



Fig. 3. Domed brass ornament from Magozastad in the Marico district (scale in mm).

disassembled Dutch buttons like the ones found in the Vergelegen slave lodge. Their masses were 0,84 grammes and 0,41 grammes and they were relatively uncorroded.

Similar domed brass artefacts, some with single and some with double perforations, have been found in the upper layers of several Later Stone Age sites in the western Cape coastal region and the Cederberg (A.B.

Smith pers. comm.; J.E. Parkington pers. comm.). It is tempting to speculate that refashioned brass buttons were traded from the Cape, through Namaqualand, to the northwestern Transvaal and that these characteristic ornaments might be clear indications of such trade. It is likely that others have arrived at similar conclusions already but this note is intended to alert archaeologists to the identification of these brass domes as reworked buttons in the hope that more examples might be forthcoming.

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PRELIMINARY RESULTS FROM MUMBWA CAVES, CENTRAL ZAMBIA*

LAWRENCE S BARHAM

31 Newtown, Bradford on Avon,
Wiltshire, BA15 1NF, England

A combined team representing Zambia's National Heritage and Conservation Commission, the National Museum, Livingstone, and the universities of Bristol and Oxford spent three weeks in June 1993 examining the deepest deposits of the main cave at Mumbwa, central Zambia (Fig. 1). The complex of caves and rock shelters generally known as Mumbwa Caves has been investigated at irregular intervals since 1925 (Macrae 1926; Dart & Del Grande 1931; Clark 1942; Savage 1983). The 1930 excavations of Dart & Del Grande discovered a quartz based Middle Stone Age assemblage (see Volman 1984:184-5) overlying bedrock at a depth of nearly seven metres. The objective of the 1993 investigation was to assess the extent of this earliest deposit and to collect sediment samples for dating and environmental analysis.

Three test pits were sunk, two to the north of Dart & Del Grande's central pit - squares H6 and G4 - and the third cutting into the surviving section of the central pit - square E9 (Fig. 2). The two northern test pits proved to

be largely sterile, with no evidence of occupation overlying bedrock. The excavation of E9 confirmed Dart & Del Grande's basic sequence with MSA material appearing beneath the sterile 'red clay' of the central pit (Fig. 3).

Bedrock was not reached in E9 as the original section face appears to have collapsed at a depth of 6 metres and been replaced by later infill. An unfortunate consequence of the collapse was the rapid reduction in area of intact lower deposit available for excavation in E9. At best, the deposit extended across 0,50 m of the one metre square decreasing to less than 150 mm near the base.

Given this limitation, the high concentration of largely quartz debitage from lower E9 is impressive (Table 1). It suggests that further excavation of the central pit area could yield the largest stratified sample of early MSA known from Zambia to date. The retouched pieces are too few in number to make firm typological comparisons, but the presence of small flake tools and the

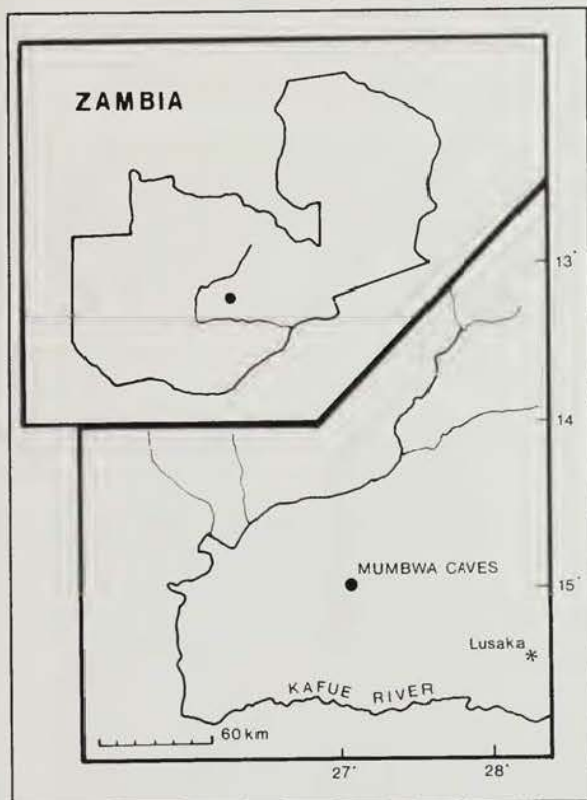


Fig. 1. Location map of Mumbwa Caves, central Zambia.

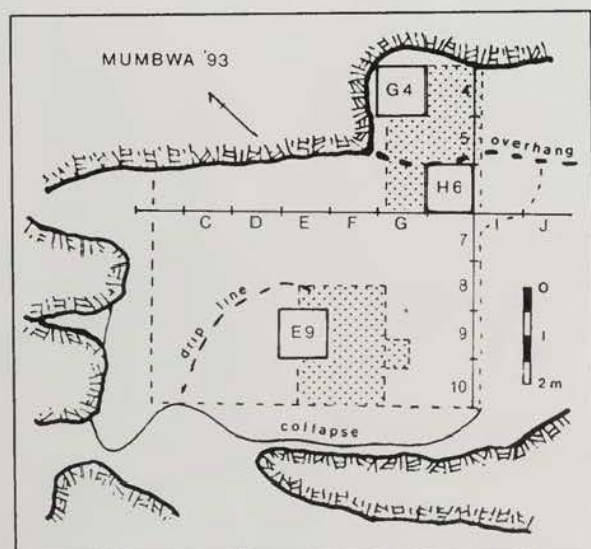


Fig. 2. Plan view of the three test pits excavated in the main cavern in 1993. The stippled areas are the deepest portions of the 1930 excavation, represented by a dashed line. E9 cuts into the central pit, and G4 and H6 are in the northern extension of Dart & Del Grande.

predominance of disc cores (Fig. 4) is suggestive of the Charama industry as known from Zimbabwe and Zambia (Volman 1984:185).

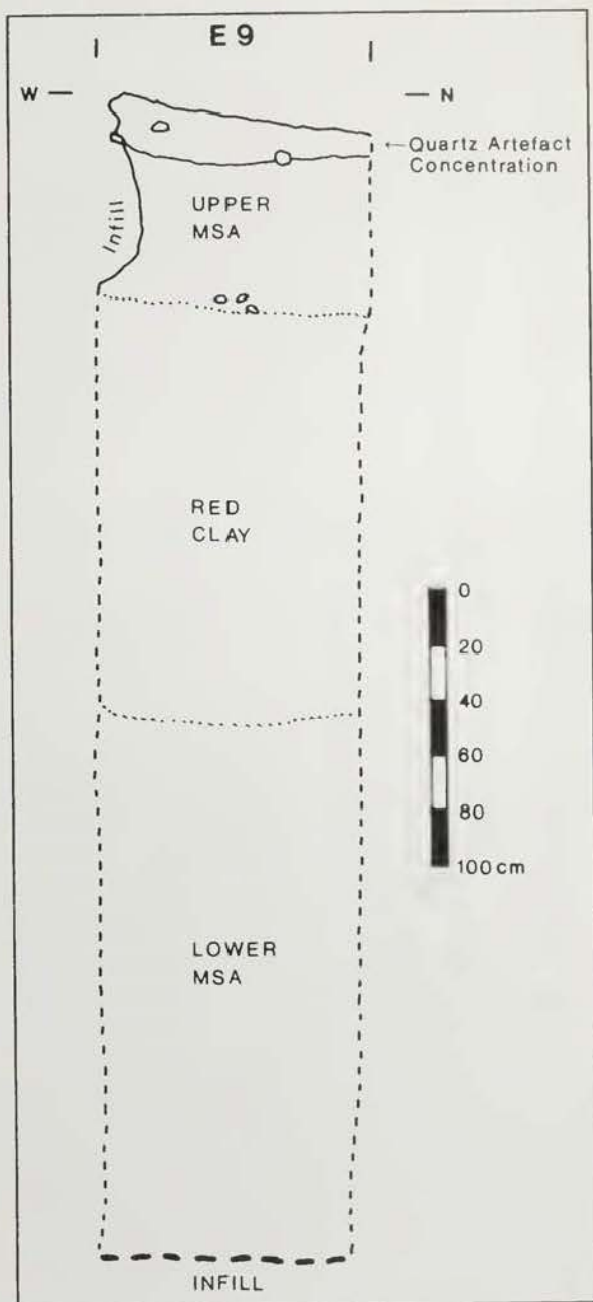


Fig. 3. Section of E9 showing major stratigraphic units.

The preservation of macro and microfauna is good throughout the Mumbwa sequence, including the lower MSA deposit. Of particular interest is the recovery of two human radius fragments from the base of E9, near the junction of the intact deposit and the infill. The fragments do not appear to belong to the same bone and may represent two individuals. These finds raise the prospect of further human remains to come from this very earliest occupation of Mumbwa.

Sediment samples were taken for optically stimulated luminescence dating. The results will be reported along with a full sedimentological analysis of the red clay

Table 1. Artefact frequencies and percentage frequencies for the upper MSA of E9 (E922-E937), the red clay (E938-E9316) and the lower MSA deposit (E9317-E9324).

Locus	Shatter	Flakes	Cores	Retouched	Utilized
E922	85	235	6	6	3
E923	173	275	15	6	0
E924	67	158	6	2	0
E931	77	85	6	1	0
E932	44	29	8	0	0
E933	27	49	0	2	0
E934	27	64	5	0	0
E935	12	47	0	0	0
E936	17	52	0	0	0
E937	16	34	1	0	0
TOTAL	545	1028	47	17	3=1640
% Total	33.23	62.68	2.87	1.04	0.18
E938	0	33	0	0	0
E939	5	14	0	0	0
E9310	0	8	0	0	0
E9311	3	11	0	0	0
E9312	2	6	0	0	0
E9313	4	8	0	0	0
E9314	2	18	2	0	0
E9315	2	11	0	0	0
E9316	0	13	1	0	0
TOTAL	18	122	3	0	0=143
% Total	12.59	85.31	2.10		
E9317	26	121	3	0	0
E9318	45	116	5	2	0
E9319	62	160	8	3	0
E9320	93	194	17	2	2
E9321	59	86	4	1	0
E9322	32	170	3	0	0
E9323	107	391	19	2	0
E9324	87	267	19	2	0
TOTAL	511	1505	78	12	2=2108
% Total	24.24	71.40	3.70	0.57	0.09

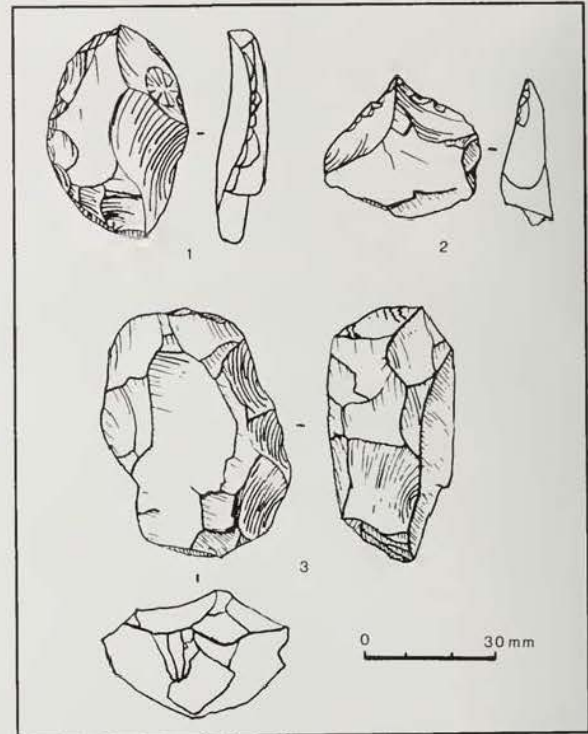
deposit late in 1994. Charcoal for dating was collected from H6 and E9, but given the possibility of infill contamination in E9 a full dating programme will be postponed until additional samples are excavated from secure contexts. The presence of teeth from large mammals in the lower MSA as well as burnt stone suggests that ESR and TL dating may be feasible, providing independent checks on the chronology of Mumbwa.

This brief testing of Mumbwa Caves confirms not only the stratigraphic sequence as described by Dart & Del Grande but also reaffirms the site's potential as a prime source of information about the early MSA of south central Africa.

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Fig. 4. Artefacts from the lower MSA of E9 - all quartz. 1: sidescraper; 2: awl 3: prepared core, possibly Levallois technique.



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