PRELIMINARY REPORT OF RECONNAISSANCE SURVEY IN THE REGION OF WADI BAYIR

by Jacqueline Calzini Gysens and Fawwaz al-Khraysheh

Introduction

A first mission of IsMEO (Istituto per il Medio ed Estremo Oriente, Roma) in the region of Bayir (Southeast Jordan) in collaboration with the Institute of Archaeology and Anthropology of Yarmouk University (IAAY), and with kind permission of the Department of Antiquities of Jordan, took place from June 6 to July 6, 1993. The expedition is part of a research program promoted and financed by the "Consiglio Nazionale delle Ricerche", the Ministry of Foreign Affairs, the General Directorate of Cultural Relations, as part of the cultural agreement between the Republic of Italy and the Hashemite Kingdom of Jordan (1992-1995) and by Yarmouk University. The 1993 survey was organized by IsMEO, J. Calzini (program director) and F. al-Khraysheh (head of the epigraphy section, IAAY) in order to follow up the research in the region of Bayir which had already been started by several visits and short surveys (Mendenhall 1988; Calzini Gysens 1993; F. al-Khraysheh 1994). The epigraphic survey team consisted of twelve members, seven of whom made up the scientific staff: M. Ababneh, A. Adjlouni, H. Hayajneh (epigraphists, Yarmouk University), G. Ruffo (topographer and photographer, IsMEO) and the authors. During the second part of our stay we were joined by L. Marino of the "Dipartimento di Storia dell'Architettura e Restauro" of Florence University and his assistants, architects O. Dinelli, M. Greco. S. Guidotti and R. Sabelli. They drew a new and detailed plan of the surface evidence of structures belonging to the socalled Fort or Qaṣr Bāyir. Their contribution was to reveal one of the most interesting results of the 1993 campaign.

The 1993 mission had three purposes:

- 1) to establish a map of all surface evidence of archaeological remains in the surveyed area of the Eastern Desert,
- 2) to collect systematically all epigraphical material to be discovered in the surveyed areas and
- 3) to draw a detailed plan of the actual situation of the ruins on the site of the Qaṣr Bāyir, necessary for future research and excavation (scheduled for the 1994-1995 season).

Several objectives were set by the survey team in order to accomplish as much as possible of the program in the short time available. Our first objective was to establish a grid system covering the area around the fort in a range of 15 km in order to record and to overview the still existing sites presenting epigraphical material or archaeological remains. Only those structures presenting such elements were taken into account. A collection of surface artifacts was made in two cases (from the area of the fort and from site 14). Only diagnostic sherds or artifacts were selected for dating purposes. Preliminary observations were made on sites within their environmental context and distribution patterns. Criteria were set for the continuity of the survey program. USGS Quadrangle maps were used. A total of twelve sites with epigraphical material (sites 1-12) and two new archaeological sites (sites 14 and 15) were discovered. (Fig. 1). The plan of the re-

Bāyir, who gave us kind permission to put up our tents and to use the camp's facilities.

^{1.} The members of our survey party were hospitably received by the Commander of the Police Post of

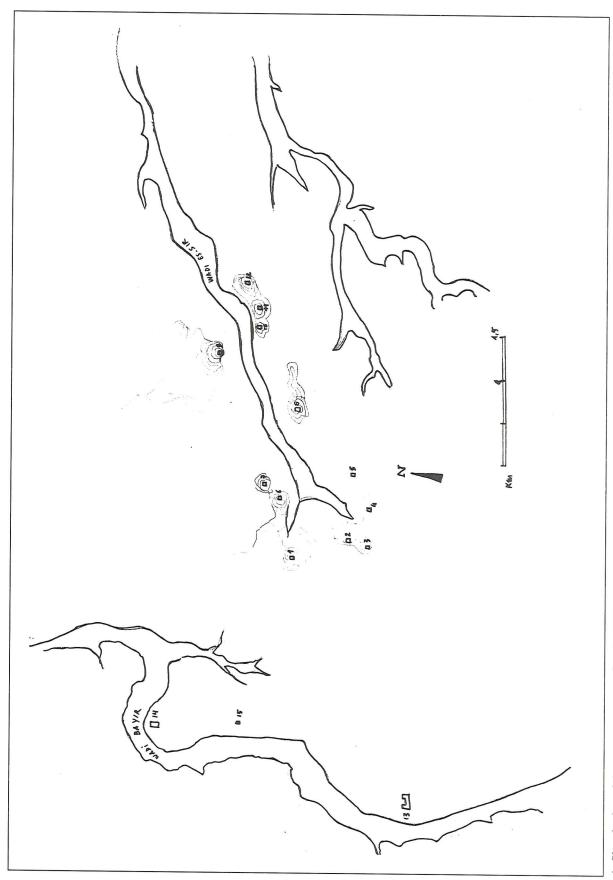
maining ruins of Qaşr Bāyir has been completed.

The Survey

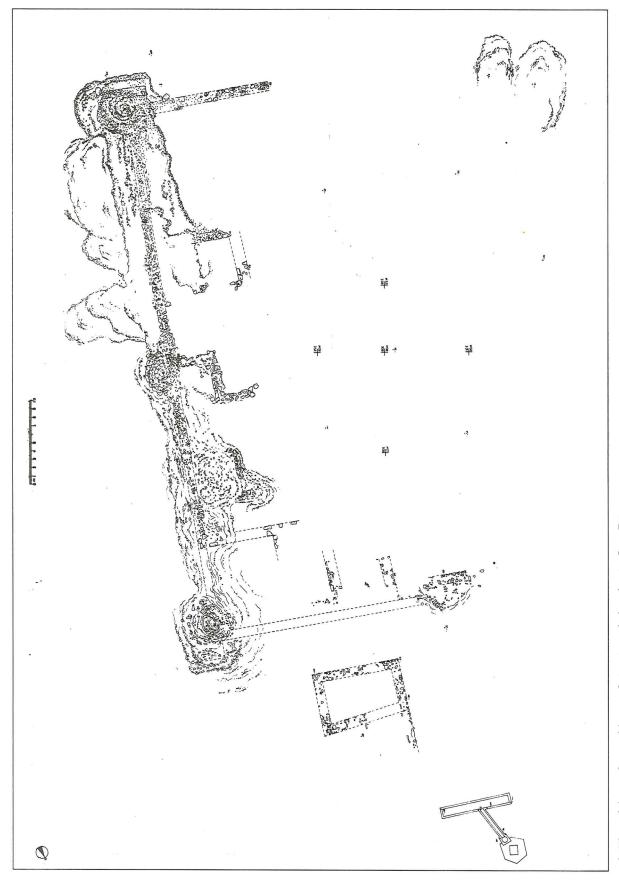
The best introduction to a survey in this region is still to be found in A. Musil (1927), N. Glueck (1934: 73f.; 1951: 47), A. Stein (Gregory and Kennedy 1985: 289-290) and H. Field (1960: 76-102). The last two explorers described the architectural remains of the old fort. N. Glueck collected and photographed some pottery sherds found on the site. No inscriptions were recorded. Two published surveys in the region followed: S.L. Rolston and G.O. Rollefson (1982) and G.R.D. King (1983). In 1932 the British authorities quartered soldiers of the newly created Arab legion in Bāyir. The ancient ruins of the fort were used as a quarry for the construction of the police post 500 m from there, on a hill dominating the valley (Field 1960: 99 n.2). Two slightly different plans of Qaşr Bāyir had been drawn by E. Schroeder (Glueck 1934: 105, Pl.19) and Horsfield (Field 1960: 99, Fig.29, A) when the structures had already disappeared. One unique photograph exists of the ancient construction prior to its destruction (Hogarth 1927). Preliminary survey work had been done east of the Transjordan plateau for the construction of the Suez-Baghdad railway line at the beginning of the century (Potts 1988: 132). D. Carruthers visited Bāyir in 1909 and discovered the ruins of what he identified as an ancient caravan station or khān on the "Egyptian-Babylonian route" between Ma'ān and al-Jawf (Carruthers 1910 243; Potts 1988: 132). Carruther's discovery was afterwards the object of much chronological debate. Those who visited the site, Jaussen and Moritz (King 1983: 398), identified the still extant structures of the fort as belonging to the Roman period. A. Musil, at the beginning of the century (Musil 1927: 324, n. 76) followed by T. E. Lawrence in 1917 (Lawrence 1955: 288) and A. Stein in 1939 (Gregory and Kennedy 1985: 257) proposed a Ghassanid date. H. Lammens (cited by King 1983: 257), G. Bell (Hogarth 1927: 6) and E. Schroeder (Field 1960: 99) considered it an Umayyad construction. Other scholars who had not seen the ruins, J. Sauvaget (1939: 39-40 in King 1983: 398) and K.A.C. Cresswell (1969: I, 642-643), accepted this opinion. The presence of a very large quantity of Nabataean or Nabataean/ Roman pottery sherds on the site of the fort suggests the possibility of a Nabataean or an early Roman occupation level: L. G. Harding (unpublished notebooks, cited by King 1983: 399, n. 38), G. W. Bowersock (1971: 242), S. L. Rolston and G. O. Rollefson (1982: 213). G. R. D. King (1983: 399), R. Wenning (1987: 52) and D.L. Kennedy and D. Riley (1990: 330).

The Fort of Bāyir (Site 13)

The site of Bayir is situated at a permanent water source, on an ancient track connecting the Wadi Sirhan with the west on a crossroad which might have been of some importance in the past. In its actual state the archaeological site is covered with sand and other debris and numerous Bedouin graves occupy its eastern sector. The tomb of 'Annad, son of the former chief of the Ḥuwaytat 'Auda Abū Tāyah is now the object of a saint's cult; it is possible that in the near future the site will be enclosed by a wall. Comparing the two known plans of the fort (Glueck and Field) and the plan drawn by our architects (Fig.2), we may observe that the actual surface remains did not alter very much from the time of the first mapping. The inner area represents approximately less than a quarter of the total surface (78 x 55 m). The remains of the foundations are buried under a very thick layer of debris and dried organic material. This is the result of the continuous arrival of camel herds attracted by the wells which are on the site of the fort.



1. Sketch plan of the surveyed area (BĀYIR 1993) (G. Ruffo).



2. Plan of the surface evidence of structures belonging to Qaşr Bāyer.

During prospecting and mapping of the remains of the western outer wall prospecting the wadi, the team of architects drew our attention to the distinctive new features which appear at the southwest and northwest corners. In fact, external climatic factors or intensive quarrying have laid bare the outer faces of the corners and indicate possibly two construction levels. The foundation blocks of the tower walls situated at the apparent lowest level meet at right angles projected rather far from the wall remains of the circular corner of the upper level. Both constructions used excellently cut limestone blocks laid in mortar. As far as could be judged from their condition, several occupational levels and successive rebuilding might be postulated.

Pottery Surface Sherding (Site 13)

After the intensive sherding of the preceding survey parties (Glueck 1934; Rolston and Rollefson 1982; King 1983), there was still a considerable amount of pottery fragments on the site. A surface collection was made, and a sample is being prepared for publication. As remarked before by N. Glueck (1934: 73) no complete vessels were found and the successive collections consist of small fragments. Only a few sherds are of sufficient size to permit reconstruction in a drawing. However, the general impression received from the complete collection consisting of fine, painted Nabataean table ware and fine to coarse common ware, was one of homogeneity taking into consideration the visible composition of the pottery and the particular quality of the painted ware. Comparative analysis of the surface pottery collection of this season is in preparation.

The Reservoir (Site 14)

Our survey team visited the old wateringpool or reservoir situated on the right bank of the Wādī Bāyir at a distance of about 3.2 km from the Police Post. When the writer came for a short visit to Bāyir the previous year, this huge and well conserved 54.86 square m ancient construction was still to be seen as described by A. Stein in 1939 (Gregory and Kennedy 1985: 289-290) and by H. Field (1960: 100-102). Even if most of the limestone block of the large enclosure (1.83 m thick) had also been used for the construction of the Police Post, its general conservation was very good and the particularly well cut facing stones suggest a Nabataean-Roman date. Moreover, the north side of the reservoir was equipped with a complex sluice system. A water channel connected the reservoir with the wadi. Our disappointment was thus great at finding this unplanned and not studied monument of ancient engineering completely destroyed, its blocks thrown around and the enclosure walls replaced by slabs of concrete.

The Limestone Quarry (Site 15)

Near site 15, we left the track along the slopes of the Wādī Bāyir to explore the region to the east, when we came across a very extensive open-air limestone quarry. A long line of cuttings is still visible on the rock floor, where operations to sever the squared blocks from the native rock had been abandoned.

Site 14

This newly discovered archaeological site is situated 2.1 km north of Qaṣr Bāyir. Near the Wādī Bāyir's actual streambed impressive remains of the podia of three rectangular ancient construction, slightly buried under the sand. had been noted by F. al-Khraysheh. We visited these on the occasion of the visit to our camp by Mr Renato Batti, former Ambassador to the Commission of the European Communities in the Middle East. The three constructions are standing perfectly parallel to one another, at

a regular distance of ca. 25 m and their back walls are set in line. The surface remains of the podia following an east to west orientation measure: building A: 26 m long x 6.8 m wide; building B: 20 m x 6.85 m; building C: 16.80 m x 11.30 m. Building A shows 0.86 m thick stylobate walls. The internal chamber of building C presents a division in two parts, the distance between the cella and the front wall being 6 m. Very carefully cut large calcareous stones had been employed for the construction of these podia. Two fragmentary terracotta tiles were found in front of the middle construction. This site produced also one single ancient North Arabian fragmentary graffito mentioning the goddess Lat.

The Epigraphic Survey

The 1993 epigraphic survey in the Wādī Bāyir was conducted by F. al-Khraysheh and myself. I would like to thank S. Tell, former Director-General of the Department of Antiquities, for granting a permit and Z. Kafafi, Director of the Institute of Archaeology and Anthropology of Yarmouk University for his support for the Project. G. Ruffo carried out the survey work and the topographical planning.

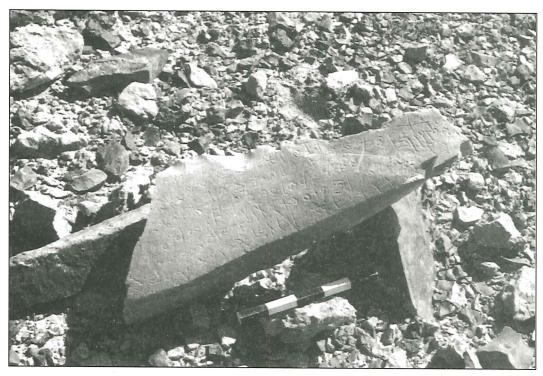
Previous to our 'Comprehensive Epigraphic Survey', V.A. Clark published six graffiti which he had recorded during his participation in the "Wādī Bāyir Paleoanthropological Survey" conducted by S.L. Rolston and G. O. Rollefson in 1981 (Rolston and Rollefson 1982; Clark 1987: 185 - 191).

Two short visits were made by the epigraphy section of IAAY in 1988 and 1989 in Bāyir and a first extensive and systematic survey in June 1990. The area investigated was east to the Wādī Bāyir in the plain of the Wādī Ukheidir as-Sātih. Eighty Safaitic and Thamudic graffiti, one Nabataean short graffito, four Greek and one Latin inscribed

dedications have been collected and prepared for publication (Calzini Gysens 1993) (Figs. 3 and 4).

This third season of Bayir's Comprehensive Epigraphic Survey organized in collaboration with IAAY and IsMEO has covered an area situated northeast of the Qaşr Bāyir (site 13), in a range from 4 to 20 km, in the plain between the Wādī Bāyir and its tributary, the Wadi ad-Si'r (see Fig. 2). We generally followed a circuitous course to the north and the south of the wadi. Most of the inscriptions were found on the hill ridges overlooking the wadi. Sites 1, 2 and 7 instead appear as irregular piles of stones and boulders in the open flint-covered plains. Site 5 was on the top of a low isolated round mountain, a typical geographical feature of the region. The Wādī as-Si'r has a considerable, broad streambed, approximately 300 m wide. Each site with epigraphic material was numbered and was classified as a "point" instead of using the term "cairn". No immediate evidence of a funerary function had thus far been noted, nor was there recovered any surface scatter from the Chalcolithic industry. The nearly regular presence of these stone heaps on the edges of ridges overlooking valleys, seem to confirm an overall impression of their function as signposts.² Altogether 64 ancient North Arabian texts were recorded (Thamudic), three Nabataean graffiti, a bilingual Nabataean/Thamudic, five short Greek graffiti, a considerable, long Greek text and several short texts of an Early Islamic date among which some, in Kufic Arabic, are now being prepared for publication. The ancient North Arabian texts consist of graffiti of "signatures", they record mostly names with few genealogical elements. Considering this onomastic material within a wider cultural issue remains problematic in the present state of documentation. No rock art has been found so

^{2.} We made good use of M. Macdonald's observations on survey strategy (Macdonald 1982).



3. Thamudic inscription from Bāyir (point 8, no. 34).



4. Early Islamic inscriptions from Bāyir (point 11).

far but several modern tribal signs or wusum cover the ancient inscriptions suggesting the regularity of the itinerary stops used by transmigrations. No funeral inscriptions were present on the sites. A number of graffiti pray to the Goddess Lt=Lat according to the common expression "dkrt It" (may Lat remember) and are sometimes accompanied by the ritual seven dots or strokes. Three other Arabian divinities are cited together in a text: al-'Uzza, Manat and Dushara (Point 12, No. 68).

Most of the texts discovered are in an ancient North Arabian language conventionally called "Thamudic". Paleographical considerations led to the thesis of the original unity of the alphabet (Van den Branden 1950; contra: Ryckmans 1956) and of the chronological and regional division of the various scripts. F.W. Winnett would have classified this type of script found in the region of Bāyir as "Thamudic E or Tabuki

Thamudic" (Winnett 1937: 42-49, Pl.X; Winnett and Reed 1970: 70). This class of inscriptions seems closely related to "Safaitic" so that E.A. Knauf recently proposed to name it "Southern Safaitic" (Knauf 1980; but see Macdonald 1986, G. King 1988). Epigraphic surveys in Southern Jordan confirm its regional character (Harding and Littman 1952; Knauf 1980 Clark 1985; G. King 1988; Jobling 1980-1986).

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