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More on the Terminal Palaeolithic of the Fayum Depression

In 1966 - 68 the Institute of Palethnology of the University of Rome surveyed the Fayum Depression north-east of modern Birket Qarun (Puglisi, 1967)¹. As far as the Terminal Palaeolithic is concerned, ten surface concentrations were localized and collected. We report here the following sites: MB2Sa (the "Two Sisters" site: Caneva *et al.*, 1978), S4, MOE 2, MOE 2b, MOE 2c. They are located near the Terminal Palaeolithic sites published by Wendorf and Schild (1976) (Fig. 1; Table 1).

We examined the stone tools following the typology proposed by Tixier (1963, 1974). Some new subdivisions were needed to account for peculiarities of the material. However, in order to make a cumulative graph and comparisons with other published sites, our categories were reduced to those of Tixier, but not without difficulty. For example, those composite tools not expressly given in Tixier's list had to be refilled, according to the directions of this author (1963 : 92) and, therefore, disappeared from our graph. A detailed classification was made of the numerous retouched pieces, which will be published later. As for the *débitage*, we made a careful classification on an extensive sample: blades, bladelets and flakes were classified according to the presence/absence, quantity and localization of cortex; cores according to platform position and to exploitation size, degree, *etc.* These more detailed results, which include studies on the style (Close, 1977) will also be presented in an extensive report.

Our collections, while on the whole similar to those of the Qarunian, are different in a number of stylistic and, possibly, functional characteristics (Fig. 2). Comparing our sites with those of Wendorf and Schild, we note the following:

1. Cores: striking platforms are usually single and unfaceted, as in the Qarunian. No more than two-thirds of the perimeter is exploited.

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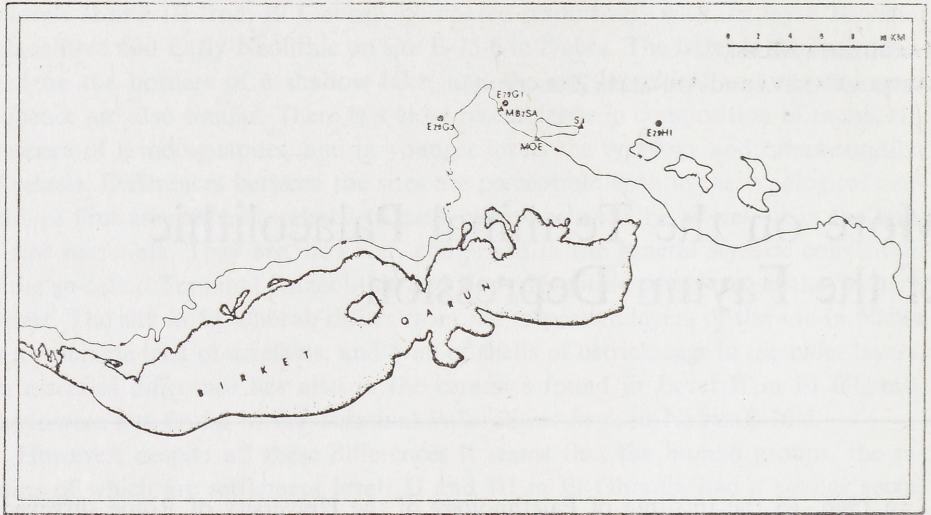


FIG. 1. Fayum Depression. Location of Terminal Palaeolithic sites

2. End-scrapers: their percentage is higher (5 - 10%) and their typology is more diversified: *e.g.*, No 4 (on a core) includes different types. In type No. 10, on a large backed blade, the endscrapper, whether simple or double, is generally poorly made and possibly should be considered rather a truncation.

3. Perforators: again, their percentage is much higher (7 - 18%). They are exclusively of the simple type, which includes borers, groovers and core tools.

4. Burins: as in the Qarunian they are rare or completely lacking; moreover, they are not very typical.

5. Backed blades: they are rare but always present.

6. Composite tools: as in the Qarunian, they are lacking, at least if we follow only Tixier's definitions.

Table 1

Fayum Depression. Elevation of Terminal Palaeolithic sites (E29G1, E29H1, E29G3 after Wendorf and Schild, 1976)

Sinking Premoeris Lake:

Site E29G1, Area 1 and B	elevation	17 - 15 m.	6,150 B.C.
Site E29H1, Area A and B	elevation	15 m.	6,120 B.C.
Site E29G3, Area A	elevation	12 m.	5,550 B.C.
Site MB2SA	elevation	12 m.	
Site MOE 2			
Site MOE 2b	elevation	-2 m.	
Site MOE 2c			

Rising Protomoeris Lake:

Site E29H1, Area C	elevation	17 m.	c. 5,200 B.C.
Site E29G1, Area E	elevation	19 m.	5,190 B.C.
Site S4	elevation	c. 22 m.	c. 4,900 B.C.?



FIG. 2. Fayum Depression. Tools from site S4

Table 2

Fayum Depression. Tool typology

Nr.	Name of tool in French (after Tixier, 1963)	Site				
		S4	MB2Sa	MOE2	MOE 2b	MOE 2c
1	Grattoir simple sur éclat	1.25	2.59	1.15	1.49	—
2	Grattoir sur éclat retouché	0.27	1.11	—	—	—
4	G. nucleiforme ou rabot	0.98	3.46	4.52	2.49	4.20
5	Grattoir denticulé	0.09	0.74	—	—	—
6	G. à épaulement ou à museau	0.68	0.25	1.51	1.49	—
7	Grattoir à coche (s)	0.45	0.62	—	—	—
8	G. simple sur lame ou lamelle	0.80	0.74	0.50	1.49	—
9	G. sur lame ou lamelle retouch.	0.09	0.25	—	—	—
10	G. sur lame à bord abattu	0.27	1.36	—	—	0.93
11	Grattoir double	0.27	0.37	—	0.50	—
12	Perçoir simple	6.00	8.16	7.03	18.41	14.02
16	Mèche de foret	3.04	—	—	—	—
17	Burin dièdre	0.36	0.37	0.50	—	0.93
18	Burin dièdre d'angle	0.27	—	—	—	—
19	Burin d'angle sur cassure	0.18	0.25	—	—	1.40
21	B. d'angle sur tronc. rectiligne	—	0.25	—	—	—
34	Éclat à bord abattu	—	1.73	0.50	—	—
37	Lame à bord abattu arqué	0.09	3.58	0.50	2.98	1.87
45	Ll. aigüe à bord abattu rect.	6.62	5.56	5.53	4.48	3.27
47	Ll. aigüe à bord abattu et base tr.	0.72	0.37	1.51	0.99	0.47
53	Aiguillon droit	3.58	1.85	3.01	3.48	—
55	Lamelle à tête arquée	2.00	4.45	—	0.99	0.47
56	Ll. à bord abattu arqué	8.68	8.65	3.01	3.97	—
60	Ll. à bord abattu gibbeux	0.45	0.25	0.50	0.50	—
61	Ll. à bord abattu et base rétrécie	3.13	2.10	2.51	0.50	—
63	Ll. à bord abattu partiel	1.07	2.47	1.51	0.50	1.87
64	Lamelle à cran	0.63	0.12	—	—	—
66	Frag. de ll. à bord abattu	3.94	3.34	13.57	5.47	7.94
67	Ll. obtuse à bord abattu	4.47	6.80	4.52	8.46	3.27
68	Lamelle scalène	2.95	2.97	2.01	1.49	1.40
70	Lamelle Ouchtata	10.09	0.74	2.01	—	—
73	Grosse pièce à coche	2.15	6.92	6.53	7.96	8.41
74	Eclat à coche (s)	1.88	8.16	13.57	11.44	14.02
75	Eclat denticulé	0.54	1.48	3.52	2.49	9.34
76	L. ou Ll. à coche (s)	14.86	1.73	4.02	7.46	4.20
77	L. ou Ll. denticulée	6.27	0.37	1.00	—	0.93
78	Scie	0.27	—	—	—	—
79	P. à coche et ret. continue	0.89	0.12	—	—	—
80	Pièce à troncature (s)	5.55	10.26	15.07	8.95	20.56
82	Segment ou demi-cercle	0.27	0.86	—	—	—
102	Microburin	2.15	—	—	—	—
104	Pièce esquillée	0.18	1.98	—	—	—
106	Racloir	0.36	1.24	—	—	0.47
112	Divers	1.25	1.36	—	—	—

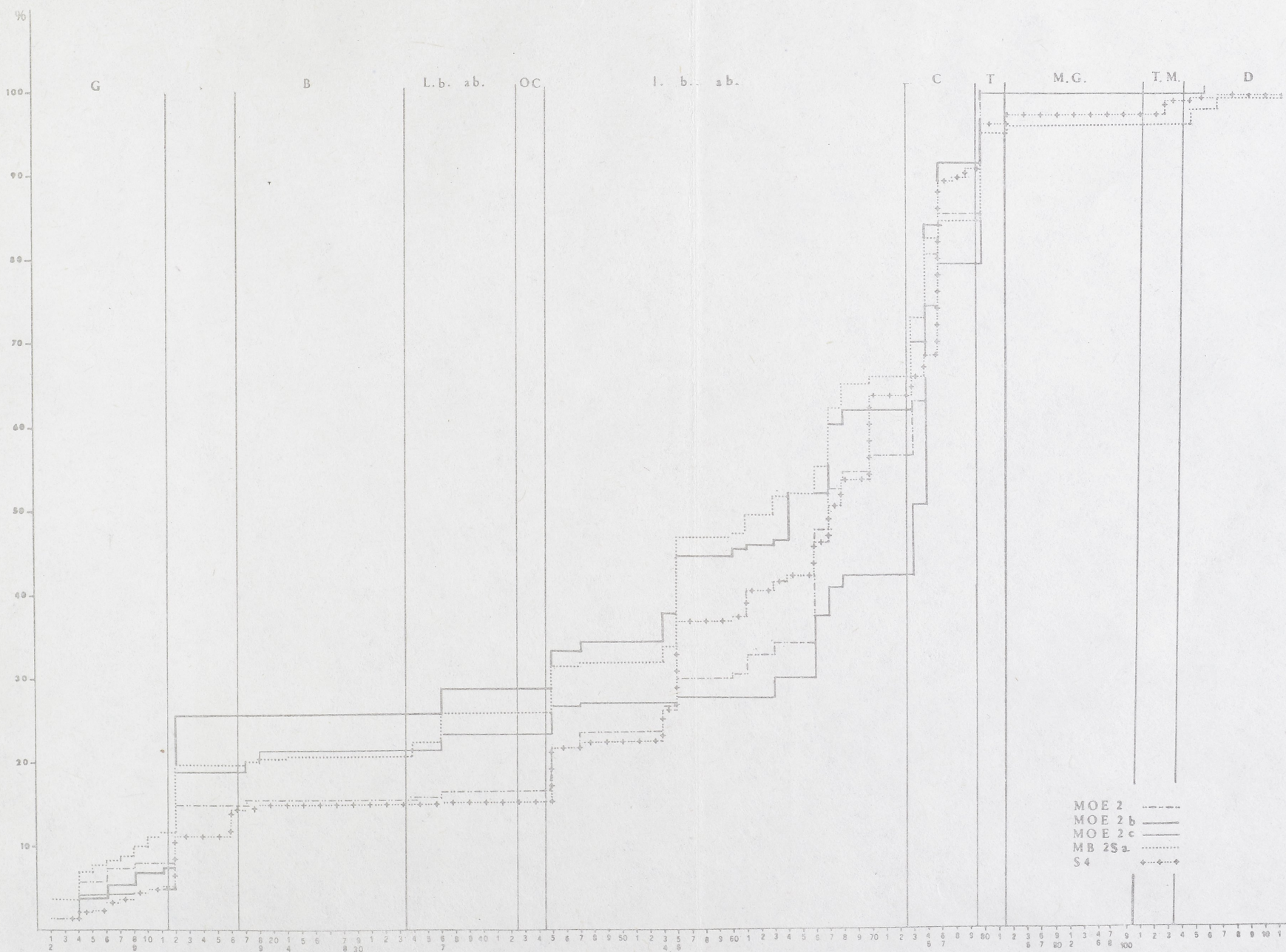


FIG. 3. Fayum Depression. Cumulative frequency curve.

Table 3

Fayum Depression. Main typological indices (percentage)

Name of tool in French	Site				
	S4	MB2Sa	MOE 2b	MOE 2	MOE 2c
Grattoirs	5.2	12.0	7.5	8.2	5.7
Troncatures	5.6	10.7	8.9	15.4	20.5
Denticulés	27.3	19.7	29.8	29.2	36.3
Burins	0.8	0.9	—	0.5	2.3
Bords abattus	49.4	47.1	33.8	37.4	20.0
Perçoirs	9.2	8.6	18.4	7.2	13.9
Microburins	2.2	—	—	—	—
Géométriques	0.3	0.9	—	—	—
Total number	1.117	809	201	199	214

7. Backed bladelets: the tool kit is dominated by them (18 - 48%) but in the Qarunian they are more frequent. Types No. 45 (pointed straight backed bladelets) and 55 (bladelets with curved backed end) as well as No. 56 (curved backed bladelets) predominate, as in the Qarunian. However in our collections there are many pointed straight backed bladelets with truncated base (No. 47) which in the Qarunian are poorly represented.

8. Notches and denticulates: they account for a much higher percentage of the tool kit (20 - 36%) and it would be useful to keep these two groups of tools separate on the graph. At S4 either deep or marginal notches occur, often on blades, as well as fine strangulated or denticulated blades. At MB2Sa denticulates and notches are always on flakes or cores, except for one piece.

9. Truncations: they occur much more frequently in our collections (7 - 20%). Many of them are on flakes or blades retaining cortex.

10. Geometrics: they are only a few, as in the Qarunian. The microburin technique is unknown, except at S4, where it could be accidental resulting from the fracture of deep notches on blades.

The different techniques used for the collection of the material (surface collection vs. excavation) do not seem to have had a relevant effect, since microliths have similar values. The possibility of mixtures with artifacts from subsequent periods cannot be rejected, but one of us (A.Z.) studied the Neolithic collections of Fayum without discovering any resemblance. The graphic trend is very similar in all five cases (Fig. 3 - 4) and makes any substantial mixing unlikely.

Between our backed bladelets and the Qarunian ones, stylistic differences exist. These and the different elevation of the sites may point to different chronological positions. The greater number in our collections of end-scrapers, perforators, notches and denticulates and lower percentage of backed bladelets, as well as the considerable presence of retouched pieces (at MB2Sa — more than 700) suggest a different range of activities (Table 2 - 3).

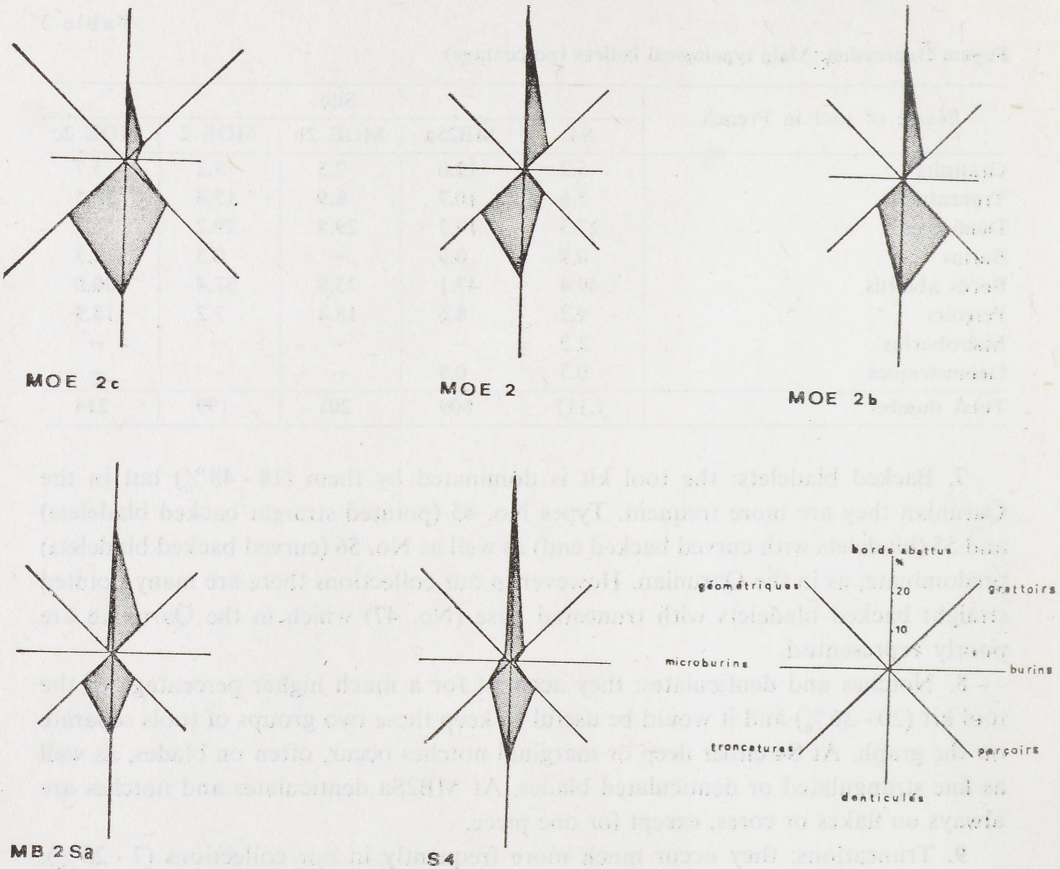


FIG. 4. Fayum Depression. Diagrams of main typological indices

The Terminal Palaeolithic of the Nile Valley does not seem to be as homogeneous as Wendorf and Schild suggest (1970; 1976). From a technological point of view there are some affinities between Elkab (Vermeersch, 1978) and the Qarunian sites (E29H1A, E29H1C: Wendorf and Schild, 1976): for example, bladelets were obtained essentially from cores with unfaceted striking platforms. However, from a typological point of view the Qarunian is characterized by backed bladelets which are very rare at Elkab. Moreover, the microburin technique which is highly noticeable at Elkab, is lacking in Qarunian sites.

Although the relations between the Arkinian and the Shamarkian, and between the Elkabian and the Qarunian are still poorly understood, there are certainly connections between the industries of the Nile Valley and the Western Desert (Nabta Playa and Siwa Oasis: Hassan, 1980) as well as those of the Sahara. For instance, similarities exist between Elkab and site E-72-5 in the Western Desert (Hassan, 1980). While there appear to have been no direct contacts between the Nile Valley

and the Western Desert industries on the one hand, and Iberomaurusian and Capsian on the other hand, they all are part of the same technocomplex. Local characteristics, differences and similarities can be explained not only by differences in chronology but also by various ecological adaptations and economic exploitation patterns with changing emphasis on hunting, fishing or collecting.

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