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THE EARLY STONE AGE AT BOSMAN'S CROSSING, STELLENBOSCH

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Introduction

In 1926, at the Annual General Meeting of the South African Association for the Advancement of Science, it was resolved to name the South African counterpart of the "Chellean" culture the "Stellenbosch" culture after the type locality. Fifteen years before this decision was made Dr. Peringuey had described certain finds that he had made at a site he called Bosman's Crossing after the railway station situated nearby:

"At the foot of a steep hill called Papagaiberg runs a small rivulet—a tributary of the Eerste River. The spur of the hill abuts on that rivulet and is intersected on one side by a cart road and is intersected on the other side by a railway cutting on the other. The space thus left has been used for a good many years as a brick field from which a thickness of 20 feet of material or more has been removed. I found there, in the vertical wall . . . two superposed layers of fractured, water worn

boulders, spalls, nuclei etc. They had been deposited on the granite formation . . . which terminates abruptly on the bank of the Eerste River." (Peringuey 1911)

On the site described by Peringuey half a century ago there now stands a monument erected by the National Monuments Commission to commemorate this important discovery, bearing the following inscription:

"In a road makers borrow-pit here in 1899 Louis Peringuey made the first discovery of 'Stellenbosch' stone implements and thereby proved the great antiquity of man in Southern Africa."

Peringuey himself notes (1911) that "the great accumulation of this brick clay is in itself a proof of great antiquity". But today this "brick clay" has gone and the grass of the Archaeological Reserve, which lies in a triangle between two roads and the Plankenberg River (Fig. 1), is level

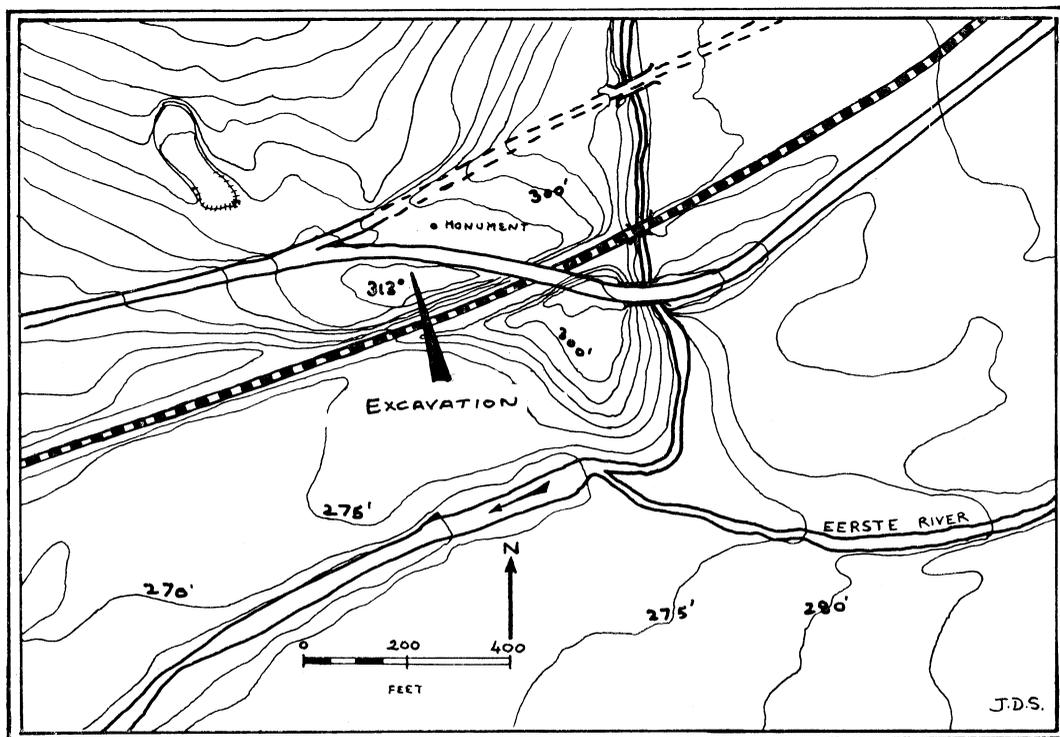


FIG. 1

with the main road that runs over the Adam Tas bridge into Stellenbosch.

The implements recovered from this site fell undoubtedly into the category of Early Stone Age; that they are, for the most part, crude and manufactured on boulders is immediately apparent and in this they differ from the Early Stone Age assemblages from the Montagu cave (Goodwin 1929) and from Hopefield (Elandsfontein) (Mabbutt 1957b, Malan 1962). The hand axes and cleavers from Cape Hangklip are less strikingly different. It would appear that the assemblages from these three sites for typological and for other reasons, constitute a late stage of the Early Stone age. Are the implements from Stellenbosch earlier than those from the other main sites, as their cruder appearance might lead one to believe and in what sort of stratigraphic context are they found?

A small test excavation was carried out in March 1965, while I was at the University of Cape Town, in order to clarify, both chronologically and stratigraphically if possible the position of Early Stone Age artefacts found in the Stellenbosch area. The hills around Stellenbosch are littered with the artefactual remnants of the camping places of early man at almost all heights above the present river, although the scatter would seem to thin out below the 200 foot contour line. In very few places are these artefacts in any sort of context and dating seems difficult, if

not impossible. The only place where numerous artefacts are to be found *in situ* is opposite the monument already mentioned; at the Bosman's Crossing site.

Excavation

At the right hand side of the road as one drives into Stellenbosch from Cape Town, just before the Adam Tas bridge, is a road cutting that reveals a patch of boulders and rotten granite. It was in this deposit, which rises some three and a half to four feet above the road surface, that the excavation was carried out. A small area was opened up by five 4 foot squares and a number of artefacts were recovered. All of these artefacts came either from the clear land-surface to the left of the composite section (cf. Fig. 2) or else from the top-most part of the boulder bed. Most of the artefacts were fresh and unrolled, despite the fact that, in some cases, they lay beneath pebbles and boulders. A few of the pieces, however, were rolled. The artefacts found in this excavation do not appear to differ significantly from those collected from the surrounding hillsides but the sample is too small for valid statements to be made regarding similarity and therefore the excavated artefacts from Bosman's Crossing will be regarded separately from any surface finds.

In describing the condition of the artefacts 1 represents an absolutely fresh piece, 2 a slightly worn piece and 3 a well rolled and rounded piece.

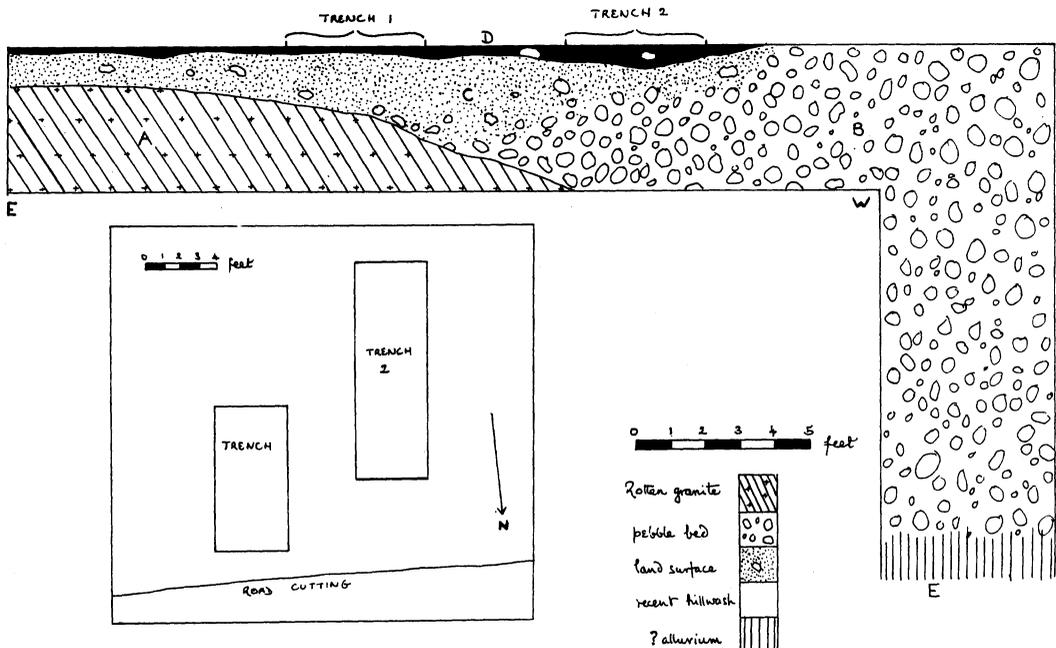


FIG. 2

Artifact type	Quartzite/quartzitic sandstone	Silcrete	Condition		
			1	2	3
Cores, miscellaneous:*	9	—	8	—	1
Cores, discoid:	1	—	1	—	—
Cores, disc:*	—	1	1	—	—
Cores, utilized:	5	—	4	1	—
Hand axes:*	4	—	3	1	—
Choppers:*	3	—	3	—	—
Bifaces, various:	3	—	1	—	2
Chips and chunks:	30	—	20	9	1
Unretouched flakes:					
0-50 mm:	34	2	31	5	—
50-75 mm:	28	—	21	7	—
75-100 mm:	4	—	4	—	—
100+ mm:	3	—	3	—	—
Retouched flakes:					
0-50 mm:	5	—	4	1	—
50-75 mm:	2	—	1	1	—
75-100 mm:	3	—	3	—	—
Total:	134	3	108	25	4

* cf. Fig. 4.

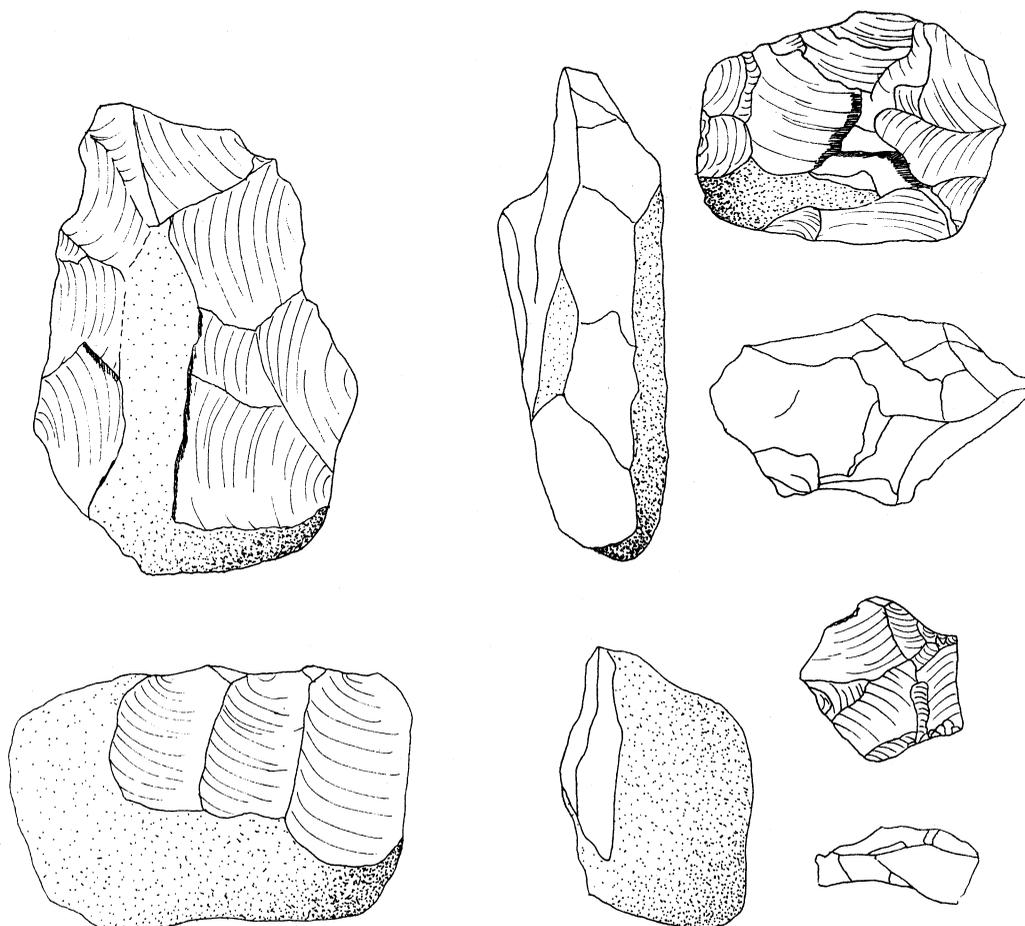


FIG. 4

Discussion

Typology. The artefacts themselves are of no great interest; they serve merely to show that we are dealing with an Early Stone Age assemblage. One or two points, however, are worth making:

(a) The association of hand axes and pebble cores (quartzite) with a small disc core (silcrete) is of interest. (cf. Fig. 4.) Similar small, delicately-made cores have now been found associated with Early Stone Age assemblages in widely separated parts of Africa and Europe (Inskeep 1965, Mason 1962, Wymer 1965 pers. comm.) and it is apparent that the certain assignation of pieces other than "typical" implements to particular cultures is virtually impossible. This is important for it means that a mixed site like Hopefield (Elandsfontein) can be divided into different cultures only in the broadest sense from the presence of typical pieces like hand axes and cleavers and fine "Stillbay" points, and that the vast mass of the material is not divisible. It therefore follows that the division of the Hopefield Early Stone Age material into more than one phase is not possible until material is recovered *in situ* and associated with a datable faunal assemblage. (See Malan 1962, Mabbutt 1957 p. 74.) The term Fauresmith cannot with validity be applied to this assemblage or to part of it. (Seddon 1965.)

(b) The condition of the artefacts is, for the most part, quite fresh, but some of the pieces are rolled. The freshness of the majority argues for an undisturbed situation and it is known that any land surface may contain some worn and abraded pieces (cf. Kleindienst 1961: "the material from each land surface is considered a unit despite the abrasion of some small components").

(c) At least one of the hand axes (Fig. 4) recovered shows signs of careful workmanship and although the majority of pieces from the Bosman's Crossing site might lead one to describe the industry as "crude" the presence of some finer artefacts is very significant. The sample recovered is not large enough to admit of typological comparisons with the three other important Early Stone Age sites in the South West Cape: Hopefield, the Montagu cave and Cape Hangklip but this in itself is not too serious—differences in manufacture and in tool percentages are often found between assemblages within a single stratigraphic horizon (Howell, Cole and Kleindienst 1962) and the different situations of the four sites will have affected the nature of the industries to a considerable degree. Perhaps predictably the Bosman's Crossing material resembles that of Hangklip beach site more closely than that from Hopefield or Montagu, both Bosman's Crossing and Hangklip providing a high proportion of tools made on pebbles and still showing the cortex. Sampson (1962) suggests that the shape of the raw material affects the shape of the final product and it seems

consistent with the idea that an implement represents a compromise between an ideal form and greatest economy of effort¹ that the cruder tools are found in areas where raw material is abundant in the form of river or beach pebbles.

In view of the points made above it is impossible to define the Bosman's Crossing material more closely on typology than as Early Stone Age, and in the absence of valid typological comparisons the stratigraphic context of the industry becomes all-important.

Context. The artefacts are associated with a land surface that interdigitates with the top-most part of a boulder bed (cf. Fig 2). Where there is no sign of the land surface among the boulders no artefacts are found and the mass of the pebble bed (some fifteen feet thick) appears to be sterile. This suggests that the artefacts date to a period either at the very end of the pebble deposition or else after it. Artefacts are found among and under the pebbles in several cases but this is hardly conclusive either way. For the purposes of this discussion the problem is not a vital one; what is important is that the artefacts post-date the main body of the boulder bed. It seems unlikely that a river flowing fast enough to deposit gravels of this size would have washed so close to an older land surface and left it intact. If this is so then the artefacts are younger than the boulder bed.

The dating of the river deposit therefore becomes the prime concern. The gravels lie between 30 and 45 feet above the present river level (cf. Fig. 3) and presumably form a part of an older

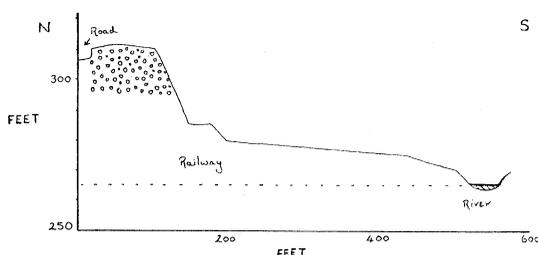


FIG. 3

terrace of the Eerste River. Three terraces have been described for the Eerste River (Shand 1913 and 1917) at 45, 18, and 12 feet. The levels of these terraces seem to have been only roughly measured but although Shand's highest terrace is fragmentary and lies to the northeast of Stellenbosch it seems likely that the patch of gravel found at Bosman's Crossing represents a part of this higher terrace. The excavation revealed only one layer containing cultural material and the 20 feet of deposit that Peringuey mentions has gone. Almost certainly the greater part of this "brickearth" was hill wash from the Papagaiberg

1. This concept suggested by Dr. C. B. M. McBurney of Cambridge.

hill above but the relationship in time of the missing layer to the one found in 1965 cannot surely be known.

The Eerste River has its source in the mountains behind Stellenbosch and flows into the sea only 16 miles away. Between source and mouth there are only very low hills and one would expect that any rise or fall of sea level during the Pleistocene would have affected the river level considerably. There is good evidence for Pleistocene high sea levels in the beaches around the coast of the South West Cape and these lie at 100, 60, 45, 23-28, 18, 6-8 and 2 metres above mean sea level. (Mabbutt 1957a.)

It seems improbable that the Eerste River, which runs so short a course, could have altered its profile so radically during the later part of the Pleistocene except in response to a changing sea level. The 30-45 foot terrace of the river at Bosman's Crossing is unlikely to relate to a sea level as high as the 100 foot, although, as with all rivers, old terraces and present river level move further apart the closer to the sea the measurements are taken. The best correlation would be with the so-called Major Emergence (Krige 1927) which varies from 18m - 20m. Unworn implements of a relatively advanced stage of the Early Stone Age overlie an abrasion platform of this marine stage at Cape Hangklip (Mabbutt 1954). If the correlation is a good one then the Early Stone Age assemblage at Bosman's Crossing could be tentatively assigned to the period of the 60 foot beach at Hangklip (equivalent to the Riss/Wurm interglacial in Alpine Terminology) with a rough date of 150,000 to 90,000 years B.P.

If my hypothesis is correct all the major sites with Early Stone Age assemblages in the South West Cape appear to represent a late stage of this culture. In addition to this there is, at the present time, no good stratigraphic evidence known to me for dating the surface collections made widely in this area to any earlier stage.

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