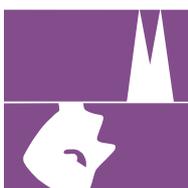
The seal of the University of Cologne is a large, circular emblem in the background. It features a central scene of the Adoration of the Kings, with three kings kneeling before the infant Jesus held by the Virgin Mary. A king stands to the left holding a gift. Above them is a six-pointed star. The seal is surrounded by a Latin inscription: 'SIGILLUM UNIVERSITATIS COLONIENSIS' at the top and '1250' at the bottom. Below the central scene is a shield with three crowns and a diamond-patterned base.

■ **Messum 1: a Later Stone Age pattern of mobility
in the Namib Desert**

Jürgen Richter

Cimbebasia (B)4,1-11

1984



Universität zu Köln
Institut für Ur- und Frühgeschichte
Weyertal 125
50923 Köln
www.ufg.uni-koeln.de

I. INTRODUCTION

Messum 1 shelter (21°22' S; 14°17' E) appears to be one of the most interesting prehistoric sites found in Namibia so far. This is not only because of the abundance of stone artefacts (47 000) but also because of its location in the central part of the Namib Desert (Fig. 1).

The 1968 excavations at Messum 1 shelter had been part of a long term archaeological research programme conducted by Dr. W.E. Wendt throughout Namibia (Wendt 1972) and sponsored by the Deutsche Forschungsgemeinschaft (Projekt "Felsbilder im südwestlichen Afrika", Prof. H. Schwabedissen, Dr. R. Kuper).

West Africa (Andersson 1857). Almost one hundred years later a detailed geological investigation of the Messum Mountains was undertaken by Korn and Martin (1954). A Middle Stone Age site from Messum was found by A. Viereck (1961). E.R. Scherz published rock art from Messum 2 shelter (Scherz 1974), attracting the interest of W.E. Wendt to the area and during the 1968 excavation at Messum 1 and Messum 2, Wendt discovered further sites that have not yet been investigated (Wendt 1972: 14-16).

Research work by Korn and Martin identified the Messum hills as components of an igneous complex differing from the surrounding syenite formations by

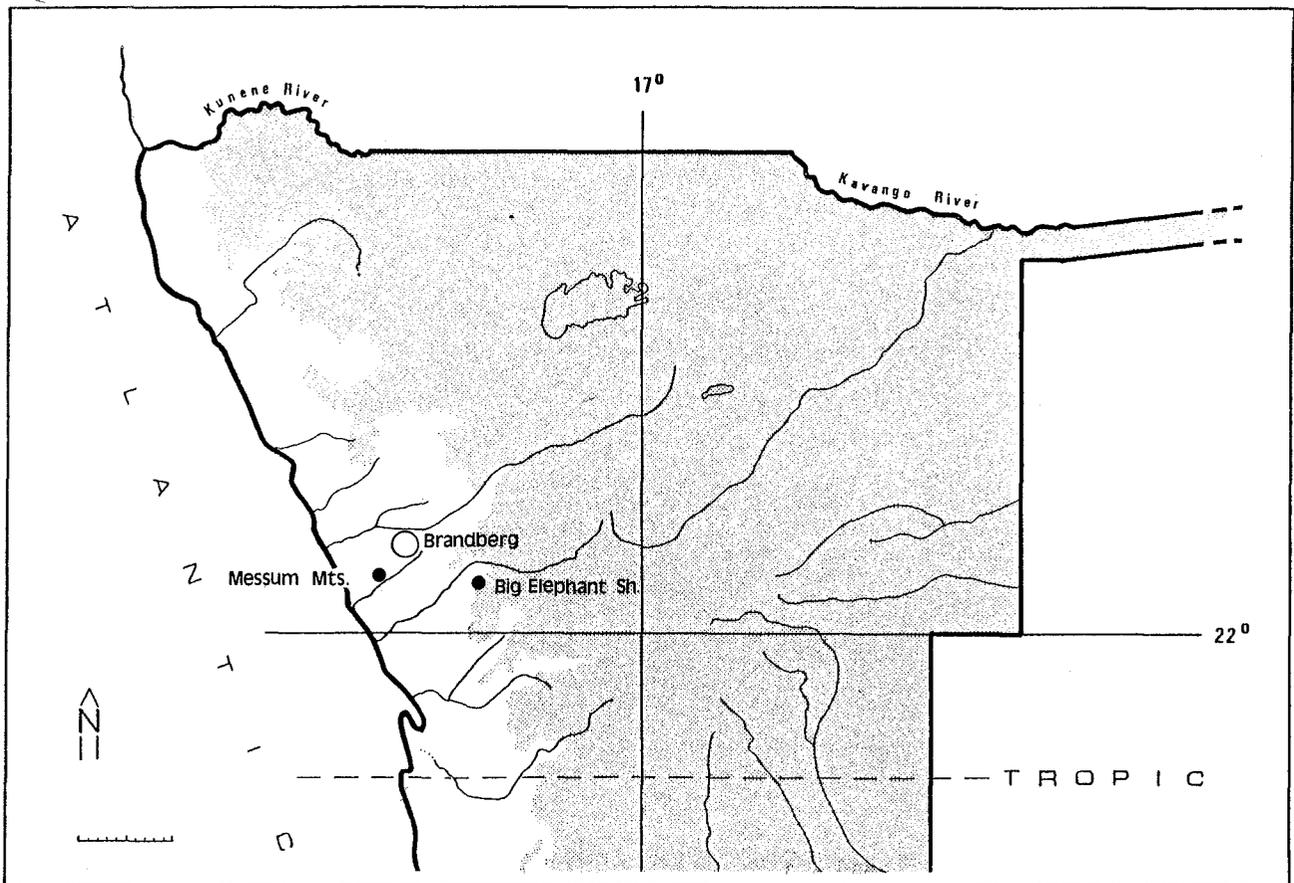


FIGURE 1. Map of northern Namibia

The Messum area was discovered by a ship commander, Captain Messum in the middle of the 19th century. The well known Swedish merchant, scientist and writer, C.J. Andersson, recorded the Messum Mountains some years later on his map of South

its basalt structures. Like the Brandberg, Erongo and Spitzkoppe, the Messum Mountains have been looked upon as "Ringkomplex" since then (Blümel *et al.* 1979: Fig. 4) consisting of concentric circular basalt outcrops.

W. Giess (1971) gave some details about the ecological situation of the Messum Mountains: he mentions fields of *Stipagrostis subacaulis* and *Stipagrostis hochstetterana* after even low precipitation during irregular rainy seasons. Grass plains are characteristic of the escarpment-related Namib belt.

The Messum shelters are situated in a longish shallow syenite hill north of the centre of the Ringkomplex. Some other shelters in the neighbourhood of Messum 1 do not contain any sediments and seem to be heavily eroded. All around the hill are groups of hut circles. The various types of these stone structures compare well with other hut circles in South West Africa published so far (Carr *et al.* 1978).

Excavations at Messum 2 and the hut circle problem will be dealt with later in a separate report. The present investigation gives an introduction to the ecological setting and the stratigraphy of Messum 1 at first.

II. EXCAVATIONS AT MESSUM 1

Messum 1 is a shelter 7 m wide, 2 m high and 5 m deep. The entrance is almost closed by large syenite roof rocks offering a protected area of ca. 30 m² convenient for housing prehistoric inhabitants. In front of the rocks and between them are two hut circles. They are well preserved up to a height of 0,35 m. Wendt's 1968 excavation began with a 6 m NW-SE (125°) trench and was later extended to a maximum of 14 m² (Fig. 2). Wendt excavated in square metre units and in artificial spits of approximately 0,05 m thickness. Two sections in rectangular position were documented by the excavator (Section A and B). Section A shows all main features of the stratigraphy (Fig. 3): under the surface (I) there is a 0,3 m thick upper layer of homogeneous grey-brownish ashy sediment (III). In this layer a hollow was found (diameter 1,20 m depth 0,25 m) filled with

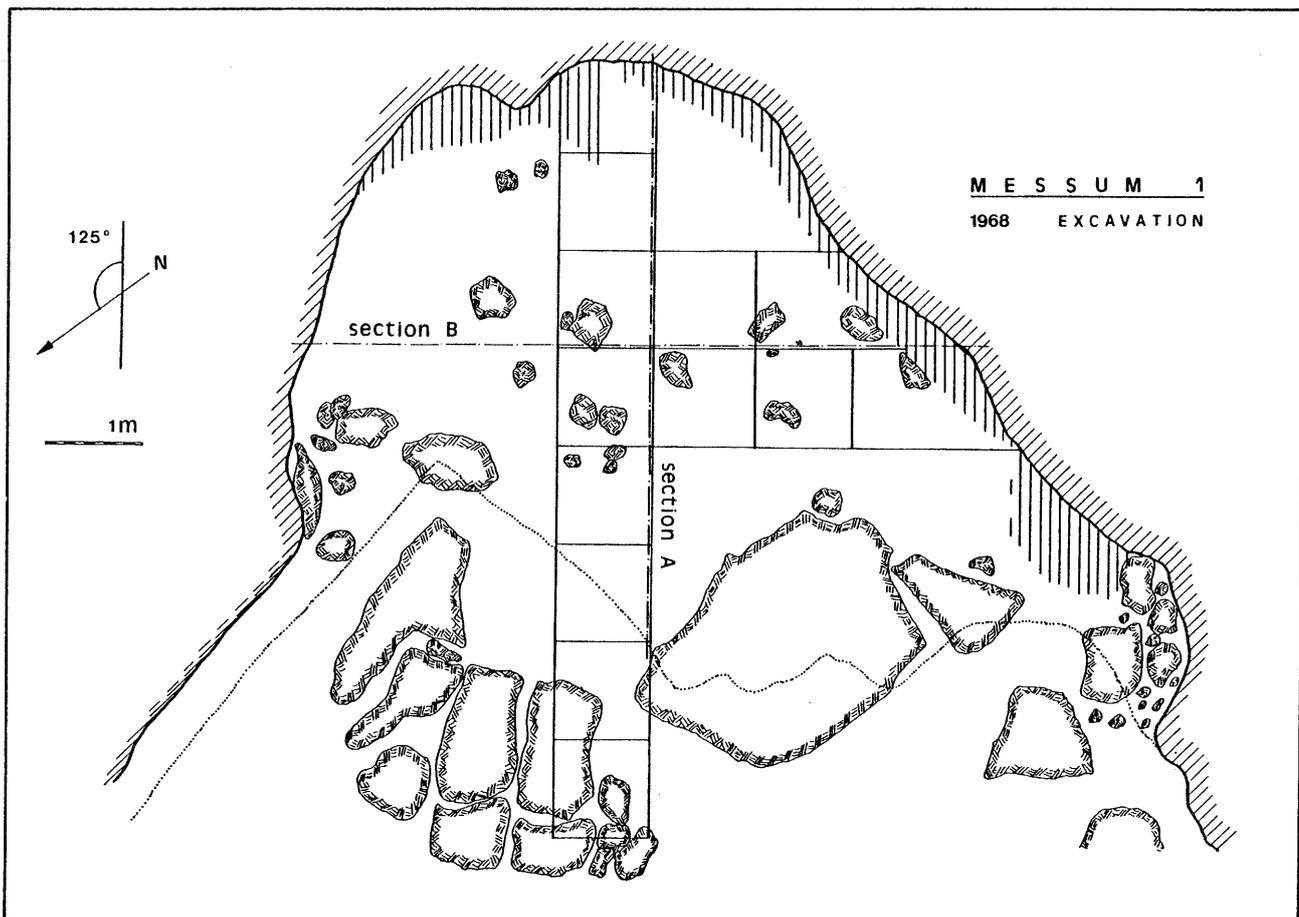


FIGURE 2. Messum 1. Excavation by W.E. Wendt 1968.

organic materials such as grasses and ostrich feathers (II). The lower layer of about 0,3 m consists of homogeneous brown-reddish sand (V) firmly consolidated at the base (VI). The transition between these two very different layers contained syenite stones and rocks from the roof (IV).

Five archaeological horizons have been identified: (a, b, c, d, e), partially corresponding with the sedimentary layers (Fig. 4, Fig. 6).

bones were associated. Among the plants were different parts of grasses such as seeds and inflorescences. Ostrich feathers filling the occupation hollow mentioned above gave a radiocarbon date of 1370 ± 50 BP (Pta-2681) (Vogel & Visser 1981: 59). A charcoal sample from another square provided a date of 860 ± 55 (KN-I.636) (Freundlich *et al.* 1980: 79).

For this industry there is as yet no suitable comparison in South West Africa. Especially double-

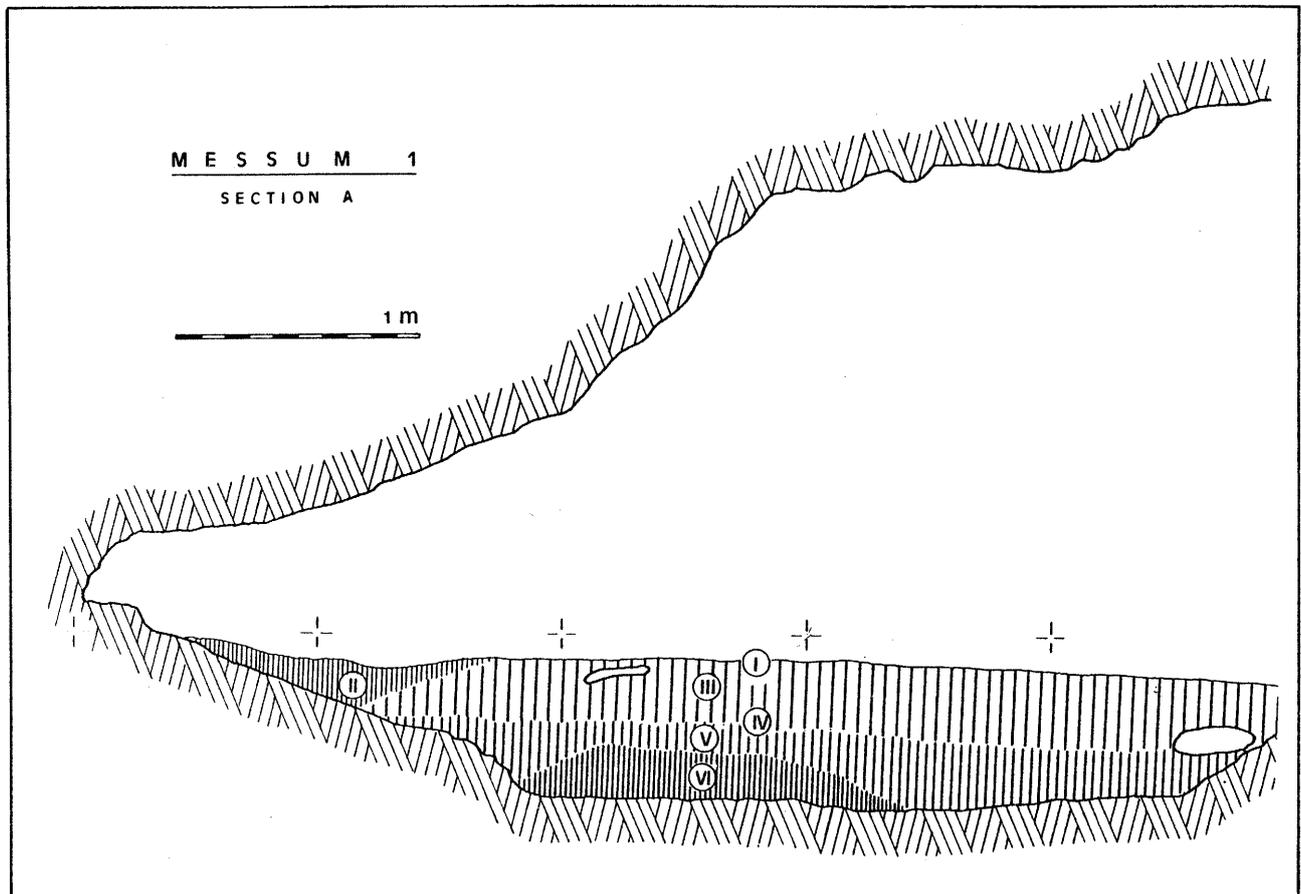


FIGURE 3. Messum 1. Section A. Stratigraphy.

HORIZON a, b

This very thin layer (I, II) cannot be clearly separated because of postholes and hollows. Some iron pieces were collected from its surface. These document the European influence of the last 400 years. Characteristic tools from this layer are micro-points, end-retouched micro-blades, double-borers and large segments as well as bone points and ostrich eggshell pendants. Ceramic material is present in this horizon. Seashells have also been found: *Donax serra*, *Perna perna* and *Choromytilus meridionalis*. Some fish

borers of the Messum a, b type have not yet been reported. Generally it is a ceramic Late Stone Age facies older than the macrolithic Brandberg Industry (cf. Jacobson & Vogel 1975).

HORIZON c

The upper part of the ashy layer (III) contained 27% microlithic quartz segments (T 1, 2, 3, see type list), mostly very small pieces (T 3, Fig. 5, Fig. 6). There

are also micro-sidescrapers (T 31) and micro-endscrapers (T 33). Micro-triangles (T 5) and medium-sized end-scrapers (T 52) did not appear in any of the other horizons. More than 90% of the toolkit is of microlithic size. Ostrich eggshell ornaments and seashells were also found. Charcoal from this layer provided radiocarbon dates of 2070 ± 90 BP (KN-I.637) and 2090 ± 45 BP (KN-I.639) (Freundlich *et al.* 1980: 79).

numbers of pigment lumps were discovered. The Messum 1 LSA/Wilton facies (horizon c and d) can be firstly compared to assemblages described by Jacobson (1978) for the Brandberg and Twyfelfontein and as a whole to the Zambian Wilton (Sampson 1974: 342, 354) because of the significant abundance of segments, but the Namibian radiocarbon dates do not agree well with dates from Zambia. The very small size of the segments (some are less than 5 mm)

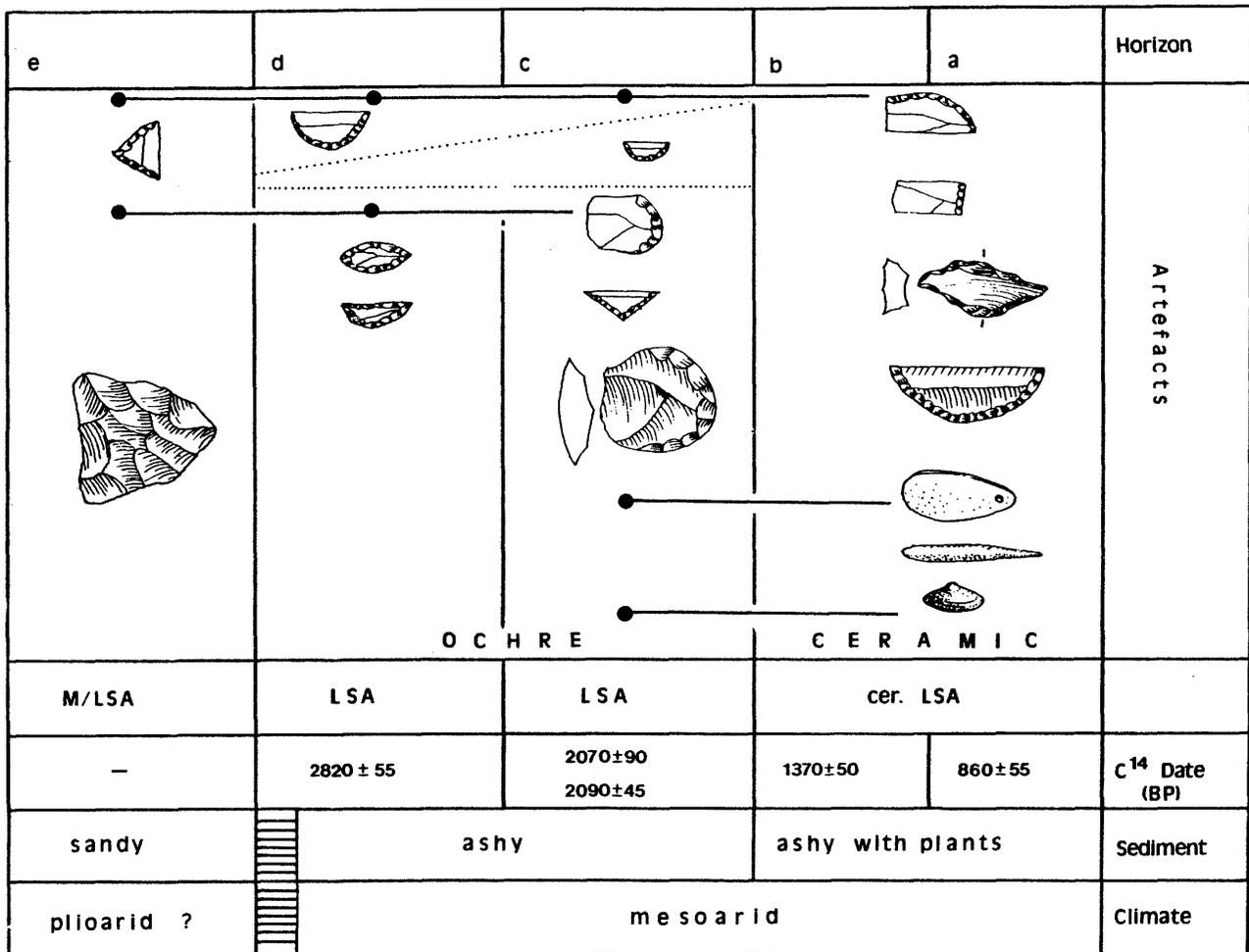


FIGURE 4. Messum 1. Chronology.

HORIZON d

The lower part of the ashy layer (III) yielded a very similar industry of predominantly microlithic type. Here fewer very small segments were found than in horizon c. Micro-double-points (T 19, 20) only occur in horizon d. A marine snail was found but no shells or fish bones. A radiocarbon date of 2820 ± 55 BP (KN-I.638) (Freundlich *et al.* 1980: 79) is associated with this horizon. From both horizon c and d large

and the predominance of rock crystal as raw material seems to emphasize the individual character of the central Namibian LSA industries.

HORIZON e

The basal red-yellowish sand contained only a few artefacts and tools (V, VI). With the exception of a few ostrich eggshell fragments, there was no organic material. Micro-triangles (T 3) and micro-points (T

12) are associated with a bifacial point, burin-like tools and scrapers. Some medium-sized and even microlithic artefacts show faceted platform preparation. All artefacts can easily be distinguished from

the roof of the shelter as a result of intensive weathering. This would suggest a climate more humid than today with high temperature differences. Perhaps the big rocks at the entrance of the shelter also fell during that period.

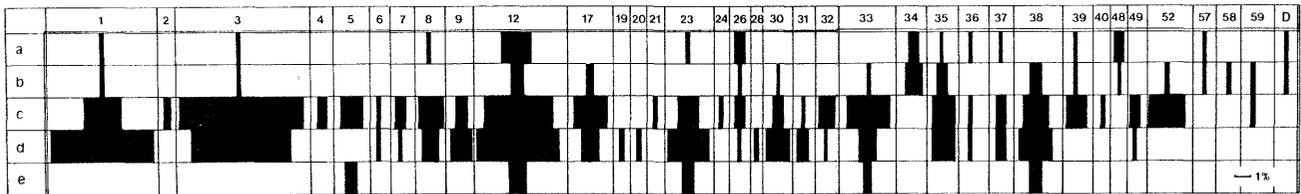


FIGURE 6. Messum 1. Stone Tool Frequencies. cf. IV Type List. D = Double-Borer..

the artefacts of the later horizons by their yellowish patina. Because of containing both MSA and LSA elements, horizon *e* seems to have a transitional status between these two phases. Comparisons are possible with the Umguzan of Zimbabwe (Cooke 1963; Clark 1965; Sampson 1974: 236-244) where microliths and bifacial points are associated as well. Nevertheless the individual forms are quite different. For example, segments are known from Pomongwe but not from Messum 1 *e*. No radiocarbon date could be obtained from this layer.

CHRONOLOGY AND CLIMATE

The Messum radiocarbon dates correspond to a pattern identified by Vogel & Visser (1981). There are few or no radiocarbon dates from northern Namibia for the last 500 years, from 1 500 - 2000 BP and before 5 000 BP. Nevertheless a late occupation indicated by the iron pieces from the surface has taken place and Capt. Messum saw a "Damara" village near the mountain according to the map of Andersson (1857). There were ceramic LSA occupations between the 9th and the 15th centuries BP. The most intensive LSA settlement took place in the 3rd millennium BP.

The nature of the sediment of the last 3 000 years has not suffered any changes. Because of its highly organic character, this layer seems itself to be more an artefact than a sediment. It consists of numerous eroded hearths, carbonized plant material and soil. This homogeneous sedimentation has presumably occurred under a climate not very different from the present, i.e. a very dry desert climate with some irregular precipitation. The abundance of grasses and the faunal remains including antelope bones support this view.

A lot of syenite rock debris was found at the bottom of the ashy layer. There is no doubt that this fell from

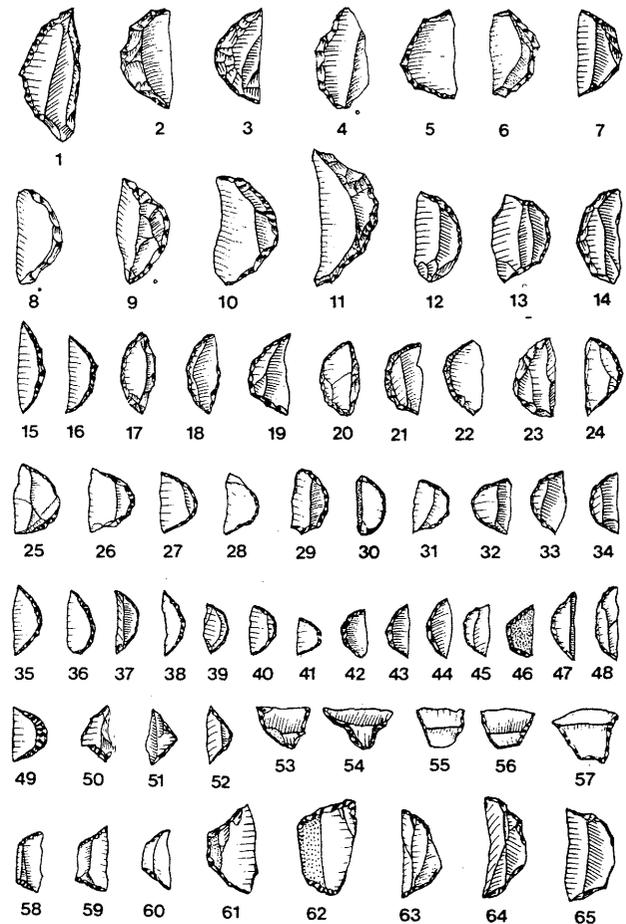


FIGURE 5. Messum 1. Microlithic Tools. Scale 1:1. 1-24 segments, 25-48 very small segments, 49 segment with crossed backing, 50-54 triangles, 55-62 trapezes, 63-65 segment-like trapezes.

The inorganic basal sandy layer seems to be a product of an extremely arid climate with strong wind activity. Sand dunes must have been in the neighbourhood of the shelter at that time. We can suggest this to have taken place in the late Pleistocene when an arid climate caused an enlargement of the Central Namib Desert (Van Zinderen Bakker 1980).

SUBSISTENCE AND MOBILITY

It has probably never been possible for people to subsist throughout the year at Messum. Prehistoric groups were able to live at the site only for short spells. They probably stayed for some weeks either during or after an irregular rainy season when some

favourable climate situations, the Messum Mountains provide a good route for crossing the desert on the way from the eastern savannas to the Atlantic coast. A basalt artefact with a heavily wind polished cortex was made of raw material from basalt outcrops in the coastal belt. Raw materials from the inland and escarpment area are also represented: many chalcedony and indurated shale artefacts and a limestone slab relate the Messum sites to the northern Karoo formations. Two artefacts have been made of typical Brandberg basalt. The seashells illustrate connections to the coast most vividly (Fig. 7).

Some of the imported materials may have been acquired through trade. But some of them certainly reflect mobility. If the occupants only stayed at the

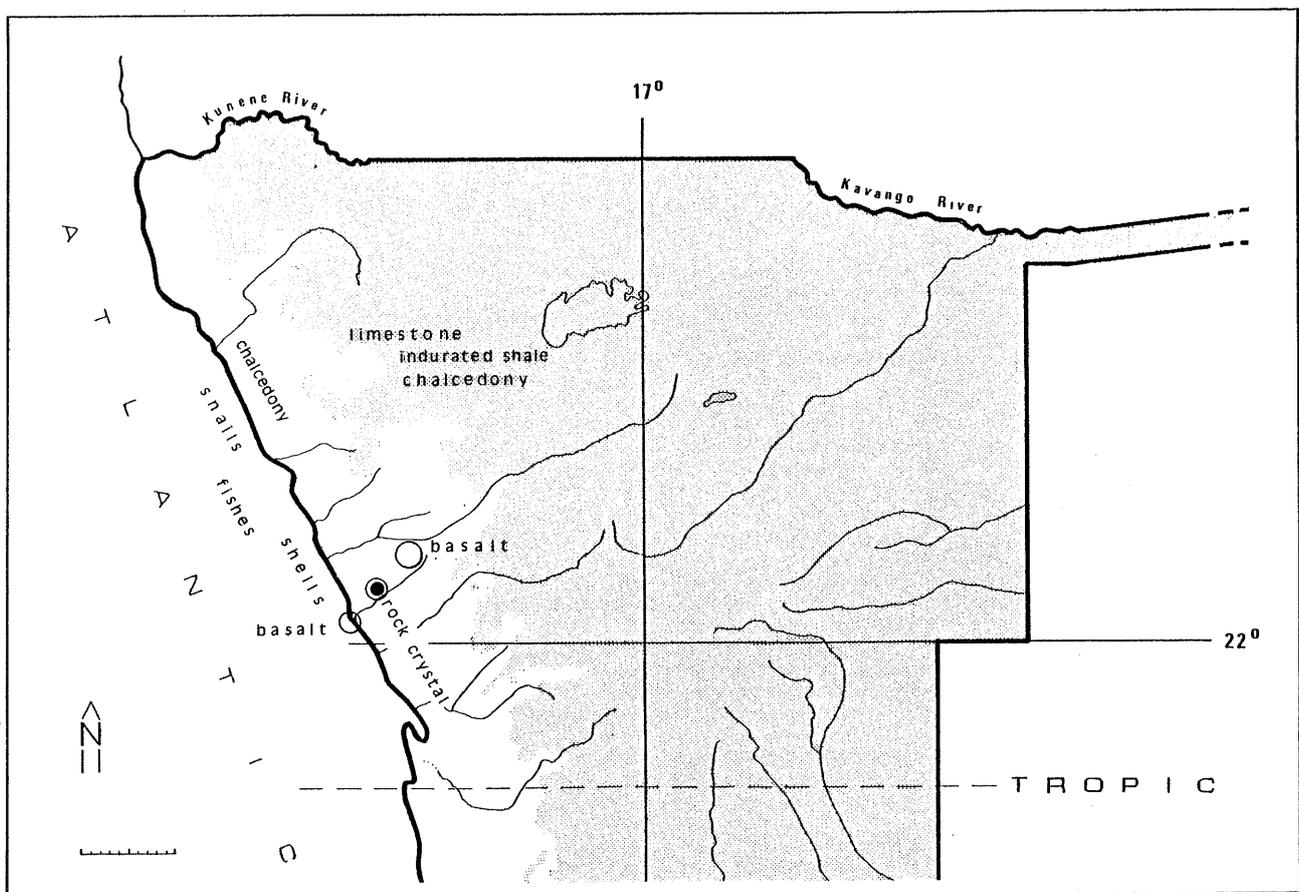


FIGURE 7. Messum 1. Raw Material Proveniences as possible indicators of mobility.

grass was available and antelope visited the area. The plant and faunal remains from the excavation support this (cf. Cruz-Urbe & Klein 1983: 96). The abundance of rock crystals in the Central Namib could also have been a reason to occupy the site. In

coast and at Messum during occasional good rainy seasons, they must have had camps in the savanna area where they used to live at other times. The toolkit of Big Elephant Shelter, Erongo, (Wadley 1979) is very similar to Messum 1, horizon *c*, *d* (Fig.

8). Seashells have been found in this shelter. Rock crystals with typical red surfaces come from the Central Namib. Radiocarbon dates (2550 ± 80 BP, 2600 ± 50 BP, 3130 ± 40 BP) (Wadley 1979) correspond very closely to the older Messum 1 dates.

Wadley points out that the evidence from Big Elephant Shelter does not contradict the possibility that the "shelter occupants may have remained in the area on a perennial basis" (Wadley 1979: 30).

The present Kalahari Bushmen give an idea of how seasonal mobility in a savanna biotope can work. Climate, space, resources, social organization and territoriality are important aspects of such mobility patterns. In the Kalahari, the seasonal movement of people used to be limited to an area of not more than

20-30 km (Lee 1979: 263).

By contrast, the imported materials at Messum document connections of at least 80 km. The scarcity of food resources means at the same time that it would have been difficult for individual groups to maintain territorial claims. The occasional Namib resources may have been open to many groups who took the opportunity to collect raw material (rock crystal) and food in the desert, and shellfish and fish at the coast.

All these factors indicate a casual, opportunistic mobility pattern which could have been an alternative to seasonal patterns in the inland savannas for prehistoric hunters and gatherers.

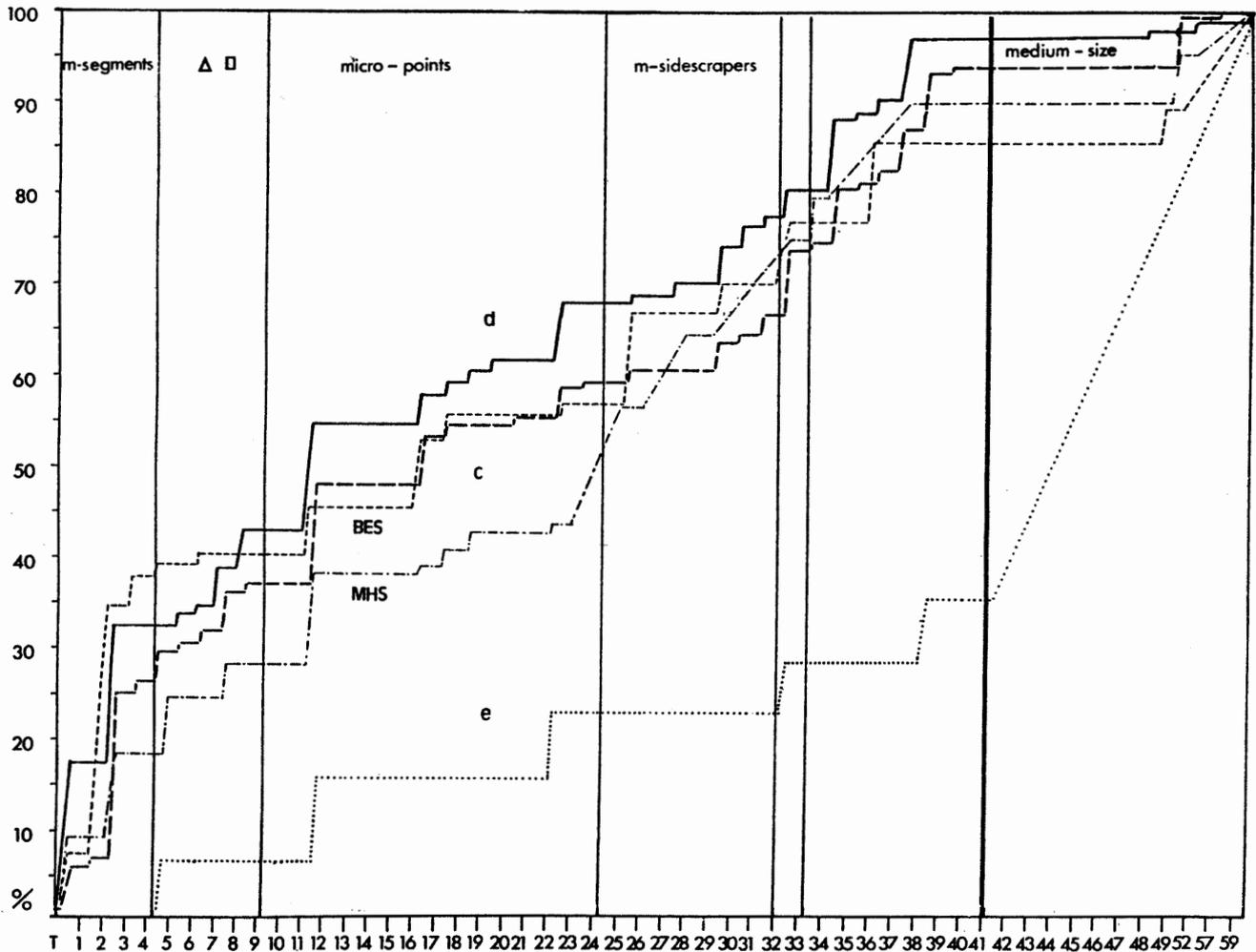


FIGURE 8. Stone Tool Frequencies from Messum 1 c, d, e, Mirabib Hill Shelter (MHS) and Big Elephant Shelter, Units 6 & 7 (BES). (MHS after SANDELOWSKY 1977: 265. BES after re-analysis by permission of State Museum, Windhoek.)

III. SUMMARY

Excavations at Messum 1, Central Namib, yielded five cultural phases: under two ceramic LSA horizons, two preceramic Wilton/LSA horizons have been found. Radiocarbon dates range from the 9th century BP to the 3rd millennium BP. An undated

MSA/LSA phase was discovered at the bottom of the stratigraphy. Climatic evidence and faunal and botanical remains argue for short stays after occasional rains. Imported raw materials support a model of extensive mobility for the prehistoric occupants of the area over the last 3 000 years.

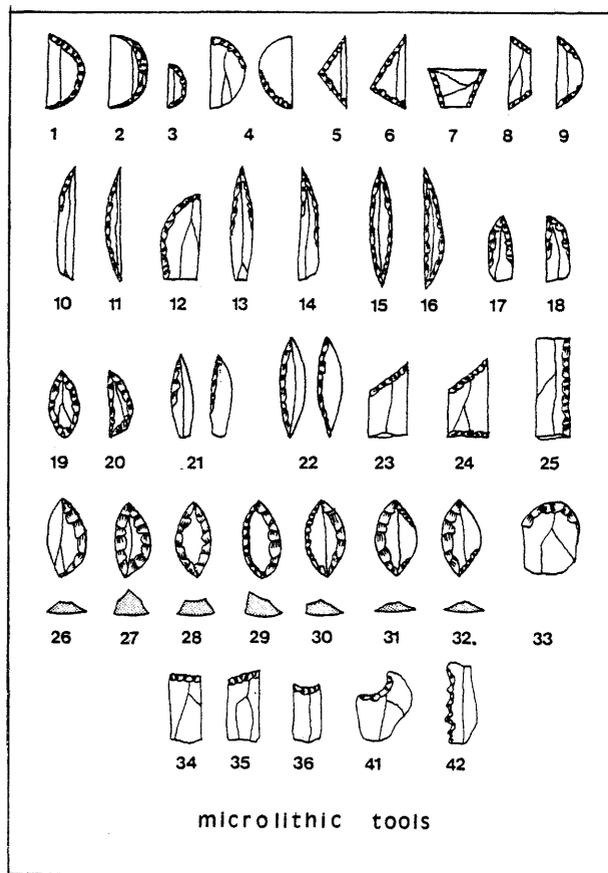


FIGURE 9. Formal microlithic tools.

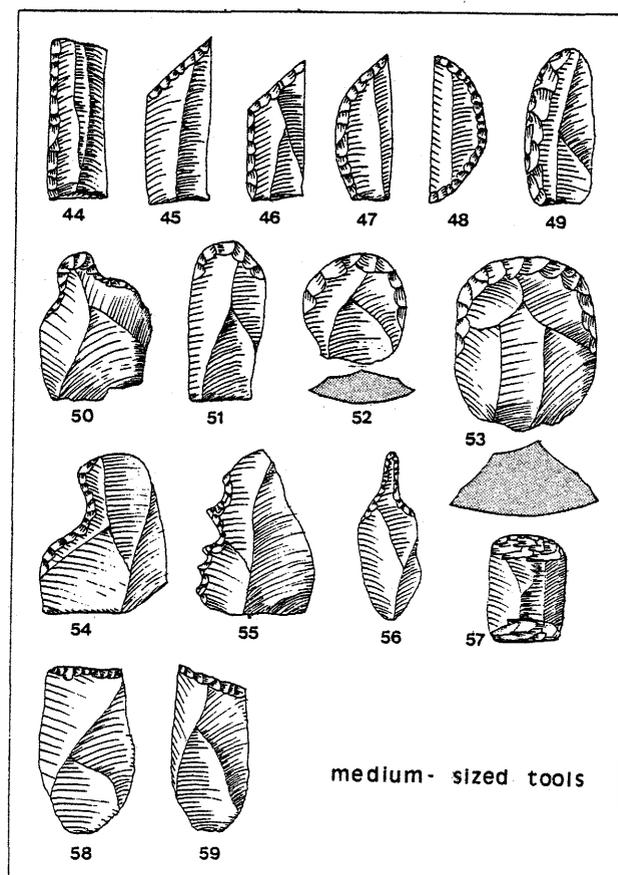


FIGURE 10. Formal medium-sized tools.

IV. TYPE LIST OF FORMAL TOOLS

- | | | | |
|----|---|----|---|
| 1 | Micro-segment | 13 | Long micro-point, bilaterally retouched ("borer"), symmetrical |
| 2 | Micro-segment with crossed backing | 14 | Long micro-point, bilaterally retouched ("borer"), asymmetrical |
| 3 | Very small segment (<7 x 14 mm) | 15 | Long micro-double-point, bilaterally retouched, symmetrical |
| 4 | Alternately retouched micro-segment | 16 | Long micro-double-point, bilaterally retouched, asymmetrical |
| 5 | Isosceles triangle | 17 | Short micro-point, bilaterally retouched, symmetrical |
| 6 | Scalene triangle | 18 | Short micro-point, bilaterally retouched, asymmetrical |
| 7 | Short trapeze | 19 | Short micro-double-point, bilaterally |
| 8 | Elongated trapeze | | |
| 9 | Segment-like trapeze | | |
| 10 | Long micro-point, unilaterally retouched | | |
| 11 | Long micro-double-point, unilaterally retouched | | |
| 12 | Short micro-point, unilaterally retouched | | |

- | | | | |
|----|---|----|--|
| | retouched, symmetrical | 38 | Laterally retouched microlith |
| 20 | Short micro-double-point, bilaterally retouched, asymmetrical | 39 | Laterally retouched microlith, semi-abrupt |
| 21 | Alternately (bilaterally) retouched micro-point | 40 | Laterally retouched microlith, abrupt |
| 22 | Alternately (bilaterally) retouched micro-double-point | 41 | Notched microlith |
| 23 | Terminally retouched micro-point, oblique | 42 | Denticulated microlith |
| 24 | Terminally retouched, additionally retouched at the base | 43 | Other microliths |
| 25 | Backed bladelet | 44 | Backed blade |
| 26 | Micro-sidescraper | 45 | Backed point |
| 27 | Double micro-sidescraper, thick | 46 | Backed point, angular |
| 28 | Double micro-sidescraper, flat | 47 | Backed point, convex |
| 29 | High-backed micro-sidescraper | 48 | Large segment |
| 30 | Low-backed micro-sidescraper | 49 | Sidescraper |
| 31 | Trapezoid micro-sidescraper | 50 | Notched Scraper |
| 32 | Triangular micro-sidescraper | 51 | Endscraper on blade |
| 33 | Micro-endscraper | 52 | Endscraper on flake |
| 34 | Terminally retouched microlith, straight | 53 | Large endscraper |
| 35 | Terminally retouched microlith, oblique | 54 | Notched tool |
| 36 | Terminally retouched microlith, concave | 55 | Denticulated tool |
| 37 | Terminally retouched microlith, convex | 56 | Borer |
| | | 57 | Outil écaillé |
| | | 58 | Terminally retouched tool, straight |
| | | 59 | Terminally retouched tool, oblique |

V. ACKNOWLEDGEMENTS

I am indebted to P. Beaumont, J. Deacon and J. Pratt for reading the manuscript.

VI. REFERENCES

- ANDERSSON, C.J. 1857. *Reisen in Südwestafrika bis zum See Ngami*. Leipzig: E.A. Seemann.
- BLÜMEL, W., EMMERMANN, R., HÜSER, K. 1979. *Der Erongo. Geowissenschaftliche Beschreibung eines südwestafrikanischen Vulkankomplexes*. SWA Scient. Soc., Windhoek.
- CARR, M.J., CARR, A.C., JACOBSON, L. 1978. Hut remains and related features from the Zerissene mountain area: Their distribution, typology and ecology. *Cimbebasia* (B) 2: 237-257.
- CLARK, J.D. 1965. The distribution of prehistoric sites in Angola. *Actas V. Congr. Panafr. Teneriffa* 1963, I: 225-309.
- COOKE, C.K. 1963. Report on excavations at Pomongwe and Tshangula caves, Matopo Hills, Southern Rhodesia. *S. Afr. archaeol. Bull.* 18: 71, 73-151.
- CRUZ-URIBE, K. & KLEIN, R.G. 1983. Faunal remains from some Middle and Late Stone Age archaeological sites in South West Africa. - *Journal XXXVI/XXXVII S.W. Afr. Wiss. Ges.*: 91-114.
- FREUNDLICH, J.C., SCHWABEDISSEN, H., WENDT, W.E. 1980. Köln radiocarbon measurements II. *Radiocarbon* 22, 1: 68-81.
- GIESS, W. 1971. A preliminary vegetation map of South West Africa. *Dinteria* 4.
- JACOBSON, L. 1978. A study of functional variability in the Later Stone Age of western Damaraland, Namibia. Unpubl. B.A. Hons. thesis: University of Cape Town.
- JACOBSON, L. & VOGEL, J.C. 1975. Recent radiocarbon dates from the Brandberg. *S. Afr. J. Sci.* 71: 349.
- KORN, H. & MARTIN, H. 1954. The Messum igneous complex in South West Africa. *Trans. geol. Soc. S. Afr.* 57.
- LEE, R.B. 1979. *The !Kung San*. Cambridge University Press.
- SAMPSON, C.G. 1974. *The Stone Age archaeology of Southern Africa*. Academic Press, New York.

- SANDELOWSKY, B.H. 1977. Mirabib - An archaeological study in the Namib. *Madoqua* 10: 221-283.
- SCHERZ, E.R. & A. 1974. *Afrikanische Felskunst*. Dumont, Köln.
- VAN ZINDEREN BAKKER, E.M. 1980. Comparisons of late Quaternary climatic evolutions in the Sahara and the Namib-Kalahari region. *Palaeocol. Afr.* 12: 381-394.
- VIERECK, A. 1961. Steinzeitkultur am Messum. *Der Kreis* 2 (9): 68-70.
- VOGEL, J.C. & VISSER, E. 1981. Pretoria radiocarbon dates II. *Radiocarbon* 23, 1: 43-80.
- WADLEY, L. 1979. Big Elephant Shelter and its role in the Holocene prehistory of Central South West Africa. *Cimbebasia* (B) 3: 1-76.
- WENDT, W.E. 1972. Preliminary report on an archaeological research programme in South West Africa. *Cimbebasia* (B) 2, 1: 1-61.