The Middle Stone Age in south-western Namibia

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In the last decades research on the Middle Stone Age has been relatively neglected. As a result our knowledge regarding this period in the whole region of southern Africa has suffered. A refined chronological differentiation is lacking even for the relatively well investigated material from South Africa (Thackeray 1992). With the exception of a short preliminary report on the Middle Stone Age layers from the "Apollo 11" site (Wendt 1974), so far no Middle Stone Age stratigraphies have been published in Namibia. In the course of my dissertation the Middle Stone Age artefacts from 9 excavated rock shelters and 104 surface-sites from the south-western part of Namibia have been analysed. The area of research covers the region between the Orange river in the south, the Atlantic ocean in the west, the 24° latitude in the north and the 19° longitude in the east. This region includes the three typical landscapes of Namibia: the Namib Desert, the Great Escarpment and the Inland Plateau. The present climate of the whole area is arid.

All known sites of this region have been recorded and analysed. With regard to the few multi-sequenced sites, Apollo 11, Pockenbank and Bremen 1C, it was possible to formulate a chronological framework, allowing the cultural classification of the other excavated assemblages (Table1).

Most of the archaeological remains are older than the dating range of the radiocarbon method, so that the chronological order is solely based on stratigraphical reasons. The assigning to one of the five formulated Middle Stone Age complexes resulted from typological and technological criteria (Table 2).

Except for the Howiesonspoort there are only slight changes in the stone knapping technology and typology throughout the Middle Stone Age, given the long time span involved. The great technological similarities and the very low proportion of formally retouched artefacts hamper the classification of the assemblages. For this reason the material from most of the surface sites could not be correlated with the chronological sequence.

Nevertheless and irrespective of the local variability of the assemblages, there are changes in the stone artefact material showing advanced trends. Except for the "Unmodified MSA", there is a continuous increase of distinctive artefact types from the "Early MSA" to the "Howieśonspoort". All tool types of the older complexes may still appear in the younger assemblages but new forms enlarge the spectrum. The absence of formally retouched artefacts in material of the "Youngest MSA" might indicate the decline and end of a cultural development, whereas the low proportion of tools during the "Unmodified MSA" is a break in the general trend. However the latter is also the most tentative group of all the Middle Stone Age complexes and future research has to verify its justification.

Figure 1 Middle Stone Age sites in southwestern Namibia. Excavations sites: 1 Apollo 11; 2 Pockenbank; 3 Aar 1; 4 Aar 2; 5 Haalenberg; 6 Tiras 5; 7 Bremen 1C; 8 Bremen 2B; 9 Zebrarivier.

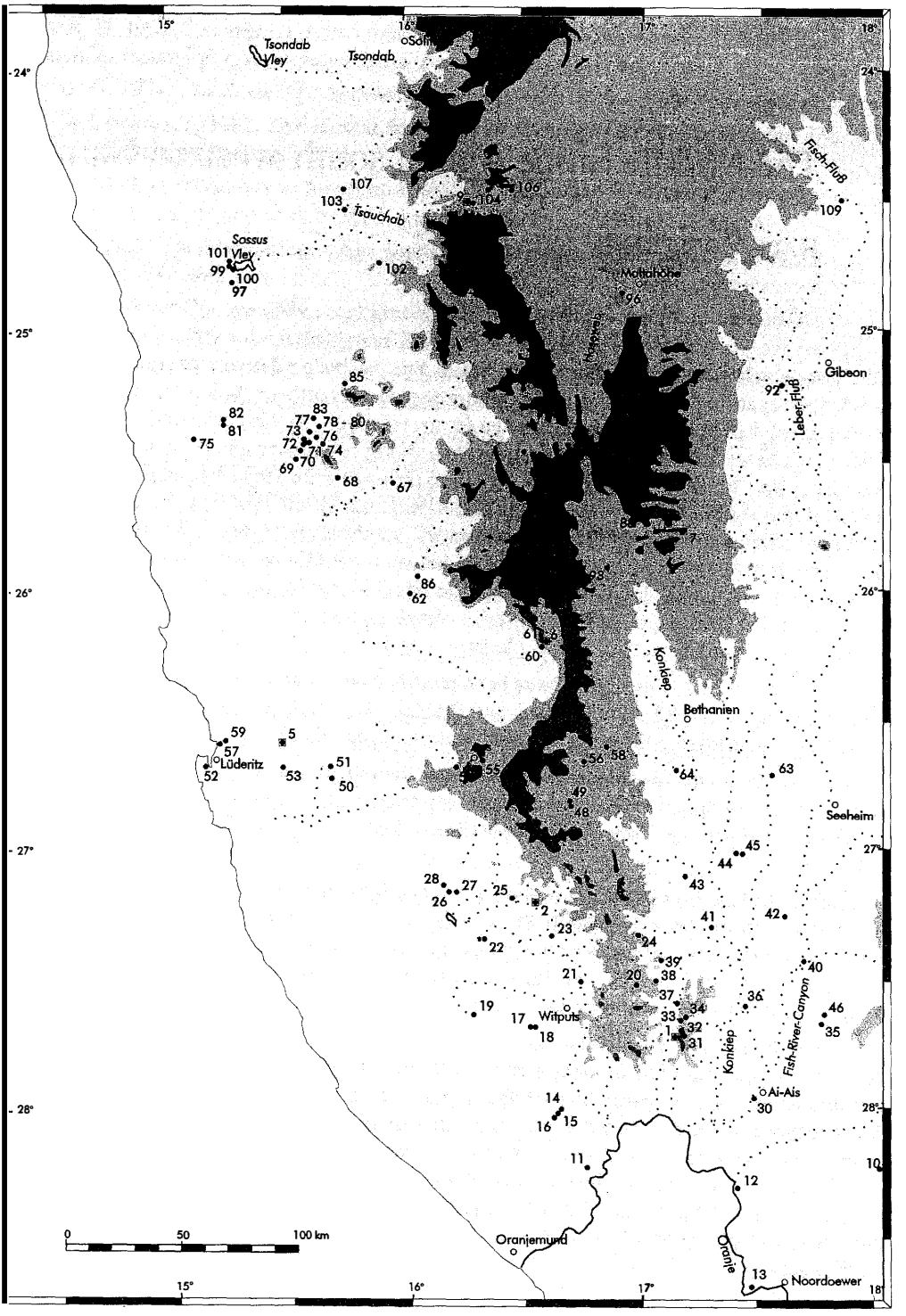

Table 1 Chronological sequence of the excavated assemblages.

MSA complex	Apollo 11	Pockenbank	Bremen 1C	single-phase sites	Radiocarbon dates (BP)
Youngest MSA	layer 4				27.500 - 25.500
Howiesons-poort		layer 3			35.000
	layer 3			Haalenberg	40.000
			layer 2	Aar 1	>48.000
					not dated
Unmodified MSA		layer 2		Zebrarivier	43.000->48.000
Developed MSA	layer 2				>49.000
		layer 1	Aar 1		not dated
			Tiras 5		
Early MSA	layer 1			Aar 2	not dated
			layer 1	Bremen 2B	

Table 2 Characteristics of the Middle Stone Age complexes.

MSA complex	Characteristic tool types	Retouch	Raw material	Debitage product	Butt
Youngest MSA	No standardised tool types		High percentage of Quartz	Extremely high portion of debris, few and irregular blades	High percentage of linear, punctiform and splintered butts
Howiesons-poort	Segments and backed blades (convex or straight)	Backing and truncation	Heterogeneous raw material spectrum. Quartz is rare	High portion of debris, few and relatively short blades	High percentage of linear, punctiform and splintered butts
Unmodified MSA	Almost no retouched tool types, numerous pointed flakes		Heterogeneous raw material spectrum, high percentage of crypto-crystalline silicas	Numerous, relatively short blades	Extremely high portion of facetted butts
Developed MSA	"Basal-scrapers". Many points with lateral or facial retouch	Facial retouch	Domination of Quartzite	Extremely plentiful and accurately worked blades	Facetted butts are numerous
Early MSA	Almost no retouched tool types, numerous pointed flakes	Exclusively lateral retouch, often quite crude	Exclusively local raw materials	Already many, but relatively crudely manufactured blades, some very large	Facetted butts, especially "talon dièdre" are already numerous

During the "Early MSA" raw material usage is limited to one, or at the most two locally occurring varieties. For the production of the abundant large blades and flakes, raw material had to be available in sufficient quantity and size. Core preparation and debitage production were conducted at factory sites next to the rock outcrops. Therefore the percentage of flakes with cortex is very low at the habitation sites. Mainly quartzite and calcareous mudstone, occurring in large outcrops, was exploited in the Inland Plateau, whereas in the surroundings of the Namib inselbergs (Uri-Hauchab, Awasib-mountains) quartzporphyry dominates the raw material spectrum. These varieties of rock also met the demands of the "Developed MSA" stone knapping technology. In particular, fine-grained quartzite is excellently suited for the production of the typical, very regular blades. Only for the manufacture of intensively trimmed tools, for example bifacial points, were crypto-crystalline silicas preferred. In "Howiesonspoort" assemblages the flakes are on average smaller, so that the size of the raw material nodules was not so important. The quality of the rocks was crucial for the production of the relatively small segments and allied forms and crypto-crystalline silicas were preferred because of their excellent knapping qualities. Often long distance transport of raw material was necessary and also the use of pebbles from the banks of the dry rivers was intensified. Mostly small nodules and pebbles were brought complete to the habitation sites. This is verified by the increased number of cores and cortex flakes in most of the younger assemblages. During the "Youngest MSA" the production of the often irregular and crudely manufactured artefacts required no particular raw materials and even quartz, mostly pebbles, was often utilised despite its poor knapping suitability, .

The blade percentage is the most valid parameter concerning debitage production. Even the assemblages of the "Early MSA" contain numerous, but often large and irregularly manufactured, blades. The very high portion of blades during the "Developed MSA" justifies the designation of this complex as a "blade industry". The diminution of the blade percentage in the "Howiesonspoort" material continues during the "Youngest MSA". The debris percentages dominating the appearance of the younger assemblages. The flake and core percentages differ very little and are of no value for chronological differentiation.

Characteristic of all Middle Stone Age complexes are facetted butts. In general these increase in number from the "Early MSA" to the "Unmodified MSA" and diminish in the younger assemblages, but within the complexes percentages vary so much that they do not allow even an approximate differentiation.

Other raw materials were of no importance during the Middle Stone Age. There are no bone or wood artefacts, even when the conditions for the preservation of organic material were good. The only exception are three notched rib-fragments of unknown function on the site of "Apollo 11". Ostrich eggshell fragments with signs of intentional opening are also present, but the bulk of the ostrich eggshell samples are unmodified fragments. Only single finds indicatione the decoration of ostrich eggshell during the Middle Stone Age.

The painted slabs of the "Apollo 11" site, that may be dated to the period between 27,500 and 25,500 BP are so far unique in Africa (Wendt 1976). The seven fragments are not exfoliated parts of a larger wall-painting, but separate representations on loose slabs ("mobile art"). This and stylistic traits distinguish the paintings from the later rock art. With the exception of the drawing of a rhinoceros, the zoological identification of the representations is not unequivocal. The depictions appear "clumsy" and "gross" and the remarkable long, stiffly stretched legs are characteristic.

The Middle Stone Age layers of only four sites contained identifiable faunal remains (Thackeray 1979; Cruz-Uribe and Klein 1983). All the species represented occur in the area at present and some of them are highly adapted to arid environments. The low diversity of mammalian species is also an indicator of dry climatic conditions. Whereas the other organic remains (insects, micro mammals,

plant remains) suggest environmental circumstances not entirely dissimilar to the present conditions, sediments of some of the sites indicate climatic changes. However it was not possible to formulate a supra regional climatical model.

The spatial distribution shows a paucity of Middle Stone Age sites in the area of the Inland Plateau, that can not be explained solely as an artefact of sampling. The vicinity of the Great Escarpment seems to have been the preferred habitation area, from which hunting expeditions to the nearby Namib plains could be undertaken. In the central Namib, sites are associated with the inselbergs rich in raw material and the dry pans (*vley*), which today still become lakes after heavy rains in the Inland Plateau.

The comparison with Middle Stone Age sequences south of the Limpopo shows many similarities to the appearance and changes of assemblages from the south-western part of Namibia and other regions in southern Africa (Volman 1984). However a detailed culture-stratigraphic differentiation is still lacking and there are further fundamental uncertainties, for example regarding the terminology. It can be hoped that growing interest in the Middle Stone Age period, occasioned by the discussion of the origin of modern Homo Sapiens, may lead to an intensification of research regarding the problems of chronological differentiation. The biggest problem is the absence of a reliable dating method for the period > 40.000 BP

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References

Cruz-Uribe, K. and Klein, R.G. 1983. Faunal remains from some Middle and Late Stone Age archaeological sites in South West Africa. *Journal of South West African Scientific Society* 36/37: 91-114.

Thackeray, A.I. 1992. The Middle Stone Age south of the Limpopo River. *Journal of World Prehistory* 6(4): 385-440.

Thackeray, J.F. 1979). An analysis of faunal remains from archaeological sites in southern South West Africa (Namibia). *South African Archaeological Bulletin* 34: 18-33.

Volman, T.P. 1984. Early prehistory of southern Africa. In *Southern African Prehistory and Palaeoenvironments* (ed. R.G. Klein): pp. 169-220. Rotterdam: A.A Balkema.

Wendt, W.E. 1974. "Art mobilier" aus der Apollo 11-Grotte in Südwest-Afrika. *Acta Praehist. et Arch.* 5: 1-42.

Wendt, W.E. 1976. "Art mobilier" from the Apollo 11 Cave, South West Africa: Africa's oldest dated works of art. *South African Archaeological Bulletin* 31: 5-11.