundation trench for the foundations of the eastern wall of the large columned building. Between 1.20 and 1.40m down, a level of natural gravel deposit was reached, but there were no signs of the nearby travertine.

At the northern end of the terrace, stratigraphically connected with the columned structure by the two terrace walls, a house complex with three rooms was discovered, (Pl. XC): Here too, the floor surface has been eroded and only the foundation walls remained intact. The walls go down 1 m to 1.5 m and are founded on bedrock or on wadi gravel. They are built with large boulders on top and smaller stones below, the latter strengthened by mortar.

Very little pottery was found, but several coins were discovered in the loose surface soil, dating from the second half of the 4th century A.D. and the beginning of the 5th century A.D.

In conclusion one can say that the lower terrace of ez-Zāra shows clear evidence of Early Roman to Late Byzantine occupation, with possible gaps in between. However, further excavations are needed to provide additional information. Further work at ez-Zāra is planned for October 1986, and it is hoped that more efforts on a larger scale will help clarify the history of the site.

A preliminary geological evaluation was undertaken by Dr. K. H. Proesl and Dr. J. Mutterlose (Dept. of Geology and Mineralogy, University of Jordan), whom we would like to thank.

August Strobel and Christa Clamer

L'UTILISATION ACTUELLE PAR LES BEDOUINS DES GROTTES ARCHEOLOGIQUES DE PETRA

par

Anna Ohannessian-Charpin

1 — Introduction

Ce travail est issu des trois missions ethnoarchéologiques menées sur la population contemporaine des Bdoul, occupant le site archéologique de Petra¹. Un trait spécifique est développé ici, à savoir l'utilisation des grottes archéologiques par les Bdoul.

a - Situation des Bdoul

Les Bdoul forment une tribu d'origine bédouine. Ils sont rattachés à la confédération tribale des Huweitat qui occupe tout le sud de la Jordanie et s'étend en Egypte et en Arabie-Saoudite.

Actuellement, la tribu des Bdoul est divisée en deux clans : celui de Pétra et celui du village moderne de Humeimah². A Pétra, le clan est composé de cinq unités lignagères : celles des Fuqara, des Mawassa, des Judeilat, des Samahine et des Jumada. Les deux derniers lignages sont plus récents ; les Samahine ont été rattachés aux Bdoul en contractant mariage avec les Mawassa, quant aux Jumada, ils sont une segmentation des Mawassa. Par contre, nous retrouvons les trois premiers lignages chez les Bdoul de Humeimah accompagnés d'autres, absents à Pétra.

Jusqu'en 1985³ les Bdoul ont occupé le site de Pétra. Les grottes creusées ou aggrandies aux époques nabatéenne et romaine et qui servaient essentiellement de tombes sont réinvesties et utilisées pour l'habitation en général.

Ainsi jusqu'à cette date Pétra (et surtout le site)⁴ a constitué l'habitat des Bdoul, qu'ils ont partagé avec les touristes de plus en plus nombreux.

En Avril 1985, une grande partie des Bdoul, ceux qui occupaient le site même, ont déménagé au village d'Um-Sayhoun, après plus de cinq ans de refus. C'est un lotissement construit à cet effet par le gouvernement, et qui fait partie d'un projet de sédentarisation en vigueur dans la région.

b - Travail et objectifs :

Les différentes transformations survenues à Pétra depuis l'ouverture du site au tourisme ont profondément influencé le mode de vie des Bdoul dont le village d'Um-Sayhoun est le résultat le plus tangible. A différentes reprises, les Bdoul ont mis en avant des "stratégies" socio-économiques et culturelles diverses pour s'adapter ou répondre à ces changements externes. Ces

1. Une première mission de 2 semaines, a eu lieu en oct.-nov. 1983, en collaboration avec l'architecte R. Jarno. Elle s'est centrée sur l'observation directe de l'occupation des grottes et l'organisation de l'espace à Wadi-Farassa.

La deuxième mission en 1985 (1 mois) a eu plusieurs objectifs : les premières installations dans le village, les semi-nomades Bdoul de Stouh et de Beidha et le système de parenté des Bdoul notamment la généalogie. La 3ème mission (1986) avec la collaboration de R. Jarno s'est centrée uniquement sur le village, d'Um-Sayhoun. Ces missions sont subventionnées par O. Aurenche directeur de la R. C. P. 624 "Ethnoarchéologie du Proche Orient" et par la Direction des Relations Culturelles du Ministère des Affaires Etrangères. La mission de 1983 a bénéficié également d'une subvention de l'Institut du Monde Arabe.

2. Humeimah, près de Quweira sur la route du desert,

est un village moderne construit vers 1960, et qui longe les 2 bords de l'autoroute. L'ancien village, à quelques kms dans le desert, regroupe quelques maisons anciennes, actuellement en état de ruine. Elles étaient utilisées comme grenier et stockage par les Bdoul nomades. Une partie des maisons neuves ont toujours cette même fonction.

3. La question de l'origine des Bdoul ainsi que la date de leur installation à Petra n'est pas encore claire. Les Bdoul, actuellement déplacés et hors du site, réclament leur droit sur le site et le territoire de Pétra d'une manière indirecte, soit en soulignant leur descendance des Nabatéens, soit en racontant des légendes se rapportant sur leur installation à Pétra. Ces dernières ressemblent au moins par leurs formes aux événements historiques liés au site.

4. Dans ce travail, Pétra désigne le territoire archéologique global. "Site de Petra" désigne par contre le circuit touristique qui s'étend du Sik au musée.