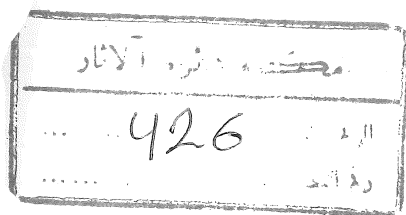


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CONTENTS

	Page
<i>study of</i> 1962 SURVEY OF THREE DOLMEN SITES IN JORDAN	
JAMES L. SWAUGER	5
THE 1962 EXCAVATION AT ARAQ EL-EMIR	
PAUL LAPP	37
NOUVELLES STELLES FUNERAIRES A PETRA	
J. STARCKY	43

1962 STUDY OF THREE DOLMEN SITES IN JORDAN

JAMES L. SWAUGER

Carnegie Museum

Pittsburgh 13, Pa.

1 November, 1962

INTRODUCTION

When, What, and Where

During the period 15 March to 15 April, 1962, a small party which I led investigated dolmens at three sites on the east bank of the Jordan River: Damiya, Tell Um el Quttein, and Tell el Matabi. (Wherever possible, my spelling of site names follows the usage of the Archeological Map of the Hashemite Kingdom of Jordan.) Site locations are given in Fig. 1. These are known sites which have been published by others to some extent. Glueck's discussion of them in the fourth volume of his EXPLORATIONS IN EASTERN PALESTINE includes excellent bibliographical references (Glueck, 1951, 356-359, 385-389).

The dolmen site of Tell el Matabi as located on Fig. 1 does not correspond exactly to the Tell el Matabi of the Archeological Map. My identification of the site is based on Nelson Glueck's description (Glueck, 1951, 387-389) which corresponds to the situation on the ground at the site and to its geographical relationship to the site of Tell Um el Quttein.

Who

Members of the party in the field were Rafik W. Dajani, Technical Assistant in the Department of Antiquities of the Hashemite Kingdom of Jordan; my son, John L. Swauger; Lutfi Qadro Siyam, our driver; and myself.

As secretary, my wife, Helen P. Swauger, handled daily dictation and turned it into field notes and correspondence, did shopping for odd bits of equipment, and performed a dozen other tasks that permitted the field party to get out during the day and to get some rest in the evening.

We could not have done our work without the assistance of many other people. Authorization for the work was given for the Department of Antiquities by its Director, Dr. Awni Dajani. We were the recipients of many courtesies from him and are grateful for his continuing interest in the dolmen studies.

Before choosing the three sites we worked in the 1962 season, we conducted survey work on both banks of the Jordan. On the west bank we were accompanied by Nicola Antar through the courtesy of Sami M. Maddah of the Department. Yussuf Labadi of the Department was most helpful in directing us to various locations. On the east bank we were led in part by Anwar Akroosh of the Department.

As is the general experience of those working in Jordan, we were afforded every assistance by police at various posts near which we worked.

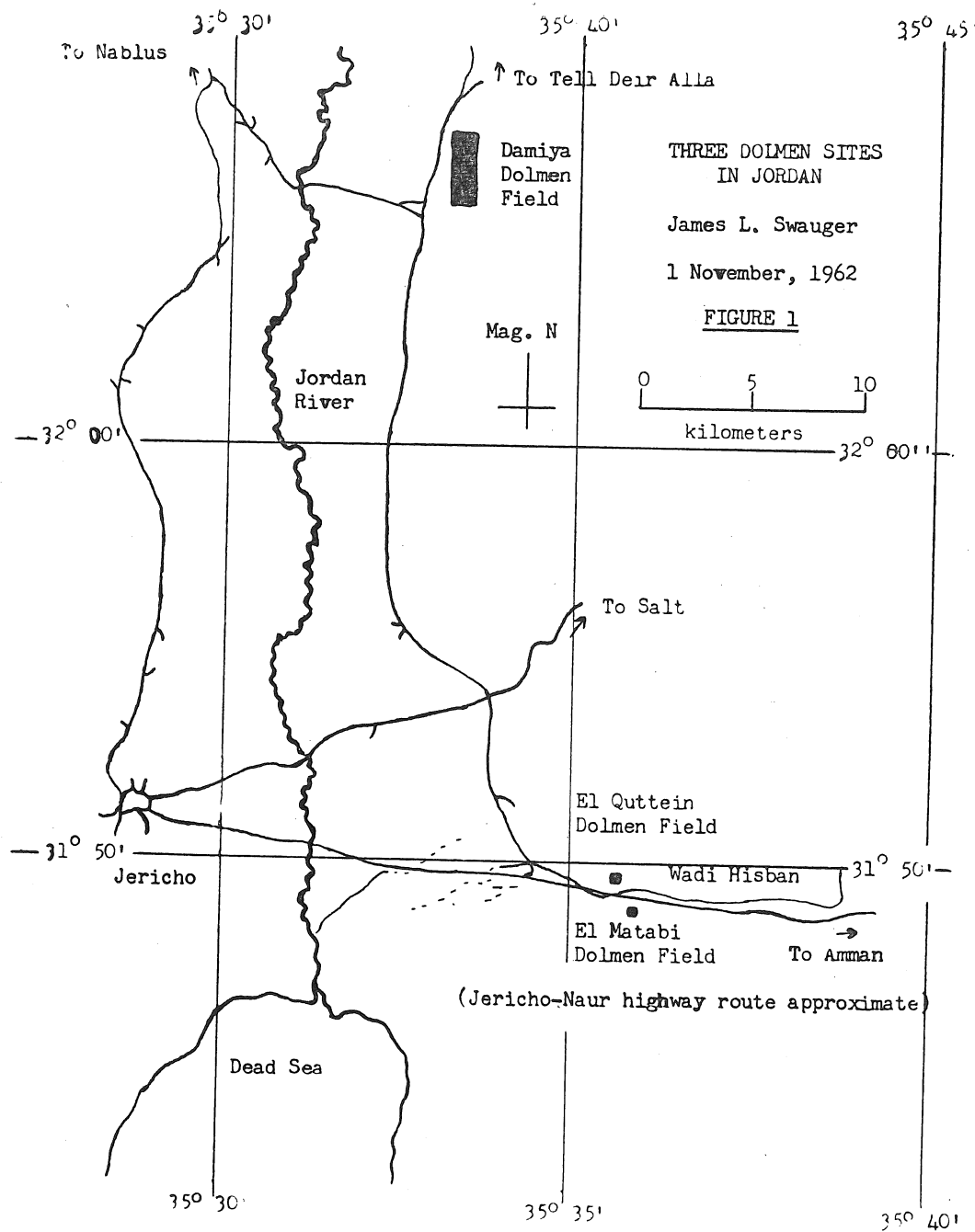


Fig. 1

My family was housed in the American School in Jerusalem. Our thanks are due the Director of the School, Dr. Paul W. Lapp; his wife, Nancy; and the staff of the school for their many kindnesses; and to Dr. William L. Reed, Executive Assistant to the President of the Schools, for assisting us in making arrangements for and beginning survey work.

The study was financed primarily by field funds of Carnegie Museum. Further assistance was furnished by the American Philosophical Society, the United Steelworkers of America, and several private donors who wish to remain anonymous.

How

We mapped the three fields under study, measured the structures in them, photographed them in black-and-white and in color, and wrote cursory descriptions intended as a means of identification of individual dolmens. The first season permitted me to become familiar with dolmens and dolmen fields, to achieve the sort of rapport with the structures and their environment that permits meaningful interpretation, and to test recording methods.

Angles were measured with a Brunton compass mounted on a tripod. Angles were read only to the degree. Course measurements were ground measurements. We did not try for exact horizontal or vertical measurements. This methodology was adopted in order that a man armed only with a compass and a reasonably good idea of his pace over rough ground can use the maps we made. The maps are intended to permit location and identification of gross objects, whole dolmens, rather than arbitrary points on a course, although we consistently located a dolmen by its southwest corner. In time we plan to make exact maps of these and other fields with angles and horizontal and vertical distances measured exactly.

Why

The dolmen study was begun at the suggestion of Prof. James L. Kelso of the Pittsburgh Theological Seminary, and his advice and guidance have been most helpful. It was at his urging that in 1959 I began bibliographical research on Jordanian dolmens.

While I delved into well over one hundred and fifty articles and major works mentioning dolmen studies, the following authors were particularly helpful: Edwin C. Broome, Jr. (1940a, 1940b); Claude R. Conder (1889); Glueck (1934, 1935, 1939, 1951); Harding (1959); Schumacher (1889, 1890); and Tristram (1874).

As Kelso had pointed out, dolmen study was not a major concern of former students except for Broome. Such work as had been done was descriptive or speculative, and while much of it was good, it had been performed as ancillary to other projects. There is still no sure knowledge as to who built the dolmens, when, or why.

It is my purpose to proceed methodically to study the dolmens of Jordan trusting that by means of refining the techniques tested and found useful in 1962, excavation at selected dolmens, and application of appropriate methodologies from geology, mineralogy and other exact sciences, we may sometime know who, when, and why. I believe relationships among fields can be established on the basis of distribution and construction that will lead to sound chronological ordering of the fields.

DOLMENS AT DAMIYA

The Damiya site is on the east bank of the Jordan River. It is 32 kilometers and at an angle of 25° east of north of Jericho (Fig. 1). Its coordinates on the highway map of the Hashemite Kingdom of the Jordan are 200.8-160.8. The dolmens lie in an area roughly 4 kilometers north to south, 1 kilometer east to west. They are all east of the main road along the river and many are visible from it. They stand on and are built of Um Sahm sandstone (Geological map of Jordan, Sheet 1, Amman).

I consider the Damiya site divided into three sections: southern, central, and northern. The central section is separated from the others by dry stream beds in which water must course only infrequently. Dajani, my son, and I mapped, recorded, photographed, and briefly described only the dolmens in the southern section. We walked over the central and northern sections and familiarized ourselves with them but time did not permit our recording them in detail.

We recorded 52 dolmens in the southern section. Their positions are given in Fig. 2. Plate 1 is Dolmen No. 1, the initial point of Fig. 2. (In all photographs, the measuring stick shown is one meter in length. The person holding the stick is John.) Not all these are complete and standing, to be sure, but all are either whole or have enough identifiable remains standing to permit our calling them dolmens. In the central section, we counted 60. In the northern, 52. Until a detailed mapping project is carried out in the central and northern sections, the count cannot be considered exact, and depending on opinion some additions to or subtractions of the count might be made even in the southern section. Since the dolmens at Damiya are built of the sandstone on which they stand, not only collapsed but also complete dolmens melt into their backgrounds and disappear unless seen from favorable angles. It is likely 200 is a reasonable estimate of the number of dolmens at Damiya which Harding said is the largest field in Jordan (Harding, 1959, 41).

COPY OF FIELD NOTES, MAPPING OF DOLMENS AT DAMIYA

310362, 010462, 020462, 050462, 070462

Dolmen No. or Station Letters	to	Dolmen No. or Station Letter	Angle in degree of azimuth	Distance in meters
1	B		4	18.75
B	C		292	28.60
C	D		313	29.90
D	2		311	19.45
2	3		336	32.70

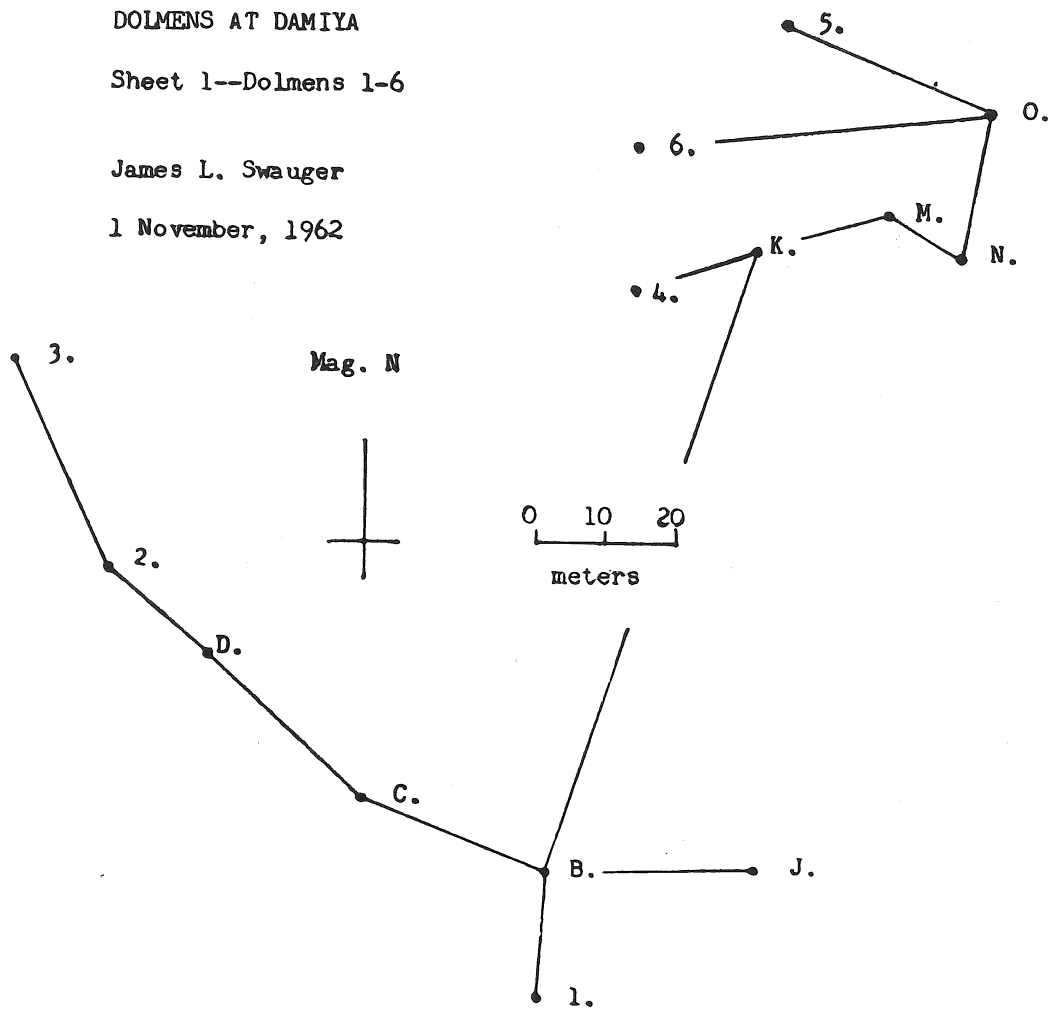
Most southerly dolmen, No. 1 is on the south end of the lip of the west face of the small plateau here. Like other lettered points, B is a station for running line.

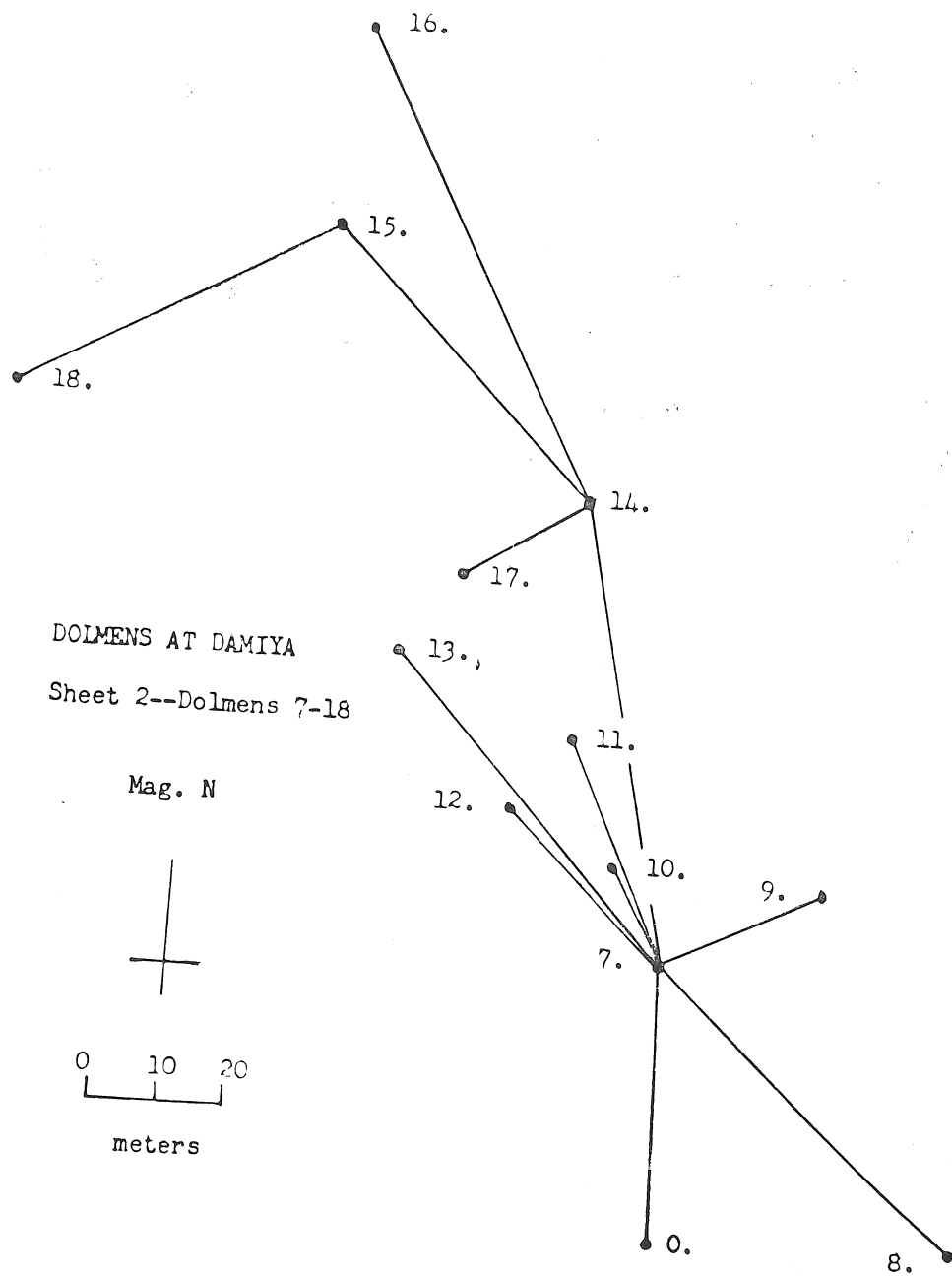
DOLMENS AT DAMIYA

Sheet 1--Dolmens 1-6

James L. Swauger

1 November, 1962



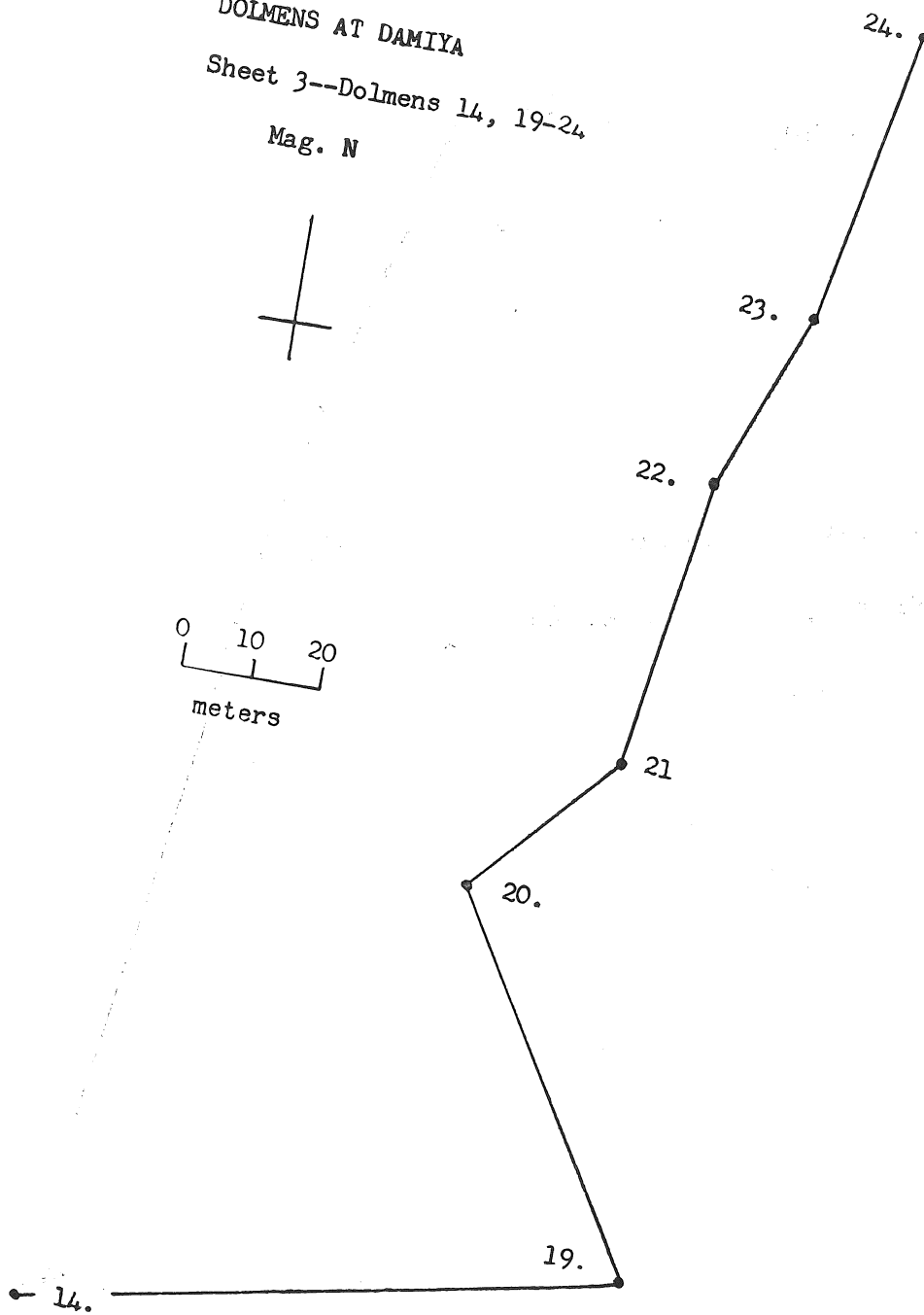


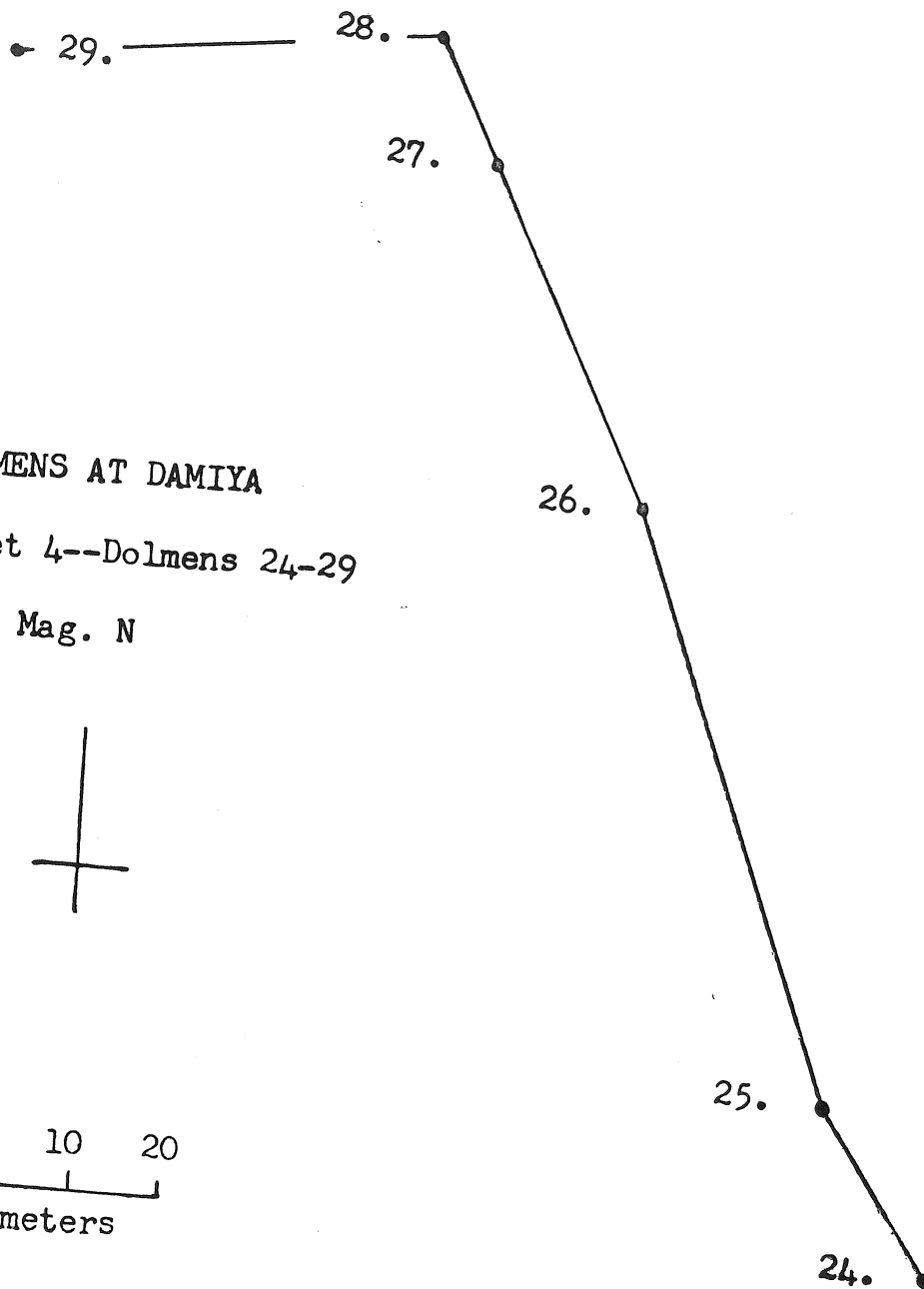
DOLMENS AT DAMIYA
Sheet 3--Dolmens 14, 19-24

Mag. N



0 10 20
meters

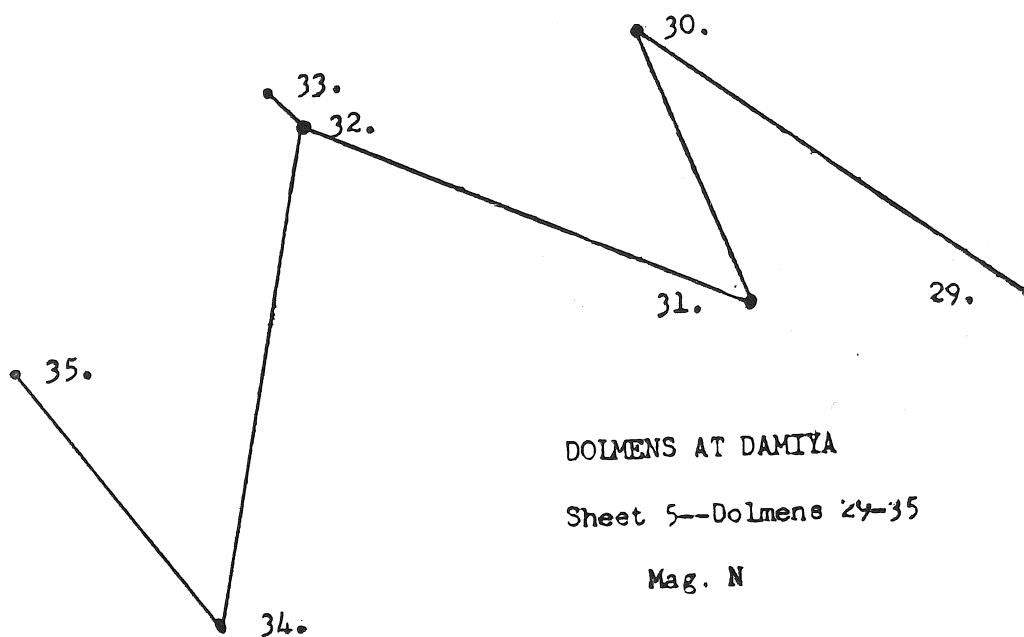




DOLMENS AT DAMIYA
Sheet 4--Dolmens 24-29
Mag. N



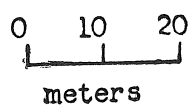
0 10 20
meters



DOLMENS AT DAMIYA

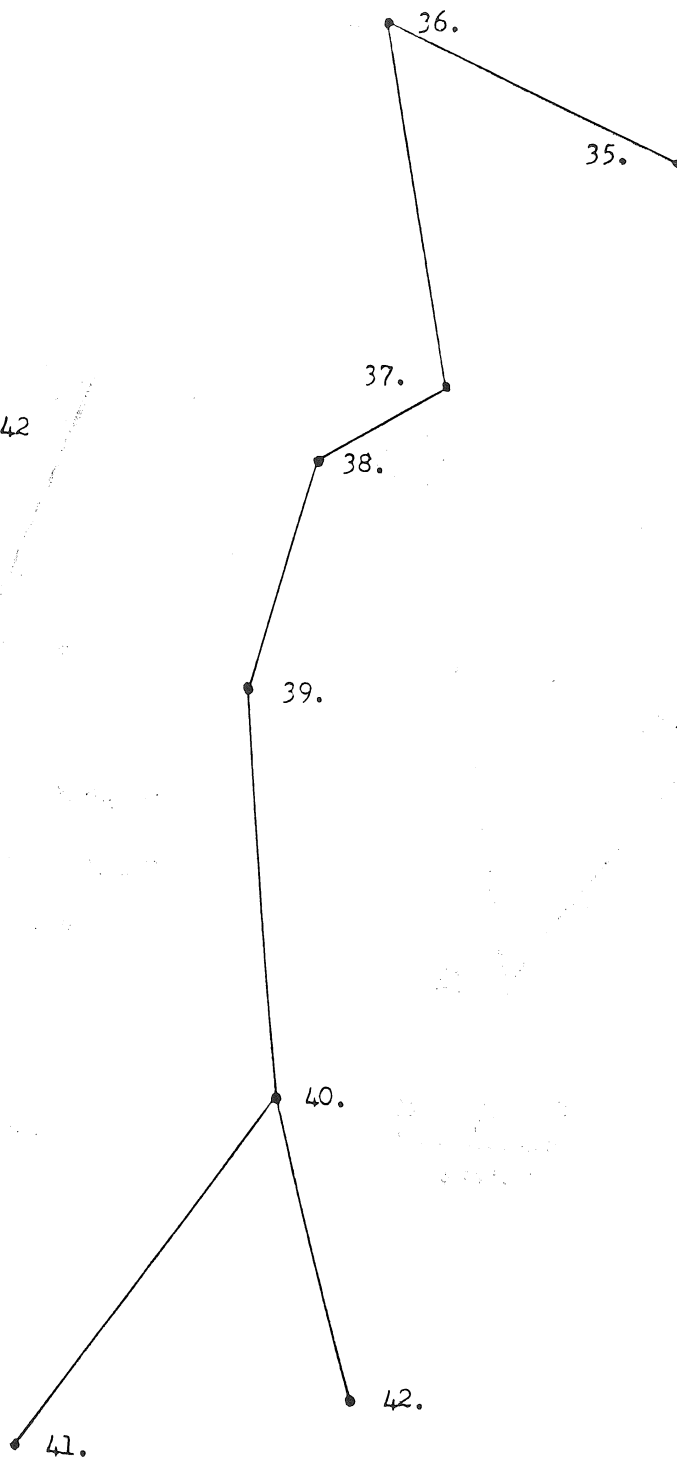
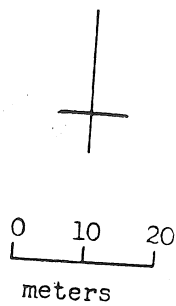
Sheet 5--Dolmens 24-35

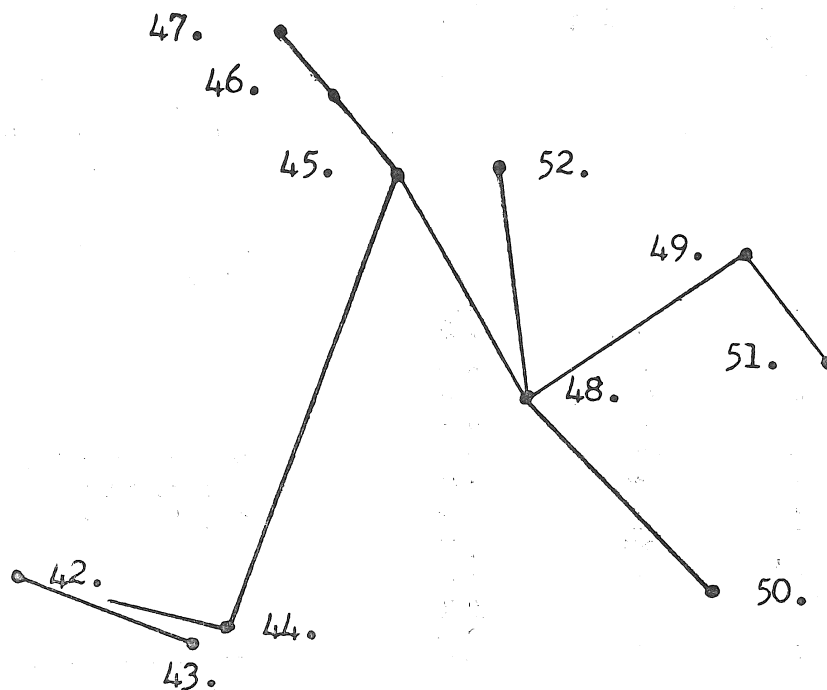
Mag. N



DOLMENS AT DAMIYA
Sheet 6--Dolmens 35-42

Mag. N





DOLMENS AT DAMIYA

Sheet 7--Dolmens 42-52

Mag. N



0 10 20
meters

COPY OF FIELD NOTES, MAPPING OF DOLMENS AT DAMIYA

310362, 010462, 020462, 050462, 070462

Station No. or Station Letter	to	Dolmen No. or Station Letter	Angle in Degree of Azimuth	Distance in meters
3 ⁰		G	4	12.90
3		H	4	103.00
3		I	98	24.40
B		J	90	30.00
J		K	0	90.00
K		4	251	19.20
K		M	73	19.50
M		N	120	12.50
N		O	12	21.50
O		5	293	32.00
O		6	264	51.5
O		7	0	40.50
7		8	113	60.15
7		T	101	35.3
7		9	63	26.00
7		10	332	15.00
7		11	336	35.50
7		12	313	31.50
7		13	349	59.50
7		14	317	68.15
14		15	315	55.50
14		16	332	77.30
14		17	238	21.55
15		18	241	52.80
14		19	79	86.50
14		GG	79	9.30
19		20	329	61.00
20		21	40	28.00
21		22	9	42.00
22		23	21	28.00
23		24	11	44.00
42		25	326	22.00
25		26	339	67.5

Neither G, H nor I are, in our opinion, dolmens nor remnants of dolmens. From a distance, however, we thought they were, and we mapped them in. Although not shown on Fig. 2, their statistics are included for the use of others.

M is the remains of a stone tower.
N is the remains of a stone tower.
O is the remains of a stone tower.

We thought at first this was a collapsed dolmen, later decided it was a natural formation. It is not charted on Fig. 2.

Circle of stones on end. It is not charted on Fig. 2

COPY OF FIELD NOTES, MAPPING OF DOLMENS AT DAMIYA:

310362, 010462, 020462, 050462, 070462

Dolmen No. or Station Letter	to	Dolmen No. or Station Letter	Angle in degrees of azimuth	Distance in meters	Remarks
26		27	332	41.50	
27		28	332	14.90	
28		29	254	46.00	
29		30	305	62.00	
30		31	158	39.50	
31		32	293	64.40	
32		33	314	7.00	
32		34	191	67.00	
34		35	322	44.00	
35		36	292	46.00	
36		37	167	53.20	
37		38	237	21.40	
38		39	193	33.4	
39		40	172	58.20	
40		41	214	61.30	
40		42	164	45.00	
42		43	108	21.40	
42		44	102	32.90	
44		45	19	52.50	
45		46	320	11.70	
45		47	318	19.90	
45		48	148	28.80	
48		49	54	28.90	
48		50	134	29.00	
49		51	141	14.50	
48		52	350	25.50	

Table 1, Sections A (which gives general description) and B (which gives measurements) lists the characteristics of the dolmens at Damiya as we observed and measured them. Measuring dolmens is not a precise operation because of the irregularity of the stones and the slopes on which they stand, and because one does not always find all a dolmen's members, but I think the lengths, widths, and heights here given are reliable enough to permit formulation of general statements. All measurements are maximum figures. All are given as meters and fraction of meters.

TABLE 1 — Section A
Dolmens at Damiya

No.	Condition	Porthole		Oriented
		Slab	Frame	
1.	Collapsed. W, S slabs present, standing. Cover slab present.			N-S
2.	E, W slabs standing. Cover slab present.			NE-SW
3.	E, S, W slabs standing. Cover slab broken off and covers only S end of dolmen.			NE-SW
4.	Collapsed.			N-S
5.	E, S, W slabs standing. Cover slab present.			NE-SW
6.	E, S, W slabs standing. N slab recumb- ent to N, broken. Cover slab broken.	N		N-S
7.	E, W slabs standing. Cover slab present			N-S
8.	Collapsed. Portions of N, E, S slabs remain. Dimensions listed give only present, broken status.			N-S
9.	Collapsed. Large slabs.			
10.	Collapsed. Large slabs.			
11.	E, S, W slabs standing. Cover slab present, broken.			N-S
12.	Collapsed. Only W slab standing.			N-S
13.	E, S, W slabs standing. N slab recumbent to N. Dug out inside for nearly a meter Diamond-shaped cover slab, long dimen- sion oriented N-S.	N		
14.	E, S, W slabs standing. N slab recum- bent to N, earth packed over it. Cover slab present.	E		E-W
15.	All walls standing, cover slab.	N		N-S
16.	Collapsed. E, S, W slabs leaning. N slab fallen in dolmen; was a carved door now broken off at base. Cover slab present.	N		N-S
17.	Collapsed.			N-S
18.	All slabs standing, cover slab present.	N		N-S
19.	Collapsed. W slab standing. S on ground.			N-S
20.	All slabs standing, cover slab present. 1/3 N slab broken off.	N	X	N-S
21.	Collapsed. E, S, W slabs leaning. Cover slab slipped off to W. 3/4 N slab broken off.	N		N-S
22.	All slabs standing, cover slab present but broken off on S side.	N		N-S

No.	Condition	Porthole		Oriented
		Slab	Frame	
23.	All slabs standing, cover slab present. N slab broken off.	N	X	NW-SE
24.	Collapsed. One slab leaning and twisted.			
25.	Collapsed. One slab standing.			E-W
26.	E, S, W slabs standing. N slab broken off.	N	X	NE-SW
27.	Collapsed. One slab leaning.			
28.	W, S, N slabs standing. Cover slab present.			E-W
29.	Collapsed. W slab standing. S slab fallen in.			N-S
30.	Only carved porthloe standing. This can be a porthole in process of preparation. It is oriented N-S meaning if it is part of a complete dolmen the latter was oriented E-W.			E-W
31.	Collapsed. Door slab on E broken, but basal portion present. On bedrock.			E-W
32.	Collapsed. Only W slab standing. Bedrock on E. Terrace on W to level of bedrock.			
33.	Collapsed. E, W slabs leaning. S slab broken off. Impression it is a small one.			N-S
34.	E, S, W slabs standing. N slab knocked forward. Cover slab present.			N-S
35.	E, S, W slabs standing. W slab broken in two.			N-S
36.	E, S, W slabs standing. Cover slab present.			N-S
37.	Collapsed. Only W slab standing.			N-S
38.	Collapsed. Only W slab standing.			NE-SW
39.	Collapsed. E, W slabs present but broken.			E-W
40.	All slabs stading. Cover slab present.	N		NE-SW
41.	Collapsed. N, S slabs present.			E-W
42.	E, S, W slabs standing. Cover slab present Partially dug inside.			N-S
43.	Collapsed.			NE-SW
44.	N, E, S slabs standing. W slab fallen in. Cover slab present.	E	X	E-W
45.	Standing. Cover slab present.	N		N-S
46.	Collapsed. Single standing slab, E (?).			
47.	Collapsed. Single standing slab, E (?).			N-S

No.	Condition	Porthole		Oriented
		Slab	Frame	
48.	Collapsed. E, W slabs present. Cover slab present.			NW-SE
49.	E, S, W slabs standing. Cover slab present.			N-S
50.	N, E, W slabs standing. Cover slab present.			N-S
51.	Single carved slab oriented E-W at entrance to natural fissure. Cover slab fallen in fissure.			N-S
52.	E, S, W slabs standing, N slab recumbent to N. Cover slab roughly pentagonal.			N-S

TABLE 1 — Section B
Dolmens at Damiya

No.	Cover Slab	N Slab	E Slab	S Slab	W Slab
		E-W	N-S	E-W	N-S
1.	3.75 N-S; 2.5 E-W. 0.35 thick.				
2.	2.30 N-S; 2.45 E-W. 0.30 thick. Pentagonal. Point to W.		2.10 1.12 high		2.40 1.30 high
3.	1.5 NW-SE; 0.95 NE-SW. 0.40 thick.		2.65 1.00 high	0.70 1.00 high	2.70 1.25 high
4.			1.00 0.95 high		2.50 0.70 high
5.	3.40 N-S; 2.65 E-W. Rectangular.		2.60 0.90 high	1.00 NE-SW	3.35 1.25 high
6.	2.80 N-S; 2.65 E-W. Roughly triangular.		2.55 1.00 high	1.20 1.00 high	2.50 1.00 high
7.	2.35 N-S; 2.00 E-W 0.40 thick. Roughly triangular		1.85 0.75 high		2.25 1.25 high
8.			0.80 0.30 high	1.10 0.60 high	
9.	No measurements possible.				
10.	No measurements possible.				
11.	2.77 N-S, including broken portion. 2.20 E-W.		2.20 0.76 high	0.70 0.70 high	2.50 1.10 high
12.					2.05 0.90 high
13.	3.65 N-S; 2.80 E-W.	1.50	2.55 0.50 high	1.10 0.85 high	2.70 0.95 high
14.	3.20 N-S; 3.05 E-W. Roughly pentagonal.	2.10 0.70 high	1.00 0.60 high	3.15 0.45 high	
15.	2.80 N-S; 2.50 E-W. 0.25 thick. Roughly pentagonal.	1.10 1.10 high 0.15 thick	2.60 1.07 high	1.00 1.30 high	2.08 1.60 high

No.	Cover Slab	N Slab E-W	E Slab N-S	S Slab E-W	W Slab N-S
16.	3.10 N-S; 3.00 E-W.		2.85 1.15 high	1.15 1.30 high	2.40 1.45 high
17.					1.30 1.65 high
18.	3.10 N-S; 1.70 E-W. 0.40 thick.	1.00 0.83 high	2.20 0.45 high	0.90 0.70 high	1.75 1.15 high
19.			2.15 1.15 high		2.70 1.25 high
20.	2.30 N-S; 2.10 E-W	0.85 1.00 high	2.60 1.00 high	0.85 1.00 high	1.85 1.30 high
21.			2.45 1.00 high	0.85 1.20 high	3.00 1.20 high
22.	1.80 E-W. 0.40 thick.	0.85 1.00 high	2.70 5.70 high	0.95 1.00 high	2.20 1.10 high
23.	2.10 N-S; 2.10 E-W.		2.65 1.25 high	0.95 .. 1.30 high	2.20 1.25 high
24.	No measurements possible.				
25.	No measurements possible.				
26.			2.70 0.95 high	1.00 1.20 high	2.00 1.25 high
27.			1.80 0.80 high		
28.	2.50 N-S; 2.25 WE- 0.35 thick.	2.40 1.10 high		2.40 1.10 high	0.85 1.10 high
29.					2.70 1.25 high
30.			1.25 1.50 high		
31.	No measurements possible.				
32.					2.25 0.80 high
33.			1.50 0.85 high	0.80	1.45 1.00 high
34.	2.10 N-S; 2.00 E-W.		2.10 0.85 high	0.85 1.25 high	1.90 1.25 high
35.			2.40 0.80 high	0.75 1.50 high	2.10 1.25 high
36.	2.50 N-S; 2.25 E-W.		2.60 0.85 high	0.75	2.30 1.25 high
37.					1.90 0.65 high
38.					2.70 1.40 high
39.		2.25 1.25			

No.	Cover Slab	Slab	E Slab	S Slab	W Slab
		E-W	N-S	E-W	N-S
40.	2.60 N-S; 2.00 E-W.	1.00	2.35	1.00	2.35
		1.00 high	0.95 high	1.25 high	1.45 high
41.			2.25		
			1.35 high		
42.	2.30 N-S; 2.10 E-W.		2.35	1.00	2.35
	0.60 thick.		0.65 high	1.35	1.70 high
43.	3.00 N-S; 2.70 E-W.				
44.	3.60 N-S; 2.80 E-W.	3.23	1.35	2.32	1.15
		1.10 high	1.40 high	0.85 high	1.70 high
45.	2.90 N-S; 1.90 E-W.	1.00	2.30	1.00	2.30
		1.00 high	0.50 high	1.10 high	0.50 high
46.			2.35		
			1.00 high		
47.			1.90		
			0.80 high		
48.	2.35 N-S; 1.65 E-W.		1.40		2.80
			0.80 high		0.90 high
49.	2.85 N-S; 1.76 E-W.		2.65	1.00	2.60
			0.80 high	1.50 high	1.15 high
50.	3.10 N-S; 2.00 E-W.	1.00	3.60		2.60
		1.00 high	0.59 high		1.10 high
51.		1.25			
		1.00 high			
52.	2.35 N-S; 2.45 E-W.	0.75	2.00	0.80	2.40
	0.60 thick.		0.65 high	0.75 high	1.20 high

Most dolmens are of a fairly standard size. Their lengths hover around 2.75 m.; widths, 1.00 m.; cover slab greater dimensions, 2.5 m. by 2.10 m.; exterior heights, ground to underside of cover slabs, 1.00 m. Interior volumes average 2.75 cu. m. Exceptions to this standardization exist, but they are obvious, and an observer sees at once that he is approaching a dolmen larger or smaller than the usual run.

The standardization is remarkable since we saw no reliable evidence of shaping of the main slabs of which the dolmens were built. I think they must have been at least battered to size since such uniformity can hardly be accounted for by random splitting of the Um Sahm sandstone although that possibility cannot be ruled out (Plate 2). If there was shaping of the stones, weathering has erased its traces.

Most dolmens are oriented north to south. Deviations from this standard are only swings to northeast to southwest or northwest to southeast. Of 47 dolmens whose orientation was established, only 8 are east to west. Dolmens oriented north to south received full benefit from the north to south breeze that blew nearly every day we worked there. This led to a conjecture that the dolmens might have been dwellings sited to receive the breeze, but such an explanation cries for another to account for eight malcontent dolmen builders who refused to be comfortable.

Floors of the dolmens are level. In most instances, they are on circular terraces formed of one, two, or three layers of blocks of stone of heterogeneous shapes and sizes. Those without terraces are 23, 30, 31, 39, 43, 46, 47, 51, and 52. Perhaps excavation will uncover terraces for some of these, but we saw none in our reconnaissance. Representative terraces average 6.00 m. in diameter. Dolmens sit off-center on their terraces. A very few dolmens are on bedrock. On the steep western slopes where angles of declivity of 30° to 45° are common, western terrace layers are frequently three high while on the east there is but one or even none. This technique produces floors on slopes as horizontal as those on the plateau to the east. The terrace technique probably gave an elasticity to the dolmenic structure as a whole that permitted it to absorb the shock of earthquakes that overthrew more pretentious buildings but left the dolmens standing.

I believe all the dolmens had floor slabs when originally built. Most we observed at Damiya are without full slabs but broken remnants of floor slabs and vandalized interiors indicate both that slabs had been present in many of them and that an accurate count is not now possible. Even those floor slabs still present are usually undermined to some extent to prove that the treasure-hunting that led to former vandalizing touched all the dolmens.

What one might call a complete dolmen (Plate 3) is one with a floor slab; four wall slabs of which the two longer — we saw no square dolmens — we called "side slabs", the two narrower, "end slabs"; and a cover slab. There are several variations on this theme at Damiya. There are collapsed dolmens whose original construction and members we could not have understood without rebuilding them. There are dolmens of which only walls remain standing, one to four as the case might be, with or without floor slabs, but without cover slabs which have slipped or been thrown off. In some instances displaced cover slabs lie intact beside the dolmens they once covered; in others, they have been shattered but still are recognizable and lie close by; in yet others, there is no sign of them. There are dolmens in which two or three walls yet support a cover slab and rare instances in which a cover slab slants from one wall to the ground, the others having collapsed.

Small openings, which I shall call "portholes" after Wheeler (1956, 206) and Daniel (1958, 23) among others, were carved into the end slabs of a number of dolmens. (Plate 4). A representative door is 0.45 m. high, 0.35 m. wide. On dolmens oriented north to south, they are in the north end slab. On dolmens oriented east to west, they are in the east end slab. The slabs in which doors were carved were smoothed and rubbed to an extent that makes them appear of a different stone from the side slabs, but inspection of their edges proved they, too, are of the Um Sahm Sandstone of Damiya.

The general impression received by a person making such a survey as ours is that the dolmens of the southern section at Damiya do not have portholes and that portholes are not a common feature at the site until one has passed about one-third of the way to the section's northern boundary. This impression may be false since many dolmens of the southern area have collapsed, some have no trace of end slabs on the north or east where, according to the location of portholes correlated with orientation, portholes might have been present, and in others, end slabs are broken or have fallen forward and have been covered with earth so that only excavation — for which we had no permit — can reveal whether or not they had portholes.

There is an established fact concerning porthole architecture and distribution. The portholes of some dolmens have borders 0.05 m. carved around them. (Plate 5). From a distance the borders looked like frames to us, and so we termed them. Dolmens with framed portholes occur only in the northern area of the southern section.

There is a geographical progression of dolmens without carved portholes in the southern area to dolmens with plain carved portholes in the central area to dolmens with framed carved portholes in the northern.

The progression is particularly provocative when considered in light of the central and northern sections of the entire field. In these sections most of the dolmen portholes are of the framed variety. Further, there are caves carved into solid hillocks of rock and huge tumbled boulders, many in the northern section, a few along the western slope of the central, and the entrances of these caves are carved in the fashion of the dolmen portholes. (Plate 6). Framed entries into caves are also present west of the road at a continuation of the Um Sahm sandstone cropping up there. All stages of manufacture of these entries are present from holes just begun to finish openings. All obviously completed entries are framed.

This sort of thing is foreshadowed in the northern area of the southern section. Dolmen 30 is but a slab with a framed porthole carved in it placed before a natural fissure enclosing a space approximately as large as that of the inside of the average wholly artificial dolmen. (Plate 7).

Perhaps many of the entries into caves in the northern section are only elaborations of natural cracks leading to natural caves, but they are quite uniform, a condition most unlikely if large numbers of natural features were used.

The framed portholes of the caves of the northern section add another rung to the ladder of geographical procession of architectural types from south to north: 1. no carved portholes; 2. plain carved portholes; 3. framed carved portholes; and 4. framed entries like those of dolmens leading into caves.

I am not certain this distribution in space represents distribution in time. Conceivably four different groups of even the same people might have prepared dolmens with the different kinds of entires, and even the cave entrances, at the same time.

I am not certain men always progress from relatively crude to more refined work. I cannot state categorically that the southern dolmens are older at Damiya than those of the northern because the work in the south is cruder.

Nevertheless, I suggest that a working hypothesis for the relative chronology of the Damiya Dolmen Site is that the field was begun in the south and extended to the north over a considerable period of time and that the geographical distribution represents not only a distribution in time but also an improvement in technique and changing social attitudes.

This hypothesis is supported only by the pattern of distribution of types of portholes over the whole Damiya field. What information recording of the central and northern sections will produce cannot, of course, be known at this time, but no features but the portholes show distributional patterning in the southern section. There is no other pattern of variation from south to north in size, orientation, use of terraces, or any other gross features, nor, in-

deed, is there from east to west except that terraces on the west, as already indicated, are built of more layers on the western side than the eastern.

We found no artifacts in the southern section. In the central there were a few sherds identified as Iron Age by Rafik Dajani. In the northern there were sherds of Iron Age and Roman pottery, and we know Byzantine pottery has also been found there. These materials were all surface finds with no sure association with dolmens and have no real meaning for us in terms of identifying either the builders or the time of building of the dolmens. They were found mingled with bladelets and microlithic scrapers of at least Neolithic times, and cans and modern Arabic pottery of the 20th century A.D. All the artifacts prove is that men have visited Damiya for 7000 years or so.

Excavation may produce acceptable association between artifacts and dolmens to permit identifying the culture and the time of the Damiya dolmen builders. Our surface survey did not.

DOLMENS AT TELL UM EL QUTTEIN

Tell Um el Quttein (hereafter El Quttein) is on the east bank of the Jordan River. It is 22 km. and at an angle of 98° east of north from Jericho. (Fig. 1). Its coordinates on the highway map of the Hashemite Kingdom of Jordan are 210.-130.8. The dolmens are north of the Wadi Hisban and the Naur-Dead Sea Highway 12.8 km. by road east of the highway bridge across the Jordan River. They are clearly visible. They stand on Um Sahm sand stone. (Geological Map of Jordan, 1954. Sheet 1, Amman). They were brought to our attention by William L. Reed.

We recorded six elements at the El Quttein site. Their position is given in Fig. 2. The element I called Dolmen No. 1 has been called a "menhir" or standing stone (Conder, 1889, 234), and this is probably right. (Plate 8). From the road, it appears a continuation of the east wall of the dolmen I numbered No. 2. Reflection prompts me to remove the designation "Dolmen No. 1" from this feature which gives us the anomaly of a numbered series of dolmens at El Quttein beginning with No. 2.

The other five features are partially destroyed dolmens. They are very different from those at Damiya. Those at El Quttein are all double dolmens, not the double-decker type, one of which was found at Damiya, but a two-chambered structure as if two dolmens had been built sharing a back wall. Dolmen No. 5 (Plate 9) still retains the vertical slab separating the chambers. The others do not, but broken stubs remain to prove all had such dividing slabs at one time.

The dividing slab of Dolmen No. 5 was carved into a porthole as were many of the entry slabs at Damiya, but the resemblance to the Damiya portholes is remote. (Plate 10). Those at Damiya are relatively small and generally pear-shaped. The porthole of Dolmen No. 5 at El Quttein is quite large by comparison, 0.95 m. wide, more than a meter high (only excavation can tell how much higher), and it is rectangular with gently rounded corners. It is of the same genre as the portholes of Damiya, of course, a carved entry in a vertical,

DOLMENS AT EL QUTTEIN
James L. Swauger
1 November, 1962

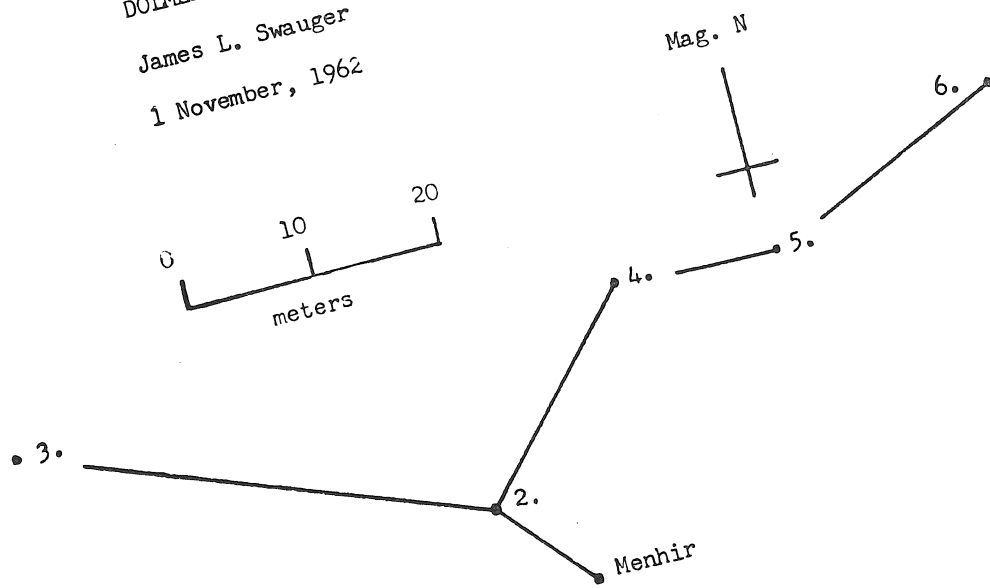


FIGURE 2

narrow dolmen slab, but it impresses one almost as though it were from another tradition and only accidentally as much like those of Damiya as it is.

El Quttein dolmens are larger than those at Damiya. Long walls are made up of more than one slab. Enough remnants are present to permit reasonably accurate measurement of the long walls. Table 2 gives characteristics and such statistics as were available at El Quttein. The long walls average 4.68 m. This is reasonably close to twice the length of the average length of the long walls at Damiya, 2.75, but the long walls of No. 5 at El Quttein are 7.25 m. I think the other dolmens were probably nearer to this length before being battered than to the present average and that the difference in length as indicated by No. 5 is a significant difference.

In like fashion, the widths differed. The average end slab width at Damiya is 1.00 m. At El Quttein, the average width between side walls, where it could be measured, is 1.40 m.

We found no intact cover slabs. Two large slabs at No. 5 may be broken remnants of cover slabs or may be whole portions of multi-slab roofs corresponding to the multi-slab long walls.

The dolmens are oriented north to south.

Terraces are present. Like the dolmens, they are larger than their counter-parts at Damiya. That of No. 2 was probably originally 10 m. in its long dimension, north to south, 7 m. in its short dimension, east to west. That of No. 1 was probably 15 m. by 12 m. in its corresponding dimensions. "Probably" is used because clearing is required to permit accurate measurement and description. The dolmens are off center to the north on their terraces.

COPY OF FIELD NOTES, MAPPING OF DOLMENS

AT EL QUTTEIN: 310362

Dolmen No. or Station Letter	to Dolmen No. or Station Letter	Angle in degrees of azimuth	Distance in meters	Remarks
A	2	320	8.90	Station A is a menhir or standing stone
2	3	290	37.50	
2	4	42	19.70	
4	5	93	12.73	
5	6	65	21.00	

TABLE 2 — Section A
Dolmens at El Quttein

No.	Condition	Porthole	Oriented
2.	Collapsed. E, W walls standing. Battered remnant of what may have been a door slab at N end of floor slab. 1.70 width of dolmen. Floor slab present.		N-S
3.	Collapsed. Circle of terrace stones, battered remnants of wall slabs and floor slab all that are left. 1.46 width of dolmen. Floor slab present.		N-S
4.	Collapsed. Terrace notice able on S. E-W slab at S end may be remnant of an end slab. Indication of a floor slab.		
5.	Collapsed. Double dolmen. Porthole in center. Terrace 17 m. in diam. Excavated on W side to depth of 1.50.	X	N-S
6.	Collapsed. May well have been a double dolmen. Dug to a depth of 1.80 at N face of S slab.		N-S

TABLE 2 — Section B

No.	N Slab	S Slab	S Slab	W Slab
2.		N-S 4.75 1.70 high 0.20 thick	E-W	N-S 3.35 0.75 high 0.40 thick
3.				
4.		3.26 1.34 high 0.25 thick		
5.			1.80 0.50 thick	Northerly piece 2.25 1.25 high Central piece 1.40 0.45 high Southerly piece 3.60 1.10 high
			Porthole: 1.60 E-W 1.15-1.30 high 0.50 thick Opening 0.40 below top of slab	
6.		Northerly piece 2.25 0.90 high Southerly piece 2.90 1.15 high Each 0.40 thick		Northerly piece 3.00 1.00 high Southerly piece 2.20 0.60 high Each 0.60 thick

NOTE: Remember all these structures have been damaged, and measurements are not true measurements of the original sizes of the stones.

Floor slabs are present at the El Quttein dolmens. All have been vandalized.

Slabs of the Damiya dolmens are obviously from the Um Sahm sandstone formation on which they stand. This is not true at El Quttein. We saw no nearby member of the Um Sahm much like the stone of which the dolmens were built, in fact, all close outcrops are of quite different stone. Perhaps they were built of fractured slabs of the hillock on which they stand. Digging is required to test this hypothesis since no such slabs were apparent when we were there.

All dolmens at El Quttein have been vandalized. Fortunately for us, someone with energy dug along the west face of Dolmen No. 5 to a depth of 2.30 m. from the top of the most northerly slab. This proves the great size of the wall slabs at El Quttein, for the battered remains of this particular slab is still 2.30 m. from top to ground level (and I'm not certain we saw its actual base), 2.25m. wide, and 0.50 m. thick. The base of the central slab is reinforced by two stone blocks 0.80 m. wide. The south end of No. 6 is sunk 0.70 m. into the ground.

Wall slabs of Damiya dolmens were not set deeply into the ground. At El Quttein, if the evidence from Nos. 5 and 6 can be assumed to hold for the others, the wall slabs were firmly planted deep in the earth. Only excavation can tell whether or not this hillock is natural or has been built up during manufacture of terraces, terrace fill, and dolmens.

Objects from the debris of the excavations by vandals and from the surface of the site gave the same information as objects from Damiya. Men have walked across this hillock from Neolithic times to the present. We found no association of artifacts with dolmens that permitted closer dating.⁽¹⁾

⁽¹⁾ In correspondence, Rafik Dajani informed me he had dug into dolmens both here and at Damiya and found Iron Age pottery. Whether this material is intrusive or of the same date as the construction of the dolmens is not yet clear to me.

DOLMENS AT TELL EL MATABI

Tell el Matabi (hereafter El Matabi) is on the east bank of the Jordan River. It is 22.8 km. at an angle of 111° east of north of Jericho (Fig. 1). Its coordinates on the highway map of the Hashemite Kingdom of Jordan are 210.6-130.7. The dolmens are south of the Wadi Hisban and the Naur-Dead Sea Highway 13.7 km. by road east of the highway bridge across the Jordan River. They are clearly visible from the road once one knows they are there, but they, like those of Damiya are difficult to see intially since they fade into their background. They, too, are on Um Sahm sandstone and built of it. (Geological Map of Jordan, 1954, Sheet 1, Amman). We drove past them several times before John one day noticed them and called our attention to them.

We recorded 16 dolmens at El Matabi (Fig. 3). They are different from those of both Damiya and El Quttein, even though El Quttein is less than a kilcmeter away and the sites are inter-visible. Plate 11 illustrates Dolmen No. 1 at El Matabi.

Of the 16 recorded dolmens, six (Nos. 2, 5, 6, 9, 10, and 15) are collapsed into amorphous piles of bolcks of stone. Their original relationships cannot be ascertained without rebuilding the structures. Of the other ten the end slabs of four (Nos. 3, 4, 8, and 14) are measurable and are noticeably of a narrow gauge as compared with those of Damiya. The widths of the four average only 0.63 m. Nos. 7, 1.25 m. wide, and No. 16, 1.00 m. wide, more nearly approximate the Damiya standard, and they, with No. 14, whose end slab is 0.70 m. wide, more nearly resemble those of Damiya in general appearance than any of the others that still stand at El Matabi. All have terraces. Table 3 gives characteristics and such statistics as were available at El Quttein.

COPY OF FIELD NOTES, MAPPING OF DOLMENS AT EL MATABI: 090462

Dolmen No.	to	Dolmen No.	Angle in degrees of azimuth	Distance in meters
1	2		26	29.50
2	3		69	32.50
3	4		110	17.50
4	5		68	19.00
5	6		45	36.00
6	7		337	11.50
7	8		74	5.75
8	9		87	5.85
9	10		47	12.35
7	11		333	17.80
11	12		16	7.50
11	13		28	11.65
11	14		56	34.90
14	15		218	27.25
14	16		347	117.90

DOLMENS AT EL MATABI

James L. Swauger

1 November, 1962

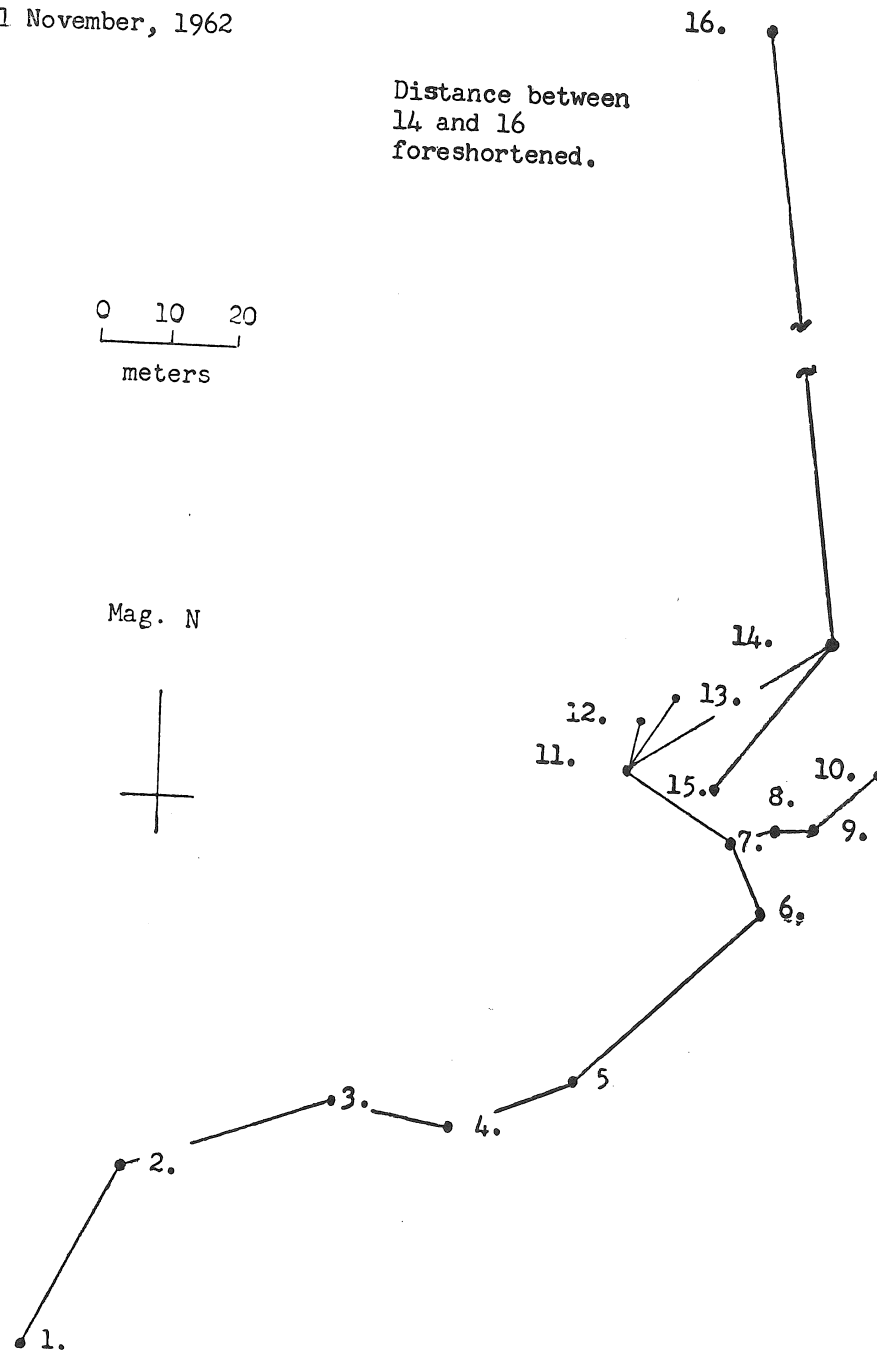


TABLE 3 — Section A
Dolmens at El Matabi

No.	Condition	Oriented
1.	Collapsed. N wall is one slab, standing. S wall is one slab, broken. Cover slab broken. Terrace 4.25 diameter.	E-W
2.	Collapsed. Amorphous.	
3.	Collapsed. No cover slab present. 0.60 wide at best.	E-W
4.	Collapsed. No cover slab present. 0.50 wide at best.	N-S
5.	Collapsed. Amorphous.	
6.	Collapsed. Amorphous.	
7.	Standing. Double dolmen. Smaller section on S. Cover slabs on both sections. Terrace amorphous.	N-S
8.	Collapsed. No cover slab. Terrace amorphous. 0.60 wide at S, 0.35 at N.	N-S
9.	Collapsed. No cover slab present. Terrace amorphous. 0.70 wide at N. Walls broken off, not measured.	N-S
10.	Collapsed. Cover slab broken, slipped off to W. Walls broken off, not measured. 0.85 wide at best.	N-S
11.	E, W slabs standing. Cover slab 0.75 wide at N end.	N-S
12.	Collapsed. On E and W, one wall slab standing. N, S slab present. 0.85 wide at base on N.	N-S
13.	Collapsed.	N-S
14.	N, E, W slabs standing. Cover slab present	N-S
15.	Collapsed. Amorphous.	
16.	N wall is two slabs. W slab present. E, S slabs broken off at ground level. 1.20 wide at W end. 0.60 at E.	N-S

TABLE 3 — Section B
Dolmens at El Matabi

No.	Cover Slab	N Slabs E-W	E Slabs N-S	S Slabs E-W	W Slabs N-S
1.		2.10 0.80 high			
3.		Easterly, 0.60 0.25 high		Easterly, 0.45 Westerly, 1.10 0.40 high	0.50 0.50 high
4.		0.55 0.65 high	1.95 0.75 high		Northerly, 1.30 0.80 high Southerly, 0.62 0.55 high
5.					
6.					

7.	Larger, 2.20 N-S; 2.00 E-W. Smaller, 1.20 N-S; 1.80 E-W.		Larger section only:	
		1.25	1.90	2.00
8.		0.85 high	0.85 high	0.75 high
		0.75	Northerly,	Northerly,
		0.55 high	1.00	1.25
			0.35 high	0.60 high
			Southerly,	Southerly,
			0.95	0.85
			0.30 high	0.45 high
9.				
10.				
11.	2.90 N-S; 1.60 E-W.		Northerly,	3.00
			2.10	1.20 high
			0.75 high	
			Southerly,	
			0.75	
			0.50 high	
12.			Northerly,	Northerly,
			2.10	1.10
			0.65 high	0.60 high
			Southerly,	Southerly,
			0.70	0.90
			0.45 high	0.50 high
13.			1.30	2.10
			0.75 high	0.80 high
14.	2.90 N-S; 1.50 E-W.	0.70	1.75	2.35
	0.40 thick.	0.95 high	0.90 high	1.15 high
15.				
16.		Easterly,		1.00
		1.10		
		0.80 high		0.90 high
		Westerly,		0.30 thick
		0.95		
		0.90 high		

Walls are generally of two or more thin slabs. Nineteen long walls were measurable. They average 2.04 m. long, about 0.70 m. shorter than the Damiya average.

The walls are in such poor condition, broken, fallen, split, that the measurements from ground level to their tops are meaningless. They range from ground level to 1.15 m. high on the west wall of No. 14.

Only three cover slabs were measurable, hardly a fair sample.

Dolmen No. 7 is peculiar (Plate 12). John described it as a dolmen with a trailer, and the description is apt. The northern element is a dolmen of standard Damiya type, four side walls and a cover slab. The southern is a small dolmen backed up against the larger. Its cover slab of only 1.80 m. east to west, 1.20 m. north to south, covers it adequately. Whereas the walls of the large dolmen are 0.85 m. high, those of the smaller are but 0.45 m. It is unique in the three sites we worked.

Dolmens Nos. 8, 9, and 12 are not of the standard Damiya type either (Plate 13). They more resemble slab-sided cist-graves whose walls protrude above the ground. They were recorded as dolmens because they are integral parts of the site and are made of the same materials as the other structures.

There are three architectural styles at El Matabi. Dolmens 11, 14, and 16 (Plate 14), even 7 if one disregards the trailer for a moment, are reasonably close to the general style at Damiya. Others, Nos. 3 and 4 are good examples (Plate 15), are different indeed from those of Damiya, narrow, short, squat, and thin-slabbed, yet without question dolmens. The peculiar structures Nos. 8, 9, and 12 (Plate 13), have been discussed.

Of 12 dolmens whose orientation could be determined, 10 are oriented north to south, 2 east to west. These latter are built in contour situations where an east to west orientation is more convenient than any other.

Fifteen of the sixteen dolmens have terraces. Perhaps the one at which we discerned no terrace also has one, but it is low on the slope leading to a small wadi and so much loose rock and soil is piled around it we could not distinguish one.

There are floor slabs in several of the dolmens. The stone of which the walls are built is so scaly and has fallen into the body of the structures to such an extent that it is not feasible to discuss floor slabs as significant features of the site without clearing all the dolmens.

The Um Sahm formation at El Matabi furnished the builders with shoddy material. The slabs are thin, friable, mis-shapen, altogether a very poor sort of construction stone. The high percentage of collapsed dolmens, 38 per cent, is evidence of the poor quality of the stone.

The general impression given by the dolmens at El Matabi is that they are noticeably shorter, narrower, have thinner slabs, smaller terraces, and poorer construction than those of Damiya, and that while they resemble those at Damiya only in a general fashion, they resemble those at El Quttein even less.

Iron Age sherds were identified by Rafik Dajani at 12 dolmens. Both he and Dr. Awni Dajani identified a sherd from No. 12 as Chalcolithic. We found microlithic blades and even a Levalloisian flake on the surface of the site. Again, there was no acceptable association of artifacts with dolmens.

SUMMARY

Tangible results of the 1962 work in Jordan are:

1. Maps were made of each of three dolmen sites.
2. General descriptions were prepared for 74 dolmens.
3. Three general types of dolmen construction, each peculiar to one of the three sites, were identified.
4. Four distinct architectural styles were identified at Damiya.
5. Three distinct architectural styles were identified at El Matabi.
6. Surface collecting at the sites gave no clue as to their age or the culture of their builders.
7. Terraces are commonly associated with dolmens.
8. Most dolmens have been vandalized.
9. The only relationship between the orientation of dolmens and any other pattern in construction is that at Damiya doors are in the north slab of north to south oriented dolmens in the east slab of east to west oriented dolmens.
10. Style of construction of dolmens is probably conditioned less by cultural motivation than by available building stone.
11. Dolmen sites have been used by men for one purpose or another since at least Neolithic times.

DIRECTION OF FUTURE RESEARCH

1. Intensive work at the sites studied in 1962:
 - a. Map with more precision than possible in 1962.
 - b. Excavate to clear structures to their skeletons to determine details of construction of dolmens and terraces, relationships of dolmens to terraces, relationships among the dolmens at each site, and relationships among the dolmens of the sites.
 - c. Prepare detailed descriptions and isometric drawings of each dolmen.
 - d. Collect artifacts assiduously from each site since while they may not have immediate apparent association with dolmens, they can reveal the use of the sites chronologically and quantitatively.
 - e. Rebuild collapsed dolmens.
 - f. Experiment to determine effort and time requirements in shaping stones of which dolmens were built.
 - g. Experiment to determine effort required to split out slabs suitable for use in building typical dolmens.
 - h. Experiment to determine methods and effort required to move such a slab as a cover slab fifty yards or so.
2. Continue location of sites noted in literature. 1962's work proved such work must be carefully planned according to the routes followed by such men as Glueck, that much of the work must be done on horseback or on foot, and that it must be performed as companion to, not part of, excavation work.
3. Map, excavate, and describe sites in addition to the three worked in 1962, and study them in terms of knowledge of Damiya, El Quttein, and El Matabi.

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- the dolmens of Jordan
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THE 1962 EXCAVATION AT 'ARAQ EL-EMIR

The third campaign at 'Araq el-Emir took place between September 10 and October 12, 1962. Except for a minor operation outside one of the caves, work was concentrated exclusively at the Qasr and in the northwest quarter of the village where the work of the earlier campaigns was continued. The campaign was supported by the regular archaeological budget of the Jerusalem School with a substantial grant from Princeton University through the courtesy of Professor R. B. Y. Scott.

The staff was composed of Paul W. Lapp, Director and Photographer; Professor R. B. Y. Scott, Associate Director and Recorder; Fr. Alexander Di Lella, Dr. Dorothy K. Hill, Professor George M. Landes, Dr. John Zimmerman, Fr. Wm. Casey, Mr. Sten Lundgren, and Mr. Carney Gavin, Field Supervisors; Mr. Ahmed Hassan, Jordan Department of Antiquities Representative; Mr. Michael Brett, Architect; Mrs. Paul Lapp, Business Manager; Mr. Mustafa Tawfiq, Foreman; Mr. Muhammed Adawi, Cook. The excavation profited from the usual cordiality of the Department of Antiquities through its director, Dr. Awni Dajani, who has also continued to permit us to use a Decauville railway.

The most striking find of the campaign was a feline sculptured in high relief on a block of mottled red and white dolomite (Pl. XVI). It came to light as debris was being cleared from the face of the Qasr east wall near its north end. According to its Hellenistic plan, the Qasr was to be surrounded by a large lake, the extent of which can be appreciated by observing the depressed area which still surrounds the Qasr. A road skirted the south embankment of the lake and passed northward through Gate II and Gate I (Pl. XVII). From Gate I the main path continued north to the village and caves, but just inside the gate a path led westward across the only spur of land through the lake to the Qasr. The feline sculpture was on a line with this path, greeting all visitors as they approached.

The feline functioned as a fountain. Inside the Qasr were traces of a plastered basin with a channel leading to the animal's mouth. In the sculptured megalith the conduit consisted of a narrow circular hole which widened to a 5 by 7 cm. rectangular opening in the feline's mouth. Without teeth or tongue, the beast looks like he is swallowing a box, as Miss Hill notes. That a pool to receive the water stream from the mouth must have been planned is indicated by a channel just in front of the animal's right forepaw (Pl. XVI). Whether such a pool had ever been completed could not be determined, for Byzantine occupation layers occur to a considerable depth below the fountain megalith, which rests on the upper surface of the Hellenistic Qasr foundations. A Byzantine wall, set against the outer face of the Qasr east wall and carefully built around the sculptured block, has certainly contributed to its fine state of preservation and its concealment before our excavations.

The maximum dimensions of the sculptured block are 2.05 by 1.50 meters. It is 35 cm. thick and in addition the relief projects as much as 45 cm. A stone cut around the animal's head caps the sculptured stone and levels with the 1.75 m. height of the lowest course into which the block is set. Smaller undressed stones were used to fill out the 90 cm.

width of the megalithic course inside (Pl. XVIII). The 2.05 m. length is unique for megaliths of the lowest course of the east wall so that the placement of the fountain seems to have been part of the original building plan. Its crude insertion suggests that it was probably placed after the wall had been erected.

The possibility that the relief had been used in another setting or was available when the Qasr architects made their plans cannot be excluded. It will be noted below that the carving of the animal frieze was completed *in situ*. It could be argued that the same procedure would be expected with the fountain relief had it not been already prepared. The writer would prefer the view that the relief was commissioned in connection with the building of the Qasr and inserted after the hazards from erecting megalithic walls had passed. The relief block was of mottled red and white dolomite breccia, which is locally available. From the view point of the history of art there is nothing against its execution in the early second century B.C., when the Qasr was built (see below). Excavation so far has not brought to light any evidence of monumental buildings in the area of the third century B.C., and the large-scale building operations of Hyrcanus display enough evidence of planning to make it difficult to consider the animal fountain as originally planned for any other place than where it was found.

It seems doubtful that the sculptor had a specific beast in mind for the relief. The male body seems too sleek for a lion, not sleek enough for a leopard or panther. The head, too, seems small for a lion, large for a leopard. The tail tuft belongs to a lion, but the curling of the tail around one leg is a more common treatment for leopards. The griffin-like claws occur on Greek monumental lions, but the mane, which is a characteristic feature of the male lion, is missing. The mottled stone gives the beast a spotted appearance, which is the monument's most striking feature. Miss Hill suggests that the feline is a result of the combination of the sculptor's (distant ?) knowledge of sculptured lions, sphinxes, and griffins, and his acquaintance with live Transjordanian leopards.

In attempting to assess the artistic tradition which produced this work of art, Miss Hill points out "that there is no other known monument like the animal fountain of 'Araq el-Emir.'" Indeed, we have very little evidence at all of the effective influences upon works of art in Syria-Palestine and of the entire Near East in the second century B.C. Whole lions or leopards as fountains were rare in the Greek world though the heads of lions were commonly used as spouts. Lion spouts seem to be unknown outside the Greek world. The unequal lengths of the legs is a Greek means of portraying action. The animal with extended paw is a common Greek stance of the Hellenistic period, though only one of the expected antithetical pair appears here. These and other observations have led Miss Hill to define the fountain as "a provincial Greek work of the period 182-175 B.C." This brief discussion is based largely on her detailed discussion of the fountain in *Bulletin of the American Schools of Oriental Research*, 171 (Oct., 1963), pp. 44-55.

A second major discovery of the third campaign was conclusive evidence that the Qasr was never completed. Evidence that the Qasr was unfinished has been available to Butler when he published his detailed study of the Qasr early in this century, but he did not find it convincing. In connection with getting evidence for Mr. Brett's restored plan of the Qasr, an attempt

was made to jack up all megaliths of the frieze course ; they could easily be picked out by their dimensions. In raising one of them near the southwest corner of the building, it was surprising to find that the lion had only been roughed out for carving (Pl. XIX). Since the block had obviously fallen from the building, it was to have been finished *in situ*.

Shortly after this discovery several other unfinished elements were noted. The dentils of the string course of the north porch had not been cut in a fragment from the east corner, whereas they had been cut in the adjacent fragment of this course. The carefully dressed west semicolumn of the north porch was set against a megalith only roughly finished on the inside. A quite unexpected discovery came to light as the lowest dressed course of the east Qasr wall was being uncovered. One of the megaliths had a smooth surface, its boss having been completely removed. The boss of an adjacent megalith was obviously in the process of being removed when work on the building ceased. The observation that the margins and bosses throughout the Qasr are quite irregular suggests that the completed building would have had a smooth face.

To these discoveries should be added some of the evidence previously cited for the unfinished state of the building. A base for one of the north porch free-standing columns had a projecting ring, which had presumably been used in transport of the block but was not subsequently removed. Some of the Corinthian style capitals show remarkably detailed finish, but in others the details have only been roughed out. Other non-Hellenistic capitals have been only roughly blocked out. Together this evidence points to the fact that the outer shell of the Qasr had been erected, but much detailed finishing was left undone. The problem of the extent to which the inside of the building was completed is more difficult. It is connected with the problem of the function of the building, to which we now turn.

After the 1961 campaigns an attempt was made in *Annual of the Department of Antiquities of Jordan*, Vols. VI-VII (1962), p. 83, to develop the hypothesis that the Qasr was a mausoleum, the view of Albright. Mr. Brett's architectural study of the Qasr (*Bulletin of the American Schools of Oriental Research*, 171 (Oct., 1963), pp. 39-45) has drawn attention to the stairwell east of the north porch (Pl. XVIII). The flights of wide, low steps gave access to a gallery and led to a tower above the frieze course. Presumably they were also to have given access to a terrace roof. Although there is no evidence that the roof had been completed, the megalithic foundation lines (Pl. XVIII) are best interpreted as lines of support for a roof. Among the Byzantine walls and occupation debris (which lay well below the level of the Hellenistic floor) there was no clear evidence of a terrace roof, and certainly if it had been completed, some vestiges would have survived. Just what had been completed inside at the time of Hyrcanus and what might have been reused by the Byzantine occupants is impossible to decide.

In any case, Robert Amy in *Syria*, Vol. 27 (1950), pp. 82-136, has convincingly shown that these elements — stairway, tower, and terrace roof — are present in some 39 temples and are to be associated with a cult function. Other features of the Qasr find their best parallels in temples. The bifaciality of the Qasr (which leaves a nonfunctional south porch) has parallels in temples from Syria to Sicily. Megalithic voussoir blocks have been found at the Qasr only in the vicinity of the adytum of the temple. Other temples are associated with bodies of water. Perhaps the chief reason for hesitating to call the building a temple has been the view that such a rival to the Jerusalem temple was impossible. Such a view ignores Josephus'

reference to the nearly contemporary temple at Leontopolis in Egypt. Certainly, the religious significance of the Qasr will be an important subject of study for years to come.

In the first two campaigns evidence for dating the Qasr was extremely elusive. Byzantine occupation had cut down to the Early Bronze layers upon which the Qasr was built. Despite the lack of stratigraphic evidence, there was no hesitation about considering the building, as described by Josephus, Hellenistic. Yet, some scholars preferred a date a century earlier than that indicated in Josephus' account. This matter has been settled by the discovery in the 1962 campaign of a satisfactory group of Hellenistic potsherds clearly belonging to the first half of the second century B.C. The complete lack of anything from the third century B.C. at the Qasr or the Square Building (for location see Fig. 2; cf. *Annual*, VI-VII, pp. 85-87) makes any attempt to raise the date of the building unjustified. The evidence that the Qasr was unfinished makes the seven-year period (ca. 182-175 B.C.) in which Josephus has Hyrcanus at 'Araq el-Emir less difficult for the major operations accomplished, but it is not impossible that Hyrcanus began his operations as early as 210 B.C., and his death could have occurred a few years after 175 B.C.

Of the Byzantine occupation of the Qasr little new was learned in the third campaign. The general chronological framework proposed after the first campaign has received additional support, but no artifacts of sufficient importance to merit treatment in this report have been recovered.

The highlight of the 1962 excavation in the village was the discovery of the Plaster Building. Excavation was extended west from the west wall of the Late Hellenistic town with the aim of learning more about the heavy Iron I walls previously excavated. This purpose was completely frustrated by Hellenistic builders, who had cleared away Iron age remains for their construction. As so far excavated (Pl. XX), the building consists of an area of over 18 by 21 m. surrounded by a wall of medium and small stones some 90 cm. thick, with two thin coats of white plaster on its inner face. A second wall, placed concentrically inside this area, contains an area of some 10.5 by 15 m. This wall is 1.15 m. thick and is plastered on its outer face like the outside wall, but on its inner face with a much thicker beautiful dark red plaster with bevelled edges and white borders. The base of this wall at the doorways is composed of finely dressed rectangular blocks, but the rest of the wall consists of plaster against dirt and rubble. There was a single entrance to the inner court in the middle of the east wall, two symmetrically placed doorways in the inner south wall, one at the west end of the inner north wall, and presumably others still unexcavated. All these were about 1.10 m. wide. Between the two walls was a corridor 2.70 m. wide with an extremely hard-packed floor, and the inner court had a similar, but less well-made floor. Except for a drain at the outer wall near the northwest corner and some mysterious paving blocks interrupting the northwest entryway, there was no evidence of any kind unearthed to shed light on the function of the building.

The ashy layer which covered the floor of the corridor and part of the inner court contained a pottery group which belongs about 175 B.C. A very small sounding below the floor yielded sherds which are probably to be assigned to the early second century B.C. To the west, where the walls of the building were only preserved as foundations, we obtained our first good group of Hellenistic sherds which can be assigned with confidence to the very beginning of the second century B.C. This evidence points strongly to the construction of the

Plaster Building at the time of Hyrcanus who "built enclosures [aulai] remarkable for their size, and adorned them with vast parks." *Antiq.* XII, 233. It is difficult to dissociate the Plaster Building from the aulai, for by one definition an aule is a court or quadrangle "round which the house itself was built, having a corridor all around."

The basic stratigraphy in the village, described in earlier reports, has proved essentially correct, but some refinements should be noted. Strata I (ca. A.D. 200) and II (ca. A.D. 100) remain the same. Strata III a (ca. A.D. 50) and III b (ca. 100 B.C.) are unchanged, but Stratum IV becomes an earlier Hellenistic phase (ca. 175 B.C.). Stratum IV of the first campaign becomes the Iron I Stratum V (ca. 1050 B.C.) Early Bronze surfaces appearing in a limited area are designated as Stratum VI.

The change in strata designation became necessary when detailed study after the third campaign made it clear that the original Stratum III b consisted of two elements. Stratum III b consisted of the northern and western town walls with inner walls [parallel to these joined by crosswalls forming a casemate-type construction. A wall at the southern end of the excavated area bounded a large courtyard inside the casemates. Most of the Stratum III b walls were laid on a plaster floor of high quality some 5 cm. thick, while the plaster floor of the court was of poorer quality. Elsewhere foundations for Stratum III b walls cut through the thick plaster floor, and the trench was covered by plaster of poorer quality so that the line of the joining of the two qualities of plaster could be noted. The evidence led to a careful rechecking of material below the better and poorer quality plaster in the casemates, and it became clear that the few pockets of Early Hellenistic pottery recovered in the excavation were sealed under the thicker plaster floor.

This evidence forced the conclusion that the plaster floor unearthed over so much of the excavated area had been used during two phases of occupation. The thicker plaster floor was assigned to Stratum IV, for it became clear that it had extended beyond the III b north and west village walls and must have been part of a large building of which only a few vestiges remains. These included drainage channels cut into bedrock, two curious stone pavings several protrusions of bedrock unintelligible in their III b setting, and a column base plastered into the thick plaster floor. In only one of the casemate rooms were discovered separate III b and IV floors, and here the remnant of Stratum IV walls were covered with beautiful painted plaster, similar to that of the Plaster Building. This combined with other evidence suggests that the large plaster-floor structure of Stratum IV and the Plaster Building are contemporary, both the work of Hyrcanus.

This isolation of Hellenistic Stratum IV provides an explanation for the lack so far of Persian and Early Hellenistic remains in the excavations though we have been shown artifacts of this time which certainly come from the village. The laying of the Stratum IV floor involved cutting down several bedrock outcroppings and the scraping away of all earlier occupation debris to below the level of the Stratum V floors. The few pockets of Early Hellenistic sherds below the Stratum IV floors may be considered the bottoms of Hellenistic pits which had been cut into the Iron age layers.

The Strata III a, II, and I occupations continued to have the same character as in previous campaigns, and their dates remain the same. The progressive additions of crosswalls in the casemates and large court in Strata II and I was studied in detail, and their progressively poorer quality was noted. This reflects the change of the area from a public function

to domestic dwellings, which tended to become more crowded, presumably as the population of the town increased. We were fortunate enough to recover quite a number of new forms for the ceramic groups of Strata II and I, including quite a number of whole or reconstructed pieces. These and other ceramic groups from 'Araq are now in process of being prepared for publication.

There is still much to attract the excavator to 'Araq El-Emir, and it is hoped that a fourth campaign might be conducted there in 1964 or 1965, concentrating on a new part of the village in hope of finding especially Early Hellenistic material and on the debris piles in front of the caves.

April 10, 1964
Jerusalem, Jordan

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NOUVELLES STELES FUNERAIRES A PETRA¹

Pour éviter la montée dangereuse des eaux du wâdi Mûsâ dans le Siq de Pétra au moment des grandes pluies, le Département des Travaux Publics de Jordanie a décidé de remettre en état une dérivation antique: elle est constituée par le vallon latéral de droite qu'un tunnel met en communication avec la gorge d'el-Muzlim, elle-même en relation avec le wâdi Matâha et le centre de la ville, que traverse le wâdi Mûsâ. En ôtant les alluvions accumulées contre la rive qui fait face à l'entrée du Siq, les ouvriers ont mis au jour en février 64, des stèles funéraires avec inscriptions nabatéennes. Alerté, le Département des Antiquités procéda à leur dégagement, un travail délicat, car cette paroi rocheuse est faite de grès blanc et friable, moins compact que le grès rose du Siq. Les stèles s'en détachent avec un faible relief et par endroits se sont effritées. Elles sont réparties en deux groupes séparés par une stèle dont l'inscription est grecque (no 7). Sur l'aimable invitation du Dr Auni Dajani, le Directeur du Département des Antiquités, nous publions ici ces stèles dans la mesure où elles sont encore lisibles. Nous avons commencé notre déchiffrement sur des photographies remises par le Dr Dajani au Révérend Père de Vaux (trois d'entre elles figurent sur notre planche I), qui avait vu l'intérêt que présentait le texte no 2 (cf. infra), mais a bien voulu demander au Dr Dajani de nous les confier.

Les stèles subsistantes sont au nombre de douze, et nous avons pu les étudier sur place et les photographier (pl. II) le dimanche 5 avril. Toutes figurent plus ou moins schématiquement le monument funéraire appelé **nefesh** par les inscriptions et qui est composé d'une base à degrés, d'un corps en forme de dé, souvent plein, d'une corniche surmontée d'une pyramide, laquelle peut comporter un pyramidion terminal (notre no 3). La sépulture est aménagée sous le dé (tombeau de Zacharie dans la vallée du Cédron) ou dans le dé (les tombes cubiques avant l'entrée du Siq), mais elle peut aussi se trouver à une distance plus ou moins grande (tombeau dit de Saint Jacques à gauche du mémorial), la **nefesh** étant essentiellement le monument dressé pour le défunt, que celui-ci soit présent ou absent. Ce fait a été mis en lumière par E. Will, en particulier pour Pétra et Palmyre, dans la revue *Syria* (1949, p. 287ss et 307s). Ici il ne s'agit que d'une reproduction miniaturisée, sur deux dimensions, de ce type de tour funéraire, et on sait qu'à Pétra, le cas est fréquent. Il arrive que cette reproduction soit expressément désignée dans l'inscription par le terme de **nefesh** (en araméen **nafsha**, à l'état emphatique), et aux cinq exemples qui vont suivre, il faut en ajouter deux dans la chambre funéraire d'un tombeau "à escaliers" du Siq, face à la montée au haut lieu dit "Sacrifice Place"², et un troisième à el-Baidé, au nord de Pétra, sur une paroi de grès sans rapport avec une sépulture.³ Tel semble bien être le cas de nos douze stèles, car on ne voit pas de tombeau à proximité immédiate et le texte de notre no 2 confirmera cette constatation. Nous rappellerons à ce propos le sens précis du terme **nefesh**.

¹ Cf. *Plates*, XXI — XXII.

² CIS, II, 352 s, cf. 404; Brünnow et Domszewski, *Die Provincia Arabia*, I, no 825; QDAP, VIII, 1938, pl. LXVIII, 2.

³ CIS, II, 465; *Prov. Arab.*, I, no 833, et G. Dalman, *Petra und seine Felsheiligtümer*, p. 344, no 800, qui précise que la tombe dont parle Brünnow n'existe pas; cf. p. 77s pour le sens de mémorial qu'ont les **nefesh** et leur localisation près des routes. QDAP, VIII, 1938, pl. LXVIII, 1.

l. pl. I, b.

H L Y B R
M N T'

Hillay fils de
Manéthon (?).

La deuxième lettre est un peu courte pour un L, mais pour Z la position surélevée et la liaison seraient insolites. Pour la vocalisation, nous nous inspirons de l'anthroponyme tamoudéen Hill, que G. Ryckmans rapproche de l'arabe *hill*, nouvelle lune¹. Le B de BR, malgré l'apparence de la photo, se prolonge jusqu'à la haste du R. Faute de mieux, nous proposons pour le patronyme le nom égyptien bien connu de *Manéthon*, diversement orthographié dans les transcriptions grecques (cf. CIS, II, 354 pour un autre nom égyptien éventuel à Pétra). Un nom hypocoristique en l'honneur de la déesse arabe Manawat nous paraît moins probable, vu l'absence du W attendu (cf. J. Cantineau, *Le Nabatéen*, I, p. 116).

2. A droite de la précédente. Dimensions maxima, env. 40 x 80 cm. Les lettres ont été repassées à la couleur rouge, comme c'est fréquemment le cas, par ex. à Palmyre. Faute de caractères diacritiques, nous faisons suivre les emphatiques dentales et le ha fermé de l'arabe (le het ouest-sémitique) de la lettre x (dans les translittérations seulement, pas dans les transcriptions que nous vocalisons, ce qui les alourdirait par trop).² Pl. I, c.

D' N P Sh P T x R Y S B R
T R P T x S W Y Q R ' R Y
H W H B R Q M W D Y M Y T
B G R Sh W W Q B Y R T M H D Y
' B D L H T Y M W R B N H

Celle-ci est la nefesh de Petraios fils de Threptos et il est honoré parce qu'il a été à Raqmu, (lui) qui est mort à Jerash et a été enseveli là-bas; que lui a faite Taimu son maître.

La désinence des deux premiers noms les désigne comme grecs, mais il peut s'agir de personnages nabatéens ou orientaux. Parmi les diverses possibilités qu'offre le *Woerterbuch der griechischen Eigennamen* de W. Pape, nous choisissons les noms les plus fréquents: Petraios est porté par plusieurs personnages de l'époque gréco-romaine et Threptos est le nom d'un Athénien, d'un Italien et de plusieurs hommes en Asie Mineure. Si notre défunt ou sa famille est originaire de Pétra, l'adoption de cet anthroponyme, dont le sens est simplement "l'homme de la roche", a pu être voulue par ses parents, au sens de Pétréen.

La lecture matérielle de ce qui suit est assurée (le R pouvant naturellement être lu D). Le sens général l'est aussi, du moins si on reconnaît au milieu de la deuxième ligne la racine YQR, *honorer*. Rappelons que le monument d'un défunt est érigé "en son honneur", LYQRH

¹ Les noms propres sud-sémitiques, I, p. 10 et 73.

² Donc Tx = ط ; Zx = ظ ; Sx = ص ; Dx = ض ; Hx = ح . Nos autres transcriptions sont connues: Dh = ذ et Th = ث et théta grec; Gh = غ et Kh = خ ; J = ج . Pour alef, nous gardons la virgule en exposant, et pour ع la même virgule, mais retournée. Par l'accent circonflexe nous ne notons normalement que les voyelles longues auxquelles correspond dans le texte une mater lectionis.

leyeqāreh, comme le précise mainte inscription palmyrénienne (CIS, II, 4116, 4118, etc). Mais nous ne pensons pas que dans notre texte, nous ayons affaire au substantif, car la tournure WYQR' DY HWH BRQMW, et (cet) honneur (lui est rendu) parcequ'il a été à Raqmu (c. à d. Pétra, cf. infra), serait trop abrupte, et on attendrait au moins: WYQR' DNH, et cet honneur. Nous faisons donc de YQR un verbe au passif, soit à l'intensif parfait, yuqqar, il a été honoré, soit au causatif présent-futur (ici présent), yūqar, il est honoré. L'hébreu rabbinique connaît le participe intensif meyuqqar, honoré, et le parfait causatif haqqar, valoir cher. Nous rattachons donc l'alef qui suit aux deux dernières lettres de la ligne 2, et lisons 'RY, arê, parce que.¹ C'est parcequ'il a séjourné à Pétra que le défunt, mort à Jerash, a eu sa stèle à l'entrée de la ville. Nous lisons Raqmu, avec W final nabatéen, car si le graveur avait voulu écrire RQM, Reqem, il aurait normalement dû tracer un M final. Or nous avons ici la forme non finale et bien que peu marqué sur la photo de la pl. I, le trait de liaison apparaît sur notre fac-similé et nos autres photos. On savait que le nom araméen de Pétra était RQM, à la fois par les transcriptions grecques (ainsi Josèphe, Ant. Jud., IV, 161: Arekemê) et les écrits rabbiniques (Reqem ou Reqam). Le nom complet est Reqem de Gaia, c. à d. la Reqem près de Gaia, l'actuelle bourgade appelée Wādī Mūsā, comme le cours d'eau qui y a sa source. Il y a encore peu, les Bédouins de la région la désignaient par le nom d'el-Ji, qui dérive visiblement de Gaia. Cette dernière forme est celle des transcriptions grecques, les inscriptions et manuscrits ayant habituellement GY'' ou GY'H, c. à d. Gay'a, la Vallée, toponyme qui rejoint celui de Wādī Mūsā. Mais notre inscription apporte la première attestation épigraphique de Reqem, et dans un article sous-pressé, nous nous étonnions de l'absence du nom araméen de Pétra dans les inscriptions nabatéennes. Cette lacune est désormais comblée, et nous savons que le toponyme avait de plus reçu une désinence nabatéenne, d'où Raqmu.

Cette même désinence marque le nom de Jerash, la Gerasa des textes grecs, et qui elle aussi apparaît pour la première fois dans une inscription araméenne². Il faudra donc chercher une étymologie sémitique au toponyme, laquelle, il est vrai, n'est pas facile à déterminer. C'est à Jerash que sera mort notre Petraios, puisqu'il y fut enseveli. Le parfait passif QBYR qebir, il a été enterré, s'ajoute aux autres exemples ressemblés par J. Cantineau (*Le Nabatéen*, I, p. 74 s, cf. *Grammaire du palmyrénien épigraphique*, p. 81ss). L'épithaphe gravée sur la dalle d'où se détache le buste du palmyrénien Bôrrepha et qu'a publiée H. Ingholt dans la revue *Berytus* (I, 1934, p. 38-40), doit être citée ici. A droite de la tête du défunt, on lit: "Hélas! Bôrrepha fils de 'Atenatan fils de Bôlha, (image) que lui a faite Bôlha l'astrologue, son fils" et à gauche: "Il est enterré (QBYR) au fond de ce loculus, à droite de cette nafsha, audessous de 'Ala. fille de Yarhay". H. Ingholt considère QBYR comme un participe: "enterré". Nous préférons y voir une forme verbale, c. à d. un parfait passif, car le mot commence une nouvelle phrase. Dans notre texte en tous cas, le fait que qebir est précédé de deux formes verbales et relié à elles par la copule W, est en faveur d'un parfait passif.

¹ Nous écartons une lecture yaqqir, honoré, cher, car on attendrait la graphie YQYR et un pronom sujet.

² Le R. P. B. Couroyer, en examinant avec nous la photo de pl. I, b, nous a aussitôt suggéré cette identification. Le R. P. R. de Vaux y avait aussi reconnu plusieurs expressions funéraires, comme MYT et QBYR.

Dans le texte publié par H. Ingholt le mot **nafsha** désigne le buste même de Bôrrepha (pl. IX, 2 de **Berytus**, I), comme pour le buste funéraire CIS, II, 4328: "Cette nafsha est celle de Zabd'ateh...", cf. 4595. Nous saisissons sans doute dans ces cas la pensée exacte des Sémites qui appelaient **nefesh**, c. à d. "âme, personne", le monument funéraire: à proprement parler, il représentait le défunt, il était en quelque sorte la "personne" du mort. Certes ce sens s'est estompé au fur et à mesure que l'humble stèle se transformait en tour funéraire, puis en mausolée, mais le cippe originel, symbole du défunt comme le bétyle est l'habitable divin, s'est perpétué dans ces dalles à buste et dans les **nefesh** de Pétra, où le sculpteur a ramené le monument à pyramide aux dimensions de la modeste pierre tombale¹. Par ailleurs la distinction que les Sémites faisaient entre la **nefesh**, c. à d. le principe vital, et les ossements du mort, explique suffisamment que le monument qui fixait la présence de la **nefesh** ait pu occasionnellement être érigé en l'absence des restes mortels. C'est le cas de notre défunt et sans doute celui de ses voisins. Nous avons dit plus haut que la **nefesh** d'el-Baidâ ne comportait pas non plus de tombe à proximité.

Comme il arrive fréquemment, on indique ici l'auteur du monument funéraire, un certain Taimu. Celui-ci avait une raison de se nommer, si notre interprétation du dernier mot est exacte. L'avant dernière lettre, il est vrai, est plutôt B que N, mais cela ne donne pas de sens. Si le trait oblique en haut à gauche appartient à la lettre, on peut y voir un R. Le trait horizontal ne serait alors que la prolongation de celui du B précédent et la lettre d'avant serait à lire comme N final. On aurait ainsi: TYMWN BRH, **Timôn son fils**, et on comparera la bilingue de Palmyre où le nom grec Teimôn est rendu par TxYMWN (J. Cantineau, *Rev. Bibl.*, 1930, p. 530ss). Mais le N éventuel (qui ressemble d'ailleurs fort au D de 'BD!) serait tracé plus près de BRH que du mot qu'il est censé terminer. Nous lisons donc RBNH, **rabbaneh**, son maître, son précepteur. Petraios serait mort jeune. Si le mot **rabbân** n'est attesté à Pétra et à Palmyre, rappelons cependant l'épithaphe gréco — nabatéenne d'umm al Jimâl qui commémore Phehru fils de Shullay, précepteur de Gadimath. Le grec a **tropheus** et se nabatéen RBW, **rabbu** (E. Littmann, *Nab. Inscr.*, no 41). De même le palmyrénien connaît le mot MRBYT', **merabbita**, nourrice (*Rev. Bibl.*, 1930, p. 542s). Précisons enfin que la lecture 'BD, **il a fait**, est tout à fait sûre, malgré les apparences de la photographie.

3. A droite de la précédente; avec pyramidion. Pl. II, a.

N Tx YR'	Notaira
B R R B Hx W	fil de Rabihi

Le premier nom est le même que NTxYRW (diminutif de Natar'el, Dieu a gardé), mais avec désinence araméenne au lieu du -u nabatéen. Le patronyme, non attesté en nabatéen, est le sud-sémitique RBHx, cf. arabe **râbih**, qui fait des profits.²

¹ Pour les différents sens de **nefesh**, cf. H. Ingholt, **Berytus**, I, p. 39s (âme, personne, stèle, monument); J. Starcky, *Mélanges de l'Université Saint Joseph*, XXVIII, 1949-1950, p. 45ss. Dans le même no, voir pl. III à VIII les nombreuses stèles funéraires de la nécropole de Bdama (à 65 km au nord-est de Lattaquié), décrites par R. Mousterde, qui donne p. 15s une liste d'autres sites à **nefesh**. Celles de Bdama imitent, taillé dans le roc, le type classique d'édicule funéraire à fronton et acrotères, avec ou sans représentation du défunt. A la pl. IX est reproduite une pyramide funéraire des environs d'Apamée. Précisons que l'édicule à fronton peut aussi recevoir le nom de **nefesh**, CIS, II, 3909. A Palmyre, il s'applique le plus souvent à de grands tombeaux.

² G. Ryckmans *Les n. pr. sud. sém.*, I, p. 196 A. van de Branden, *Les textes thamoudéens de Philby*, II, p. 131.

4. A droite de la précédente, un peu plus bas. pl. II, b.

Sh 'D' L H Y	B R	'B D	Sha'd'ilahay fils de
M N K W	N G R'		'Abdmaliku le charpentier.

Il semble bien qu'ici comme ailleurs, MLKW soit écrit MNKW, reflet de la prononciation locale, mais non officielle, puisque le grec transcrit régulièrement **Malichos** ou **Malchos**. On sait que les anthroponymes débutant par 'Abd-, **serviteur**, comportent normalement un nom divin et qu'avec le nom d'un roi, ils supposent sa divinisation¹. Vu l'écriture, il s'agit plutôt de Malichos I (mort vers 30 av. J. C.) que de Malichos II (mort vers 71). L'intervalle entre l'imposition du nom et la mort du fils atteint en effet facilement un demi-siècle. Le mot **naggara**, charpentier, se réfère au premier nom. En nabatéen, il figure presque sûrement dans les graffites sinaïtiques CIS, II, 3001 et 2474 (mais pour ce dernier la copie de Bénédite porte NGRH). Le nom de notre charpentier est très commun, en particulier dans les graffites du Sinaï. Il est écrit une fois avec S initial et répond au sud-sémitique S'D'L et S'D'LH, "Bonheur de Dieu"².

5. Stèle effritée en bas à droite, et toute proche de 4. Pl. II, c, cf. pl. I, a.

N P Sh	R B H x W	Nefesh de Rabihi
(B R)	. . . W	(fils de) . . .

D'après les traces, le patronyme pourrait être MNKW, Malichos. Entre le P et le Sh de NPSH, le trait ne semble pas accidentel: ce sera un Sh manqué parceque trop proche du P.

6. Stèle dont la pyramide est barrée de trois traits horizontaux, au dessus du trait qui marque le haut du corps (très fruste). Pl. II, d et I, a, à droite.

N P Sh	' B D R B ' L	B R	Sh ' L H Y
Nefesh de 'Abdurabbel fils de Sha'lahay			

Le premier nom est connu par une transcription grecque lue par M. Dunand sur un linteau de Bosra³, provenant sans doute d'un tombeau. Ici encore, le roi divinisé peut être Rabbel I (fin du deuxième siècle av. J. C.), honoré d'une statue à Pétra (CIS, II, 349) ou son lointain et dernier successeur, Rabbel II, dont le royaume fut annexé en 106 par Trajan. Le patronyme, dont la lecture paraît certaine, s'explique comme une erreur du scribe pour Sha'd'ilahay (cf. no 4), ou plutôt comme un nom identique à ShY'LHY copié par G. Dalman au Qattâr ed-Deir (Pétra) et qu'il compare au safaitique Sh'L (Neue Petra-Forschungen, no 68). Ce dernier est vocalisé Shay'el par G. Ryckmans (Les noms propres sud-sémitiques, I, p. 250), les diphtongues n'étant pas notées en safaitique, et d'après l'analogie d'autres noms de la même racine shy', accompagner, **aider** (p. 208). E. Littmann a d'ailleurs relevé le même nom sous la forme ShY'L sur une stèle gréco-nabatéenne du Hauran (Nab. inscr., no 10; grec: Saiêlou, génitif). Notre Sh'LHY représenterait donc une graphie safaitique ou tamoudéenne⁴, mais

¹ Cf. en dernier lieu J. T. Milik, *Liber Annuus*, X, 1959-60, p. 148 s.

² G. Ryckmans, *Les n. pr. sud-sémi.*, I, p. 240 et pour l'alternance de Sh et S, J. Cantineau, *Gramm. du palm. épigr.*, p. 43, cf. *Le Nabatéen*, p. 43.

³ *Archiv Orientalni*, XVIII, 1-2, 1950, p. 148, no 323.

⁴ La même alternance se retrouve pour le nom divin écrit en nabatéen et palmyrénien ShY'LQWM, Shay'-al-qaum, et en safaitique Sh'HQM, Shay'-ha-qaum, *Accompagnateur* (ou *Accompagnement*) de la tribu.

sans l'alef de 'Ilahay, qui de fait est parfois omis.

7. Stèle isolée, à trois ou quatre mètres de la précédente. Le bas est réduit à un rectangle et la pyramide est fruste. Inscription grecque Pl. II, e.

ABDOUSARÈS, 'Abd-Dushara

Le nom propre 'Abd-Dushara, "Le serviteur de Dushara", dieu principal des Nabatéens, n'était attesté que par deux graffites sinaïtiques (CIS, II, 1255 et 2286), mais on a plusieurs Taym-Dushara, un nom dont le sens est identique. Ici, l'absence du D de 'Abd- s'explique facilement, mais la lecture de la seconde lettre offre quelque difficulté, car elle a la forme, ou d'un huit, ce qui peut être un B négligé, ou d'un cercle surmonté d'un V, ce qui est une ligature tardive de O et Y grec. Mais la stèle doit être contemporaine des autres, et donc antérieure à l'époque byzantine. D'ailleurs une lecture AOUD. avec O, est difficile à rattacher à une racine sémitique: GhWTh, secourir, cf nabatéen 'WT'L, Secours-de-Dieu, ou racine 'WDh, d'où safaitique 'WDh'L grec Audēlos, Refuge-de-Dieu (G. Ryckmans, *Les n. pr. snd-sém.*, I, p. 242) ?

8 Avec cette **nefesh**, située à cinq ou six mètres de la précédente, commence le second groupe, beaucoup plus mal préservé que le premier. Forme très simplifiée, de même pour les deux suivantes. L'inscription était gravée sur le rectangle du bas (pl. II, f, à gauche) mais il n'en reste presque rien.

9. Même type que la précédente, et guère plus lisible. Pl. II, f.

N P Sh Y . . . ' . . .

.

Le alef semble être suivi de LHY, mais nous ne voyons pas quel est l'anthroponyme en Ilahay à restituer.

10. Fruste. Cf. pl. II, f, à droite. Il se pourrait que les lignes verticales soient intentionnelles. Sur le dé, on croit voir des traces de lettres.

11. A trois mètres environ à droite de la précédente, **nefesh** sans pyramidion, mais évasée en haut (corniche ?), comme pour 1, 2, 4, 5, 6. Pl. II, g.

N P Sh B N Y B R Nefesh de Banay fils de

. . . '

Banay est un nom connu, mais la lecture n'est pas certaine.

12. A droite de la précédente. Pyramide sans pyramidion ni évasement, mais curieusement séparée du dé (très fruste) par une tabula ansata, qui porte l'inscription (il n'y a pas d'inscription sur le dé, malgré les apparences). Pl. II, h.

N P Sh ' B Y W B N Nefesh d'Abiu fils de

D N Y S Dionysios

Le texte est gravé au vilebrequin. Le nom d'Abiu, connu en hébreu, ne se rencontre qu'une autre fois en nabatéen. Le Père Savignac a copié à Dedan (al-'Ulà) le graffite suivant: 'BYW BN ShLMW, Abiu fils de Shalmu (*Mission arch. en Arabie*, II, p. 233, no 387) et note que BN au lieu de BR désigne un membre de la colonie juive de Dedan. Notre cas sera parallèle, car la longue lettre qui finit la ligne 1 se lit mieux comme N que comme R. Le

patronyme, entre cette queue et celle du Sh, n'est pas de lecture certaine, mais le retour vers la droite que présente la lettre qui précède le samek rend un Y plus probable qu'un G. Pour la transcription DNYS de Dionysios, il faut supposer une prononciation du genre de celle de notre "Denys". On comparera la correspondance DYNYS = Dionysios dans la bilingue de Palmyre publiée par A. Bounni dans les *Annales arch. de Syrie*, XI-XII 1961/62 p. 147 (tombeau de Shalmallat). Pour d'autres possibilités, cf. A. Caquot, dans le *Recueil des tessères de Palmyre*, p. 171.

Quelle est la date de cette curieuse série de nefesh ? La paléographie nabatéenne est encore à faire, mais l'impression d'ensemble que laisse celles de ces inscriptions qui sont gravées avec soin (no 2, 3, 5) est en faveur de la période d'indépendance nabatéenne, donc avant l'annexion de 106. On peut préciser davantage : le het de RBH_xW (3 et 5) a encore sa haste de gauche complète. Or sous le règne de Malichos II (40-71) les scribes de Hegra et de Pétra ont tendance à en supprimer la pointe supérieure, pour obtenir un tracé continu avec la courbe qui unit les deux hastes. Mais le M offre déjà le tracé continu, caractéristique des inscriptions à partir de Malichos II et de Rabbel II. Nous situerions volontiers, pour ces raisons et quelques autres, l'ensemble de la série entre 50 et 100. Le désir de commémorer des défunts ayant vécu à Pétra en mettant leur nefesh à l'entrée de l'illustre cité s'explique d'ailleurs mieux au temps des rois de Nabatène qu'à la période de l'occupation romaine, où le sentiment national prit rapidement des dimensions nouvelles.

Post-scriptum.— Inscription 7: on connaissait déjà trois transcriptions grecques du nom 'Abd-Dushara' les trois avec un seul dalet, par exemple ABDISAROU (génitif), cf. D. Sourdél, *Les cultes du Hauran*, p. 61.

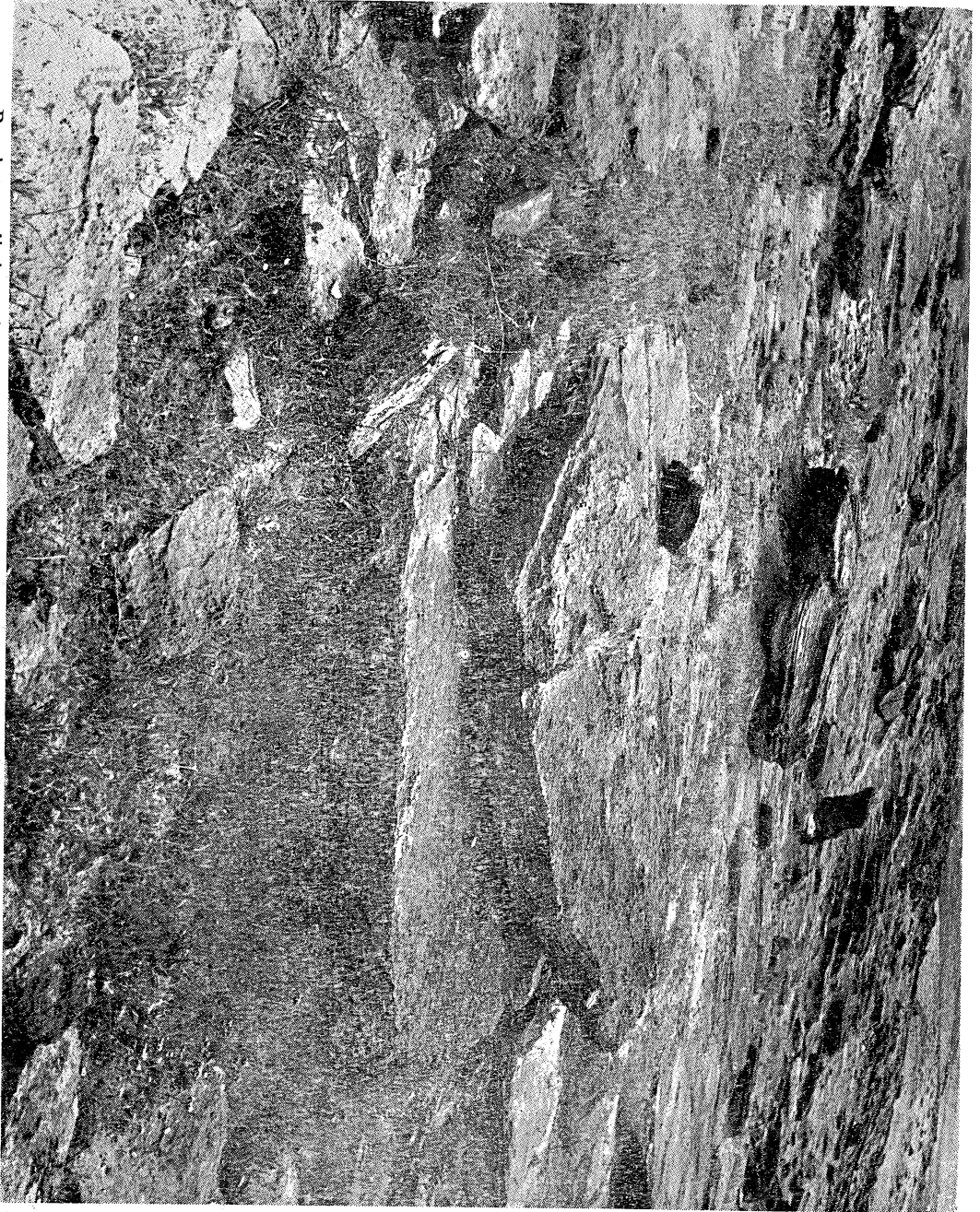
J. STARCKY



Dolmen No. 1, Damiya.

Plate II

Random splitting of the Um Sahm Sandstone, Damiya.

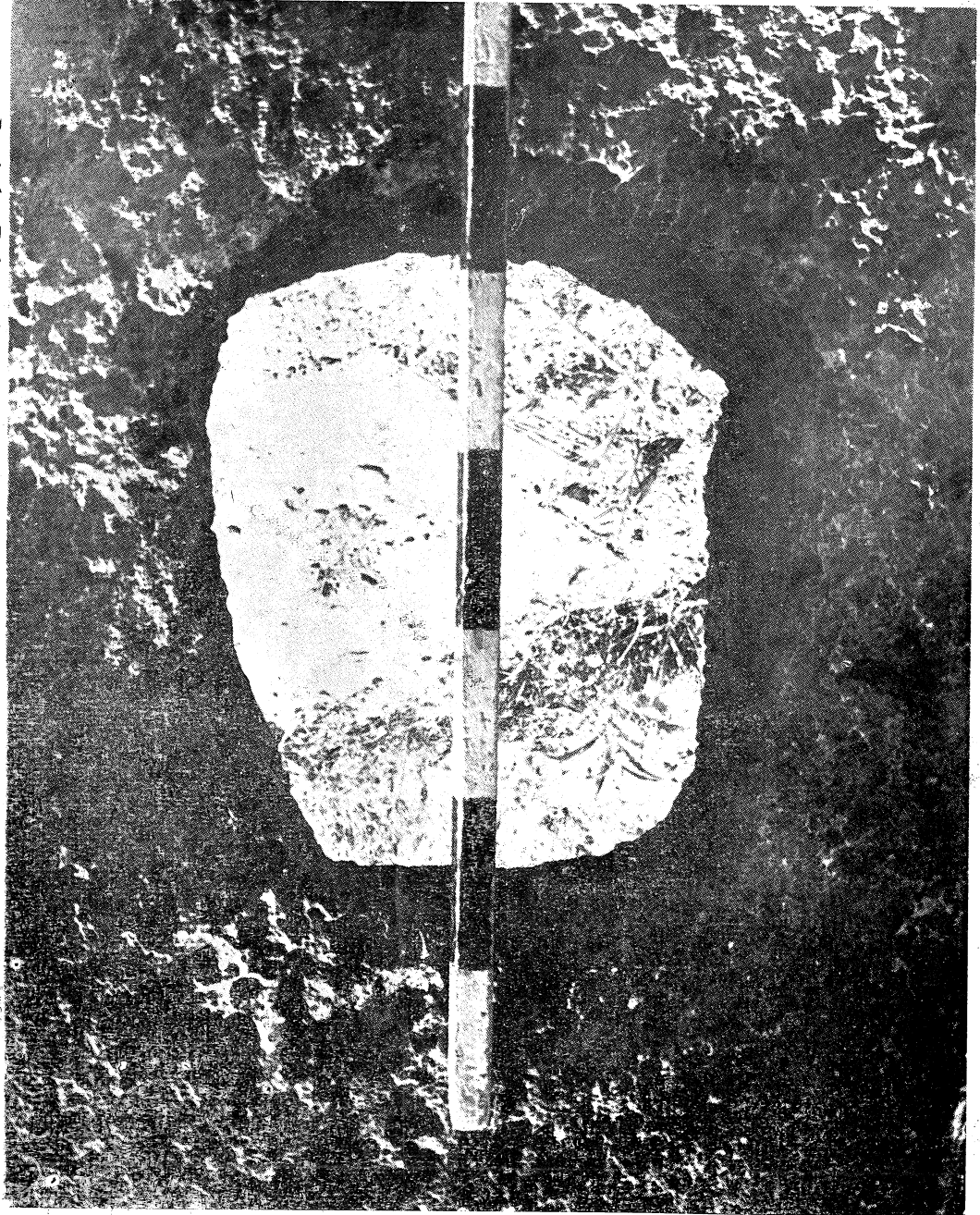


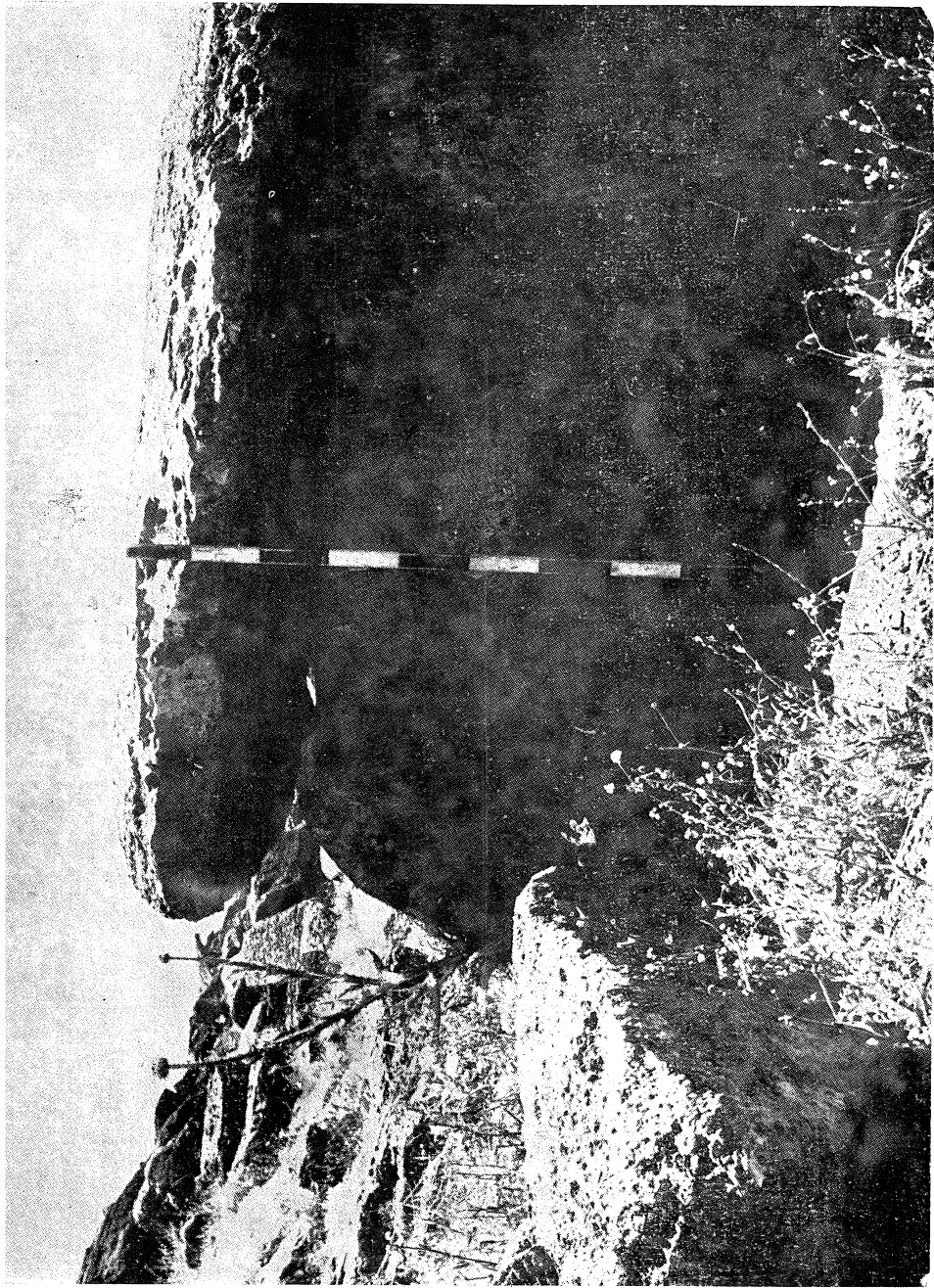


Complete Dolmen, Dolmen No. 20, Damiya.

Plate IV

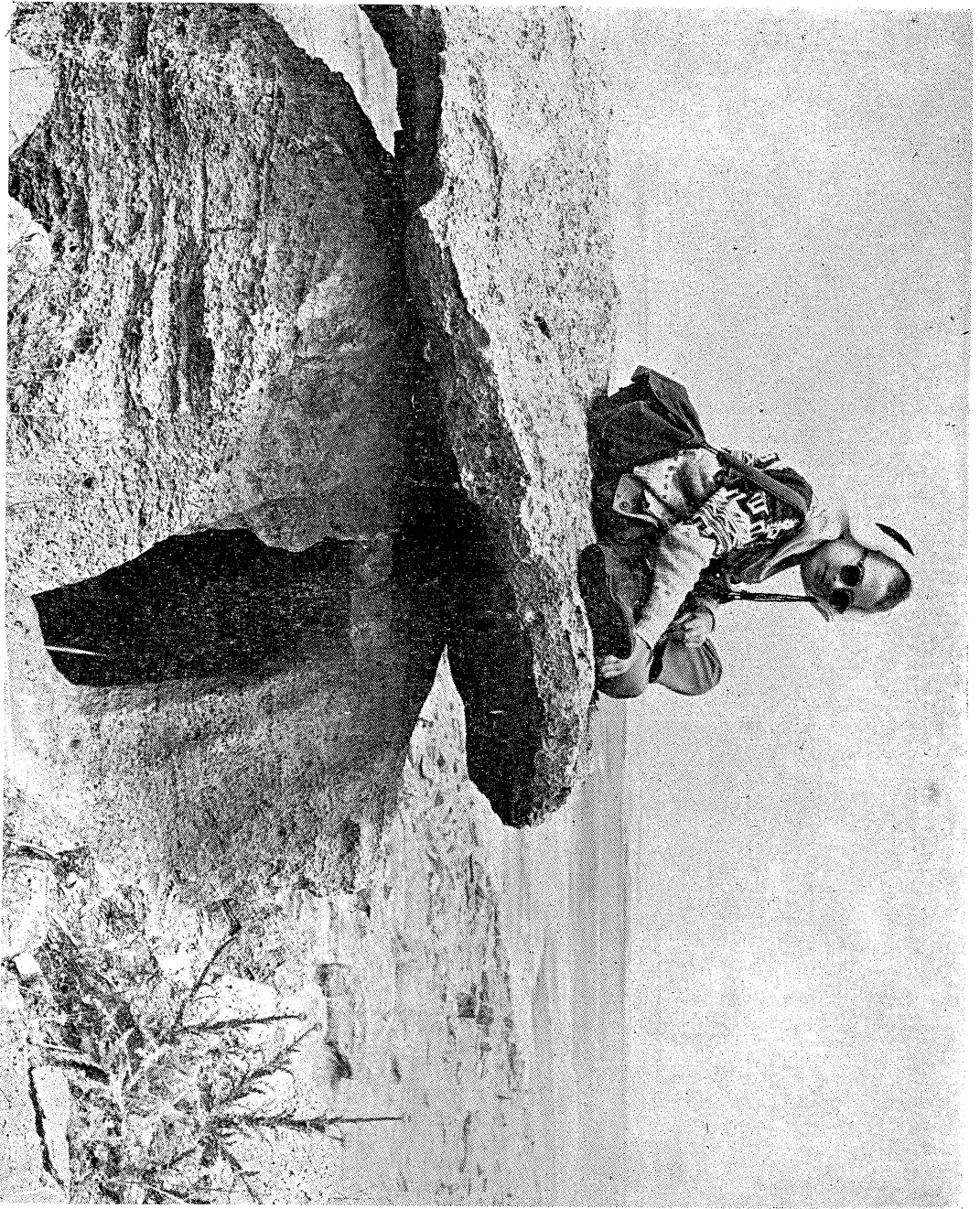
Porthole, Dolmen No. 30, Damiya.



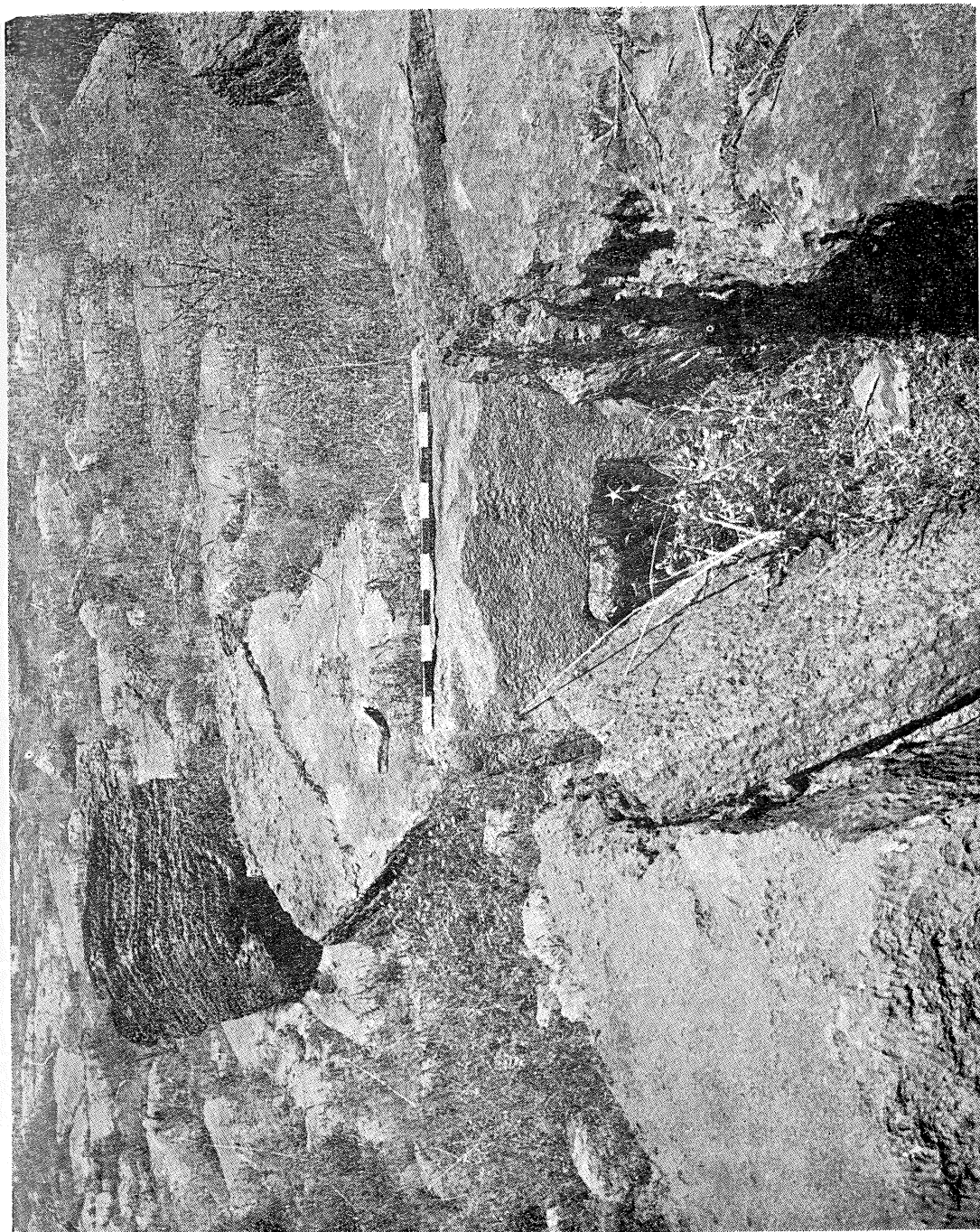


Framed Porthole, Dolmen No. 40, Damiya.

Plate VI



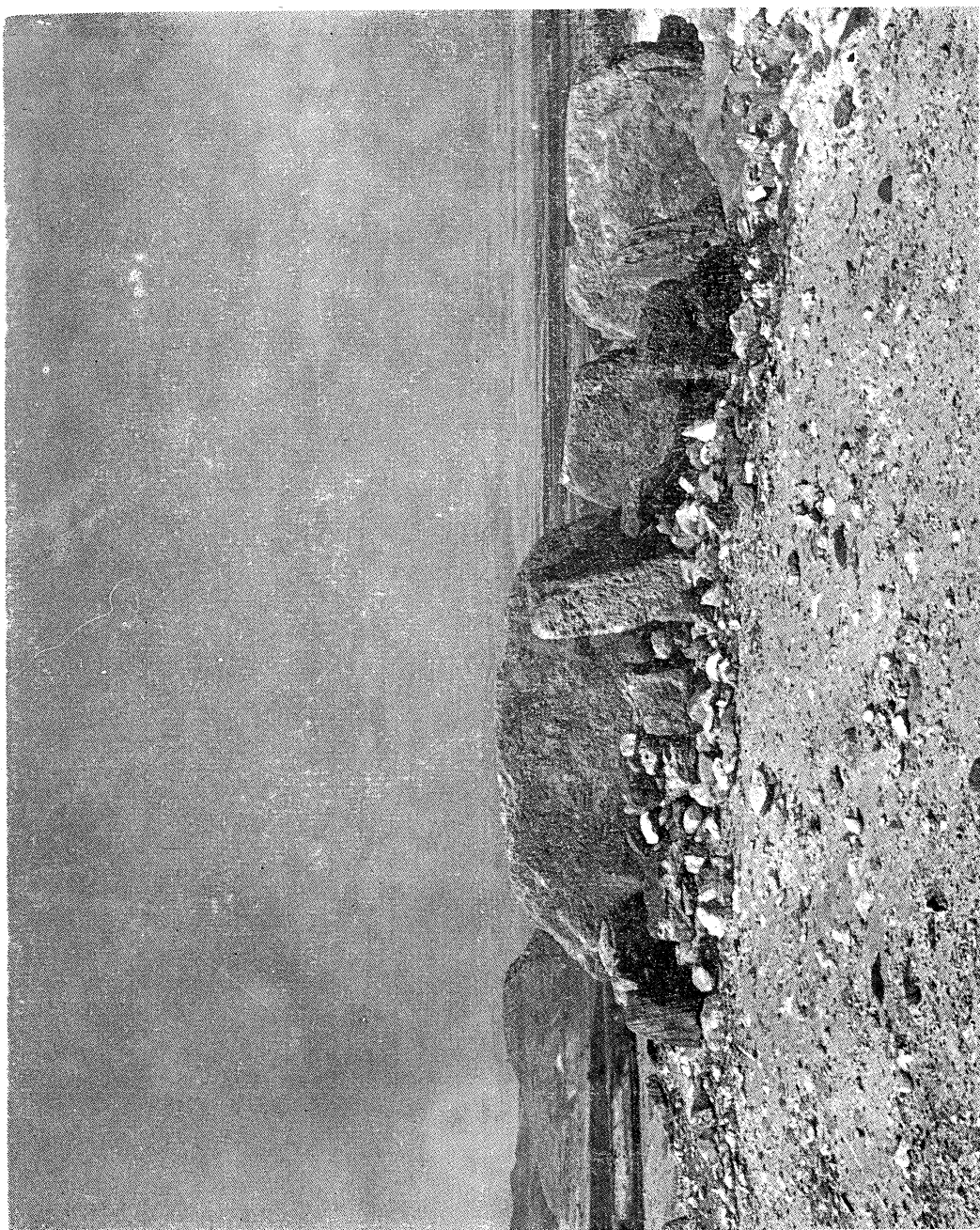
Carved Door into Boulder, Northern Section of Field, Damiya.



Porthole before Natural Fissure, Dolmen No. 51, Damiya.

"MENHIR" At Tell El Quttein





Dolmen No. 5, Tell El Quttein.

Porthole Dolmen No. 5 Tell El Qutein.





Dolmen No. 1, Tell el Matabi.

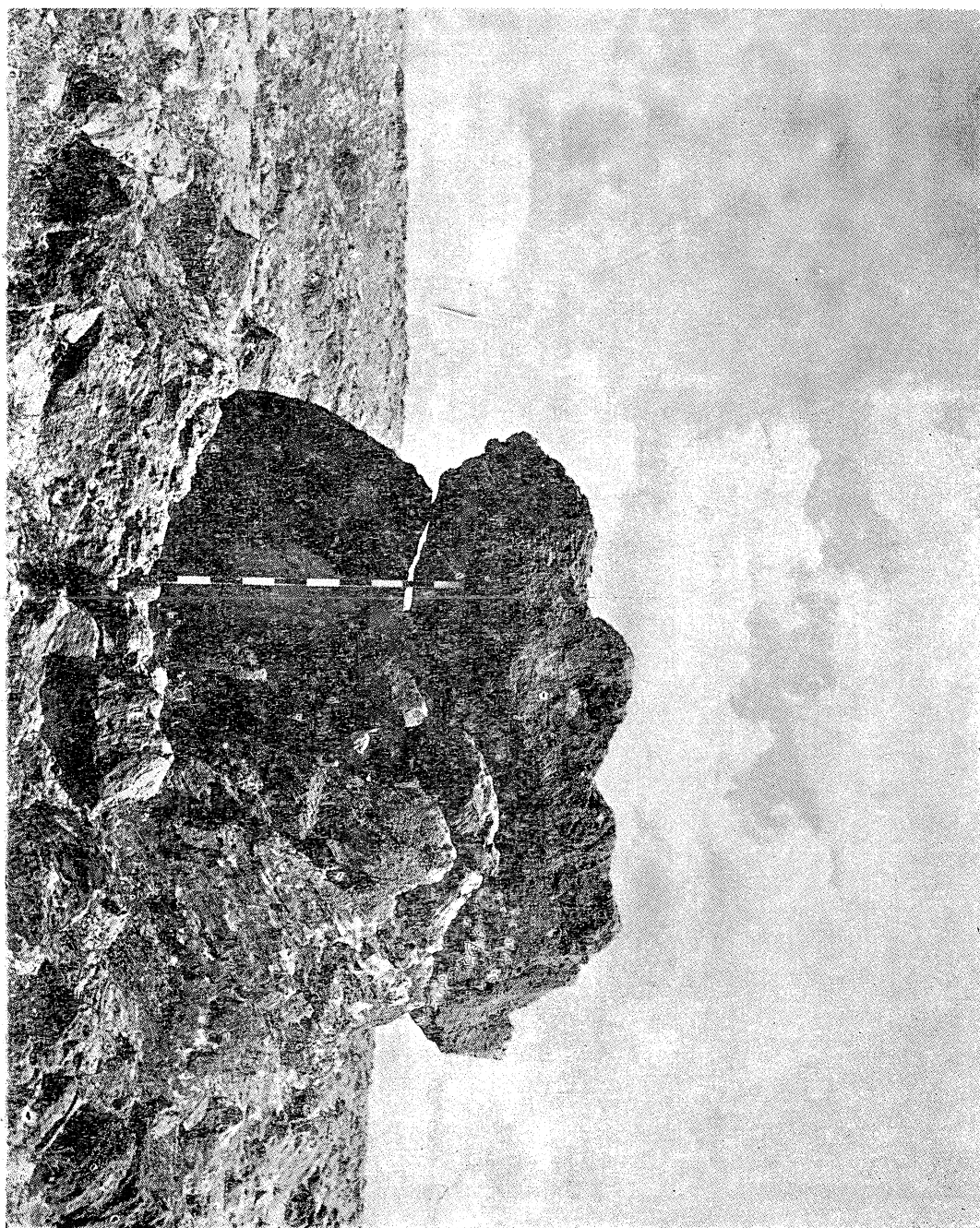


Dolmen No. 7 Tell El Matahi.

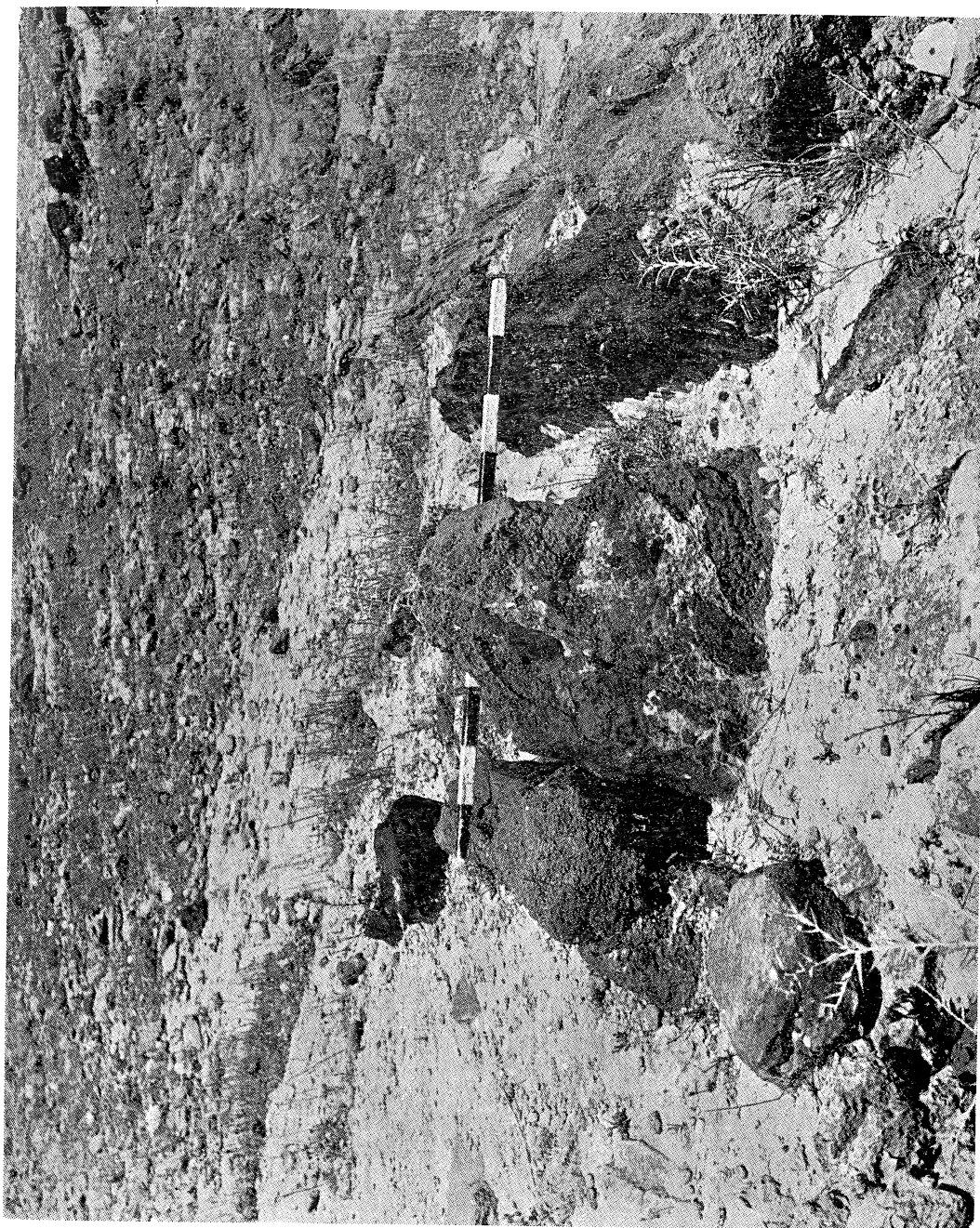


Dolmen No. 12 Tell El Matabi.

Plate XIV

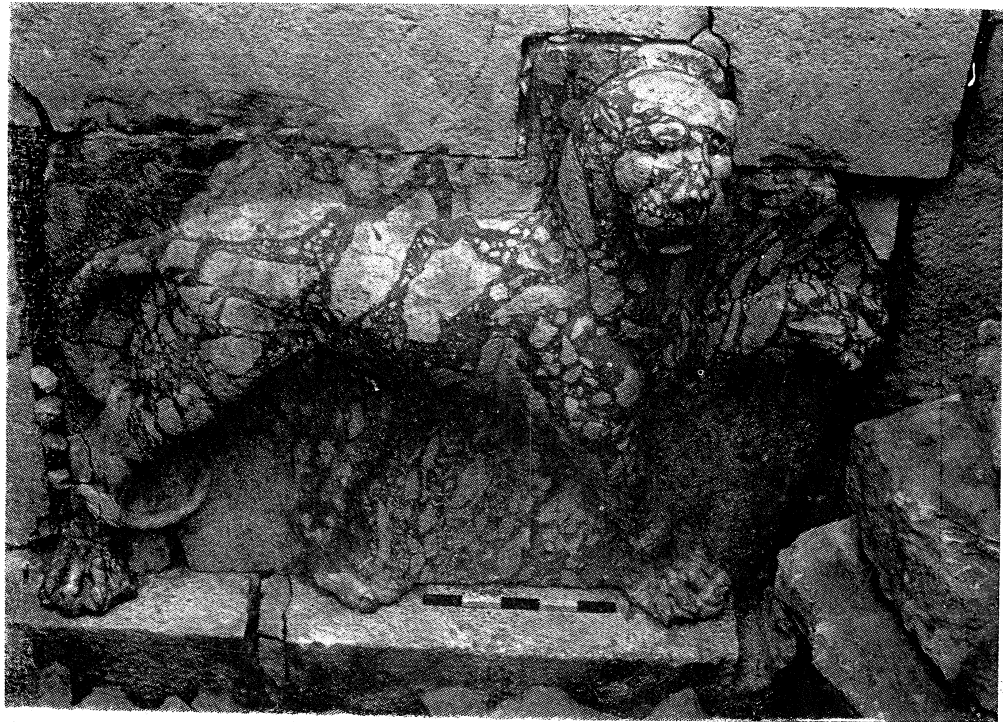


Dolmen No. 14, Tell El Matabi.

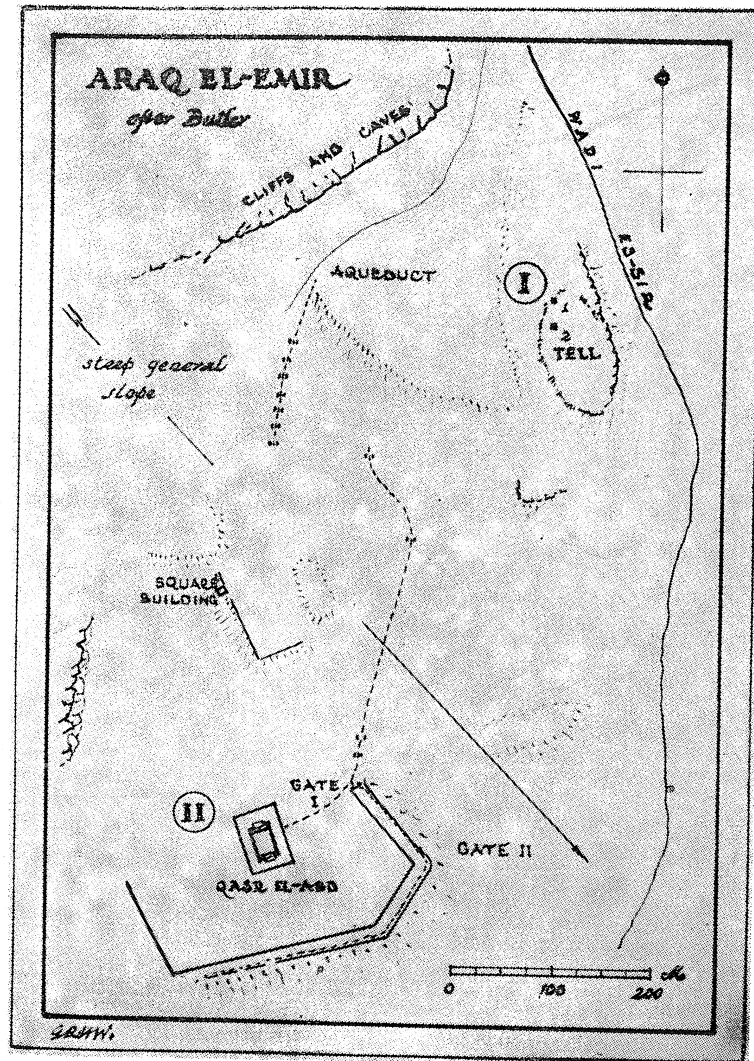


Dolmen No. 3, Tell El Matabi.

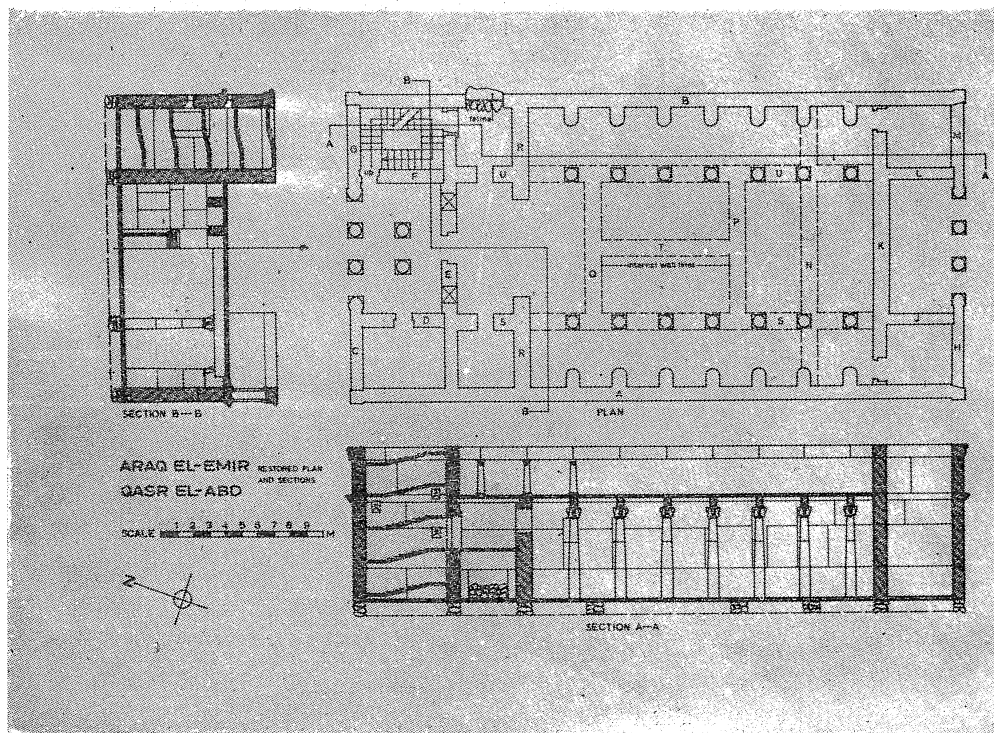
Plate XVI



Feline sculptured on mottled red and white dolomite block inserted in lowest dressed course of Qasr east wall toward north end. Note crude insertion, drain in front of animal's right forepaw, and remains of Byzantine wall, which protected sculpture, at extreme right. Sculptured block moistened for photograph. Photo by Paul Lapp.



Plan of 'Araq el-Emir environs prepared by G. R. H. Wright.

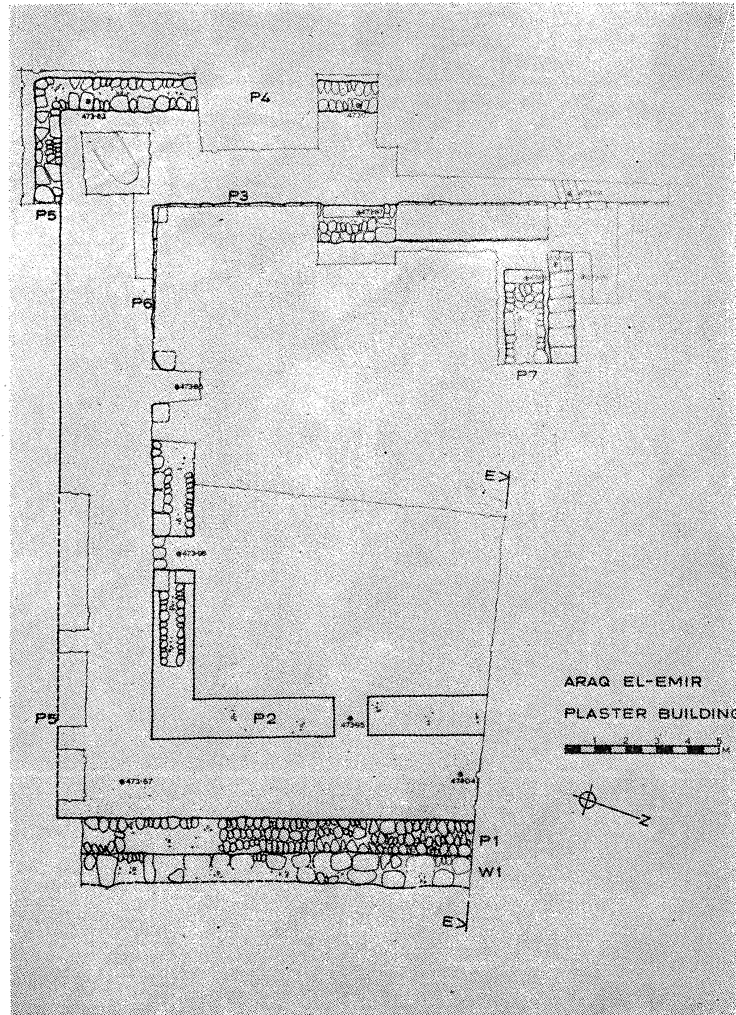


Restored plan and sections of Qasr el-'Abd prepared by M. J. B. Brett.



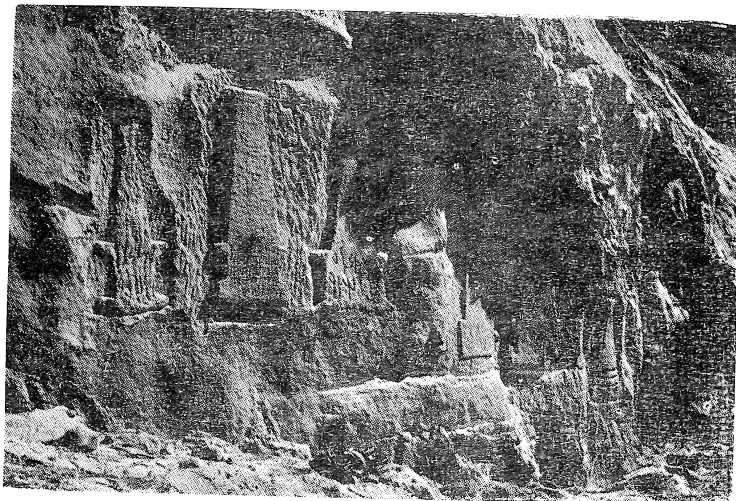
Frieze-course block with roughed-out lion found near south end of west Qasr wall. Photo by Paul Lapp.

Plate XX



Plan of the Plaster Building probably built by Hyrcanus about 175 B. C.
Prepared by M. J. B. Brett.

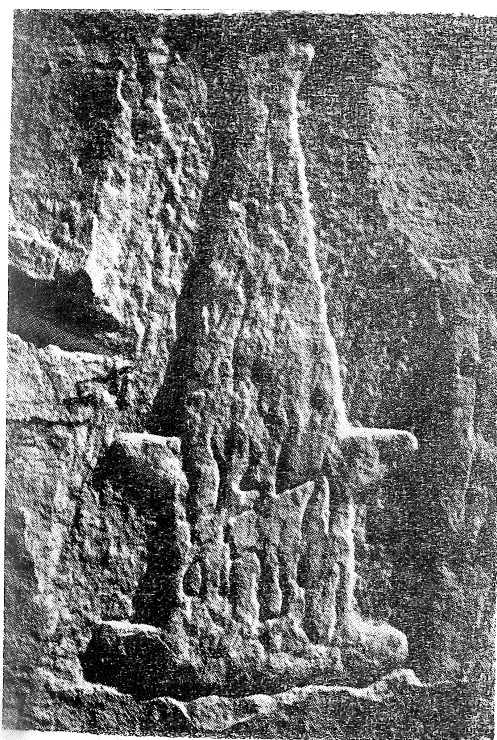
Top



I a

Down

Top



Bottom

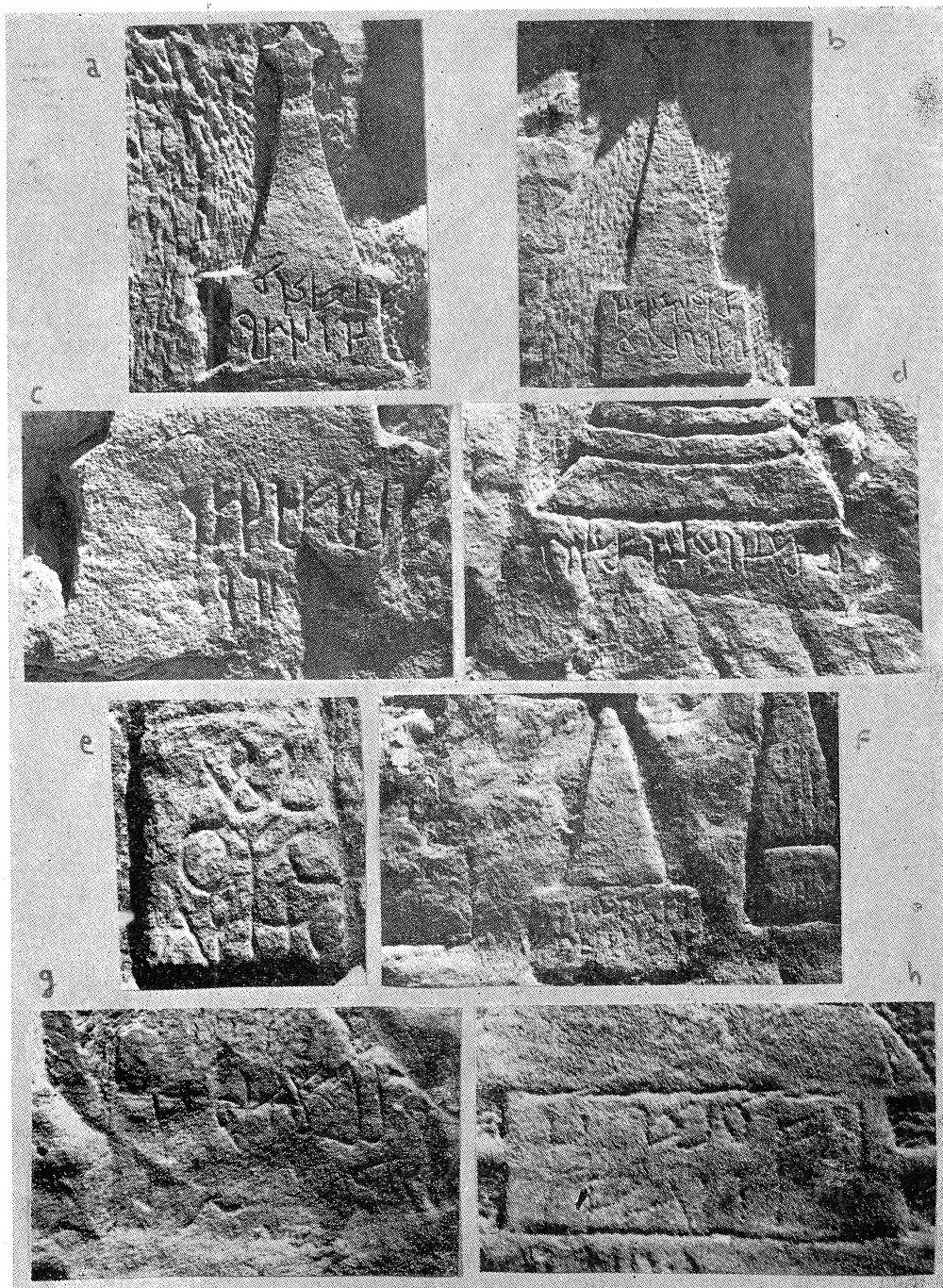
I b

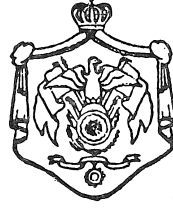


I c

Bottom

II





المملكة الأردنية الهاشمية

حوليات دائرة الآثار

المجلد العاشر

١٩٦٥

