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Sitra and related sites at the western border of Egypt

This is a preliminary report on a short prehistoric survey of the southern region of the Qattara Depression carried out in the spring of 1983. It was undertaken in view of the realization of the Qattara-Energy-Project which is to cover large regions of the planned evaporation lake. For this reason the Egyptian Antiquities Department encouraged the interdisciplinary research of the "Besiedlungsgeschichte der Ost-Sahara" (B.O.S.) project to examine this area. It constitutes the northern most part of a planned archaeological North-South transsect through the Eastern Sahara (Kuper 1981).

Today this area, including the Siwa Oasis is still provided with a permanent supply of water and the living conditions there can be regarded as sufficient. It had its importance already in the Pharaonic times. Yet in prehistoric times this north-western part of Egypt – from the great Oasis of Siwa in the west, including the oases of Gara, El Araq and El Bahrein, to Sitra in the east – had also offered favourable living conditions and witnessed a recurring or permanent settlement in different stages of its cultural development.

The region concerned is of key importance for studying the connection between cultural provinces of Northern Africa and the Near East. Siwa and the related oases might have had connections with the Levant, the Nile Valley, the Maghreb, and the southern part of the Egyptian Sahara (Hassan 1976). It was managed to prove some of these statements during our short survey.

In spite of its interesting geographical situation the archaeological field-work in this area began very late. Before the First World War H. W. Seton-Karr and O. Bates collected some artefacts in the Siwa region (Fakhry 1973). In 1918 C. Willett-Cunnington handed over some surface finds to the museum in Alexandria and Cambridge (McBurney and Hey 1955). From 1974 to 1976 F. Hassan and his associates carried out two field-campaigns in the region to the west of Siwa and in the Oasis of Gara (Hassan 1976; 1978). During these seasons some 35 sites were examined and a number of radiocarbon dates were obtained from them. These range

from the 8th to the 5th millennium B.C. A gap of nearly 800 years, between 5,700 and 4,900 B.C. has to be noted (Close 1980; 1984). In the 1970's the Combined Prehistoric Expedition examined the northern part of the Qattara Depression (V. Haynes, personal communication). In the region up to the edge of the depression seems to lack archaeological remains. Since sedimentation is still active in this area, they can be assumed to occur at a considerable depth. In some natural sections a few prehistoric remains mixed with Roman pottery could be registered. Judging from the former archaeological investigations it can be concluded that prehistoric sites in this area are rare.

It could be observed during the 1983 campaign that in the immediate neighbourhood of the present oases the sedimentation is still in process and the former shore-lines are being covered by dunes of the expanding Great Sand Sea. In this region the undisturbed sites cannot be possibly expected. On the way from Siwa to El Araq the surface accumulations of artefacts are rare. In contrast to this, the raw-material deposits – a dark-brown variety of chert – were noted several times. In an area where G. Steindorff in 1900 entered the oasis depression of El Araq for the first time (Steindorff 1904), a large surface-site with numerous notched pieces was recorded (Site 83/04). The first important camp-site was registered two kilometres southwest of the Sitra lake. On a flat "inselberg" a small stone-circle and many artefacts were examined (Site 83/09). The flakes of this site are dihedral faceted by flat, nearly invasive retouches. All artefacts show conchoid scars as a result of thermal strain. A large number of stemmed, bifacially retouched arrow-heads and leaf-shaped points are also part of this artefact concentration (Fig. 1: *1 - 4*).

The most important sites discovered during our survey are situated five kilometres to the north of the Sitra lake, in a flat undrained basin situated on a limestone plateau (Site 83/11 and 83/12). In this basin, still overgrown with low grass and bush vegetation, an extensive settlement area of some 1,000 by 500 metres was found. Straight away "Steinplätze" (Gabriel 1977), flake-middens and areas of different tool-assemblages were noted. The different activity areas were clearly separated and seemed not to be disturbed. The excavation even showed that parts of a narrow and limited knocking-pile were still embedded in the sediment. A total of three test excavations were carried out and four "Steinplätze", which yielded sufficient charcoal for radiocarbon-dating, were investigated.

Following is a short description of the Sitra-sites.

Site 83/11 (southern area)

In an area of 50 m² some 96 artefacts, all longer than 2 cms, were collected. The percentage of modified artefacts – 42% – is extraordinarily high and it seems that a group of tools was formed for a special task. Most of the tools are bifacially invasive retouched, extended leaf-points (Fig. 1: *5 - 8*). In addition, some retouched

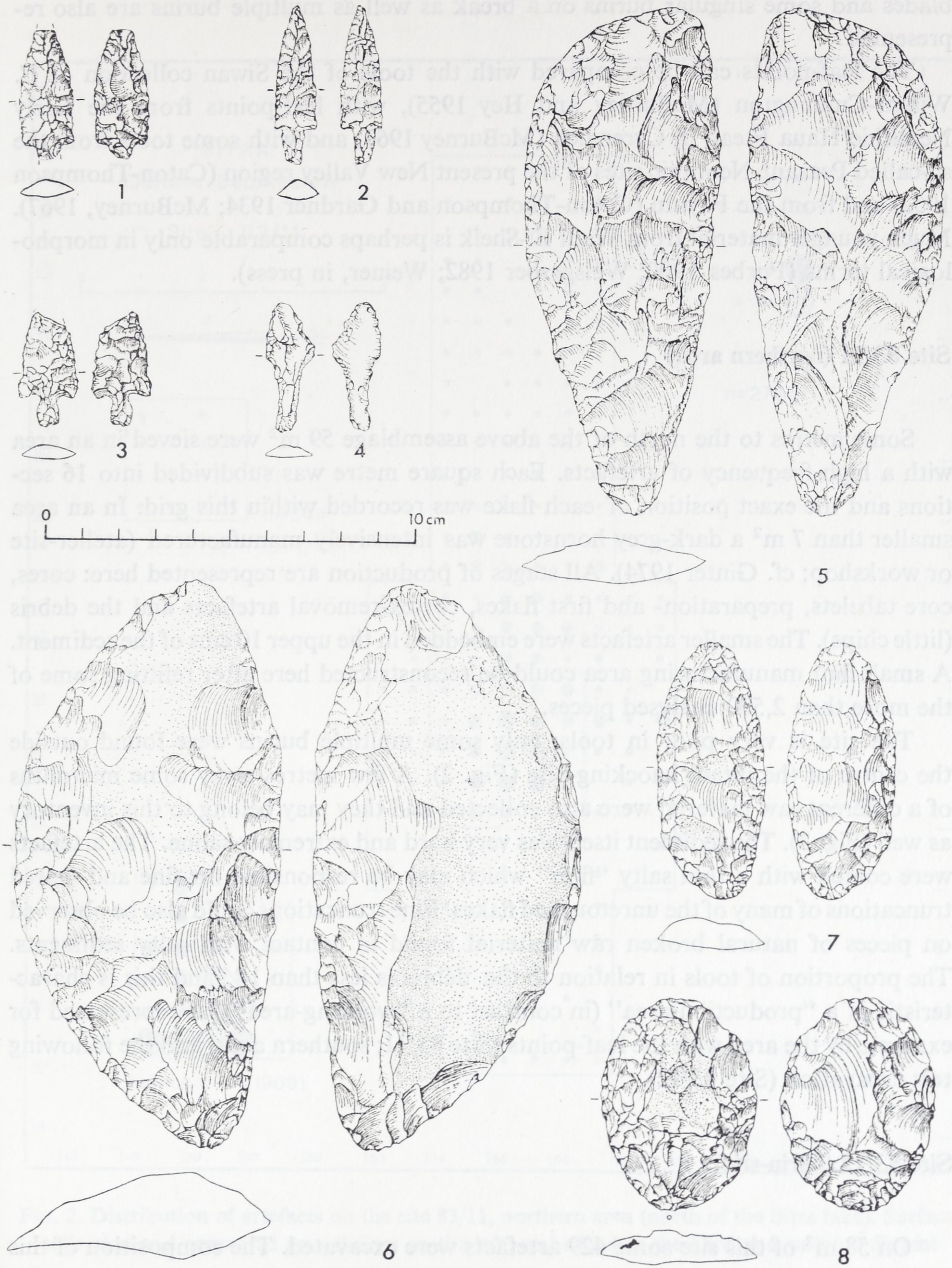

FIG. 1. Artefacts from the surface-site 83/09 (southwest of the Sitra lake)

1 - 4: Stemmed, bifacial arrow-heads. The artefacts had been seriously damaged before and after retouching by thermical strain

Artetacts from the site 83/11, southern area (north of the Sitra lake)

5 - 8: Bifacial leaves

blades and some singular burins on a break as well as multiple burins are also represented.

The leaf-points can be compared with the tools of the Siwan collection of C. Willett-Cunnington (McBurney and Hey 1955), with leaf-points from the Early Neolithic Haua Fteah in Cyrenaica (McBurney 1967) and with some tools from the so-called Peasant-Neolithic sites of the present New Valley region (Caton-Thompson 1952) and from the Fayum (Caton-Thompson and Gardner 1934; McBurney, 1967). Much younger material from Wadi El-Sheik is perhaps comparable only in morphological terms (Forbes 1900; Weisgerber 1982; Weiner, in press).

Site 83/11 (northern area)

Some metres to the north of the above assemblage 59 m² were sieved in an area with a high frequency of artefacts. Each square metre was subdivided into 16 sections and the exact position of each flake was recorded within this grid. In an area smaller than 7 m² a dark-grey hornstone was intensively manufactured (atelier-site or workshop; cf. Ginter 1974). All stages of production are represented here: cores, core tablets, preparation- and first flakes, cortex-removal artefacts and the debris (little chips). The smaller artefacts were embedded in the upper 10 cms of the sediment. A small flint manufacturing area could be reconstructed here after refitting some of the more than 2,500 analysed pieces.

The site is very poor in tools; only some multiple burins were found outside the centre of the intact knocking-pile (Fig. 2). A few metres away some microliths of a different raw material were also collected and they may belong to this inventory as well (Fig. 3). The sediment itself was very hard and extremely saline. The artefacts were coated with a thin salty "film" which may be responsible for fine and scared truncations of many of the unretouched flakes. Fine truncations could also be observed on pieces of natural broken raw material found in contact with salty sediments. The proportion of tools in relation to the débris is less than 1 % and this is characteristic of a "production-area" (in contrast to a "working-area"), as represented for example by the area with the leaf-points (Site 83/11; southern area) and the following test excavation (Site 83/12).

Site 83/12 (burin-site)

On 58 m² of this site some 429 artefacts were excavated. The composition of this inventory is a result of the above specialized activities. The scatter pattern was not as distinct as on the flake-midden but the frequency of burins is here remarkable.

The distances of refitted artefacts provide information about how intact the excavation area is (Fig. 4). Here, the refitting lines have on the average the length

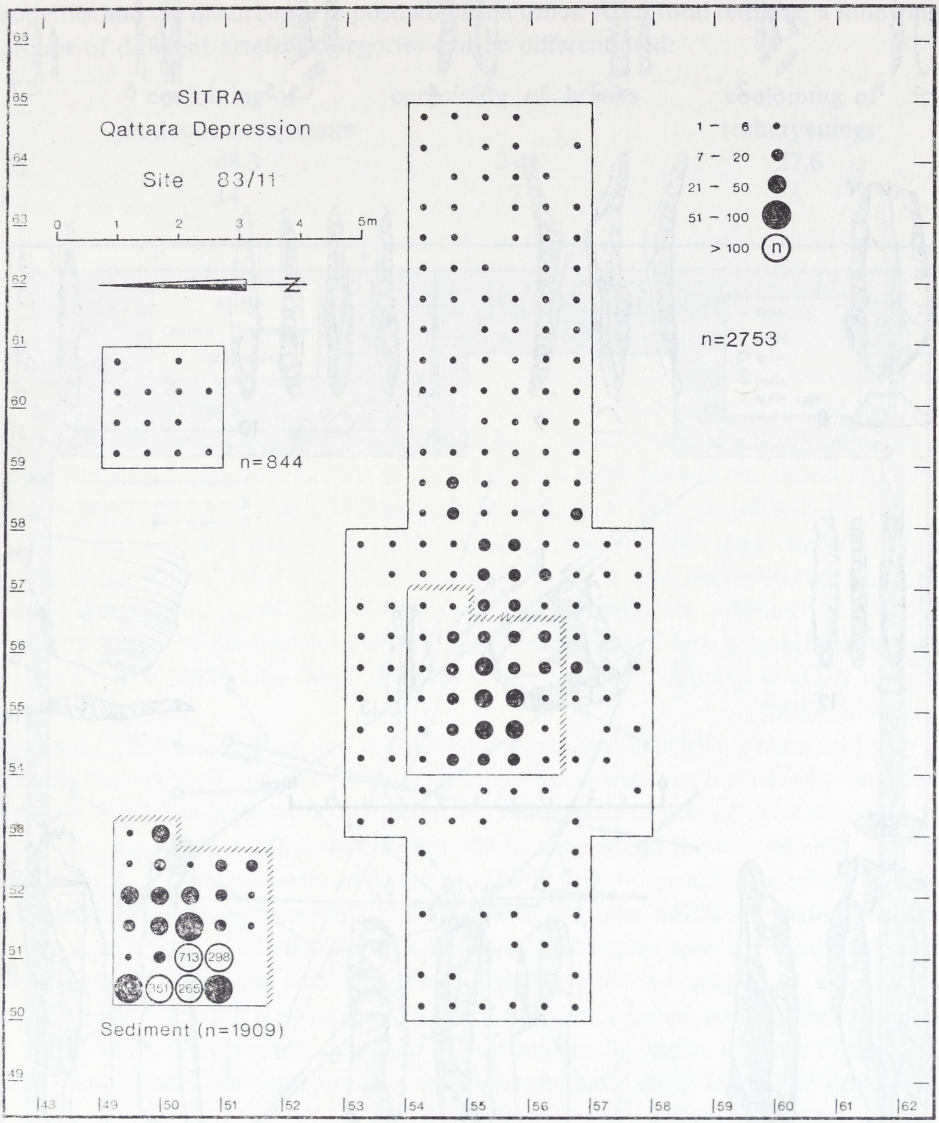

FIG. 2. Distribution of artefacts on the site 83/11, northern area (north of the Sitra lake). Surface collection and excavated area (below on the left) embedded in the hard and saline sediment

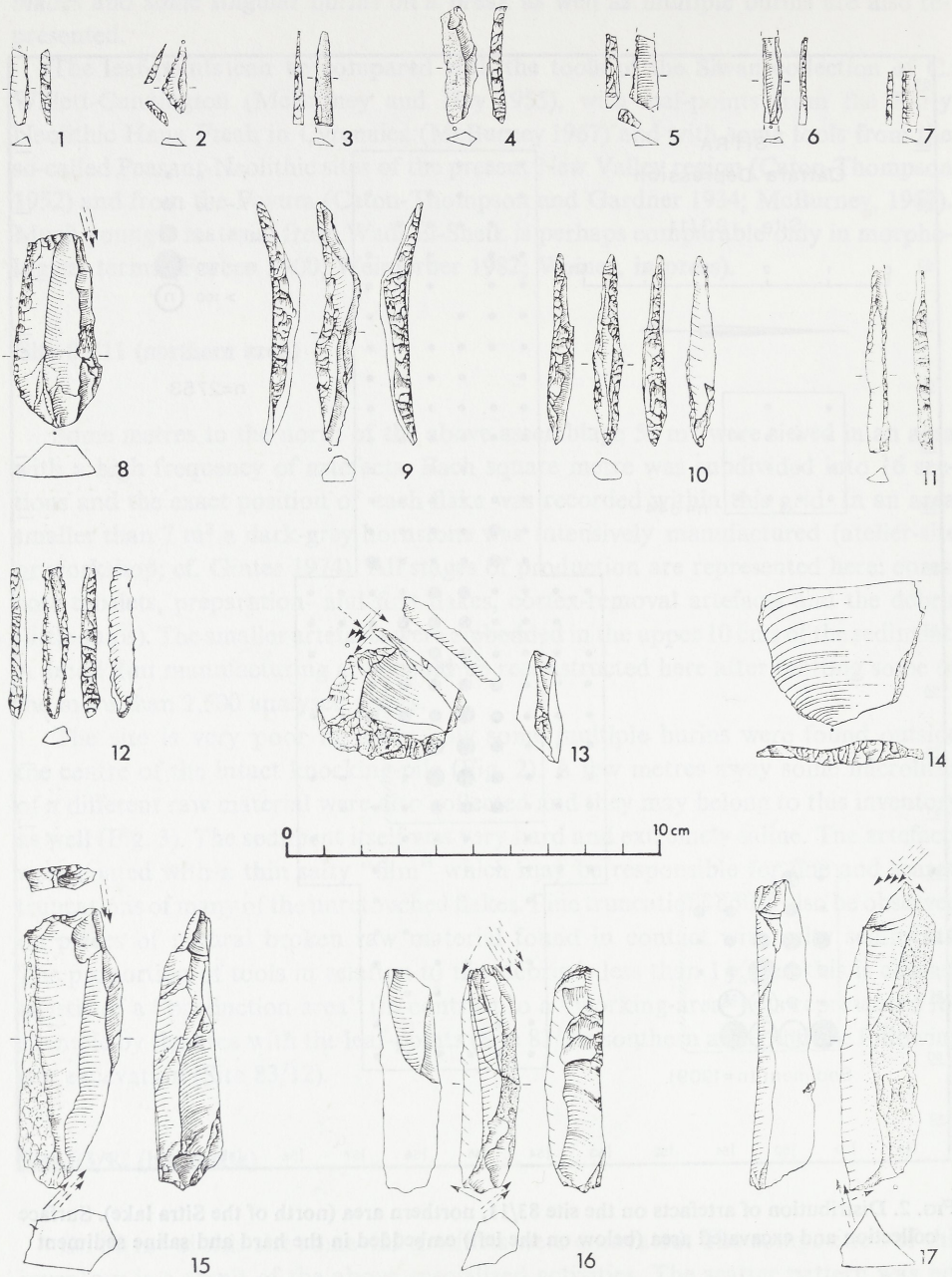

FIG. 3. Artefacts from the surface-site 83/11, northern area (north of the Sitra lake)

1, 3, 4, 6, 7, 11: Backed bladelets; *2, 5*: Elongated triangles; *8, 13, 15 - 17*: Burins; *9, 10, 12*: Bifacially retouched borers; *14*: Core-tabelet

of 1 to 2 metres. But also 25% of the refitted pieces have been scattered at a distance of more than four metres. This seems to be the result of both the intensive habitation activities and the disturbance in posthabitation times. After total refitting, a following groups of different artefact-categories can be differentiated:

	conjoining of production-sequences	conjoining of breaks	conjoining of resharpenings
%	48,3	24,1	27,6
n	14	7	8

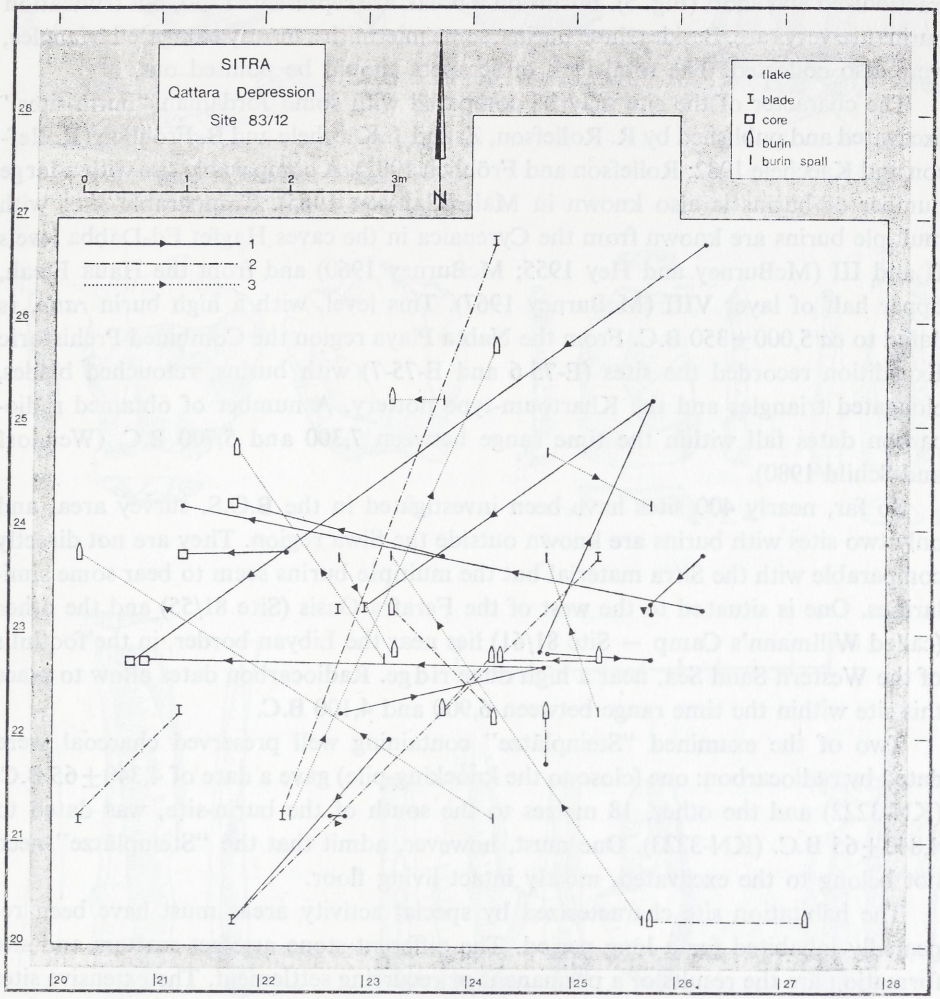

FIG. 4. Distribution of all conjoining artefacts from the surface-site 83/12 (north of the Sitra lake)

Symbols for the refitting of artefacts

1: Conjoining of production-sequences; *2*: Conjoining of breaks; *3*: Conjoining of resharpening-spalls

The manufacturing of flakes and blades was of lesser importance at this site. The conjoining of burin resharpening-spalls is very important and gives information on the character of the site (*cf.* Cziesla 1986). The most important tools here are the burins which represent 45% of the modified artefacts. These tools were very much stained-in and had suffered much abrasion. The number of resharpening-spalls (together 63 spalls) is very high. Some of the burins might be seen as cores for the production of bladelets. Multiple dihedral burins are numerous. Sometimes both ends of the blade were used as striking platforms; for example broken tools were used in this way. During the final elaboration stage the burins are very much fractionized and short (Fig. 5). Burins on a break are represented too, but truncation burins are very rare. Besides these burins, some microliths, mostly elongated triangles, were also collected. The total lack of scrapers should be pointed out.

The character of the site may be compared with some Jordanian "burin-sites" excavated and published by R. Rollefson, Z. and J. Kaechele and B. Fröhlich (Rollefson and Kaechele 1982; Rollefson and Fröhlich 1982). A comparable site with a large number of burins is also known in Mali (Gaussen 1965). Comparable sites with multiple burins are known from the Cyrenaica in the caves Hagfet Ed-Dabba levels II and III (McBurney and Hey 1955; McBurney 1960) and from the Haua Fteah, upper half of layer VIII (McBurney 1967). This level, with a high burin *ratio*, is dated to *ca* 5,000±350 B.C. From the Nabta Playa region the Combined Prehistoric Expedition recorded the sites (E-75-6 and E-75-7) with burins, retouched blades, elongated triangles and the Khartoum-type pottery. A number of obtained radiocarbon dates fall within the time range between 7,300 and 5,700 B.C. (Wendorf and Schild 1980).

So far, nearly 400 sites have been investigated in the B.O.S. survey area, and only two sites with burins are known outside the Siwa region. They are not directly comparable with the Sitra material but the multiple burins seem to bear some similarities. One is situated to the west of the Farafra Oasis (Site 81/55) and the other (called Willmann's Camp – Site 81/61) lies near the Libyan border, in the foothills of the Western Sand Sea, near a high dune ridge. Radiocarbon dates allow to place this site within the time range between 6,900 and 4,100 B.C.

Two of the examined "Steinplätze" containing well preserved charcoal were dated by radiocarbon: one (close to the knocking-pile) gave a date of 4,340±65 B.C. (KN-3222) and the other, 18 metres to the south of the burin-site, was dated to 4,840±65 B.C. (KN-3223). One must, however, admit that the "Steinplätze" need not belong to the excavated, mostly intact living floor.

The habitation site characterized by special activity areas must have been repeatedly inhabited for a long period. The different stone artefact scatters and site formation are the results of a permanent or recurring settlement. The extensive sites near the Sitra lake are of no exception. Another survey of this area is planned for the spring of 1985. One hopes that further investigation of this region will yield more detailed information about the history of settlement of North-Western Egypt.

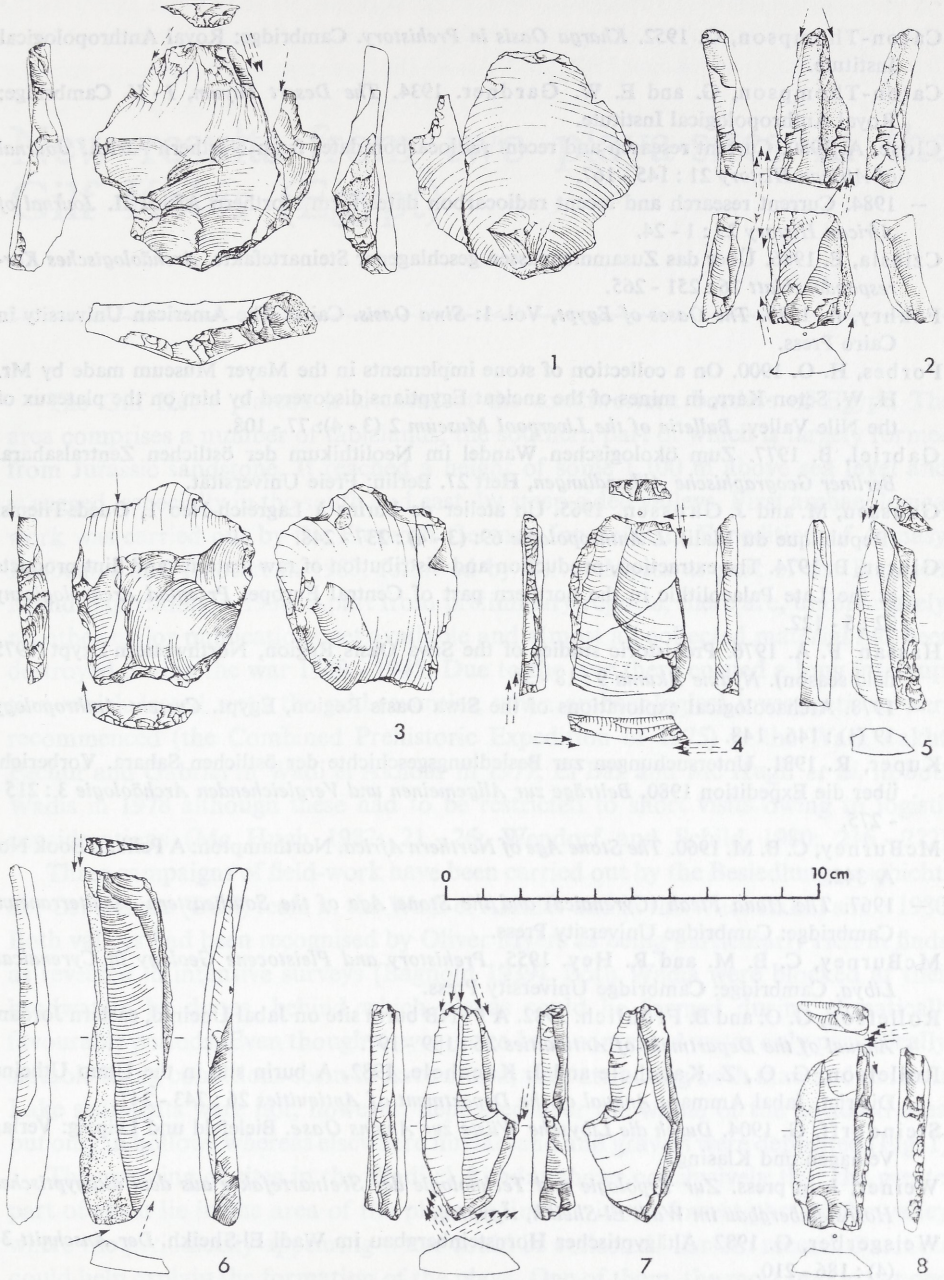

FIG. 5. Some examples of burins from the surface-site 83/12 (north of the Sitra lake)

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