

AN ARCHAEOLOGICAL INTERPRETATION
OF CERTAIN IRON AGE SITES
IN THE LIMPOPO/SHASHI VALLEY

by

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ABSTRACT

AN ARCHAEOLOGICAL INTERPRETATION OF CERTAIN IRON AGE SITES
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by

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An archaeological investigation was made of two Iron Age sites on the farms Schroda and Pont Drift. The farms are situated on the southern bank of the Limpopo River, about 65 km and 95 km respectively west of Messina. Little is known about the archaeological cultures of the area surrounding the Limpopo and Shashi Rivers in the northern Transvaal and north eastern Botswana. Attention has been given to the work done in Rhodesia, Botswana and in particular at Greefswald.

The project was initiated in 1973 with a survey during which 86 Iron Age sites were recorded. Five sites were excavated, of which Pont Drift (TPD 1/2) and Schroda (TSR 1/1) were chosen for interpretation in this dissertation. Attention was given to pottery as well as other cultural facts.

Schroda was found to contain stamp decorated Zhizo pottery, although a certain amount of incised ware was found. Certain features were noted here, which suggested that characteristics normally associated with the Leopard's Kopje A Tradition may have had their origin during the earlier Zhizo Tradition. During analysis of the material, particular attention was given to these aspects.

At Pont Drift, an interesting sequence was exposed. The two metre deep occupation could be divided into four stratigraphic units, which were culturally different from one another. The lower unit (4) contained Zhizo pottery, while the topmost unit (1) contained Leopard's Kopje A pottery. The intermediate units (2 + 3) contained a mixture of Zhizo and Leopard's Kopje A pottery with the Zhizo decreasing towards the upper levels.

Radiocarbon dates placed the Zhizo occupation of Schroda and Pont Drift Unit 4 at between 790 and 850 A.D. The Leopard's Kopje A unit at Pont Drift was dated to around 1100 A.D.

From the information a reconstruction can be made of the development of the two pottery traditions in the research area. Schroda and Pont Drift were inhabited by people with the well developed stamp decorated Zhizo pottery tradition from about 790 to 850 A.D. At this period (850 A.D.) new inhabitants entered the area bringing with them a new, incised pottery series. These people mixed with the Zhizo peoples and out of this union developed the Leopard's Kopje A tradition, which contains numerous characteristics of the Zhizo culture. There is no indication at either site of a forced abandoning of the villages, suggesting that the newcomers lived peacefully amongst the original inhabitants of the area. It is at the same time clear that the Leopard's Kopje A did not develop naturally out of the Zhizo.

Schroda represents the first excavated site of the southern branch of the Zhizo Tradition, and it is the author's opinion that it should be regarded as the type site.

Further work should still be done, particularly that other Zhizo sites be excavated to control the findings at Schroda and Pont Drift unit 4. A spatial settlement study of other Leopard's Kopje A sites should be undertaken to determine relationships to one another, as well as differences in economy.

OPSOMMING

'N ARGEOLOGIESE INTERPRETASIE VAN SEKERE YSTERTYDPERKTERREINE
IN DIE LIMPOPO-/SHASHIVALLEI

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'n Argeologiese ondersoek is gedoen op twee Ystertydperkterreine op die plase Schroda en Pont Drift. Die plase is onderskeidelik ongeveer 65 km en 95 km wes van Messina geleë op die suidelike oewer van die Limpopo-rivier. Weinig is bekend oor die argeologiese kulture van die omgewing rondom die Limpopo-en Shashiriviere in die Noord-Transvaal en Noordoos-Botswana. Aandag is gegee aan werk gedoen in Rhodesië en Botswana besonder by Greefswald.

Die projek is in 1973 aan die gang gesit met 'n opname waartydens 86 Ystertydperkterreine aangeteken is. Vyf van hierdie terreine is opgegrawe, waarvan Pont Drift (TPD 1/2) en Schroda (TSR 1/1) gekies is vir interpretasie in hierdie verhandeling. Aandag is gegee aan die potwerk sowel as ander kultuurfasette.

By Schroda is stempelpersierde Zhizo-potwerk gevind, tesame met 'n sekere persentasie met insnyding. Sekere verskynsels is hier opgemerk wat geïmpliseer het dat kenmerke wat normaalweg met die Leopard's Kopje A Tradisie verbind word, moontlik hulle oorsprong kon gehad het tydens die vroeëre Zhizo. Met die ontleding van die materiaal is besondere aandag hieraan gegee.

'n Interessante volgorde van lae is gevind by Pont Drift. Die bewoningslae, wat twee meter diep was, kon in vier stratigrafiese eenhede verdeel word wat kultureel van mekaar verskil het. Die onderste eenheid (4) het Zhizo potwerk bevat, terwyl die boonste eenheid (1) slegs Leopard's Kopje A potwerk gehad het. Die eenhede tussenin (2 + 3) het gemengde Zhizo en Leopard's Kopje A potwerk bevat, met 'n afname in Zhizo na die boonste lae.

Radiokoolstofdatering plaas die Zhizo bewoning van Schroda en Pont Drift

op ongeveer 710 tot 850 n.C. Die Leopard's Kopje A eenheid by Pont Drift se datering is ongeveer 1100 n.C.

Uit die inligting kan 'n rekonstruksie gemaak word van die ontwikkeling van die twee potwerktradisies in die navorsingsgebied. Schroda en Pont Drift is vanaf ongeveer 790 tot 850 n.C. bewoon deur mense met 'n goed ontwikkelde stempelversierde Zhizo potwerktradisie. Op daardie tydstip (850 n.C) het nuwe intrekkers die gebied binnegekom en het 'n nuwe potwerkserie wat deur insnyding gekenmerk was, saamgebring. Hierdie mense het vermeng met die Zhizo mense en uit die verbintenis het die Leopard's Kopje A tradisie ontwikkel wat talle kenmerke van die Zhizo kultuur dra. Daar is geen aanduiding by enige van die twee terreine van 'n gedwonge ontruiming van die nedersettings nie. Dit suggereer dat die nuwe intrekkers hul vreedsaam tussen die oorspronklike inwoners van die gebied gevestig het. Dit is terselfdertyd duidelik dat die Leopard's Kopje Tradisie nie spontaan uit die Zhizo kon ontwikkel het nie.

Schroda verteenwoordig die eerste terrein van die suidelike vertakking van die Zhizo Tradisie wat opgegrawe is en dit is die mening van die skrywer dat dit as die tipeterrein beskou behoort te word.

Verdere werk moet nog gedoen word, veral ten opsigte van die opgraving van addisionele Zhizo terreine om die gegewens van Schroda en Pont Drift, eenheid 4, te kontroleer. Ook moet 'n studie van die ruimtelike vestigingspatroon van ander Leopard's Kopje A terreine onderneem word om die verband tussen hulle asook verskille in ekonomie te bepaal.

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PART I

CHAPTER 1

INTRODUCTION

1. Statement of Problem

In that area of Southern Africa which forms part of the valley of the Shashi and Limpopo Rivers, one finds numerous remains of earlier habitations belonging to the Iron Age. Many of these sites can not be linked either ethnically or historically with the present Black inhabitants of the area, nor would it appear that the cultures under study extend very far into the Transvaal. Recent research work undertaken by the University of Pretoria at the site of K2 on the farm Greefswald, combined with that done between 1933 and 1940 at the same site suggested that a difference was to be found between the Leopard's Kopje A culture in the Limpopo/Shashi Valley when compared to that found in the Matop^o Hills area near Bulawayo in Rhodesia.

The southern branch of the Leopard's Kopje A culture has been excavated only on the farm Greefswald. It seemed a necessity therefore to investigate some other Leopard's Kopje A sites to control and correlate the information forthcoming from Greefswald. In particular, more information was needed on settlement patterns, as well as on the economy of smaller groups of people that had been living fairly close to what appeared to be the main settlement at K2. Furthermore, using a possibly larger and more varied sample of pottery, it would be possible at some future date to determine in greater detail what differences in ceramics were to be found between the northern and southern branches of the Leopard's Kopje Tradition.

Zhizo pottery had originally been classified as part of the Leopard's Kopje Complex, but later investigation by Huffman (1968 and 1974) prompted a change in the classification, and Zhizo was then removed from Leopard's Kopje to be placed with the Gokomere ceramics, as a second phase thereof. Huffman concluded that there was no foundation for any suggestions that Zhizo could be related to Leopard's Kopje A.

Certain observations made during the course of excavations suggested to the author that the possibility existed of the original classification of Zhizo with Leopard's Kopje not having been totally incorrect.

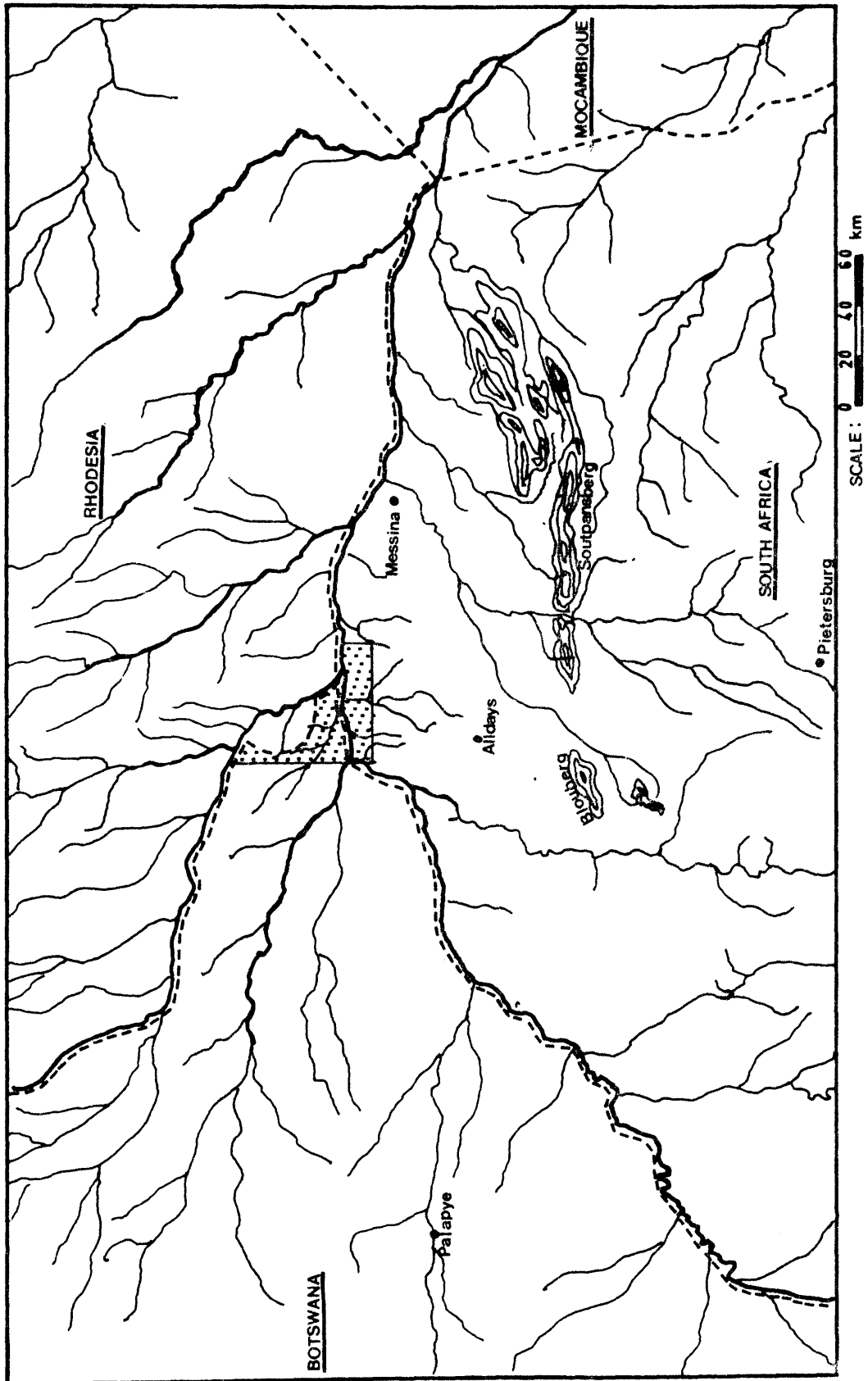


FIG. 1

The Research Area.

Therefore attention was paid to all aspects of the Zhizo culture which may or may not have developed into Leopard's Kopje A.

2. Deliniation of Research Area

Originally this research project covered a very large area of the northern Transvaal, and the area deliniated extended from the Soutpansberg Mountains in the south to the Limpopo River in the north. The eastern boundary was the Sand River, with the Mogalakwena River in the west. Site reconnaissance work was done in this area, and from the information retrieved the limits of the Zhizo and Leopard's Kopje A occupation south of the Limpopo were tentatively established. It was then decided to reassess the research project and to concentrate on these particular two cultures with their smaller spatial spread.

Intensive research work was conducted in an area along the southern bank of the Limpopo River in the northern Transvaal as well as in north-eastern Botswana between the Limpopo and Shashi Rivers (See figure 1). Many sites were discovered here, of which five were excavated.

The amount of information recovered is too vast to be covered in a Master's thesis, and after discussion with Prof. J.F. Eloff, two sites were singled out for interpretation, namely Schroda TSR 1/1 and Pont Drift TPD 1/2.

Surface finds indicated that Schroda was a Zhizo site, while Pont Drift contained Leopard's Kopje A pottery.

CHAPTER 2

DEFINITION OF CONCEPTS AND TERMINOLOGY

The archaeologist is often faced with the problem that authors fail to make themselves clear as to the meaning of various terms that they use. Consequently research articles, although containing new and important information, frequently assume a less important place in the elucidation of the past, because the reader is unable to understand or interpret what is intended by the use of particular terminology.

I hope the following will clarify some of the statements made and terminology used. They have been grouped as far as is possible under specific headings.

1) Pottery Traditions, Phases, and Branches

Bambata. Generally accepted as pottery associated with the Rhodesian Late Stone Age. Redefined by Huffman as an Early Iron Age Tradition, ancestral to Early Iron Age Pottery in the Eastern Transvaal (Huffman 1978).

Gokomere. Considered to be the first Early Iron Age Tradition in Rhodesia, with pottery dating from about 150 A.D. to nearly 600 A.D. Huffman suggests that the true Gokomere dates from about 400 to 600 A.D. The earlier dates belong to pottery which he now calls Bambata.

K2. The southern branch of the Leopard's Kopje A culture found in the northern Transvaal bordering on the Limpopo River, north-eastern Botswana and the southern part of Rhodesia bordering on the Shashi and Limpopo Rivers, spreading in a north-westerly direction to the Matopos. It is named after the site K2 on the farm Greefswald.

Leopard's Kopje I. See Zhizo

Leopard's Kopje II. See Leopard's Kopje A

Leopard's Kopje III. See Leopard's Kopje B

Leopard's Kopje A. This was originally Robinson's second phase (Leopard's Kopje II) of his Leopard's Kopje Culture. Separated from Zhizo by Huffman (Huffman 1968, 1974).

Leopard's Kopje B. The third phase defined by Robinson in the original Leopard's Kopje culture (Leopard's Kopje III) (Robinson 1965),

Mambo; This is the name given to the northern branch of the Leopard's Kopje A culture found in and around the Matopos region of Rhodesia, spreading in a south easterly direction. Differs only marginally from the southern K2 pottery, particularly in the greater abundance of wavy line decoration.

Mapungubwe. The southern branch of the Leopard's Kopje B culture. Found in the northern Transvaal, spreading south eastwards to Venda. Named after Mapungubwe Hill on the farm Greefswald.

Woolandale. The northern branch of the Leopard's Kopje B Culture, found in and around the Matopos region of Rhodesia, spreading in a south easterly direction. Differs slightly from the Mapungubwe pottery, in the greater proportion of wavy line decoration.

Zhizo. This is the culture originally described by Robinson as Leopard's Kopje I (Robinson 1965). On the basis of a qualitative seriation, Huffman separated Zhizo from Mambo pottery. Zhizo is now considered to be the second phase of the Gokomere Tradition (Huffman 1968, 1974).

2) Sites

Bambandyanalo. A hill overlooking the K2 site, and by which name the southern branch of the Leopard's Kopje A culture is often referred to.

Commando Kop. A Leopard's Kopje A site in the Tuli Block of north eastern Botswana. The site lies on top of a hill overlooking the Pitsani River. Excavated by the author in 1975 and 1976.

K2. The type site for the southern branch of the Leopard's Kopje A Tradition. Situated on the farm Greeswald.

Leopard's Kopje Main Kraal. The type site of the Leopard's Kopje A Tradition. Situated near the Khami Ruins at Bulawayo in Rhodesia.

Mapungubwe Hill. Type site for the southern branch of the Leopard's Kopje B Tradition. Situated on the farm Greefswald.

Mmamagwe. A Leopard's Kopje A site situated north of the junction of the Macloutsi and Limpopo Rivers in Botswana.

Pont Drift. A farm on the southern bank of the Limpopo River, 95 km west of Messina. Two adjacent sites (TPD 1/1 and TPD 1/2) were excavated by the author. The latter site is described in this dissertation.

Ratho. A farm on the Transvaal side of the junction of the Macloutsi and Limpopo Rivers. Contains several Leopard's Kopje A sites as well as a Zhizo site, which was excavated by the author in 1977.

Schroda. The name given to the Zhizo site discussed in this dissertation.

Tautswe. See Tautswemogala.

Tautswemogala. An Iron Age site north of Palapye in Botswana. Excavated by Lepionka in 1969 and 1970. Re-excavated in 1979 and 1980 by Denbow. Contains pottery similar to Zhizo and Leopard's Kopje A in addition to

others. In earlier publications the site is referred to as Toupye.

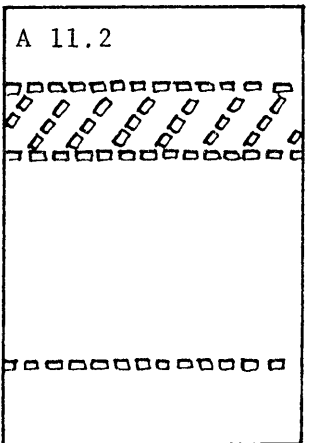
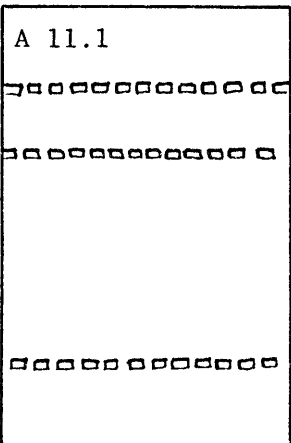
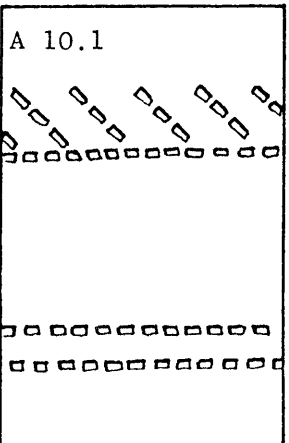
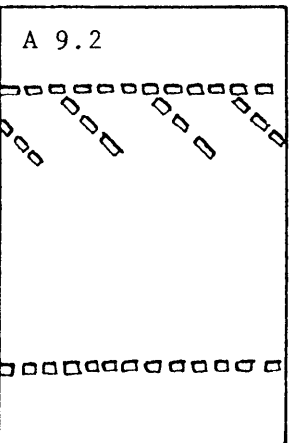
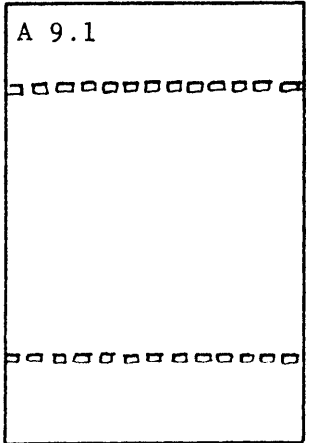
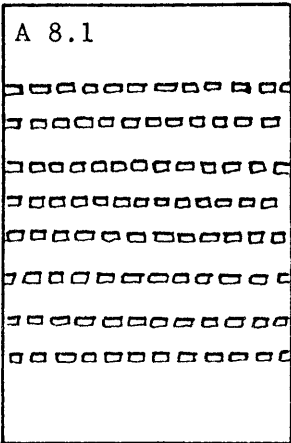
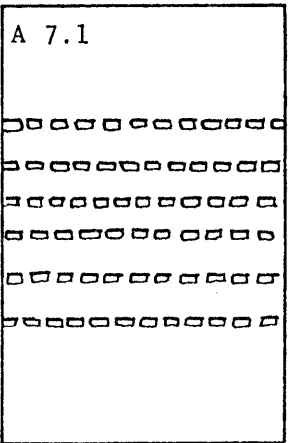
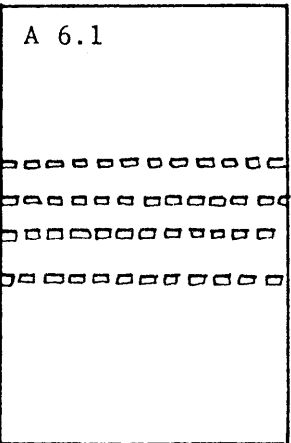
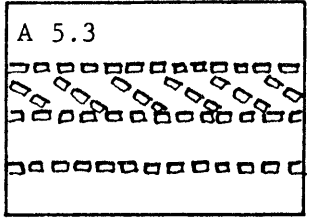
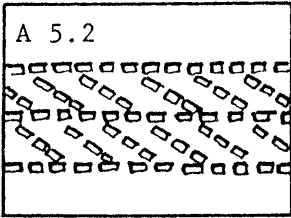
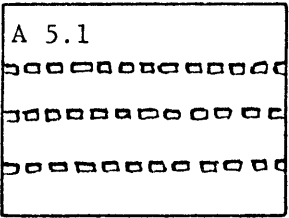
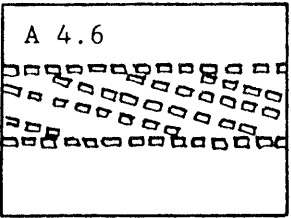
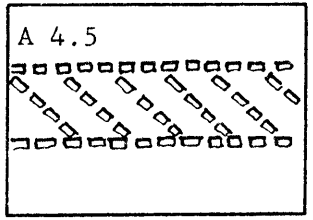
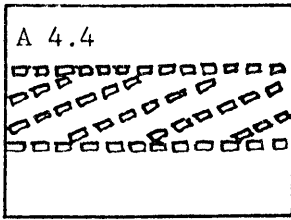
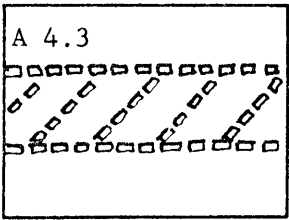
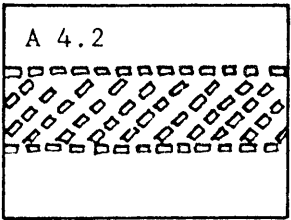
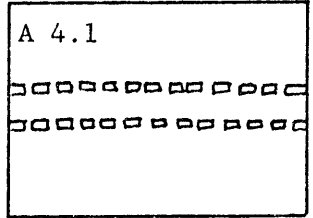
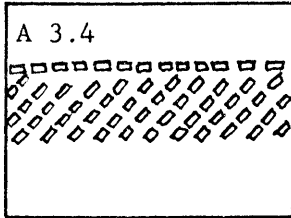
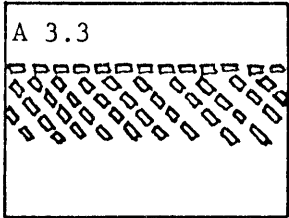
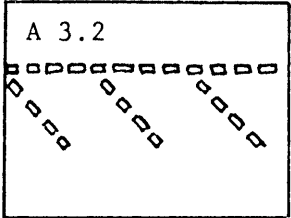
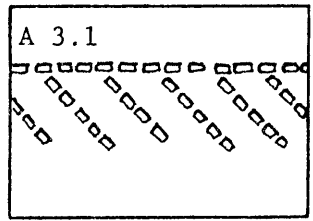
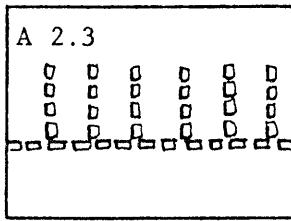
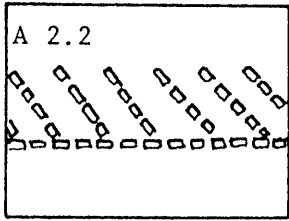
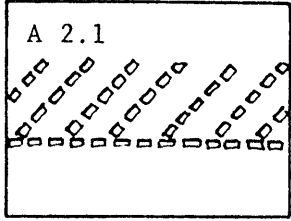
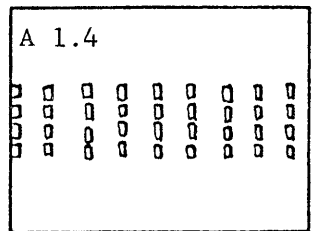
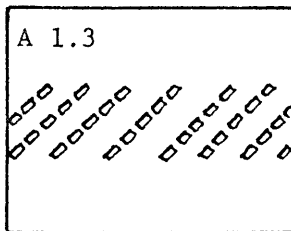
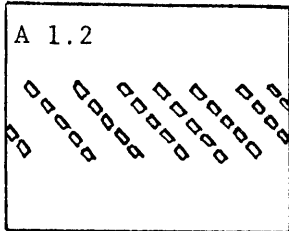
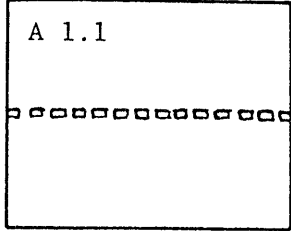
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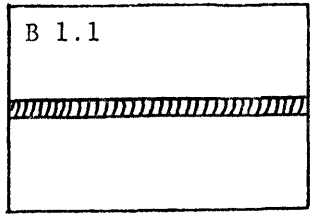
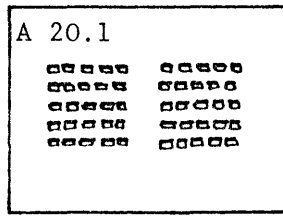
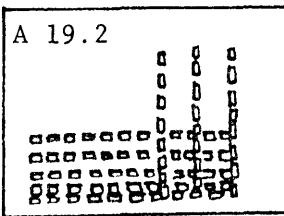
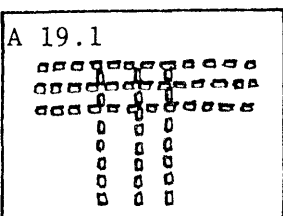
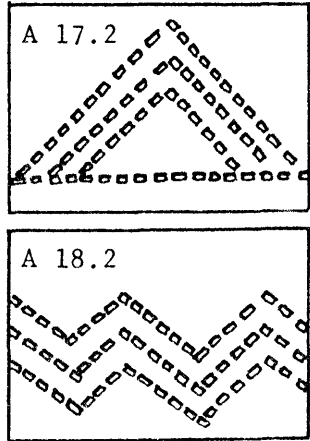
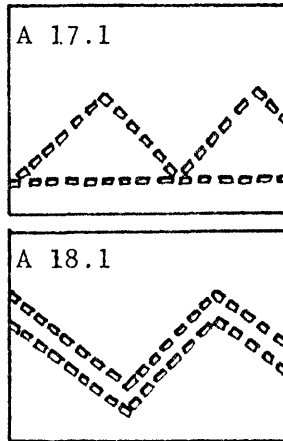
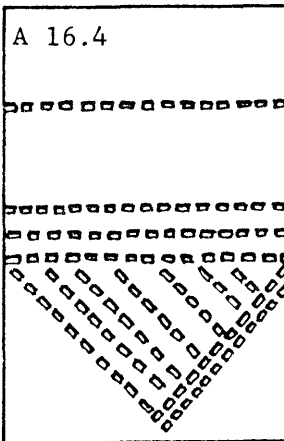
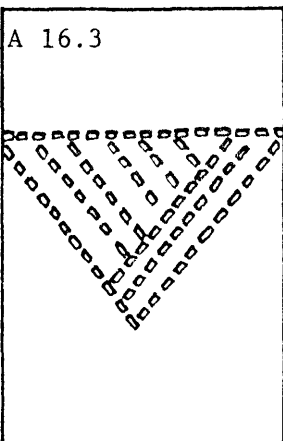
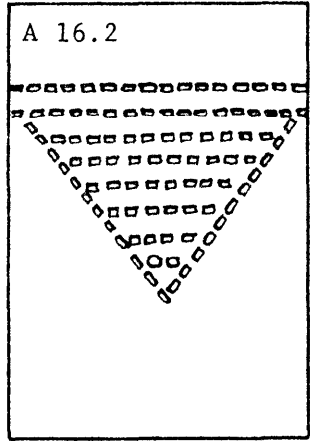
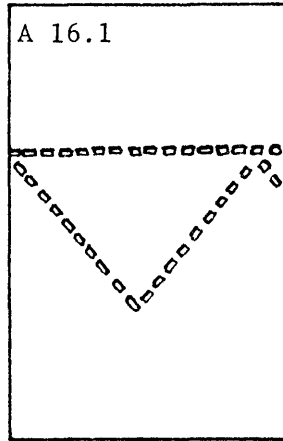
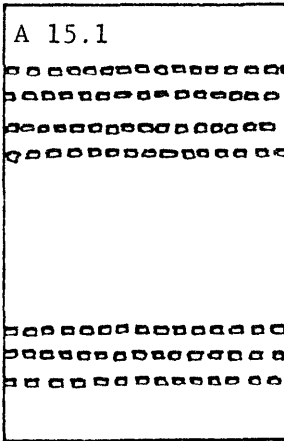
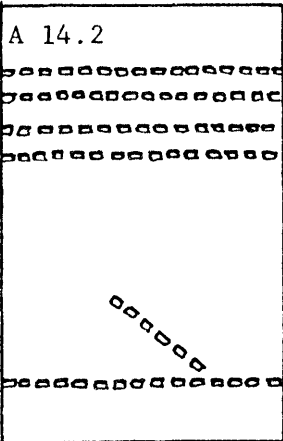
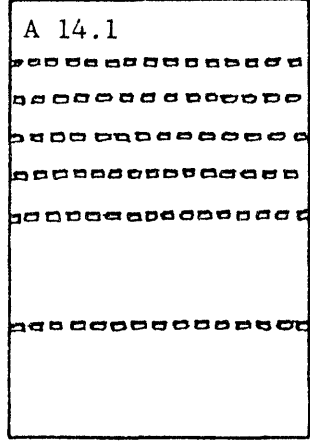
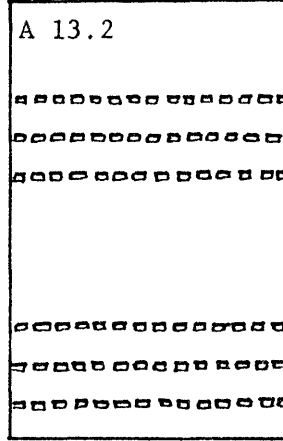
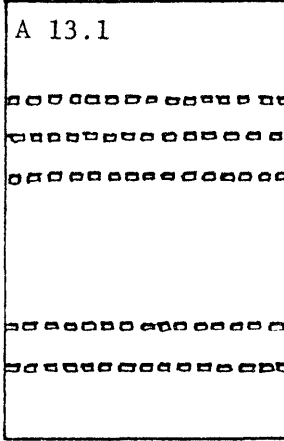
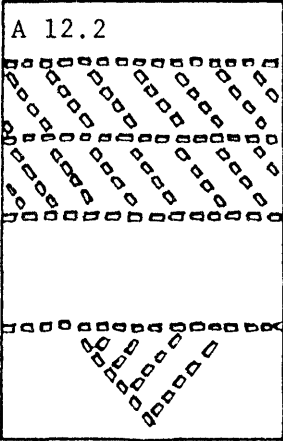
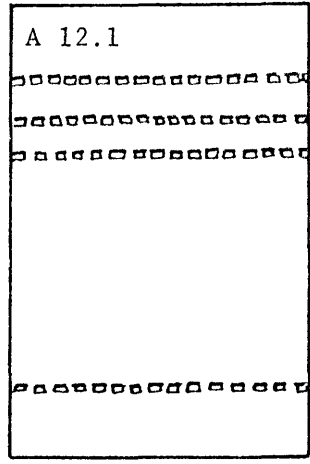
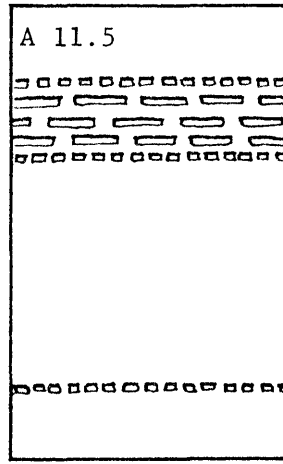
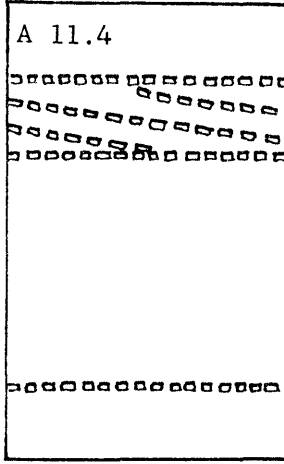
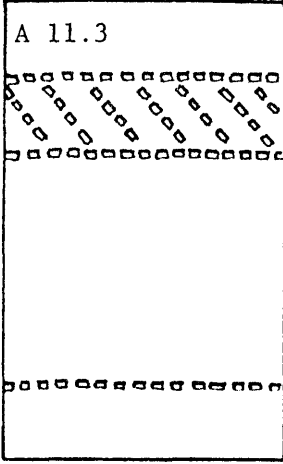
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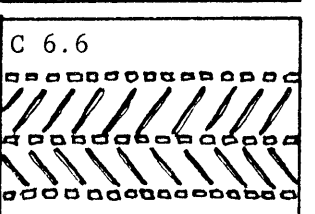
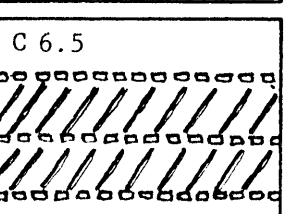
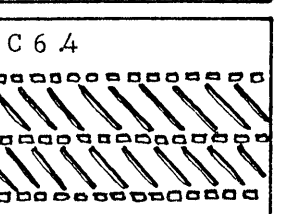
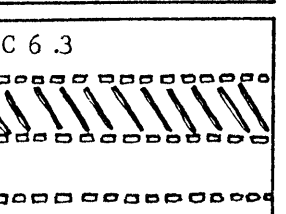
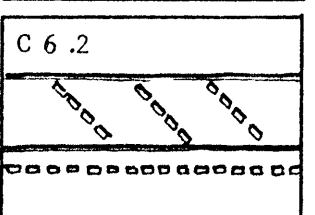
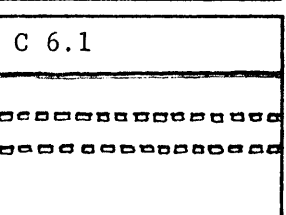
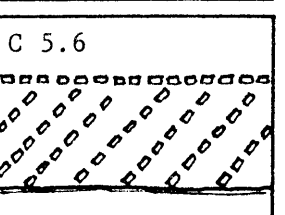
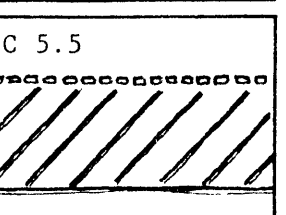
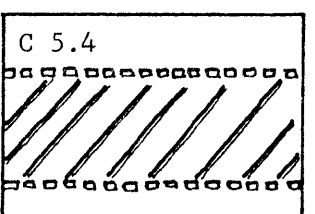
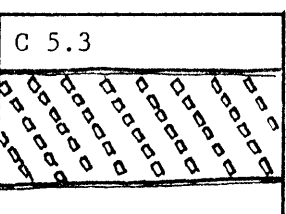
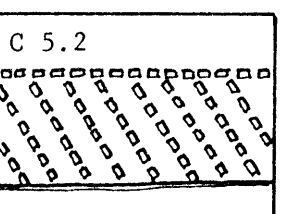
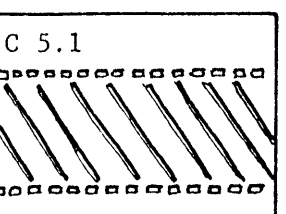
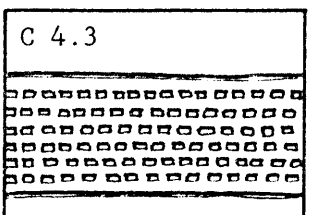
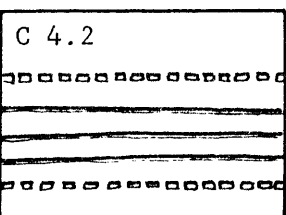
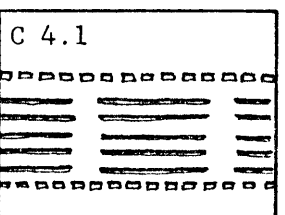
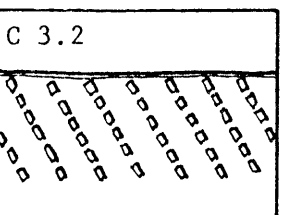
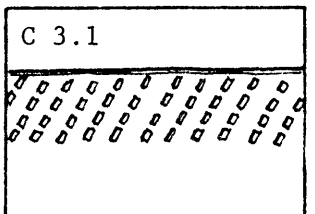
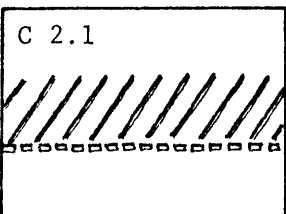
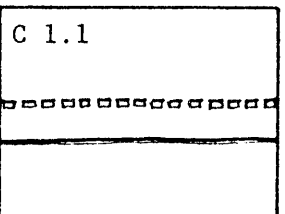
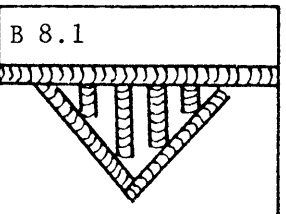
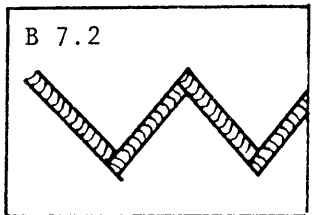
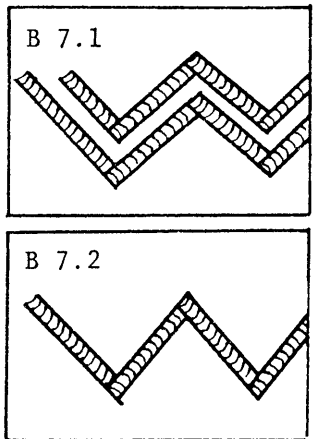
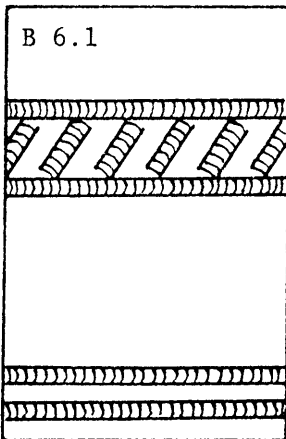
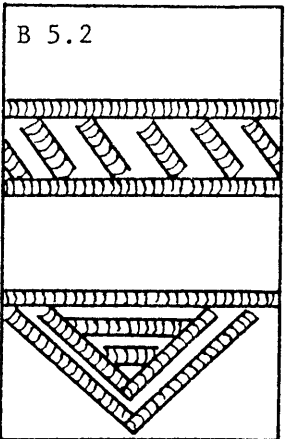
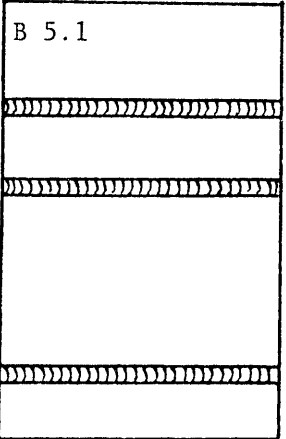
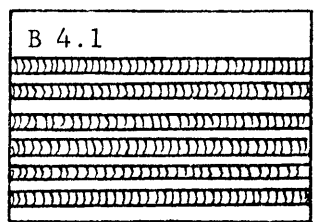
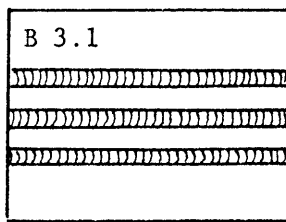
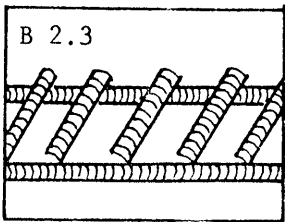
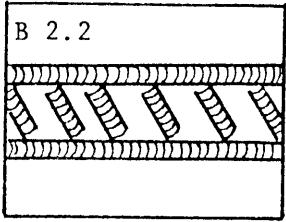
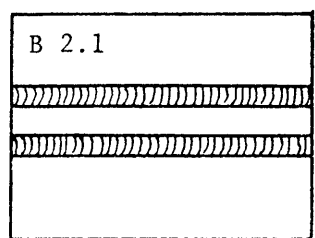
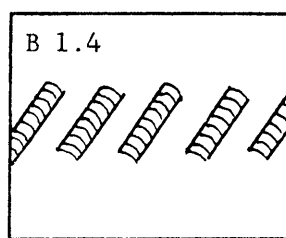
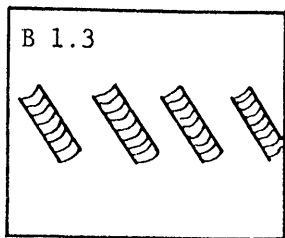
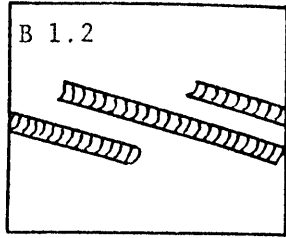
A master list has been compiled for all motifs recorded from all Zhizo and Leopard's Kopje A sites excavated by the author. This is intended for use in an eventual comparison of sites.

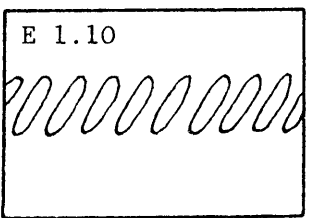
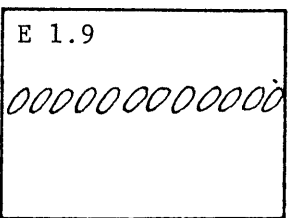
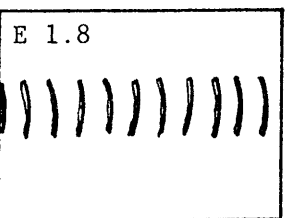
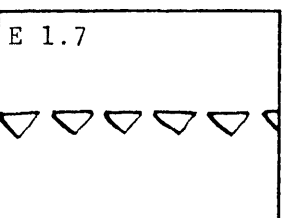
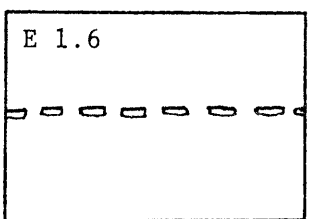
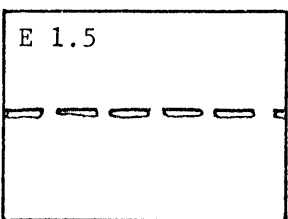
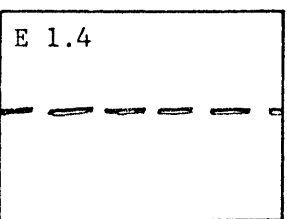
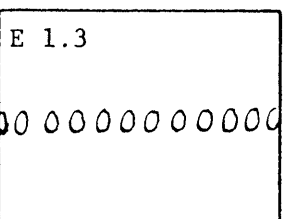
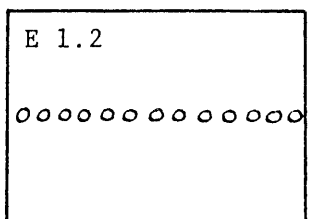
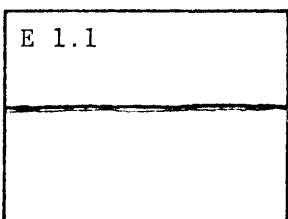
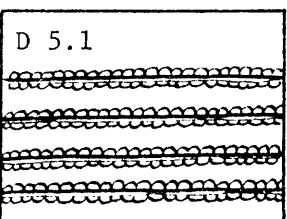
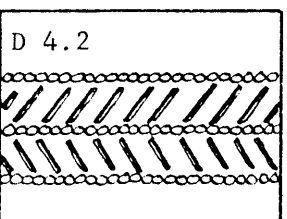
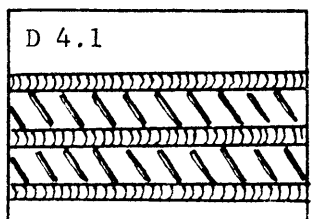
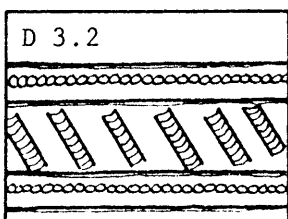
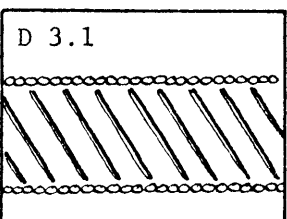
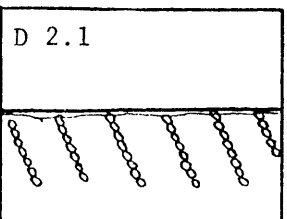
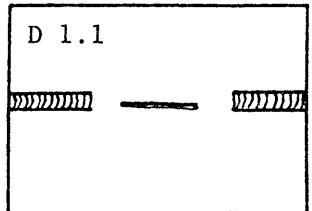
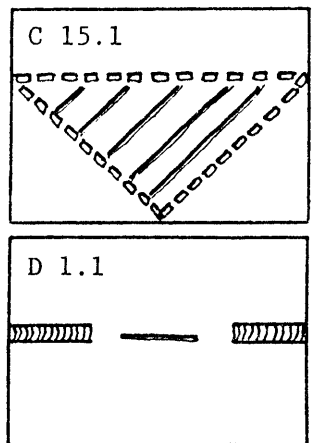
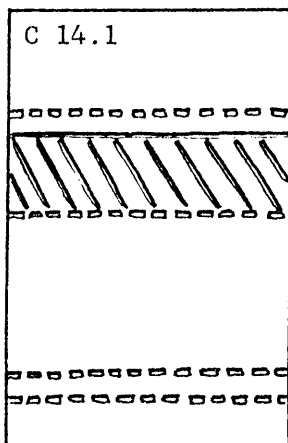
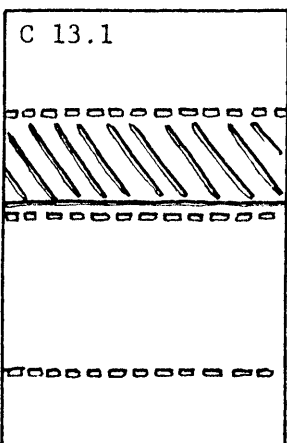
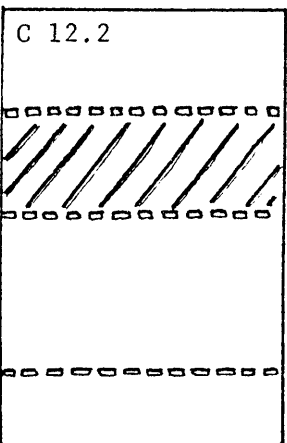
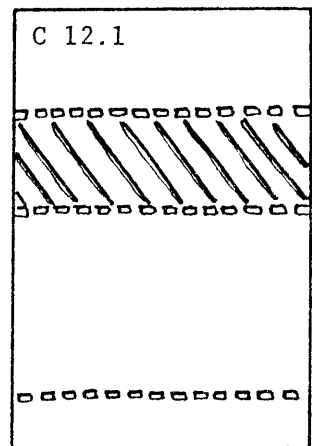
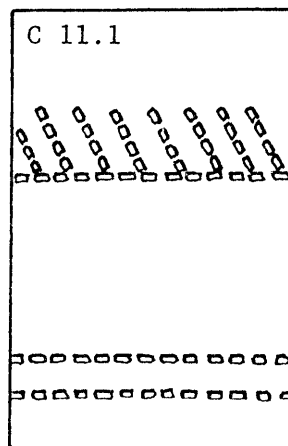
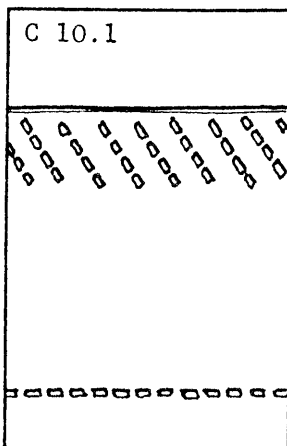
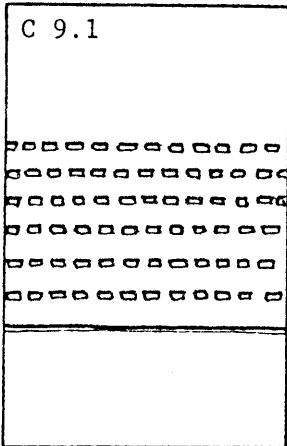
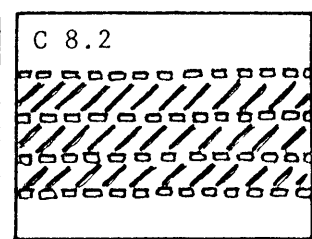
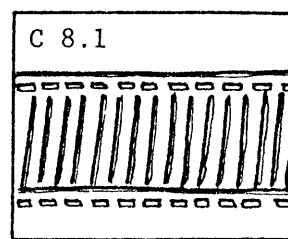
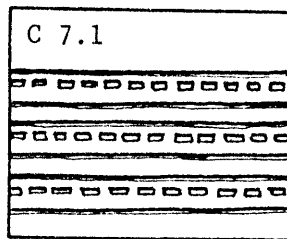
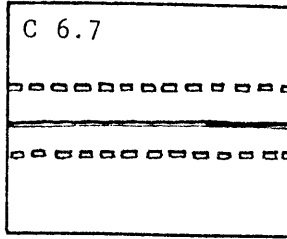
The motifs were divided according to decoration technique and labeled A, B, C, D and E. Grouping was done according to the numbers of parallel lines formed by the technique, basic geometric patterns, methods of infill, and combinations of these attributes.

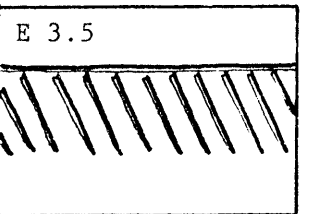
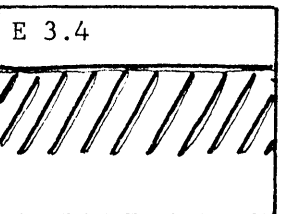
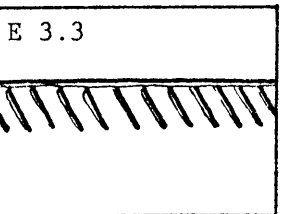
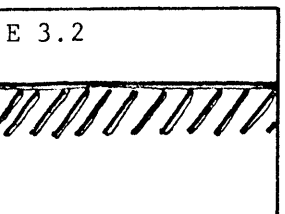
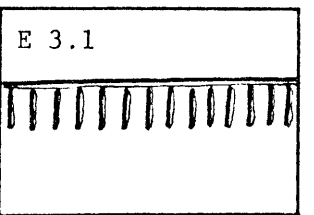
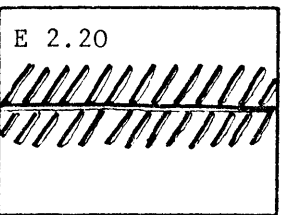
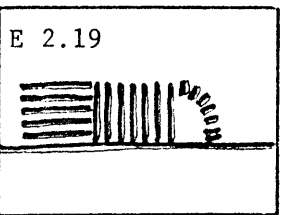
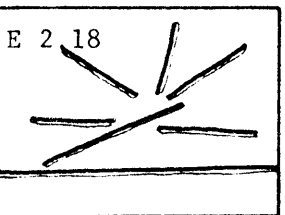
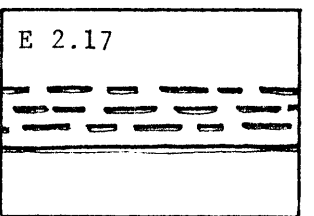
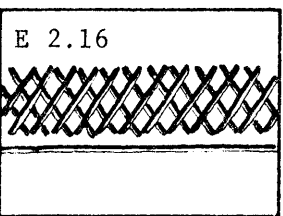
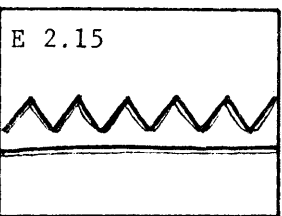
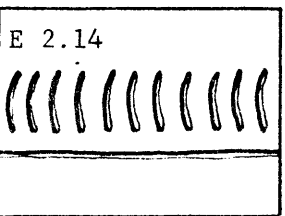
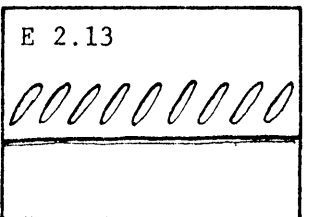
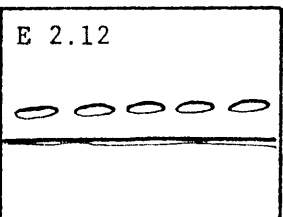
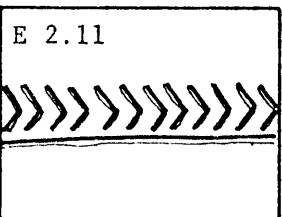
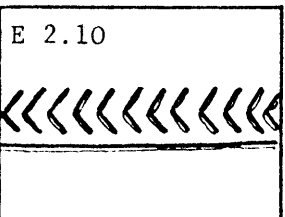
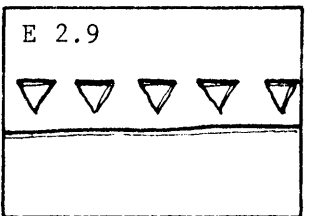
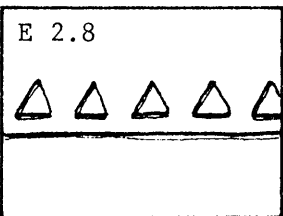
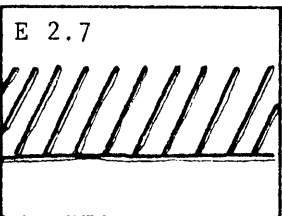
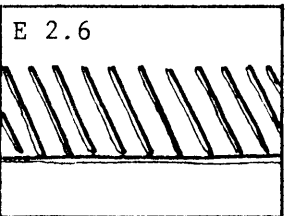
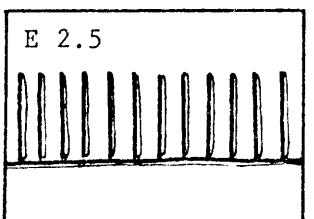
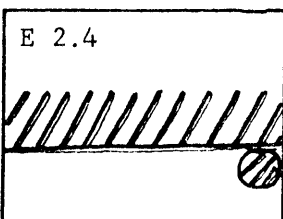
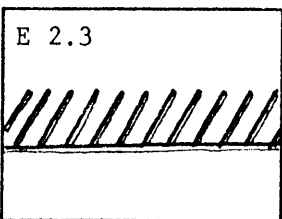
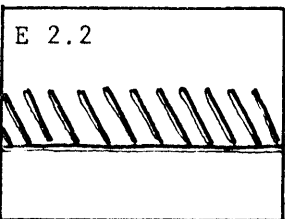
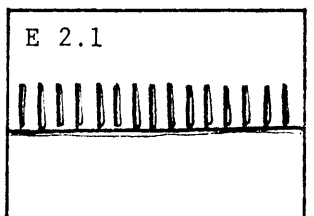
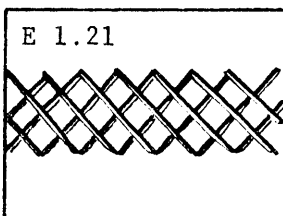
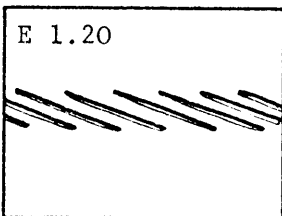
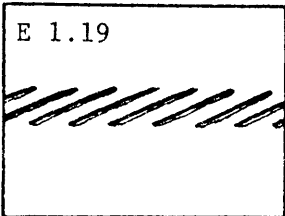
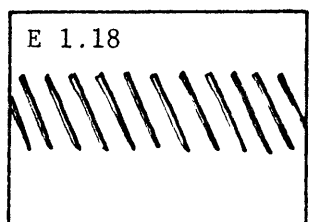
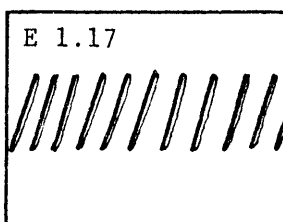
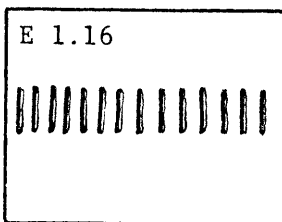
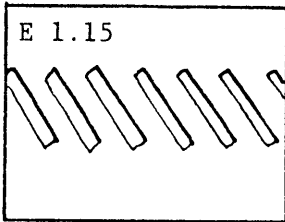
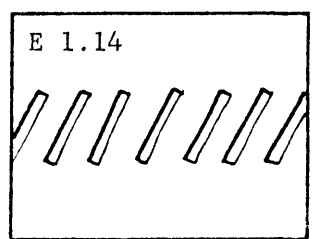
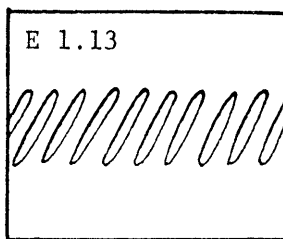
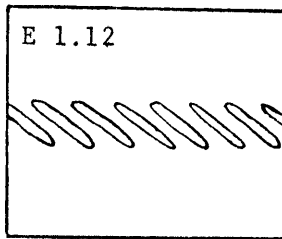
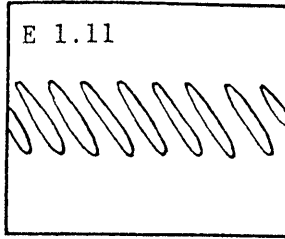
- A: Dentate or comb stamping in wet clay. Stamps leaving different impressions were used. Motifs A1.1 to A8.1 are single bands. A9.1 to A15.1 are combination decorations with the typical rim/shoulder or neck/shoulder layout. Motifs A16.1 to A18.2 are generally found on the shoulders of vessels. A19.1 to A20.1 are 'floating' or discontinuous motifs.
- B: Stamping as formed by the impression of bangles or beads in wet clay. No distinction was made between bangle and bead impressions as the principle of using an ornament for making the decoration is the same. Furthermore very few bead impressions were found. Motifs B1.1 to B4.1 are single bands. B5.1 to B6.1 are combination decorations with the typical rim/shoulder or neck/shoulder layout. Motifs B7.1 to B8.1 are generally found on the shoulders of vessels.
- C: Combination of dentate stamping with incision. Motifs C1.1 to C9.1 are single bands. C10.1 to C14.1 are combinations found on the rim/shoulder or neck/shoulder layout. C15.1 is found on the shoulder.
- D: This is the combination bangle or bead stamping with incision. Very few examples of these combinations were found, usually one of each. Accordingly the different technique combinations are clearly recorded. In one case a combination of bangle impression, bead impression and incision was found. All motifs formed single bands.
- E: This category contains incision in the wet clay as well as engraved decoration on fired vessels. For convenience, styles and punctate impressions, slashes, drag incisions and fingernail prints were all grouped under this heading. In certain drawings the motifs

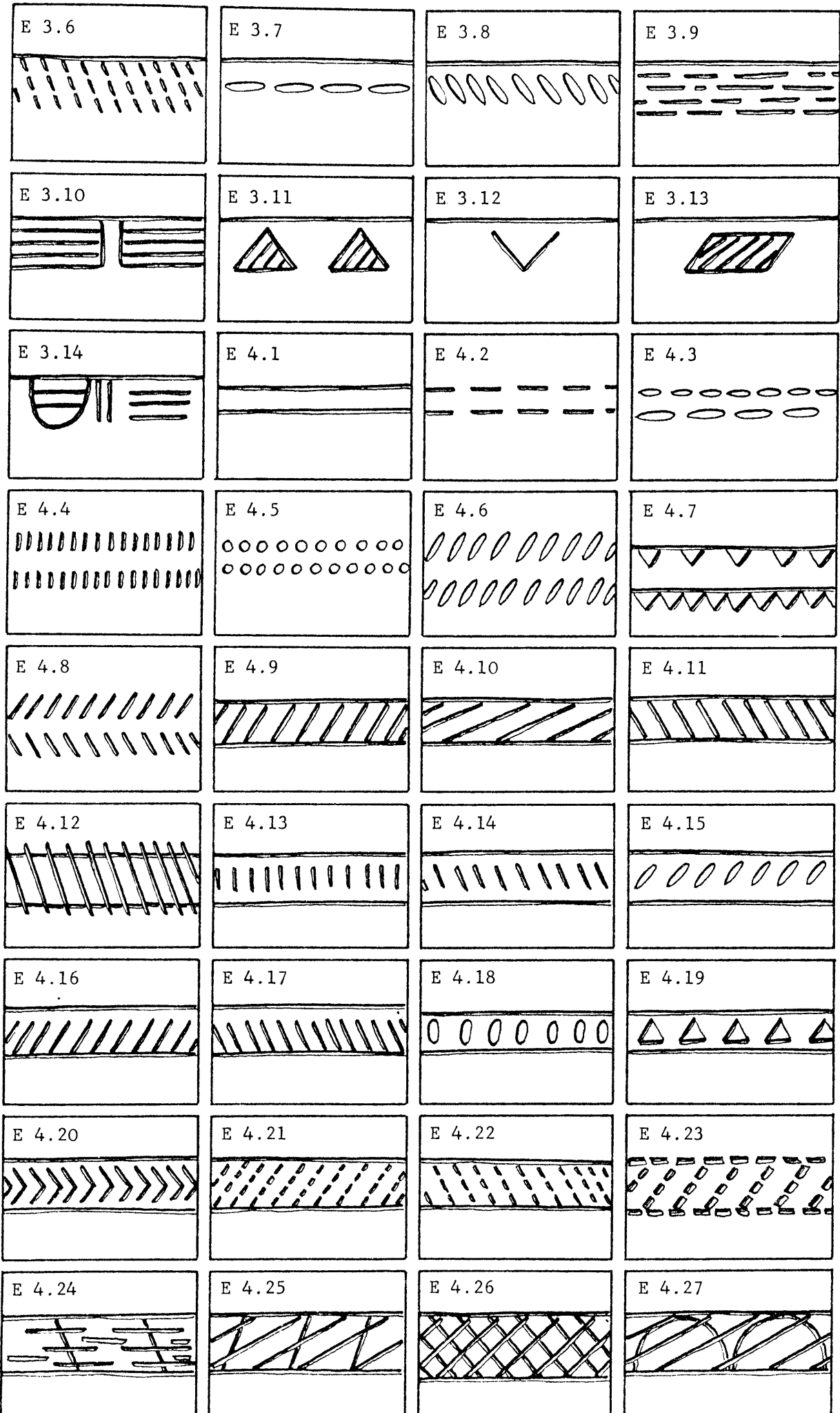


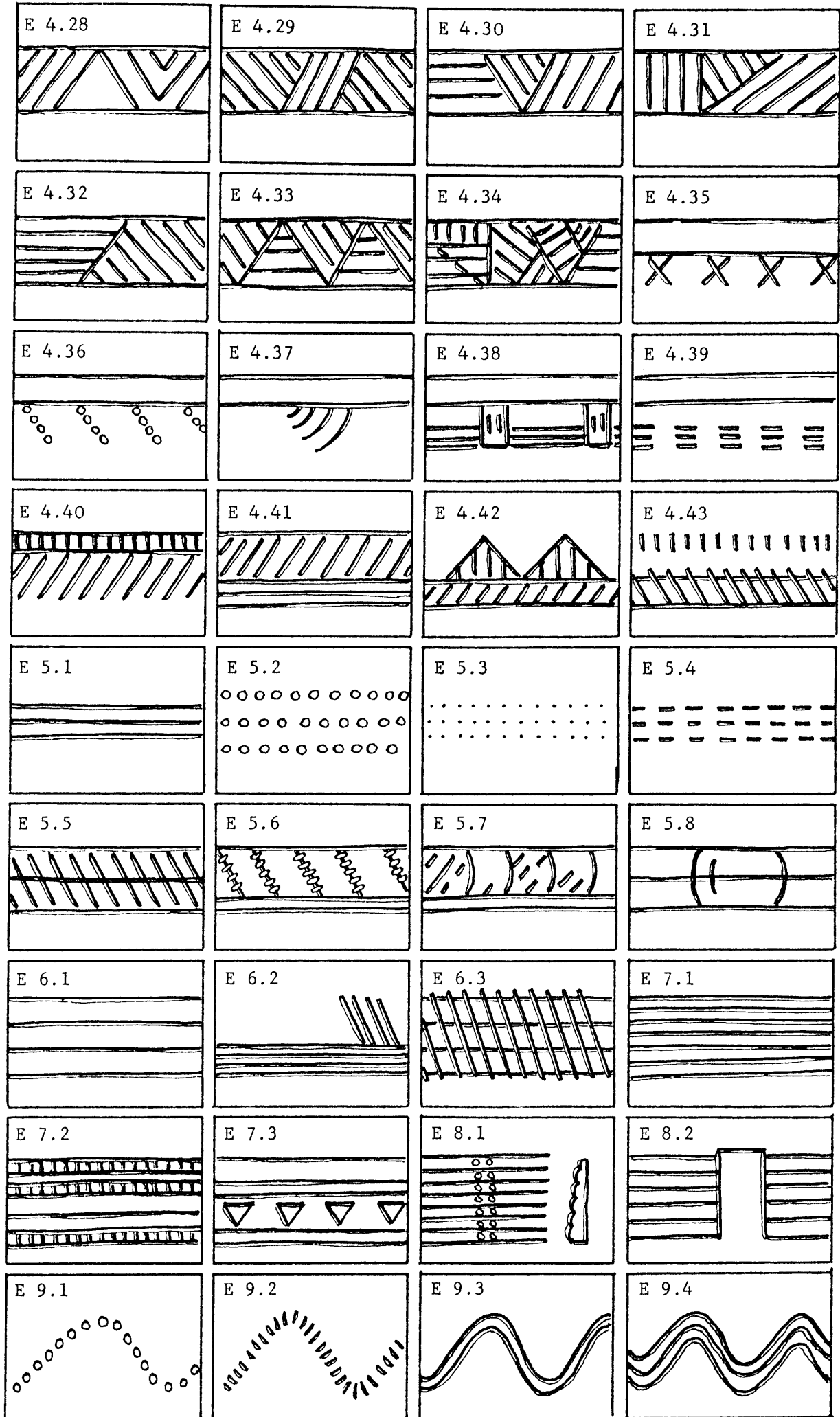


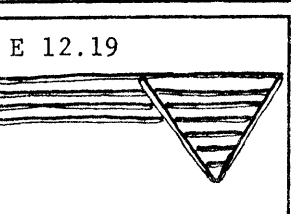
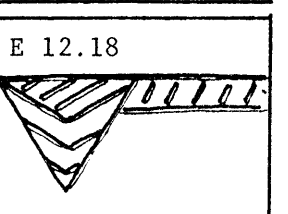
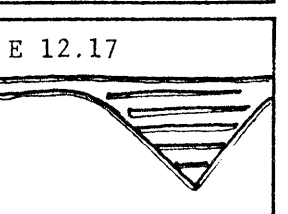
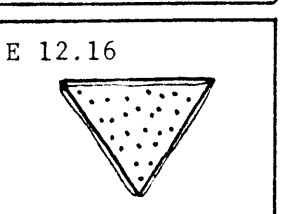
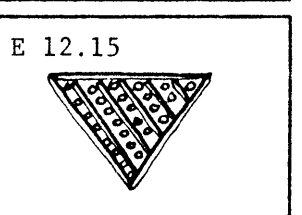
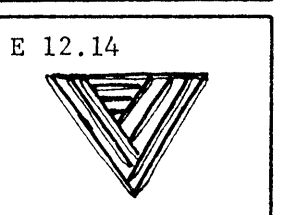
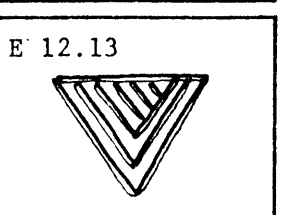
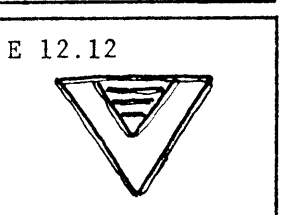
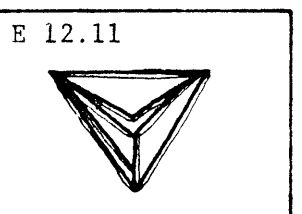
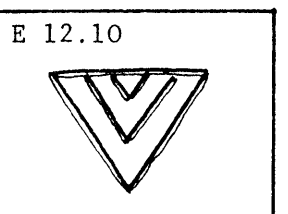
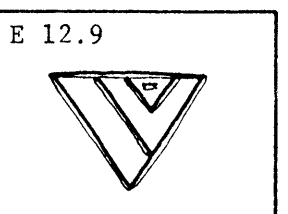
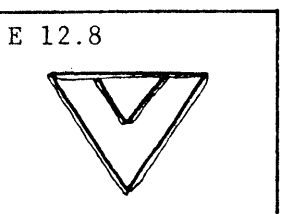
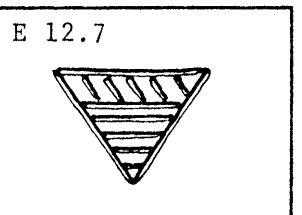
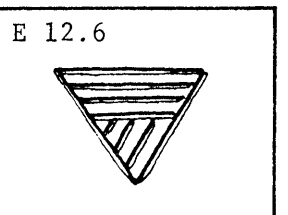
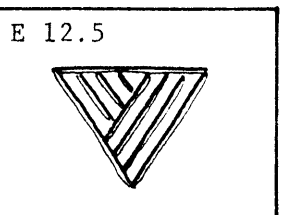
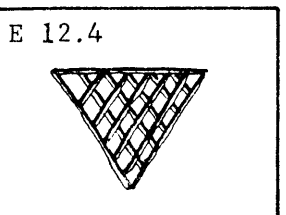
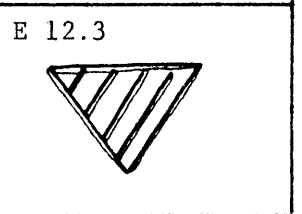
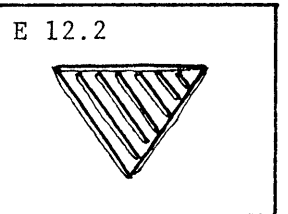
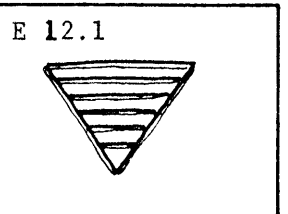
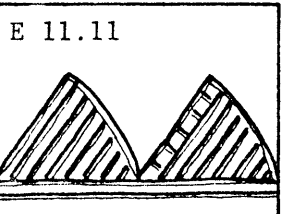
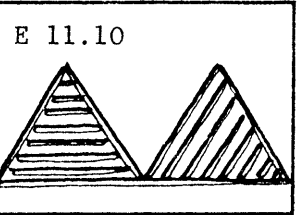
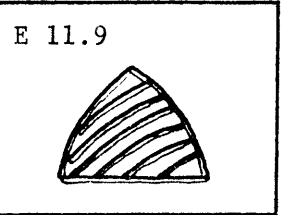
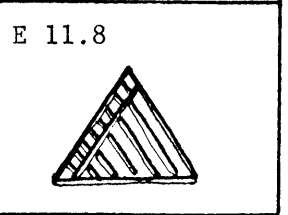
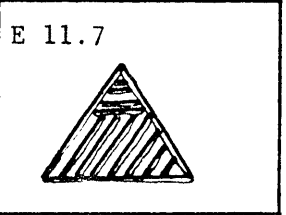
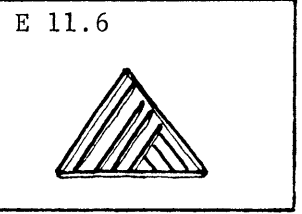
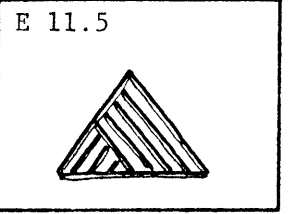
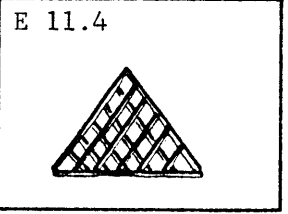
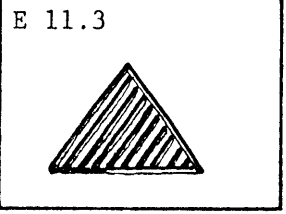
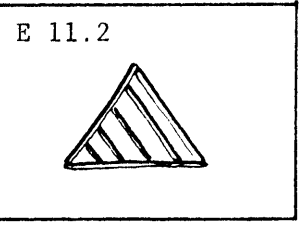
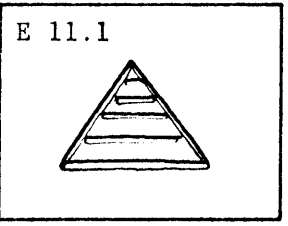
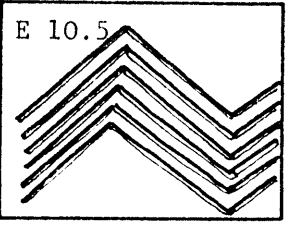
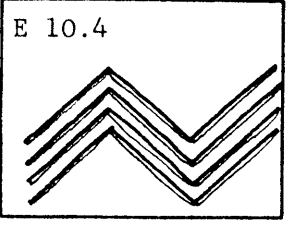
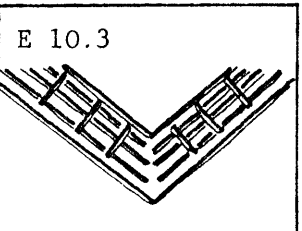
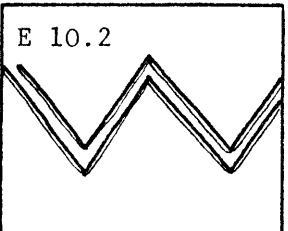
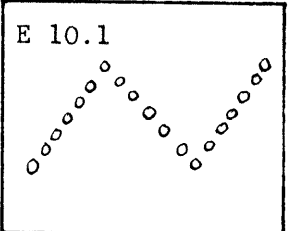
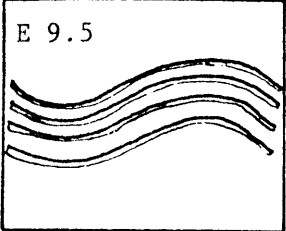


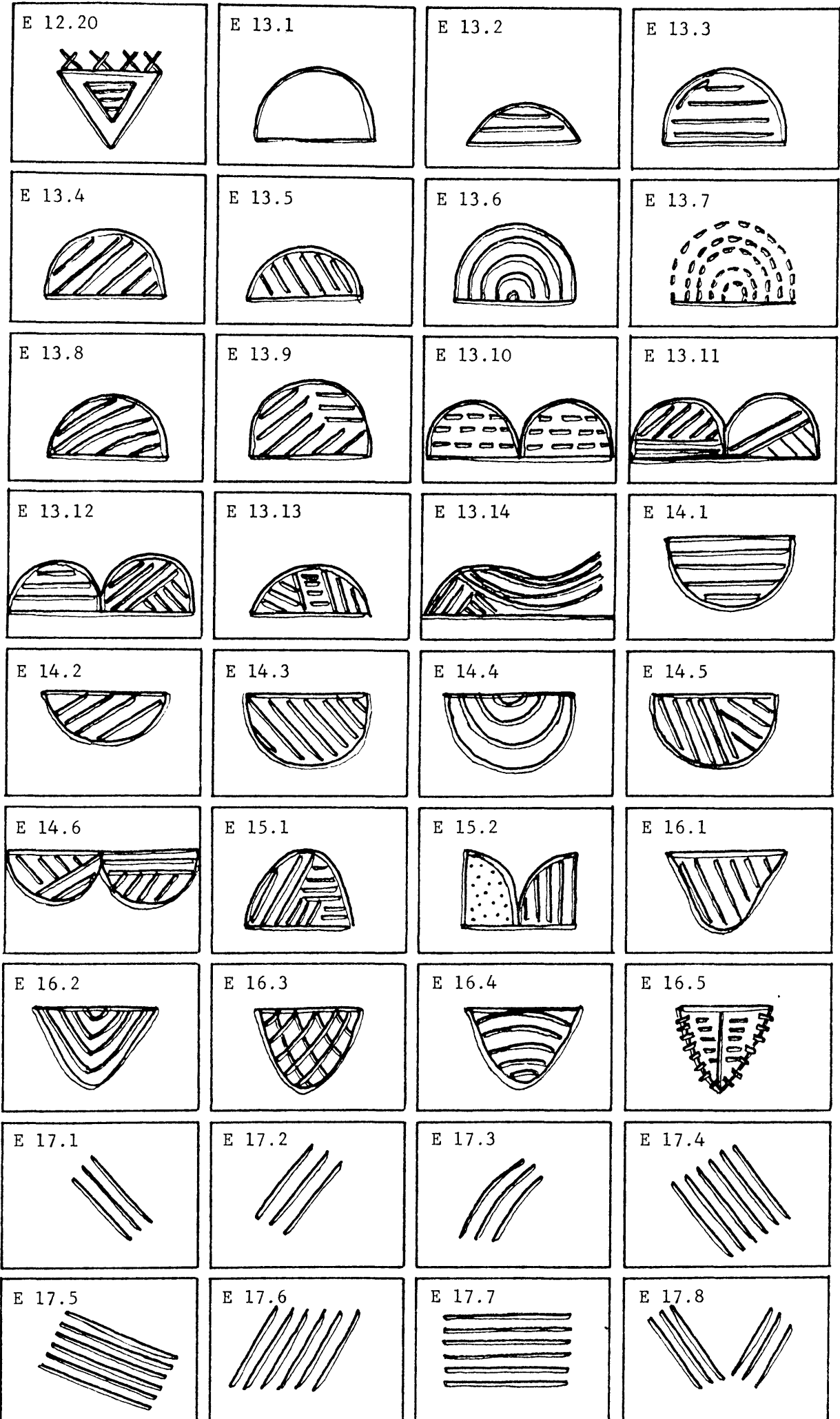


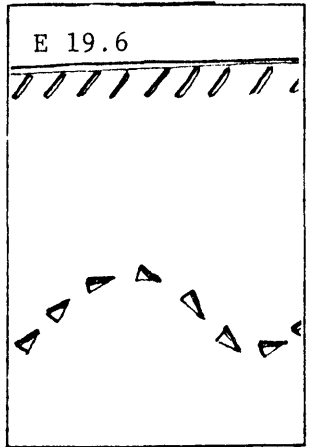
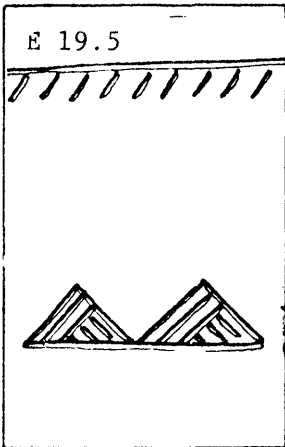
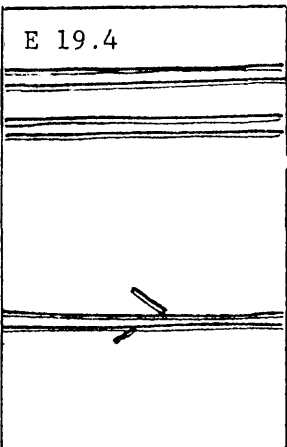
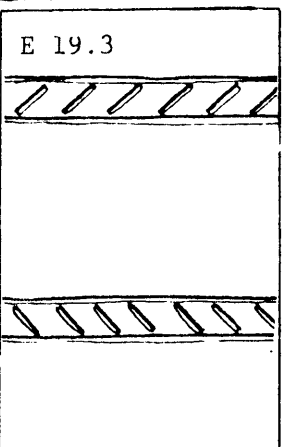
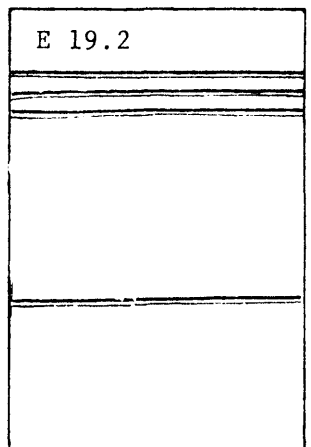
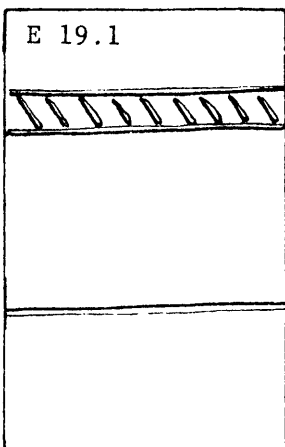
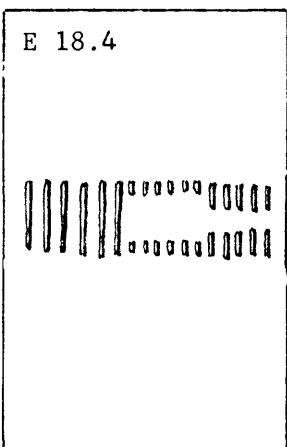
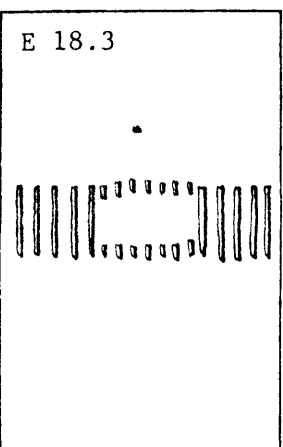
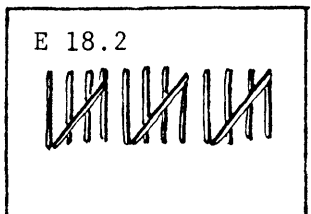
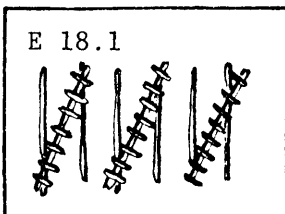
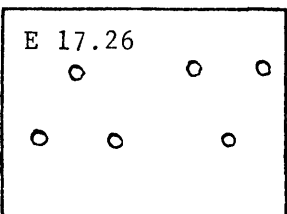
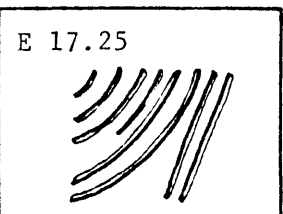
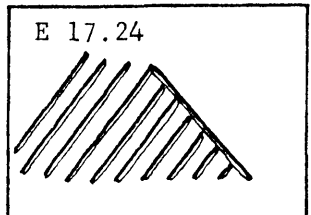
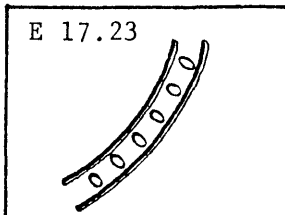
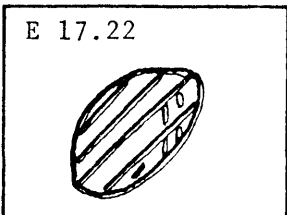
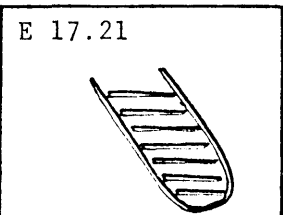
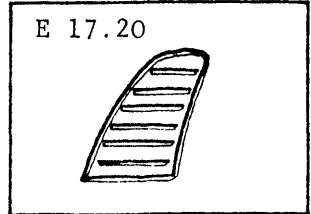
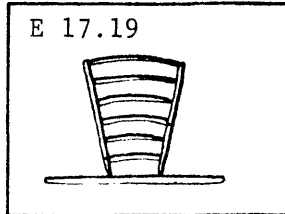
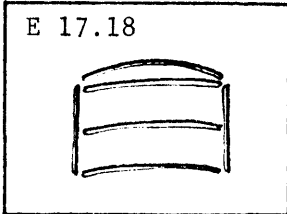
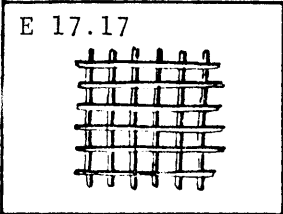
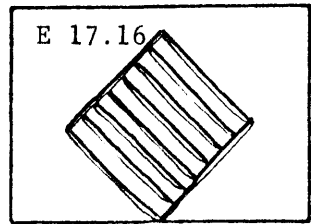
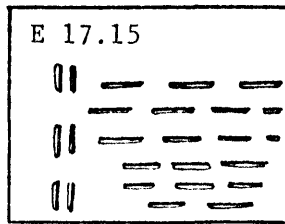
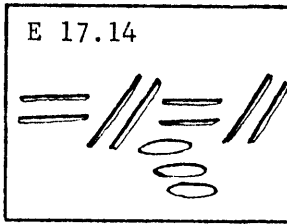
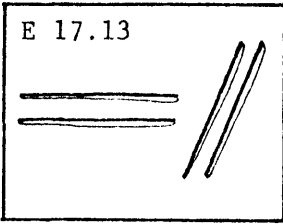
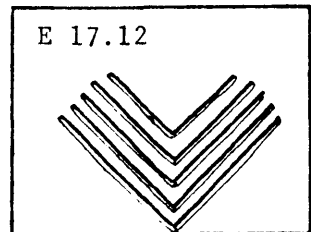
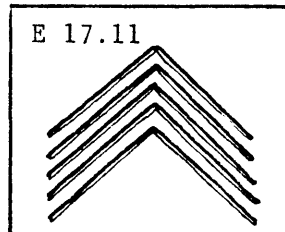
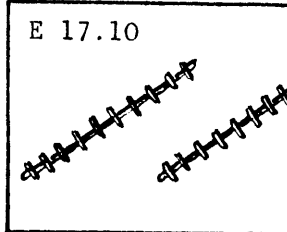
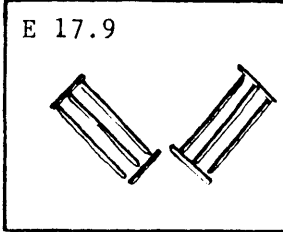


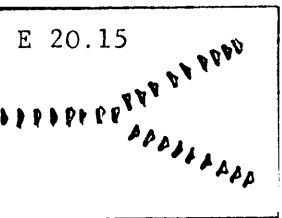
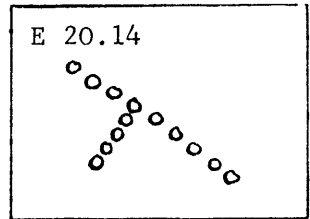
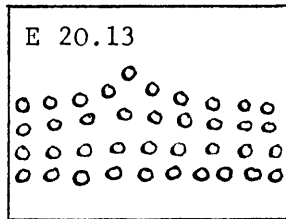
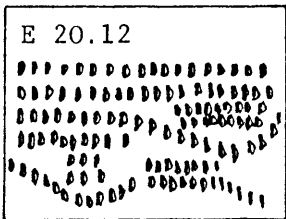
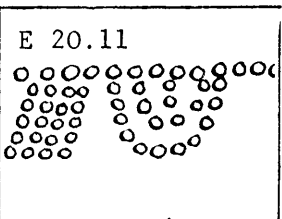
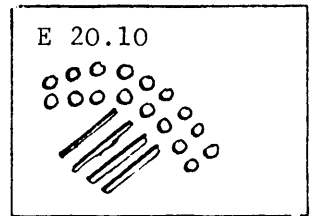
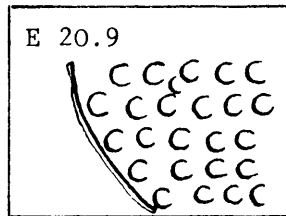
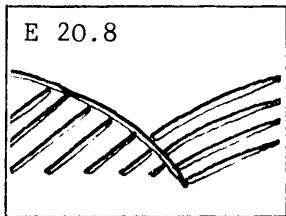
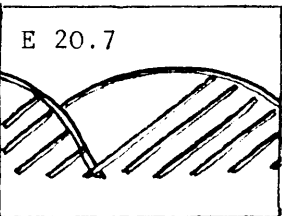
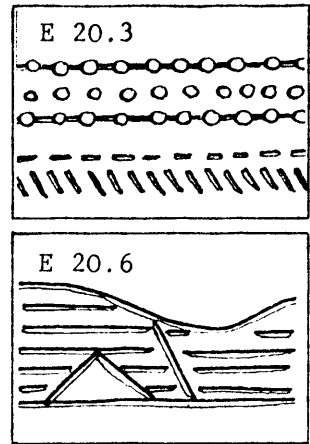
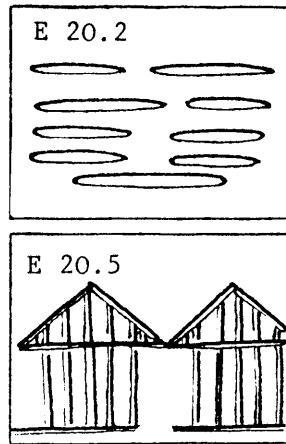
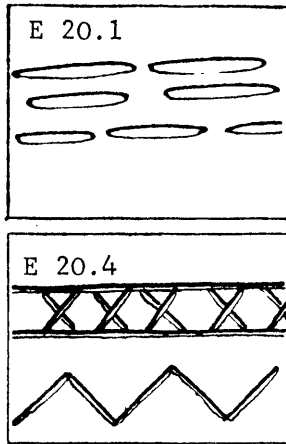
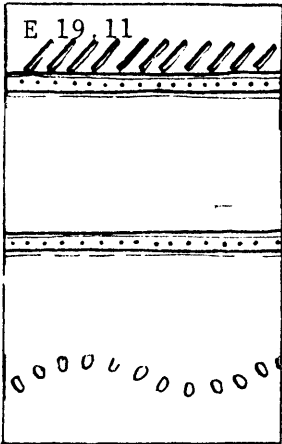
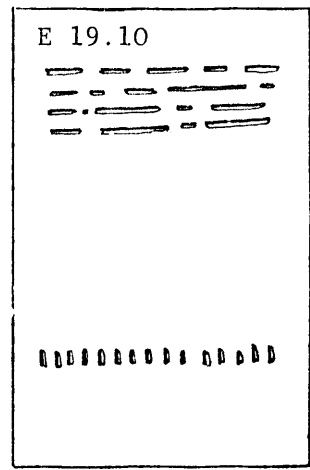
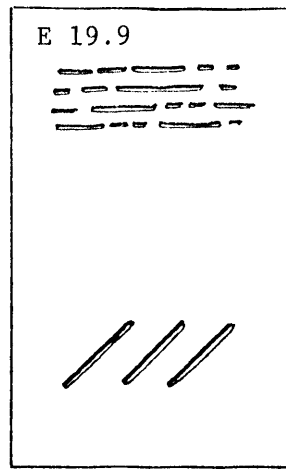
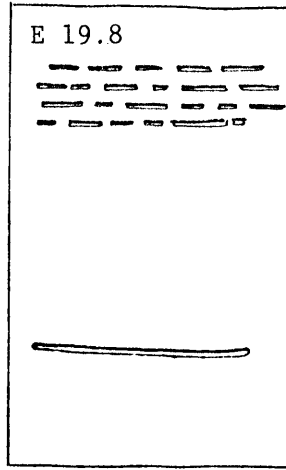
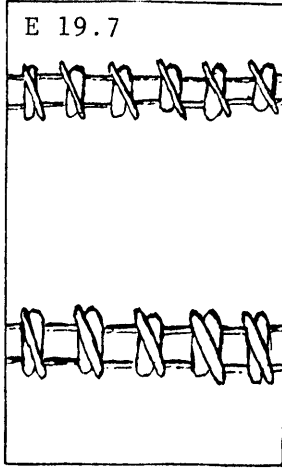












have been simplified, as it was impossible to draw the myriads of little lines with any degree of accuracy and neatness. All motifs in this group that appear from the drawings to be stamped, are in fact square or rectangular punctates. Most of the categories form bands around the vessels. In this regard, it must be made clear that types E13.1 through to E16.5 have been drawn individually, but in fact repeat themselves to form continuous bands. Motifs E17.1 to E18.4 are 'floating' motifs that may have been repeated only a couple of times with breaks in between to form a discontinuous band. Types E19.1 to E19.11 are combination decorations with a rim/shoulder or neck/shoulder layout. E19.11 is a slight exception, in that it is a rim/neck/shoulder layout. The remainder (E20.1 to E20.15) are fragmentary decorations that could not be fully identified.

Quality of Decoration

To see if any changes occurred in the quality of decoration, all decorations were judged according to a list of attributes and graded accordingly.

Degree 1 Neatly and accurately executed. Design neatly spaced on vessel. Lines and/or stamping equidistant and all to same depth and width.

Degree 2 Neat, but not as accurate in spacing as in (1). Thickness and depth may vary.

Degree 3 General impression one of untidiness. No attention paid to accuracy of lines and/or stamping. Depth, width etc. irregular. Little or no rounding off.

Degree 4 No attention paid to design. Lines criss-cross haphazardly, making motif sometimes difficult to identify. Clay often smeared over design.

Quality of Finish

To determine improvement or deterioration in the visible quality of the vessel exteriors. All decorated sherds were judged according to a list of attributes, and graded accordingly.

Degree 1 High quality burnish with even colour throughout. No striping visible.

Degree 2 Burnished but colour varies slightly. Stripes slightly visible.

Degree 3 Little burnishing or no burnishing. Surface smooth.
Stripes permitted.

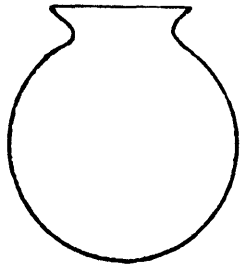
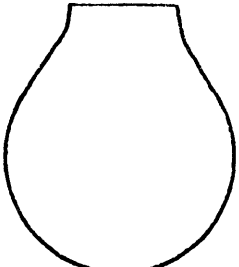
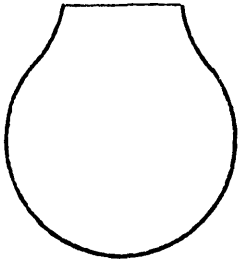
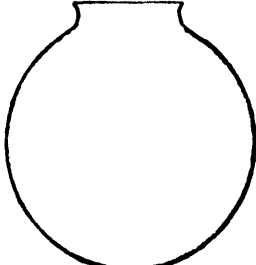
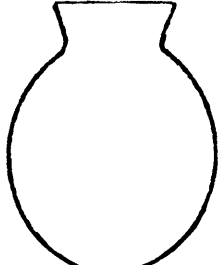
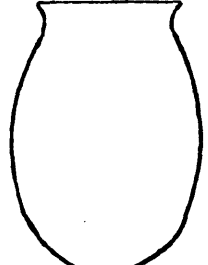
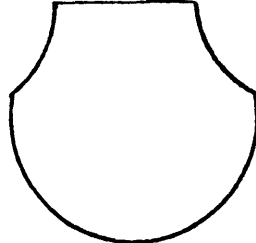
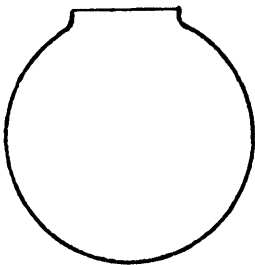
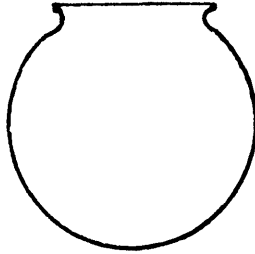
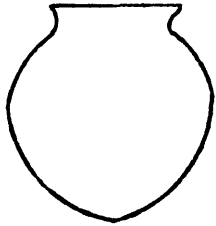


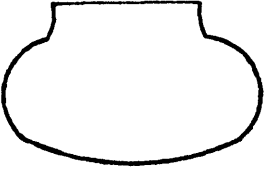
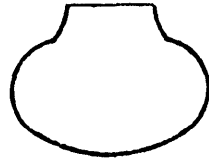
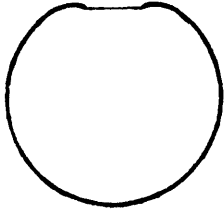
Degree 4 Rough cracked surface. Grit shows. No burnishing at all.

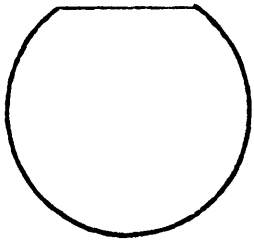
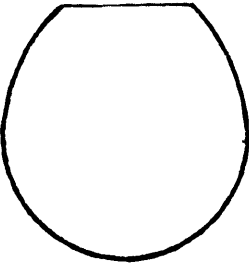
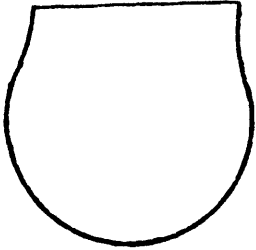
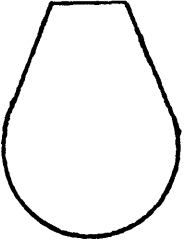
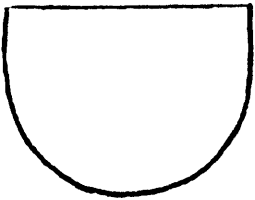
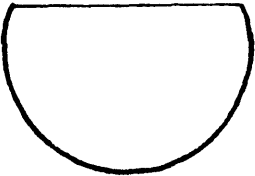
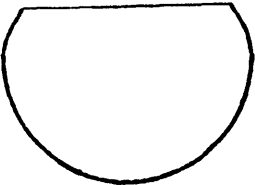
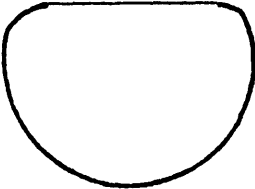

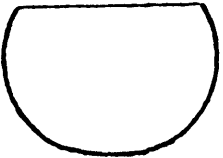
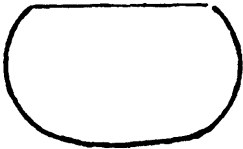
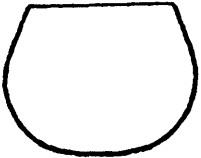

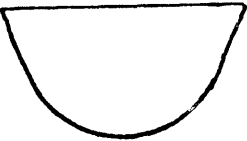

Vessel Shapes







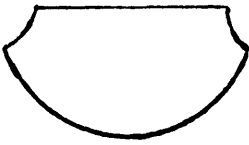



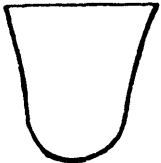
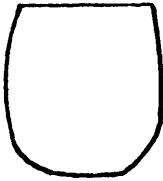
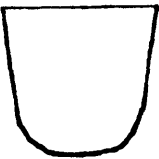
A master list has been compiled for vessel shapes from all the shapes recorded from all excavations in the Limpopo/Shashi Valley. It stands to reason therefore that not all vessel shapes will have been used in this dissertation.

Necked Pots (height greater than mouth diameter)

- 1: Globular pots with short neck and everted rim.
- 2: Globular pots with long neck and slightly everted rim.
- 3: Globular pots with short neck. Rim not everted.
- 4: Globular pots with short neck and everted rim. Pronounced shoulder.
- 5: Globular pots with short neck and everted rim which recurves slightly inwards. Similar to Shape 1.
- 6: Elongated pots with narrower body than shapes 1 - 5. Short neck and slightly everted rim.
- 7: Pots with wide mouth and pronounced shoulder, which forms widest part of vessel. Shallow neck runs parallel up to rim.
- 8: Body of pot appears globular in shape but is in fact slightly flattened. There is a very short neck, with the small straight rim almost directly joining on to the body.
9. Identical to Shape 8, but with a clearly everted rim.
10. An unusual shape, with an egg-shaped body, flat shoulder and everted rim. The widest part lies halfway down the height of the vessel.
11. Bellied pots with elliptical form, short neck and slightly everted rim having straight sides.
12. Bellied pots with elliptical form, shallow neck and no pronounced rim.
13. Bellied pots with elliptical form, short neck and vertical rim.
14. The body of the pots show a slightly elliptical profile. The neck joins the body with a sharp angle and runs inwards to the rim.

1. 	2. 	3. 
4. 	5. 	6. 
7. 	8. 	9. 
10. 	11. 	12. 
13. 	14. 	15. 

16. 	17. 	18. 
19. 	20. 	21. 
22. 	23. 	24. 
25. 	26. 	27. 
28. 	29. 	30. 

31. 	32. 	33. 
34. 	35. 	36. 
37. 	38. 	39. 
40. 	41. 	42. 
43. 		

Pots without necks (Height greater than mouth diameter)

- 15: Globular pots with constricted opening. No neck.
- 16: Globular pots with no neck.
- 17: Similar to shape 16, but slightly elongated.
- 18: Slightly elongated pots with straight sides running from widest point to rim. Wide mouth.
- 19: Small pots, conical in shape with narrow mouth.

Subspherical bowls (Height greater than $\frac{1}{2}$ mouth diameter)

- 20. Deep bowls with simple profile. Widest diameter at mouth.
- 21. Deep bowls with simple profile. Widest point approximately $\frac{1}{4}$ - $\frac{1}{3}$ of height below rim.
- 22. Deep bowls with constricted profile beginning $\frac{1}{4}$ of height below rim.
- 23: Deep bowls with sharp constriction at rim. Height approximately $1\frac{1}{2}$ times rim diameter.
- 24: Similar to shape 23, but height approximately $1\frac{1}{4}$ times rim diameter.
- 25: Bowls with slightly elliptical profile.
- 26: Bowls with pronounced elliptical profile.
- 27: Lower half of bowls elliptical in shape but extending slightly inwards with straight sides.

Hemispherical bowls (Height approximates to $\frac{1}{2}$ opening diameter)

- 28: Bowls with simple profile.
- 29: Bowls with approximately straight sides extending clearly outwards.

Open bowls (Height approximates $\frac{1}{3}$ or less of opening diameter)

- 30: Bowls with simple profile.
- 31: Shallow bowls with vertical rim.
- 32: Open bowls with sharp constriction at rim.
- 33: Open bowls with less pronounced constriction.
- 34: Open bowls with triangular profile and clear constriction at rim.
- 35: Open bowls with rounded 'triangular' profile with sharp constriction at rim combined with slight flaring of rim. Not to be confused with necked bowls.

Carinated bowls

- 36: Deep bowls with carinated ridge and long neck leading to slightly flared rim.

37: Open bowls with carinated ridge and short neck leading to slightly flared rim.

38: Constricted bowl with clear carinated ridge.

Beakers (Generally small vessels with more or less vertical sides, where height is greater than rim diameter)

39: Flat bottomed beakers with straight vertical sides.

40: Bell-shaped beaker with flared sides. Mouth opening same diameter as base.







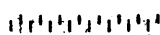
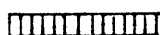

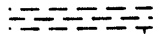



41: Bell-shaped beaker with flared sides. Mouth opening diameter greater than base.

Beaker bowls (Similar in shape to beakers, but clearly larger. Diameter of mouth opening approximates height)

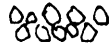
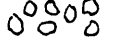










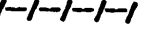
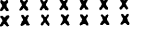
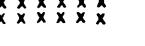




42: Flat bottomed beaker bowls with slightly rounded approximately vertical sides.

43: Flat bottomed beaker bowls with straight sides. Opening diameter greater than base.

4) Documentation list for Plan and Profile drawings

<u>Profile</u>	<u>Plan</u>	<u>Description</u>	<u>Symbol</u>	<u>Colour</u>
		Clear division	a	White
		Vague division	b	Grey
		Arbitrary division	c	Dark grey
		Division between squares	d	Black
		Consolidated gravel	e	Light Brown
		Unconsolidated gravel	f	Dark Brown
		Floor with smoothed surface	g	Dark yellow
		Dung	h	Yellow
		Charred post	i	Red
			j	Reddish brown
			k	Greyish brown
			l	Soil
			m	Sand
			n	Sandy soil
			o	Ash
			p	Ashy soil
			q	Coarse

Documentation list for Plan and Profile drawings (Continued)

<u>Profile</u>	<u>Plan</u>	<u>Description</u>	<u>Symbol</u>	<u>Colour</u>
	○	Post Hole	r	Fine
	⊙	Possible post hole	s	Disturbance
		Hut rubble	u	Greyish yellow
		Potsherds and Pots	V	Floor
		Stone	w	Pink brown
		Bones	x	Sterile
		Charred seeds	z	Hard
		Bedrock		
		Base of excavation		
		Burnt black		
		Hard sections		
		Base peg in cement		
		Soil sample		
		Sand floor		

CHAPTER 3

PREVIOUS RESEARCH

1. Earlier references to archaeological sites in the research area

Very little mention is made of the presence of Iron Age sites in the delineated research area, although a various times reference has been made in the Bulletins of the South African Archaeological Society to the presence of rock art sites in the Limpopo Valley. None of these rock art sites are of importance, as they do not contain any paintings referring to Iron Age life styles. These references will, therefore, be left out of this discussion.

Mapungubwe and K2 are the best known sites in this area, and many references have been made to them through out the years, since the publication of the first book on Mapungubwe in 1937 (Fouché 1937). It is also in this same volume, that mention is made of various sites in the area north of the Soutpansberg mountains. A great many sites lie far outside the research area. Eight farms that lie within the research area are mentioned other than Greefswald. These are Armenia (MS 20), Hilda (MS 23), La Réve (MS 39), Parma (MS5), Pont Drift (MS 12), Ratho (MS1), Schroda (MS 46), and Weipe (MS 47). Armenia and Weipe are mentioned in connection with rock paintings, while La Reve is connected with Stone Age artefacts. The remainder all have references to Iron Age sites and in some cases more than one site per farm is mentioned.

On looking at the pottery, it is found that only two sites contain ceramics of the type in which our interests lie, namely Parma and Pont Drift. The other sites furnish pottery of various types, all of which appear to belong to much later periods.

The ceramics recovered from Pont Drift appear to be all of the Leopard's Kopje A type. Schofield (in Fouché, 1937 p. 35) writes that "a grave was opened and a most characteristic beaker discovered." This was not all, and he continues " A small badly broken beaker was found with a number of rims and other sherds which showed that the pottery industry was identical with M2". This site lies to the north of the old homestead at Pont Drift, and is crossed by the road leading to Rhodes's Drift.

When investigated by myself, it was found that the site was in fact more extensive than can be assumed from the description in the book. All pottery picked up confirmed the assumptions made by Schofield, i.e. that the pottery is of the M2 type and consequently belongs to the Leopard's Kopje A culture.

The Parma ceramics were apparently recovered from a series of trenches dug on top of a high kopje with precipitous sides. This kopje is situated to the west of the southern most Parma farmhouse and overlooks the Madibohloko River, an annual tributary of the Limpopo. The pottery recovered from this site appears to be of several types and since it was recovered from an excavation it will be discussed in detail in Chapter 4 which follows below.

Even less is known about Iron Age sites in Botswana, and those which are mentioned fall far outside the research area. The best-known of these is Tautswemogala - called Tautswe for short - a hilltop site first mentioned by Schofield in 1943. At that time the site was called Touppe. Amongst others, Leopard's Kopje A pottery was found there, and in the course of later excavations, a considerable amount of Zhizo pottery came to light as well.

Oral references to sites along the Limpopo have been made by various people, who maintain that pottery similar to that of K2 has been collected from various ashy deposits on the farms Gesond 45 MR and River Hill 44 MR. Garden roller beads, which have always been associated with Leopard's Kopje A, have also been found at some of these sites.

In Rhodesia, several sites are mentioned which border onto the research area. These have been published in various Schoolboy's Expeditions, and show some Zhizo as well as Leopard's Kopje A sites.

2. Earlier Work in the Northern Transvaal

The first excavations in the Northern Transvaal were undertaken at Greefswald after the discovery of Mapungubwe Hill at the end of 1932. These were done during the period February 1933 to June 1935 and the results were published in Mapungubwe : Ancient Bantu

Civilization on the Limpopo. (Fouche 1937)

Most of their efforts were concentrated on Mapungubwe Hill and its Southern Terrace, but a 50 ft. long by 4 ft. wide trench was dug across the high central mound at K2, which at that time was referred to as Bambandyanalo. A test pit was also sunk at another point on the mound. It would appear that some trenches were also dug on the slopes of Bambandyanalo Hill to the east of the K2 site, as the Rev. Neville Jones mentions that "we then turned our attention to the slopes immediately below the walling, and here we found four children's graves," (Jones in Fouché, 1937).

From the end of June, 1935, Captain Guy Gardener arrived to take over supervision of the archaeological research work. His instructions were to concentrate on work at K2, although at various times during the course of his six seasons' work, these instructions were countermanded and work ceased at K2 to begin at Mapungubwe.

In the book Mapungubwe Volume II, (Gardner, 1963) Gardner explains in some detail how the excavations progressed. Trenches were dug at K1 and K2, numerous test pits and trenches were placed at various points on the site, in addition to the large extended excavation which was enlarged for several seasons running.

Work at Greefswald was terminated in September 1940 due to the intervention of World War II, when Gardner made himself available for military service.

Since then, no large scale research project was undertaken at the Greefswald sites until 1971, when the University of the Pretoria began with excavations on the Southern Terrace, followed by work at K2 and finally on the summit of Mapungubwe itself. It must be mentioned, however that during 1953-54 the University continued with some work on the Southern Terrace, while for several years prior to 1971, a test pit was excavated on the Terrace by students as part of their field training. The 1971-73 research project was intended to control the original work done between 1933 and 1940. It is to be expected in the light of modern methodology that the results of the work, and the interpretation thereof might differ radically from the conclusion drawn by the earlier excavators. It would appear that this is the case to some extent, but that Gardner did record and interpret many of the changes found in the deposit during the 1971-73 excavations, although his interpretations were often unsatisfactory.

(A. Meyer pers. comm.) For these reasons then, we will not concern ourselves with the interpretations, but with the facts. The results of the work done by the University of Pretoria have recently become available, but were not complete at the time when most of the analysis was done. Where possible references will be made to this work, but no summary has been attempted for this thesis. Reliance will, therefore, be made on the earlier research for comparative purposes.

The facts that are of use can be tabulated as follows.

Pottery

Based on the material found during the 1933 - 34 excavations, as well as on that recovered from various sites along the Limpopo River in the Transvaal, Schofield divided the pottery into three classes ; M1, M2, and M3 ware.

Under M1 ware, we find a neatly burnished, fine, black ware, with neat decorations on the wet clay, which is associated with Mapungubwe Hill and the Southern Terrace. There are various vessel shapes, but these need not be mentioned.

M2 ware is the ceramic type associated with K2 and is much coarser in texture and manufactured with a brown to yellow surface. Sometimes, due to uneven heat during firing, the surface would develop what has been termed a brindled burnish by Schofield (In Fouche 1937 p. 40). Decoration, which is less intricate than with the M1 pottery, was incised into the wet clay or engraved onto the fired vessel. Vessels with stamped decoration were also found. Schofield classified such stamp-decoration pottery as part of the M2 ware. Only in later years, was it realised that such vessels belonged to the Zhizo tradition.

A great variety of shapes was recovered, including some exotic and unusual forms, namely pots with flat bases, or pedestals, spouts, perforated rims, vertically perforated lugs, as well as one with a handle. Principle shapes were divided into the following categories (Schofield in Fouche 1937 pp. 38 - 39):-

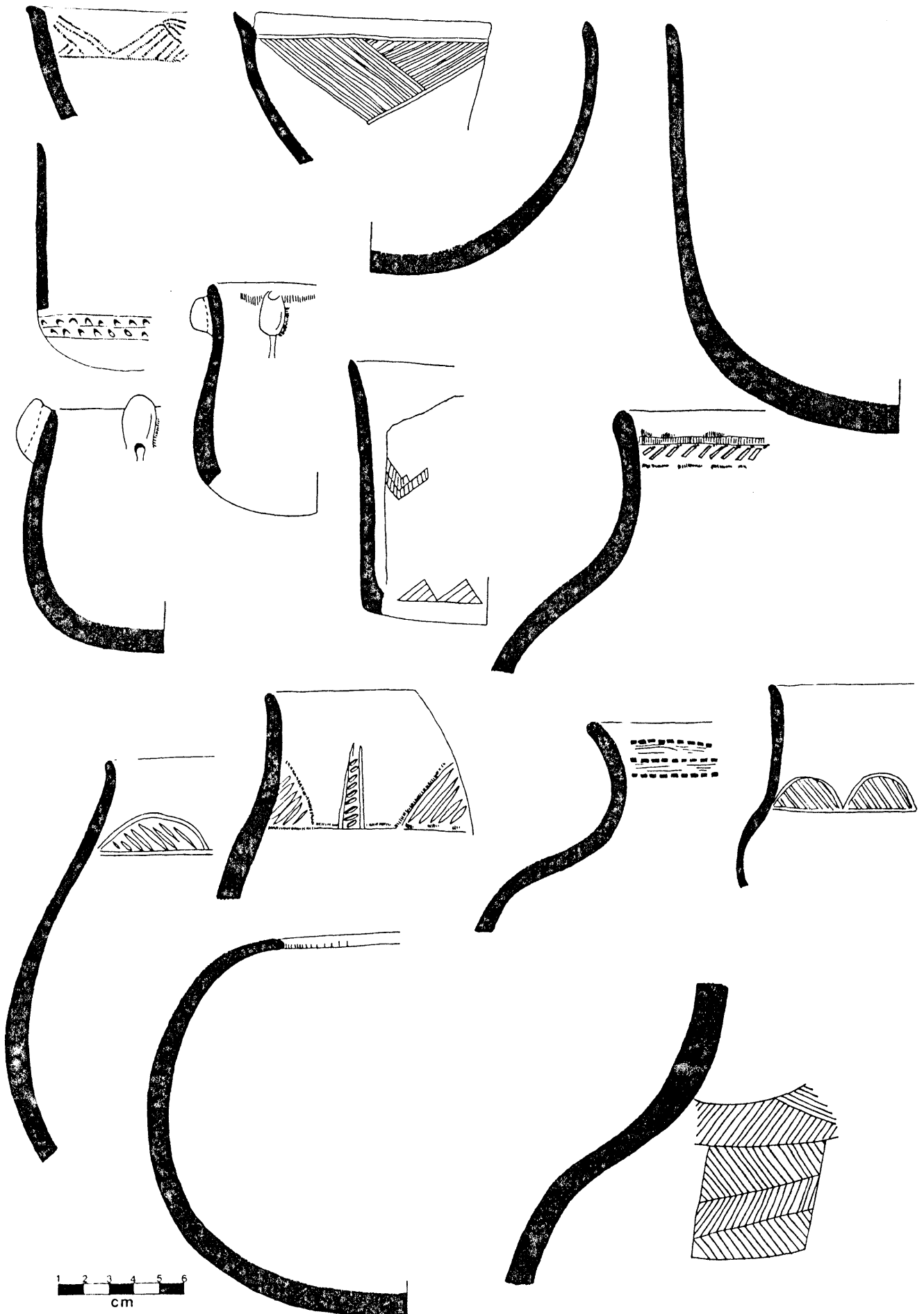


FIG 2
Examples of pottery from K2
(after Schofield)

- 1) Bowls:
 - a) with flattened rims;
 - b) with rims bevelled to the inside;
 - c) crude bowls with incurved lips.
- 2) Beakers:
 - a) small beakers with flat bottoms and vertical sides;
 - b) beakers with curved sides (commonest form);
 - c) tumbler-shaped beakers (i.e. finest beakers).
- 3) Beaker bowls:

These are similar to small beakers, but much larger.
- 4) Shouldered pots:
 - a) with incurved necks;
 - b) with vertical necks;
 - c) with flared necks;
 - d) carinated shouldered pots;
 - e) with tall necks.
- 5) Spherical pots.
- 6) Bellied pots.

Figure 2 shows examples of some of the above categories,

Decorative motives consist of hatched loops, the most common form, triangles with hatching sometimes going in different directions, bands of lattice and narrow hatched bands. Combinations of the motifs also occurred. Beakers and beaker bowls carried unusual patterns which extended from the base upwards, often in the form of a swan neck.

A variety of miscellaneous pottery was also found, and included spoons, clay 'baskets', garden roller bead moulds, 'toy' pots and clay figurines (animal and human).

Class M3 ware consists of pottery that differs markedly from either M1 or M2 in shape, colouring and decoration, and suggests, therefore, that it was not manufactured locally.

Beads

Samples of beads were sent by the Reverend Neville Jones to Mr. H.C. Beck for identification, and the latter's report forms part IV of the first volume on Mapungubwe.

Five strings from K2 were identified, and it is by no means certain that these are even partially representative of what there is to be found and the site. Little is said about the beads, and they formed part of a consignment of 38 strings, the majority being from Mapungubwe and other sites.

Reference is made to a large blue cylindrical bead, which can be identified from a photograph on plate XXXVI as a 'Garden Roller' bead, a name given to this type of bead, in later years. There do not seem to have been any other large glass beads sent in for analysis. From the chart of smaller beads (Fouché 1937 pp. 112 - 113) the following synthesized information comes to light:-

Pale blue	:	123 specimens
Dark blue	:	nil
Black-brown to green	:	21 specimens
Purple black	:	nil
Indian red	:	34 specimens
Yellow	:	33 specimens
Green	:	6 specimens
Coroded from blue or black to white	:	4 specimens
White	:	nil
Other colour	:	nil

Only one other type of bead is mentioned, namely a complete cowry shell.

Other information

The information contained in the chapters on metallurgical and skeletal remains pertains specifically to Mapungubwe, no specimens from K2 having been sent in for analysis.

Mapungubwe Volume II

Gardner recovered a large variety of material and information, most of which is factual, though requiring some sorting out. In the light of more recent knowledge and the advent of C14 dating techniques, most of his conclusions appear erroneous. Let us now examine his information.

Pottery

Gardner adhered basically to Schofield's first classification in Volume I. which was later elaborated upon and extended in the publication "Primitive Pottery". (Schofield 1948).

Gardner did, however, subdivide the main categories further in an attempt to simplify classification, but did not describe each vessel shape in detail. His shapes were:-

Beakers	:	Flared;
		Straight-sided;
Pots	:-	Cylindrical (beakers with long sides);
		Carinated;
		Lugged (Some lugged pots are in fact beakers with luggs);
		Shouldered;
		Small;
		Large;
		Exotic;
		Spouted;
		Handled;
Bowls	:	Shallow;
		Deep;
		Drinking cups (small beakers?); and
		Wide-mouthed urns. (Gardner 1963: p.63)

Beads

Reference is made to the work done by Van Riet Lowe on the Glass beads of Mapungubwe (Van Riet Lowe 1955). Gardner, however, divided his beads into three classes, namely Early Mapungubwe (M1), Middle Mapungubwe (M2) and Late Mapungubwe (M3).

The Early Mapungubwe beads are classed as the so-called typical K2 glass beads. The following types were found:-

<u>Type</u>	<u>Colour</u>
Garden roller	Sea-green to blue
Long and short canes	Sea-green and blue
Opaque Oblate	Medium blue
Long/short dull opaque bead	Green
Small Indian Reds	Pure red without green or white centre.
Lemon-yellow beads	Light yellow

In addition vast quantities of Ostrich egg and Achatina shell beads were found (Gardner 1963 pp. 33 - 34)

Two other types of bead classed as Middle Mapungubwe (M2) were also found, although apparently associated with later settlement at K2. The same beads were found in large quantities on Mapungubwe Hill, namely black beads, varying in shape from small oblates to standard cylinders.

Metal

Metal was generally scarce, with iron being more common than copper. Weapons were few, with only three small spearheads and one arrowhead being recovered. (Gardner 1963 pp. 30 - 31).

Bone and Ivory artefacts

Pointed needles with eyes drilled through the bone were common. Smoothened bone arrow points and linkshafts, both bearing identification marks, were rare. Rough bone arrowpoints were numerous. Scraping tools, and polishing and graving implements were frequently found. Numerous worked sections of elephant ivory were recovered, including armlets, bracelets and rings.

Beast Burials

Six deliberate burials of portions of bovine species in association with pottery were found, the later frequently being fragmented. No definite conclusions could be drawn, but it was suggested by Gardner (1963 pp 58 - 59) that the features represented a bovine cult of possible Hamitic origin. Other possibilities were mentioned, but were rejected, namely the possibility of religious offerings to some forgotten god, or to ensure good hunting. Another suggestion is that these might have been burials by proxy of some person who died far from his home settlement, or whose body could not be found.

Human Remains

The analysis of 37 of the 72 skeletons recovered at K2 gave some rather startling results, but fitted in with Gardner's interpretations. Galloway (1959 pp. 1 and 118) found that the population was homogeneous in most respects, and bore little or no resemblance to the Negro. The distinguishable features were considered to be characteristically Bush or Boskop in nature.

More recently, Huffman (1978) has suggested that the Leopard's Kopje Tradition can be related to an Early Iron Age tradition which can be traced back to the Eastern Transvaal. The Bambandyanalo pottery can be linked according to certain 'core concept' attributes with several related groups

at around 1100 AD. These groups can according to Huffman, in turn be related to the 800 AD 'Klingbeil' pottery present in the Eastern Transvaal. By using the same 'core concept' method of approach, Huffman has linked Klingbeil with the earlier Lydenburg and NC 3 pottery (500 A.D.) which in turn are thought to have originated out of what has been termed Bambata pottery (earlier than 300 A.D. in Rhodesia.)

This reverse flow of people out of the Eastern Transvaal northwards is contradictory to the generally accepted opinion of southwards migrating peoples.

3. Earlier work in Botswana

Little has been done on similar time period sites in Botswana. Tautswe was excavated by L. Lepionka in 1969/1970 and the results published in 1979. Stamp - decorated as well as incised ware was found and is considered by Lepionka to be similar to Zhizo and Leopards' Kopje A.

"Tautswe most closely resembles Zhizo in a comparison of technique.... but is nearer than Zhizo to the Leopard's Kopje phases. This would suggest that it is the more evolved of the two....."

"Tautswe must be constructed as an independant southern facies of the Leopard's Kopje complex, most closely related to it, but differing from it in detail" (Lepionka 1979 pp 71).

Tautswe was re-excavated in 1979 by J. Denbow, and new information is forthcoming. In conjunction with information from two other excavations at Taukome and Thatwane, Denbow (pers comm.) appears satisfied that Zhizo and Leopard's Kopje A pottery occur in a basic chronological sequence at these sites. He has also come to a preliminary conclusion that the break between Zhizo and Leopard's Kopje A is not as complete as has been inferred from Rhodesia.

4. Earlier work in Rhodesia

The Leopard's Kopje culture was first recorded by K.R. Robinson in 1947 during an investigation of the Khami Ruins (Robinson 1959).

The pottery recovered was considered to have combined characteristics of Hillside and Gokomere, and was accepted as part of the stamped ware tradition.

Further excavations were done on several sites and more detailed reports followed. (Robinson 1965, 1966). In these reports, the Leopard's Kopje Culture was divided into a three phase sequence; Zhizo, Mambo and Woolandale. These represented and continuous cultural evolution from the Early Iron Age to the Khami Ruins Period in Rhodesia, which had, from time to time, been affected by foreign influence.

No radio-carbon dates were available, so the ordering of the phases was determined entirely by the decrease in the percentage of comb-stamped decoration. "... the pottery tradition represented by the stamped and channelled wares ... which have been dated in Southern Rhodesia as early as A.D. 330 \pm 150 ... did not disappear from Rhodesian scene, except at Zimbabwe itself, but it underwent a gradual change, perhaps due partly to normal evolution within the culture, but almost certainly hastened and guided by contact with newly arriving tribal groups with different pottery traditions" (Robinson 1966 p. 27).

The characteristics and differences of the three phases are briefly enumerated in table 1.

It is noteworthy that Robinson distinguished flat bottomed vessels in the Leopard's Kopje I phase, which he considered to be beakers.

Huffman (1968) redefined Leopard's Kopje on the basis of a qualitative seriation of the Gokomere and Leopard's Kopje sequences, but as this seriation was based only on published drawings, it was not acceptable until excavated assemblages has been examined. This proof was forthcoming (Huffman 1974) and the Leopard's Kopje phases as described by Robinson were redescribed. Phase I was regrouped with Gokomere as a second phase of that tradition, while phases II and III were classed as a separate tradition and called Leopard's Kopje A and B respectively.

Huffman has further divided the Leopard's Kopje A and B into a Northern and Southern Branch of each phase. One finds thus in the Limpopo Valley that the southern branches of the two phases are Bambandyanalo and Mapungubwe respectively while the northern branches in the Matopos area

TABLE 1

ROBINSON'S THREE PHASE CLASSIFICATION

LK I	LK II	LK III
<p><u>CERAMICS</u></p> <p>Some Early Iron Age vessel shapes Possible Beakers</p>	<p>Development of Shoulder pot Beaker bowls</p>	<p>New vessel shapes much finer in form and shape</p>
<p>Stamped decoration combined with incision</p>	<p>Mainly incision with some stamping</p>	<p>Neatly executed incision</p>
<p>Figurine fragments</p>	<p>Clay figurines of domestic animals and women</p>	<p>Clay figurines of women</p>
<p><u>GLASS BEADS</u></p> <p>Coarse blue and yellow canes</p>	<p>Beads small many blue/green cylinders. Fabricated beads (Garden Rollers)</p>	<p>Small opaque oblates</p>

CHAPTER 4

RESEARCH AREA

1) Ethnological Information

The area contains a mixed population, and the present day political boundaries do not separate the different ethnic groups. The main group to be found is the Sotho, with many people tracing their origins back to Ngwato. Venda people are less common, and have, to a large extent, mixed with the Sotho. (Van Warmelo 1935, 1940). From Rhodesia, one finds the Karanga and isolated Matabele having wandered into the vicinity. The numbers of these latter two groups are small.

The languages spoken, as to be expected, are Sotho, Venda and to a lesser extent Shona. It would also appear from discussions with various Blacks, that an own lingua franca has developed in the area, and consists of a mixture of the Sotho, Venda, Shona languages as well as containing a few English and Afrikaans words. This 'language' may have developed at the Messina Copper Mines.

Obviously the ancestry of the present day black inhabitants of the area cannot be traced back to the period that we are dealing with. For this reason one cannot make direct comparisons between the archaeological cultures and those of the present inhabitants.

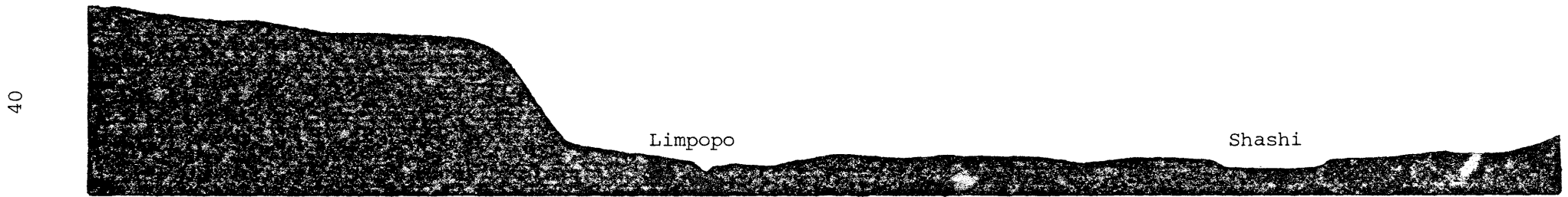
2) The ecology of the Limpopo/Shashi Valley

a) Geology and Topography

Geologically the research area forms part of the Karroo system, and can be divided into three series, namely the Stormberg lavas, the Stormberg sediments and the Beaufort series. The belt of sandstone hills and ridges found on both sides of the Limpopo River form part of the Stormberg sediments. These overlie mudstone which forms part of the Beaufort series. The Stormberg lavas are found amongst the sandstone ridges in the form of diorite dykes,

Figure 3

Cross-section of the Limpopo/Shashi Valley showing sudden drop of escarpment to the river



Horizontal scale: 1 cm = 1000 meter

Vertical scale: 1 cm = 80 meter

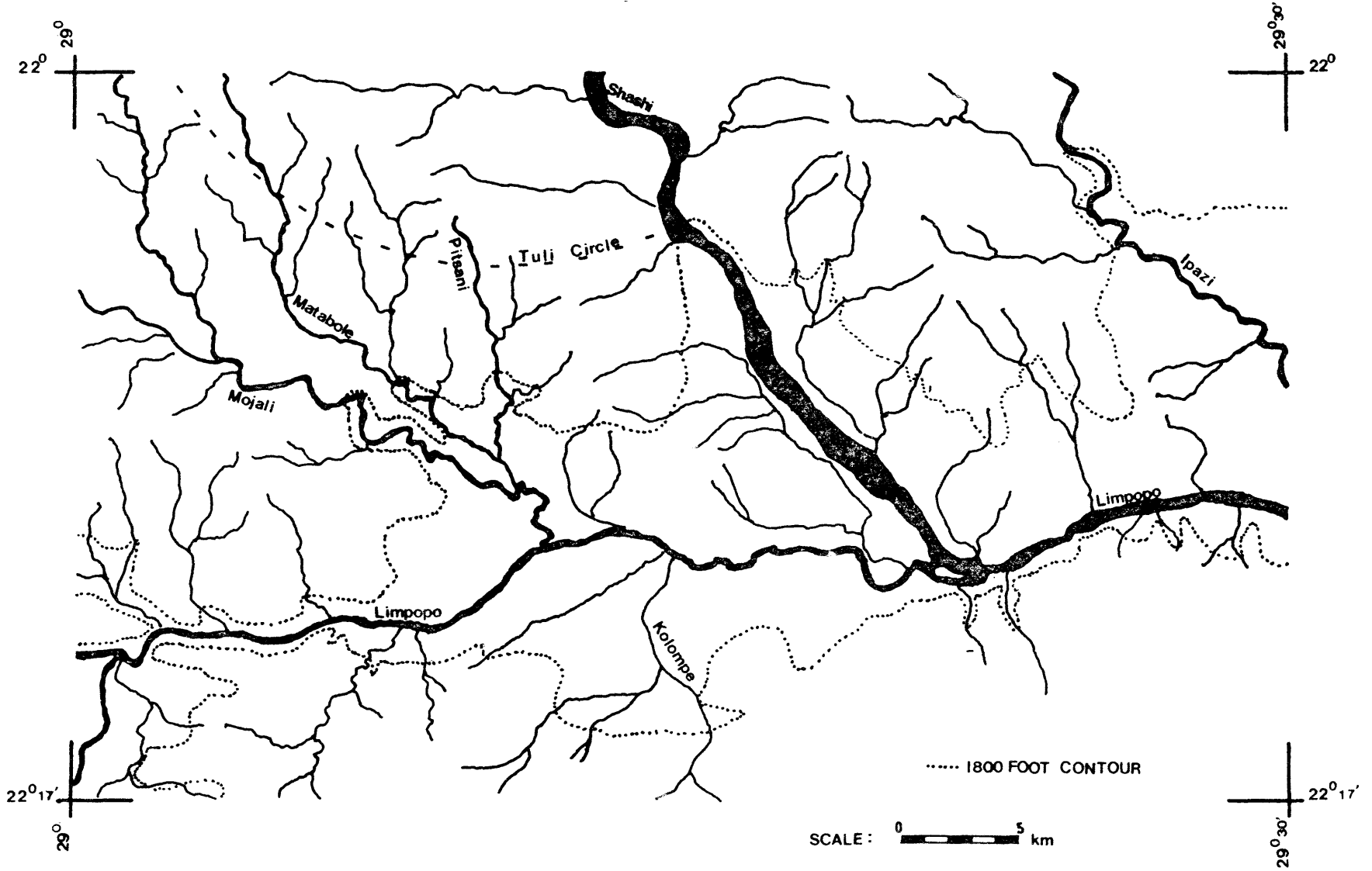
as well immediately to the north of the sandstone belt, extending northwards through the Tuli Circle into Rhodesia. (Haughton 1969) In certain areas, contact between the hot volcanic diorite and the sandstone has resulted in the formation of quartzite.

No ore deposits are found in the immediate vicinity. The nearest known copper deposits are on the farms Shelton Hall and Bruntsfield, some 25 km to the south east, and around Messina on Maryland, Uitenpos, Vogelenzang, Messina, Singalele, Antonville, Hereward and Papebril. The nearest iron ore deposits are at present being mined at Maryland near Messina (Geological Survey 1970), but it is unknown whether this was originally a surface deposit that could be worked by the ancients.

From the above, it can be inferred that the topography varies a great deal in the Limpopo/Shashi Valley. From the Soutpansberg mountains in the south, one finds a gently undulating plain, that forms an escarpment with a sudden drop close to the Limpopo. (See fig. 3). This drop varies about 30 metres in places to well over 60 metres. The edge of the escarpment follows the 1800 ft (550 metre) contour line on the southern bank of the Limpopo. In certain areas the escarpment directly overlooks the river, while elsewhere it recedes to nearly 8 km from the river bank. (See fig. 4). The sandstone ridges follow the general pattern of the 1800 ft contour line, although on the farms Schroda, Greefswald, Little Muck, Armenia, Pont Drift, and Parma numerous valleys have eroded into the plateau, giving these area a very rugged appearance and contrasting ecology.

On the northern bank of the Limpopo, the sandstone ridges extend only a short distance from the river, to be replaced by hilly terrain dominated by Basaltic lavas. These hills are not very high nor, generally speaking, very steep. This countryside is less rugged than the sandstone ridges. No clearly defined escarpment is to be found.

Figure 4



The Shashi river forms the main stream, with the Limpopo a tributary thereof. Presumably for political reasons, the whole of the river forming the boundary between the Transvaal and Rhodesia was named the Limpopo. There are a number of tributaries flowing into these two rivers, the majority of which come from the north and north west. Few noteworthy rivers flow into the Limpopo from the south, most of them being annual streams with small catchment areas.

For the major part of the year the Shashi and Limpopo rivers contain little or no water, although water is always to be found under the sand. During the summer months the flow increases, depending on which catchment area receives rain. Usually the flood is of short duration, rising and falling within a couple of hours to perhaps several days. In periods when good countrywide rains have been experienced, the river will remain high for several weeks. During such periods, floods have been experienced when the river bursts its banks, sending water several hundred metres into the interior in places.

For most of the year, both the Shashi and Limpopo are fordable, and therefore probably presented no boundary to the activities of prehistoric man in the environment.

b) Climate

i) Temperature

Temperature variation in this area can be large. According to Schulze (1965: 320-321) the maximum and minimum daily temperatures are 32°C and 18°C in January, and 22°C and 4°C in July. Exceptional temperatures have been 42°C in January and -7°C in July.

The temperatures vary considerably within the region itself. For example according to the local farmers the temperature on top of the plateau is some 5°C cooler than in the actual val-

ley. The months October to January are the hottest, with the peak usually around late November just before the onset of the summer rains. During the course of excavations at Schroda during October 1977, a daily temperature at 13h00 hours in the shade was noted. During this period it rarely was below 40°C, with a maximum of 47°C reached on one day towards the end of the third week of October.

Generally speaking the winters can be described as mild. Frost occurs from June to August, but has been known as late as October (Opperman pers comm.). It is rare in the high-lying areas, occurring usually although not frequently along the Limpopo itself and adjacent tributaries and valleys.

ii) Rainfall

The rainfall in this area is erratic and low. Official figures provided by the Weather Bureau for several stations near the Limpopo and in the interior give the average rainfall for the area as 329,5 mm. (13 inches), however most of these stations have been inoperative for the last 15 to 20 years, as most of these farms where the stations are situated are unoccupied. Official figures for the area north of the Soutpansberg are now kept at the Messina research farm near Messina, and consequently do not directly apply to the research area.

Rainfall figures supplied by Mr. H.R. Lemmer of La Reve, one of the farms in the immediate vicinity, reflect the rainfall perhaps a little more accurately. Records were kept from 1956 to 1977; a period of 21 years. Over this period the highest rainfall was in 1971/72 when 516 mm fell.

The lowest rainfall recorded was in 1965/66 when only 133 mm fell. The average over the 21 years recorded was 285 mm (11,2 inches). Table 3 shows the monthly records over 21

TABLE 3

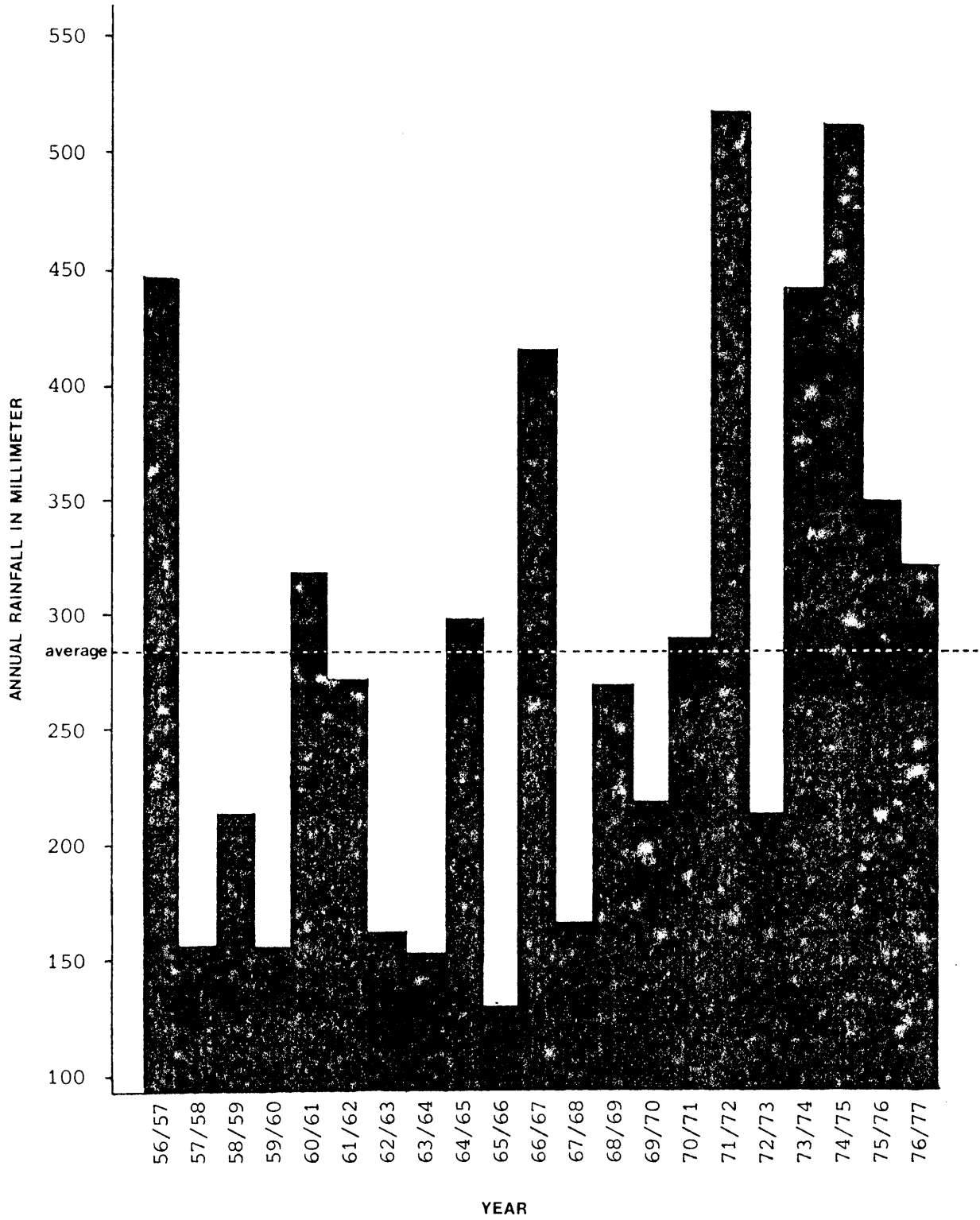
Summary of Rainfall at La Reve 1956-1977

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
1956/57			12	37	75	118	43	100	62				447
1957/58				12	9	18	75	43					157
1958/59			29		6	68	18	91					212
1959/60					14	58		43	25	18			158
1960/61					34	16	12	197		34		18	311
1961/62					81	22		15		135	12		265
1962/63					75	34	3	3		29		18	162
1963/64				31		55	51	12	4				153
1964/65				48	85	55	30	70					288
1965/66			22		52	15	17	27					133
1966/67			50	8	20		135	75	45	81			414
1967/68				12	22	22		20		62	26		164
1968/69					46	120	16		92				274
1969/70			20	20		93		55	6			22	216
1970/71				14	64	56	59		70	12	9		284
1971/72			7	64	135	8	116	98	75		13		516
1972/73				22	60		49		52	23	5		211
1973/74			34	23	33	86	67	50	99	16	30		438
1974/75	4		47		74	103	150	45	50	34		4	511
1975/76					10	54	64½	73½	72	29	47	2	352
1976/77			16	12	31	40	23	110	63	22			317
Total for 21 years	4	0	237	303	926	1041	928.5	1127.5	715	495	142	64	5983
Average/month	0,19	0	11,29	14,43	44,10	49,57	44,21	53,69	34,05	23,57	6,76	3,05	284,90

Fig. 5

Yearly rainfall at La Reve

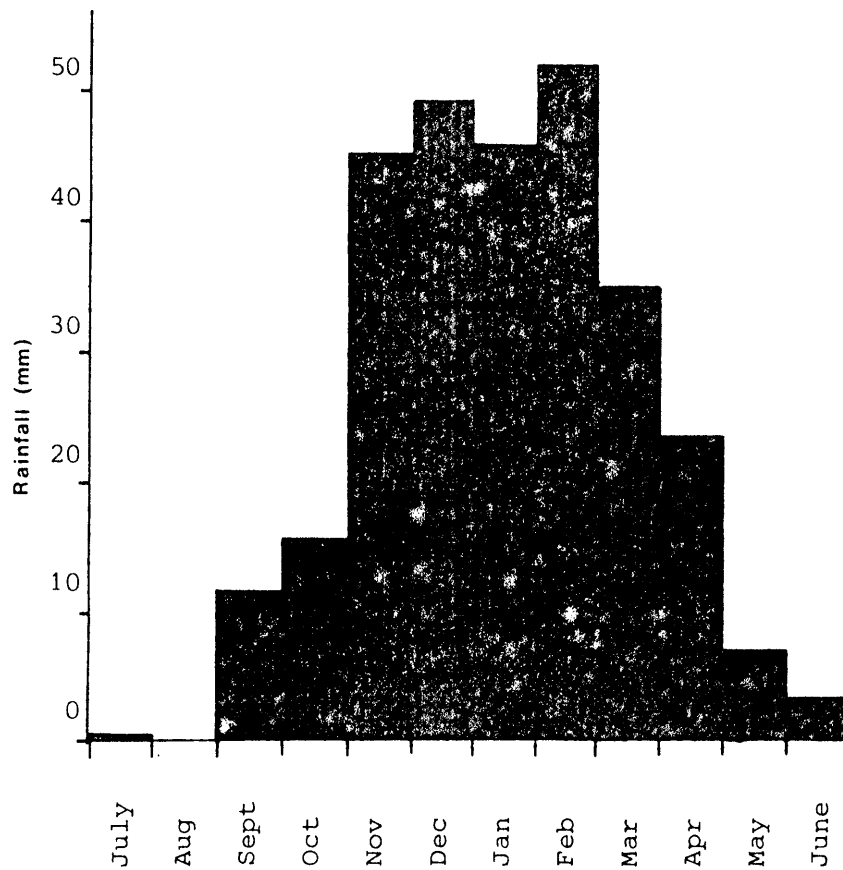
July to June



years. Figure 5 gives the same information in graphic form, while Figure 6 shows the monthly average.

Fig. 6

Average monthly Rainfall at La Réve



From the graphs it can be seen that there is a large annual variation in the rainfall, and no standard pattern can be predicted. There are months in the summer when no rain falls, and the area suffers from severe drought.

The graph of the average monthly rainfall shows the rainy

season to be from November to March, with a slight peak in February. Rain frequently comes in the form of localized thundershowers, with a short heavy shower of rain with a rapid run-off of water. Such showers can be followed by several weeks of hot sunny weather. Two or three days of overcast weather accompanied by light drizzle occur periodically, but the effect on the environment is negligible.

With the high summer temperatures, evaporation is generally very high, thereby minimizing the effect of single showers of rain. As mentioned before, water run-off is rapid, particularly amongst the sandstone hills and outcrops. In many places the soil depth is shallow, which also contributes to the low effectiveness of rain in the area.

iii) Direction of the wind

The prevailing winds come virtually all year round from an easterly direction, and vary in strength from gentle breezes to strong winds.

Rainclouds are frequently brought in by these winds, but rain usually only falls if the wind changes direction and comes from the west. Dust storms occur from the west, although infrequently.

c) Vegetation

Acocks (1975 p 37-38) describes the area north of the Soutpansberg to the Limpopo Valley as Mopani Veld, and mentions the "the vegetation is typically a short, fairly dense growth of *Colophospermum mopane*, generally associated with a number of other trees and shrubs in a somewhat sparse and tufted grassveld." Table 4 gives a list of associated trees and shrubs. Table 5 gives a list of grass types. (Acocks 1975 p 38).

TABLE 4

Trees and Shrubs (from Acocks 1975 p.38)

Colophospermum mopane
Acacia tortilis subsp. *heteracantha*
Acacia nigrescens and others
Combretum apiculatum
Sclerocarya caffra
Dichrostachys cinerea subsp. *Africana*
Cadaba termitoria
Schotia capitata
Boscia foetida subsp. *rehmanniana*
Boscia albitrunca
Cassia abbreviata subsp. *beareana*
Commiphora spp.
Grewia spp.
Ximenia sp.
Lycium sp.
Terminalia pruinoides
Adansonia digitata

TABLE 5

Grasses (from Acocks 1975 p.38)

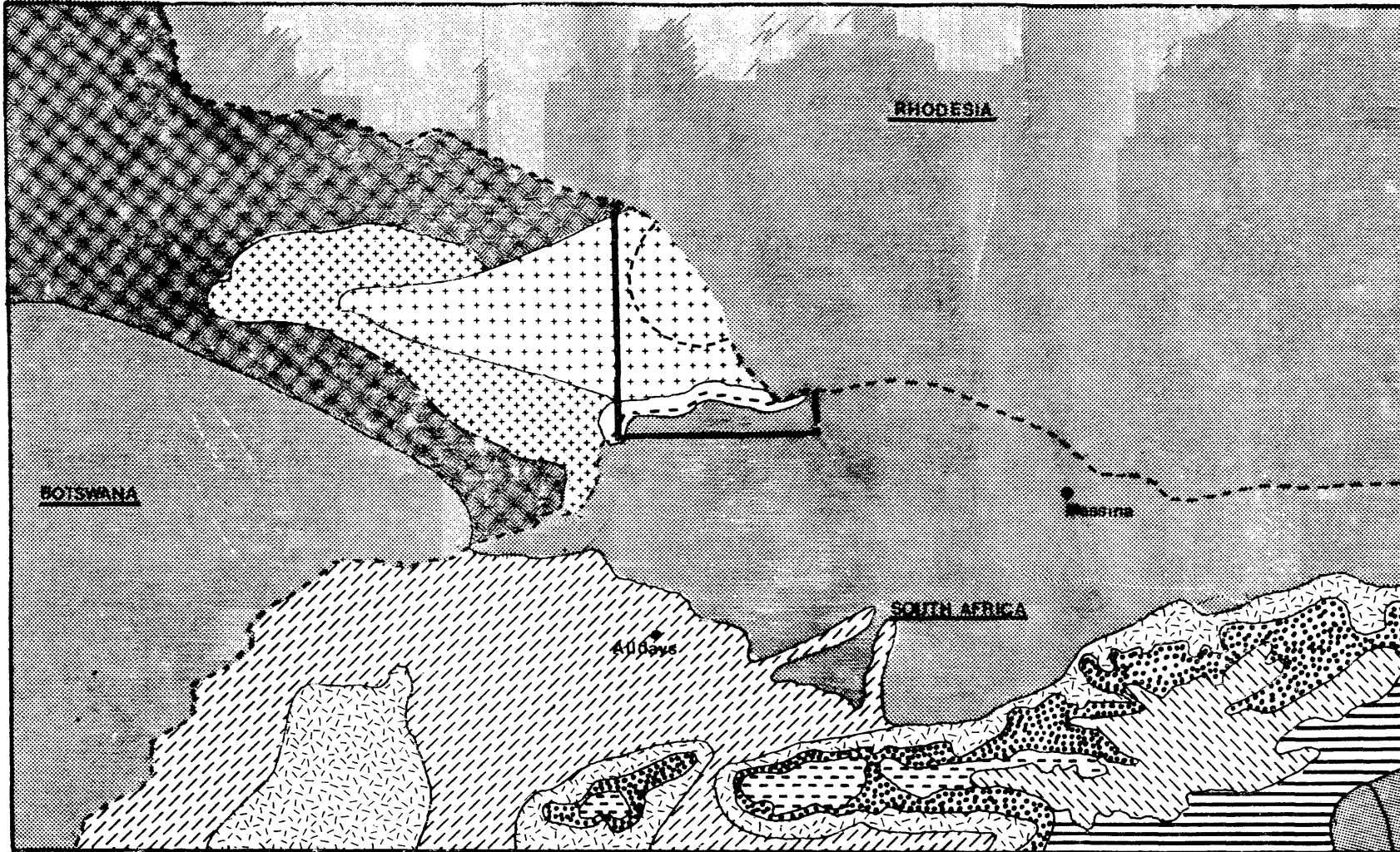
Anthephora pubescens
Brachiaria nigropedata
Bothriochlora insculpta
Eragrostis superba
Schmidtia pappophoroides
Heteropogon contortus
Stipagrostis uniplunus
Chloris roxburghiana
Tricholaena monachne
Eragrostis nindensis
Cenchrus ciliaris
Panicum maximum (patches)
Digitaria eriantha (patches)
Neorautanenia sp.

In large parts of the region the mopane is stunted and completely dominant. In the main valleys and river beds the bush is mixed, and the mopane no longer dominant. Along the Limpopo riverine bush predominates. North of the Limpopo in the Tuli Block area of Botswana, Weare and Yalala (1971) have subdivided the mopane veld into mixed mopane/Acacia trees, mixed mopane/Acacia low tree savanna and thicket woodland with mopane dominant.

The spread of vegetation in the Limpopo/Shashi valley is reflected in figure 7.

Mopane is the predominant veld type, but micro-environments exist where the bush changes. Along the Limpopo and Shashi rivers, it

FIG. 7



Compiled from Acocks(1975) and Weare & Yaiala(1971)

SCALE: 0 10 20 30 40 km

would appear that there was no preference as to where a village was located, as long as it was close to water.

The vegetation immediately around the Pont Drift and Schroda sites is not mopane veld, and suggests two different micro-environments. Fuller details of the vegetation at each site is contained in the respective site descriptions.

d) Fauna

Little of the original fauna remains in the northern Transvaal having been largely shot out during the last fifty or so years. Across the border in Rhodesia and Botswana, where hunting is more difficult or has been controlled, large herds of game are still to be found, along with their predators such as lion and leopard.

A list of the mammal species at Greefswald in the research area has been compiled by I.L. Rautenbach, Chief Mammologist of the Transvaal Museum (Table 6). The list contains 54 species ranging from bats and small rodents to large bovids and even elephant. Voigt (1978 p.11) considers this list to be indicative of the minimum range of wild species which could have been available as a food source to Iron Age hunters and gatherers.

Species not recorded by Rautenbach but which have been personally observed are the spotted hyaena (*Crocuta crocuta*), small spotted Genet (*Genetta genetta*), crocodile (*Crocodilus niloticus*) and leguan (*Veranus sp.*).

Amongst the numerous birds found in the region, the ones personally observed that could have supplemented the Iron Age diet are the ostrich (*Struthio camelus*), crowned guinea-fowl (*Numida meleagris*), various types of francolin and the Kori Bustard (*Ardeotis kori*).

e) Change in natural environment

The area between the Soutpansberg and the Limpopo is used mainly for cattle ranching today. Along the Limpopo one finds areas of land cleared of natural bush and used for agricultural activities. Such fields are spray irrigated from the Limpopo, causing the water level of the river to drop considerably.

Numerous boreholes have been drilled in the area, with a resultant

TABLE 6

Greefswald: Mammal Species listed by Rautenbach

Phylum: CHORDATA

Class: Mammalia

Order: Macroscelidae

Elephantulus myurus (Naked-tail elephant shrew)

Order: Chiroptera

Epomophorus wahlbergi (Wahlberg's epauletted fruit bat)

Epomophorus crypturus (Peter's epauletted fruit bat)

Nycteris thebaica (Egyptian slit-faced bat)

Rhinolophus hildebrandti (Hildebrandt's horseshoe bat)

Rhinolophus darlingi (Darling's horseshoe bat)

Order: Primates

Galago crassicaudatus (Grand galago)

Galago senegalensis (Lesser galago)

Papio ursinus (Baboon)

Cercopithecus aethiops (Vervet monkey)

Order: Carnivora

Otocyon megalotis (Bat eared fox)

Canis mesomelas (Black-backed jackal)

Ictonyx striatus (Polecat)

Viverra civetta (Civet)

Genetta rubiginosa (Rusty spotted genet)

Herpestes sanguineus (Slender mongoose)

Mungos mungo (Banded mongoose)

Helogale parvula (Dwarf mongoose)

Felis lybica (Cape wild cat)

Felis serval (Serval cat)

Felis caracal (Lynx)

Panthera pardus (Leopard)

Panthera leo (Lion)

Acinonyx jubatus (Cheetah)

Order: Tubulidentata

Orycteropus afer (Aardvark)

Order: Proboscidae

Loxodonta africana (Elephant)

Order: Hyracoidea

Procavia capensis (Rock hyrax)

Heterohyrax brucei (Yellow spotted dassie)

Order: Perissodactyla

Equus burchelli (Zebra)

Order: Artiodactyla

Potamochoerus porcus (Bushpig)

Phacochoerus aethiopicus (Warthog)

Hippopotamus amphibius (Hippopotamus)

Sylvicapra grimmia (Grey duiker)

Raphicerus campestris (Steenbok)

Raphicerus melanotis (Grysbok)

Oreotragus oreotragus (Klipspringer)

Redunca fulvorufula (Mountain reedbuck)

Kobus elipsiprymnus (Waterbuck)

Aepyceros melampus (Impala)

Connochaetes taurinus (Blue wildebeest)

Tragelaphus scriptus (Bushbuck)

Tragelaphus strepsiceros (Kudu)

Taurotragus oryx (Eland)

Order: Lagomorpha

Lepus capensis (Cape hare)

Lepus saxtilis (Scrub hare)

Pronolagus randensis (Natal red hare)

Order: Rodentia

Hystrix africaeaustralis (Porcupine)

Thryonomus swinderianus (Cane rat)

Paraxerus cepapi (Tree squirrel)

Pedetes capensis (Springhare)

Acomys spinosissimus (Spiny mouse)

Aethomys namaquensis (Rock rat)

Aethomys chrysophilus (African (bush) rat)

Tatera leucogaster (Bushveld gerbil)

drop in the watertable, which in turn is reflected in fountains drying up and large trees dying.

The advent of cattle, sheep and goats, in historic as well as prehistoric times influenced the veld adversely, resulting in overgrazing and rapid deterioration. This is particularly noticeable in the area between the Limpopo and Shashi rivers where large Ngwato settlements existed until about 1940 (Nel Pers. Comm.). The veld around these settlements remains denuded for many kilometers and erosion is high.

It would appear that the area is gradually becoming drier. Evidence from several archaeological sites in the vicinity suggests that there may have been a higher rainfall several hundred years ago.

CHAPTER 5

METHODOLOGY

1. Literature Study

From the outset it was obvious that little literature was to be found pertaining directly to earlier research on the Zhizo and Leopard's Kopje A cultures in the Limpopo/Shashi valley. It became necessary, therefore, to refer to literary sources outside the research area. Nearly all the sources found are Rhodesian in origin, and relate to work done on surface sites and a few excavations.

It can thus be seen that very little useful information was forthcoming about the cultures in the Limpopo/Shashi Valley as far as a full description of pottery types, economy, settlement patterns and other facets of the cultures, as well as their spread south of the Limpopo River was concerned.

2. Reconnaissance Work

The next obvious step was to start a reconnaissance of sites in the research area. As no complete record of sites in the area existed it was necessary to do a personal survey. Use was made of Trigonometrical Survey aerial photographs to ascertain possible sites. All probabilities were then marked on the relevant South Africa 1:50 000 Topo-Cadastral maps. Most of these possible sites were visited.

Reference has been made in Fouche's book Mapungubwe : Ancient Bantu Civilization on the Limpopo to various sites in the vicinity, although frequently no mention is made of the type of pottery found on these sites. Where directions were available, attempts were made to visit the sites, although more often than not, these proved to be inadequate and the site concerned could not be identified.

Information about sites was also acquired from local farmers and their farm-hands, who showed me many sites. Most sites were, however, discovered during the course of walking around in the veld.

In total some 86 sites were discovered and recorded within the confines of the research area. It must be mentioned that the survey was by no means thorough, due to limited time and finance. Many more sites must still remain to be discovered.

Excluding the two sites covered in the text, test excavations were also done at Icon, Commando Kop, Ratho and Pont Drift 1/1.

Most of the 86 sites do not belong to either the Zhizo or the Leopard's Kopje A cultures. In many cases other pottery was found in combination on certain sites, suggesting that these sites were at least double component.

A point that should be mentioned is that several ashy deposits were found, where only body sherds were visible on the surface. No decorated sherds, and only a few rim sherds were picked up. Consequently these sites could not be placed into any category. It seems probable that the surface pottery has been collected at some time in the past. It was mentioned by certain elderly farmers that during the excavations at Greefswald between 1933 and 1940, the investigators frequently went looking for sites in the vicinity, and it is possible that they might have removed the pottery from the sites that they visited. Unfortunately no references could be found in this connection.

We do know, however, that excavations were done on a hill-top deposit on the farm Parma by J.F. Schofield during 1934 (Fouché 1937). Other than a short reference to this in Mapungubwe: An Ancient Bantu Civilization on the Limpopo, we have no record of what was actually found, or what has happened to that material. This suggests the same as mentioned above.

3. Methods of Excavation and Documentation

The sites were excavated and recorded according to standard methodology. Base pegs have certain information inscribed in the cement surface. This consisted of the initials N.K.H.M., standing for an Afrikaans abbreviation of National Cultural History Museum, the excavation number, as well as the year of excavation. The peg and cement block as well as the adjacent cement block and peg were left in position on completion of the excavation to serve as a guide for future work.

Certain objects, for example, strings of beads found in situ, desintegrating metal objects or skeletons could not always be treated in the standard way. In such cases these were removed in plaster-of-paris casts, and further treatment was done at the Museum.

After on site numbering and registration, the packages were placed in large cardboard boxes, ready for transport to the Museum.

4. Methods of Analysis

The total collection of material removed from the excavations is subject to analysis to a lesser or greater extent. From the outset it must be mentioned that the analytical emphasis falls on the cultural rather than on the environmental aspects of the research work. Less emphasis is therefore being placed on the geomorphology and chemical composition of the sites and other branches of the Natural Sciences which can be used to determine climatic and environmental change. From the outset my approach has been to look at the archaeological remains as the means by which the culture(s) of the people responsible for the accumulation of the deposits can be identified and interpreted, so as to give a picture of their way of life. Any geological, climatological and other environmental information recovered during excavation will be evaluated in this light, to see in what manner it could have influenced the ancient people and how they adapted their lifestyles to changing circumstances providing that any such changes be found during the course of analysis.

Not all of the analytical work has been done by myself. Material requiring specialist analysis has been handed to the specialists concerned, and their reports are either incorporated fully in this report, or have been published elsewhere and summaries are used in the descriptions. All faunal material has been handed to Mrs. E. Voigt and her team of specialists for analysis. The human skeletal material was identified by the University of the Witwatersrand. The Herbarium in Pretoria identified the botanical material, while samples for radiocarbon dating were sent to the C.S.I.R.

5. Final Storage of Material

As far as was practical, most of the cultural material has been treated according to the standards set by museums dedicated to the preservation of their collections.

All material has been properly cleaned and marked with coded abbreviations designating the site, excavation number, square, level or feature

concerned. Where necessary friable pottery has been consolidated by means of impregnation with a strengthening solution in a vacuum apparatus. Bone, and in particular the human remains, was also treated in this fashion. Where possible metal objects were cleaned by means of electrolysis, and dipped in the strengthening solution, which, being unable to penetrate, forms a protective shell on the object. The shell limits contact with the metal by humidity in the atmosphere, thereby preventing further corrosion.

All the material excavated in the Transvaal is permanently housed in the Archaeological Department of the National Cultural History and Open-air Museum in Pretoria.

The documentary material, i.e. the field notes, plan and sectional drawings as well as the photographic negatives and colour transparencies, is housed in toto at the National Cultural History Museum, Pretoria. All the results of the detailed analytical work done on the material excavated in the Northern Transvaal are also housed at the Museum, with the exception of the details of the faunal analysis which can be found at the Transvaal Museum, Pretoria.

This detailed information is freely available to any interested persons.

PART II

DESCRIPTION OF THE EXCAVATIONS ACCORDING TO SITE

CHAPTER 6

SCHRODA (TSR 1/1)

1) General Characteristics of the site

The farm Schroda M.S. 46 lies approximately 65 km west of Messina on the Limpopo River. The site, with co-ordinates $29^{\circ}25'45''$ E and $22^{\circ}11'0''$ S, lies on top of a rocky plateau overlooking the Limpopo to the north. To the south, a long sandstone ridge with Trigonometrical Survey Beacon No. 33 at its highest point provides adequate protection from wind and attack.

The eastern and western boundaries are formed by low rocky outcrops. The site is nearly 500 meters long by 300 meters wide and is crossed by the 1800 foot (554 metre) contour line. Running along the length of the site, and approximately parallel to the southern sandstone ridge, are a series of narrow rock outcrops, behind and between which the deposit has filled, giving the impression of a series of natural terraces.

On the plateau to the south of the high ridge, the sandy veld is covered by Mopane interspersed with *Combretum* species. The vegetation on and immediately around the site is completely different. There is no Mopane growth whatsoever. It is quite obvious that the protection provided by the sandstone ridges and outcrops has produced a micro-environment in which a large number of plant species thrive.

Tables 7 and 8 give a list of plant species taken on site and in the surrounding hills and rocky outcrops. They have been identified by the National Herbarium in Pretoria, but are not necessarily fully representative of the vegetation on site, for example grasses have not been included.

It is interesting to note that *Acrotome inflata*, *Acanthospermum hispidum*, *Blepharis diversispina*, and *Abutilon pycnodon* are annuals that can be classed as weeds. In particular the latter covers large parts of the site. A thorn tree species (*Acacia tortilis*) in the form of scrub growth has also taken over large sections. The two species of fruit producing trees found on site are the Baobab (*Adansonia digitata*) and



Plate 1

View across Schroda to the sandstone ridge in the south.



Plate 2

Looking north across Schroda to the Limpopo. Area 5 is shown in the foreground.

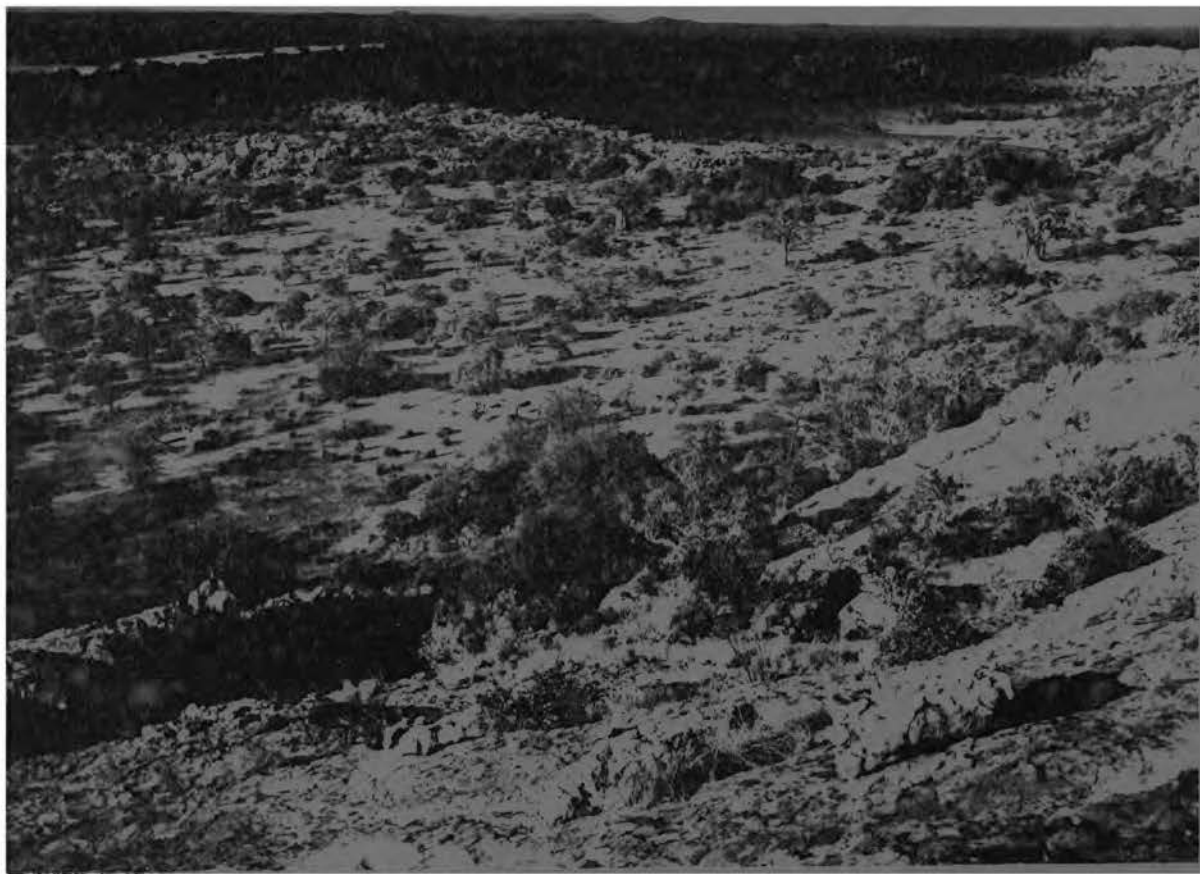


Plate 3

General view across Schroda looking east. The site is clearly divided into two halves by the motortrack.



Figure 8

Site map of Schroda showing cross-sections, excavated areas, and surface features.

belonging to European settlers, who built a small two-roomed house with an outside kitchen. The stone foundations of this dwelling form a surface feature, and were identified by the eminent cultural historian, Mrs. K. Roodt-Coetzee, during a visit to the site. No cultural remains were found around this other than the remains of several wooden posts. This suggests a stay of short duration. Intrusion into the deposit is minimal, with recent white ash found in hollows dug into levels 1 and 2 in area 3. Around the nearest Baobab tree, (directly north of area 3) a number of stone rows were found, running in different directions, suggesting an area where children might have played.

In the reddish-brown sandy soil underlying the Iron Age deposit numerous stone tools were found, belonging to the Late Middle Stone Age and Later Stone Age.

A cave shelter on top of the eastern section of the sandstone ridge to the south of the site, contains a series of unusual abstract paintings of non-human or faunal subjects, which are considered by Harald Pager (pers. comm.) to be of Iron Age origin and associated with the site below. An investigation however, showed only a small number of pottery sherds, but a vast amount of stone tools, most of which belong to the Late Stone Age. No paintings have been found in rocky overhangs or small shelters bordering on the site, and it seems therefore unlikely that the paintings can be associated with the Iron Age occupation.

2) The excavations

a) General Description

In total six areas were excavated, varying in size from small trenches to fairly extensive horizontal excavations. The positions of various excavations are haphazard in relation to one another, as the nature of the site with its thick undergrowth and rocky outcrops made it too difficult to survey fully and place a grid across. A site plan without contours was drawn up, and the relevant features and trenches shown (see figure 8).

Originally a series of small test trenches was planned in various parts of the site, to determine the nature of the deposit, before larger excavations were undertaken. This was acceptable in theory

but it proved to be the case in practise that too little information was being recovered for the amount of time spent, bearing in mind that time and money was limited. It was then decided to concentrate on surface features, and larger excavations were done where interesting accumulations were found.

The deposit in each area could not be directly correlated with the others. There were no distinguishing levels, such as burning for example, that could be followed through. However, three main distinctions on the grounds of colour could be made, namely an upper dark (humus) section, a lighter middle section and a reddish brown lower section.

TABLE 9

Schroda: General colour division of levels

Upper	Dark humus, brown to grey-brown in colour
Middle	Light soil, light grey to grey in colour Contains ash, and in certain areas, dung
Lower	Reddish-brown sandy soil mixed with charcoal and cultural material

It is doubtful whether these divisions can be used for comparing individual levels throughout the site, as a similar occurrence was noted at Pont Drift TPD 1/1. In particular it must be remembered that Schroda covers a very large surface area, and that unless a very large population was living on the whole area at the same time, one should not accept the basal level of one area to be necessarily the same age as the basal level in another area. It is quite conceivable that there might have been movement and settling on different parts of the site at different times and therefore to use the colour as basis for correlating levels is very risky.

The texture of the deposit varied from pure ash through to sandy soil, with patches of dung interspersed in various levels. Some levels had little in the way of cultural remains in them, while

others contained heavy concentrations of pottery and faunal material. Particularly areas 4 and 5 were found to yield vast quantities of ceramics and bone. Other cultural remains were few, considering the total amount of soil excavated. These comprised 1 burnt down hut, a gravel floor outside a disintegrated hut (i.e. not burnt), two probable beast burials, four human child skeletons, one human adult skeleton with grave goods, and a cache of very interesting clay figurines, in addition to the normal array of ornaments, beads, tools and weapons.

b) Area 1: Description of levels

Area 1 consists of a test trench of 1 x 4 metres divided into two 1 x 2 metre squares, labled A1 and B1 respectively. Table 10 gives the details of the levels.

TABLE 10

Schroda Area 1: Details of levels

Level	Depth (cm)	Colour and Texture
1	0 - 11	Grey-brown sandy soil
2	11 - 17	Grey ashy soil
3	17 - 25	Grey ashy soil
4i	25 - 27	White ash and charcoal
4ii	27 - 37	Grey-yellow sandy soil with ash
5	37 - 50	Grey sandy soil
Bedrock	50	

Level 1 consisted of a grey-brown sandy soil which was fairly soft. In corner A1, a stone concentration became visible. This was excavated separately, but contained no cultural material. A few fragments of burnt daga were found in B1. Other finds were beads, pottery and bone. Generally speaking, little material was recovered, with A1 having less than B1. Thickness varied between 5 and 10 cm.

Level 2 contained grey ashy soil which was softer than in level 1. Little cultural material was recovered in A1, but B1 yielded more than before. The rim of a large pot (A1.2.3) was noticed in A1, and a 200 mm wide baulk was left for context control purposes. Depth was between 7 and 12 cm.

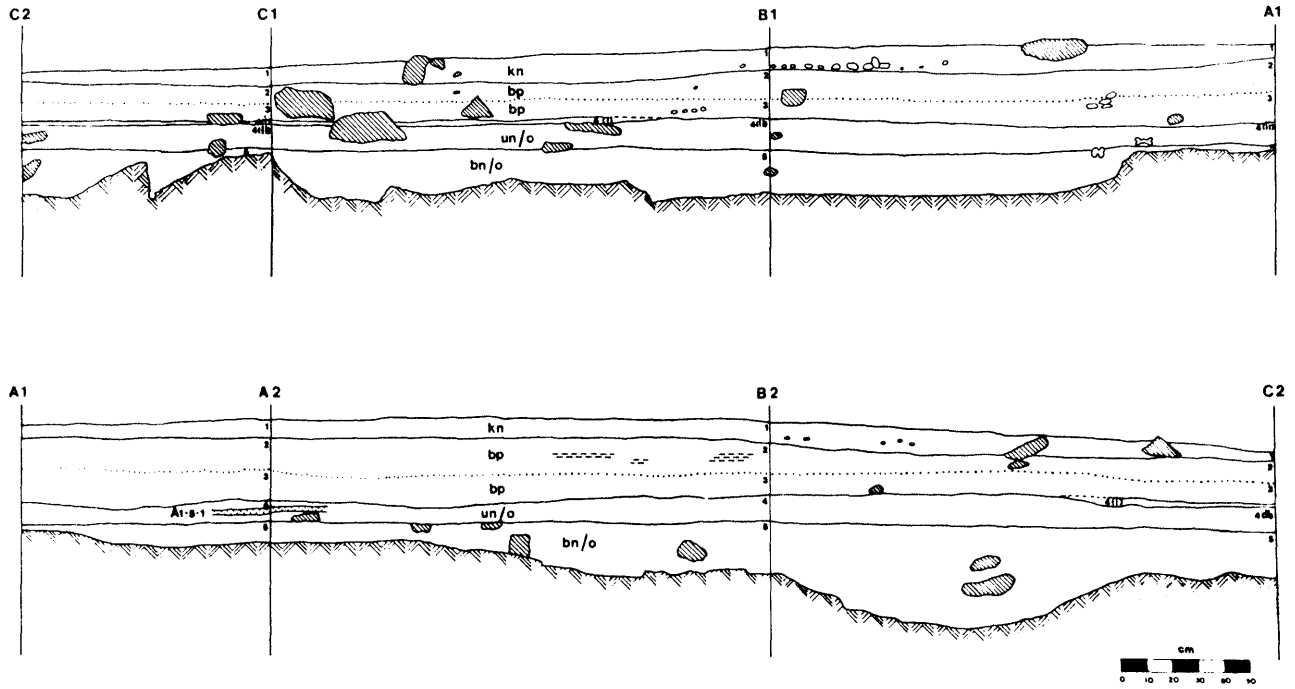


Figure 9

Schroda: Profile of Area 1

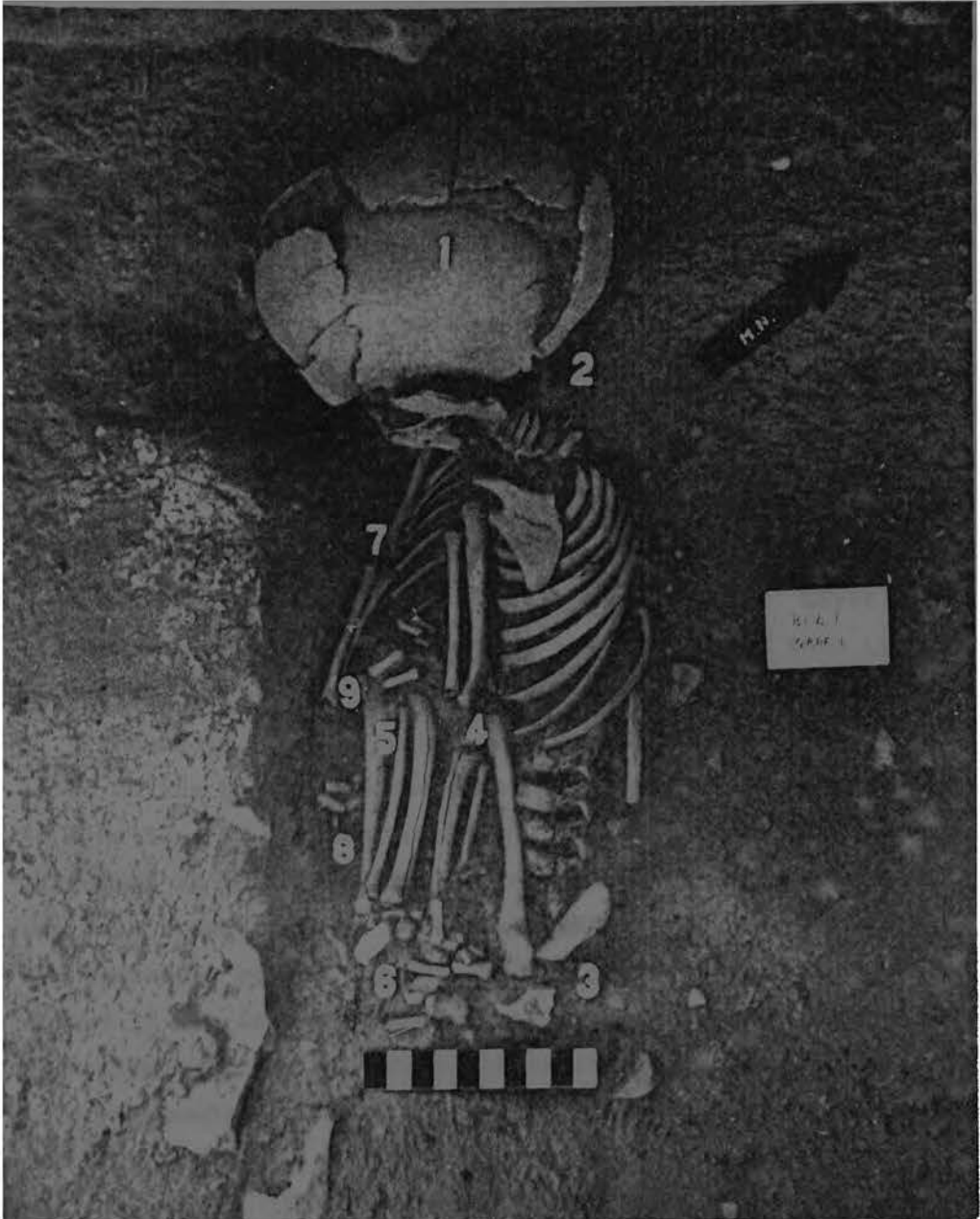


Plate 4

Schroda area 1: Burial Bl.4.1 in tightly flexed position. A small rodent burrow at 2 runs underneath the neck, and has removed parts of the right arm.

An arbitrary division was made between levels 2 and 3, and level 3 continued to have the same colouring and texture as level 2. A slight exception was noticed in B1, where the texture in places became slightly more gravelly. There was little cultural material, with B1 still containing more than A1. Thickness of this level was also between 7 and 12 cm.

Level 4 was sub-divided in square B1. The upper layer 4(i) occurred in the third of the square closest to C1 - C2, and contained white ash with charcoal fragments for a depth of 2 - 3 cm at the edges but with a definite bulge of some 6 cm towards its centre.

This gave the impression of the ash having been thrown away in a heap and gradually spreading out in a lens-shape. Layer 4(ii) contained a grey-yellow sandy soil with ash mixed into it. Little cultural material was found, but in B1 the skeleton of a child (B1.4.1) came to light. It had been buried in the flexed position, lying on its right side close to corner B2, with the head pointing to line B2 - C2 and facing south. The skeleton had been slightly disturbed in that part of the right hand was missing. This was due to a rodent tunnel. The grave had been dug from higher up in the sequence, but no indication of a grave shaft could be found, either in the form of colour, texture or soil hardness changes when digging, or as a definite break in the profile along B2 - C2. No grave goods were found. The skeleton was lifted in a plaster cast for transport to the Museum, where it was later removed for identification. The thickness of this level varied between 8 and 13 cm.

Level 5 continued down to bedrock, which was very undulating, resulting in a thickness variation of between 2 and 40 cm with the greater part of the level averaging out at approximately 12 cm. Grey sandy soil mixed in places with ash formed this basal level. A yellowish-brown unconsolidated gravel floor A1.5.1 with a fragmented potsherd on top of it was recorded in corner A2. This unconsolidated floor was 30 mm thick and extended some 30 to 40 cm into the trench. A single hammerstone B1.5.1 was found in square B1.

On examination of the baulk that had been left in A1 when the pot rim appeared, it was noticed that there was a slight colour change

immediately around the vessel, indicating that it had been deliberately buried. On removal it was found that the pot had no base. No sherds were found to fit.

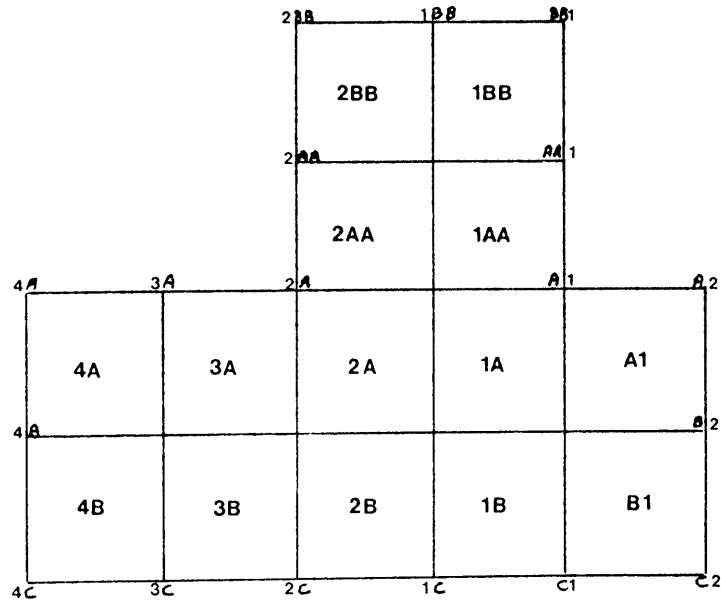
c) Area 2: Description of levels

Originally a trench consisting of two squares, each 1½ by 2 metres, was dug. It was decided to extend the excavation when a consolidated red gravel floor was uncovered in level 4. Similar floors had been found frequently at K2, but at Schroda this was an unrecorded feature. The rectangles used in the trench were enlarged to form proper two by two metre squares and a larger horizontal area was opened up.

Figure 10 shows the area with the peg numbers in the corners and the square numbers inside, while table 11 gives a resumé of the depths, colour and texture of the levels.

Figure 10

Schroda Area 2: Plan of excavation showing square and peg numbers



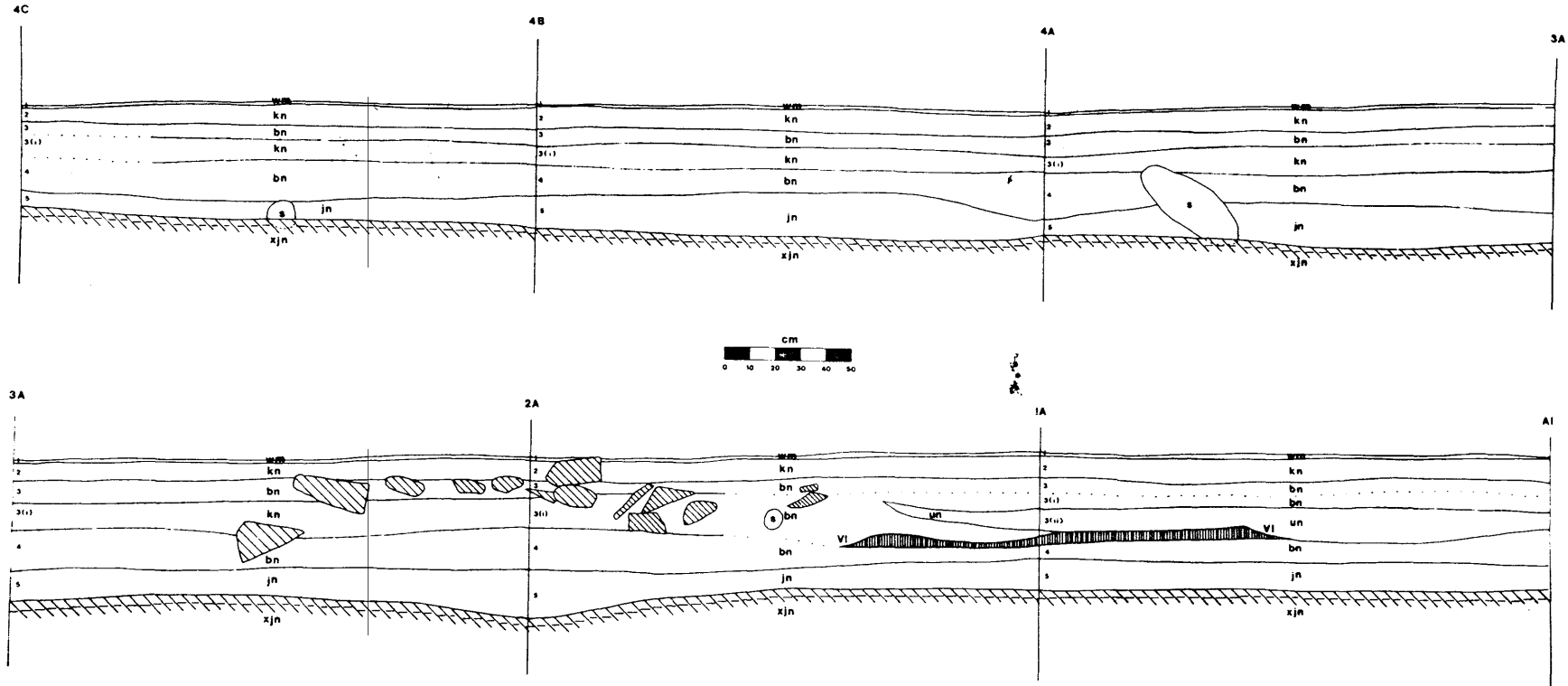


Figure 11

Schroda Area 2: Profile of line 4C - A1

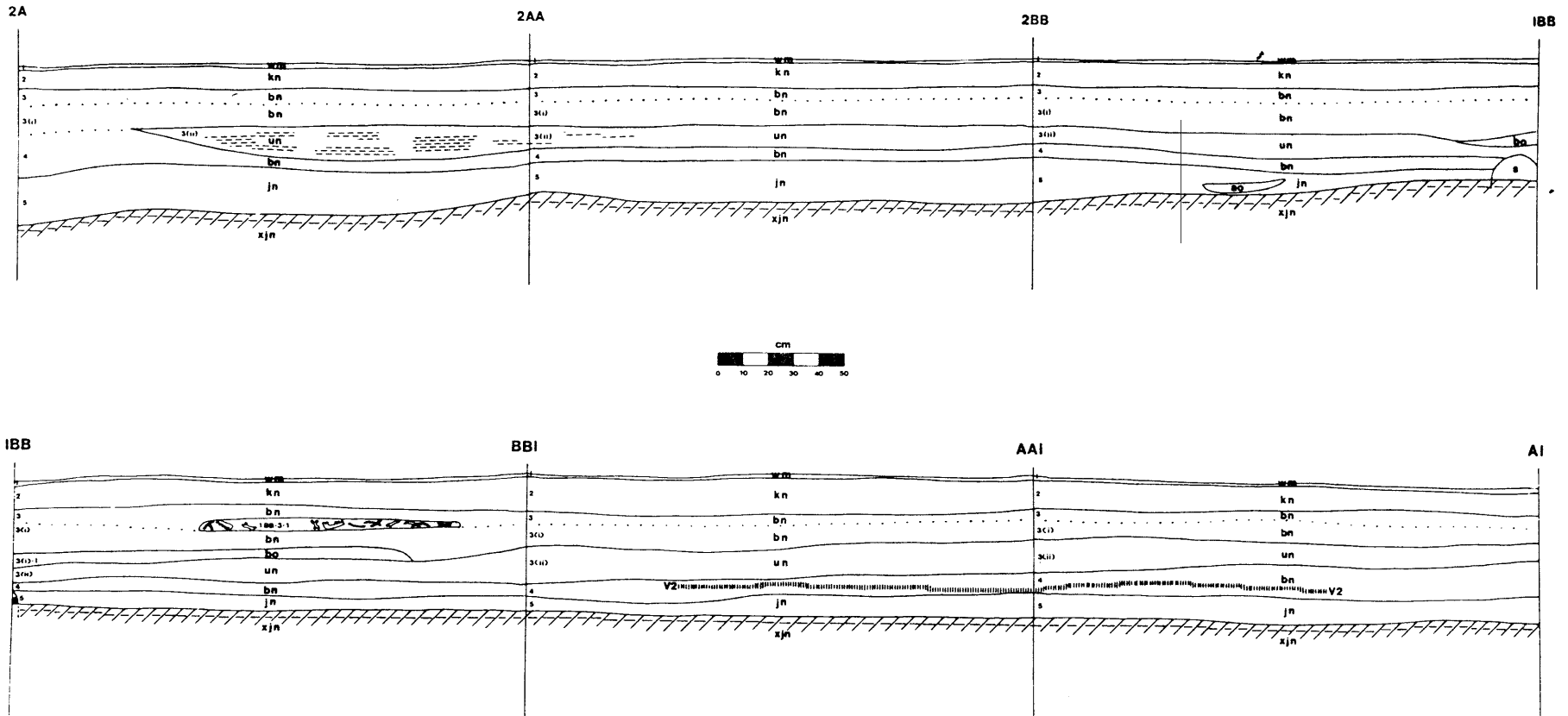


Figure 12

Schroda Area 2: Profile of line 2A - A1

TABLE 11

Schroda Area 2: Details of levels

Level	Depth (cm)	Colour and Texture
1	0 - 2	Pink-brown sand
2	2 - 10	Grey-brown sandy soil
3	10 - 15	Grey sandy soil
3i	15 - 25	Grey to greybrown sandy soil
3ii	25 - 33	Greyish yellow sandy soil
4	33 - 38	Gravel floor with grey sandy soil
5	38 - 54	Reddish-brown sandy soil
Sterile Soil	54	

Level 1 was a thin pink-brown sandy level, presumably of aeolian origin. Thickness varied between $\frac{1}{2}$ and 1 cm. A line of stones (A1.1.1), in places up to 50 cm wide was visible on the surface. This seemed to form part of a low wall. In the excavation these stones began along line A2 - B2, approximately 50 cm from Peg B2, continued in a straight line to peg B1 and curved gradually around in the direction of 2A.

The base of this line of stones was found in level 2, terminating on the division with level 3. The sandy soil was grey-brown in colour and well consolidated. Thickness throughout the excavated area was consistent, varying between 4 and 8 cm.

Part of a stone circle, consisting mainly of a single line of stones (B1.1.1) was excavated, stretching in an arc from peg B2 through to 60 cm from C1 along line C1 - C2. Inside this, a stone concentration (B1.2.1) was found slightly below the level of the stone circle. A few potsherds and bones were removed from this concentration. There does not appear to be any relationship between these two features. Very little cultural material was found in level 2, the pottery and faunal remains being well fragmented.

Level 3 was distinct from 3(i) in certain squares, but had to be arbitrarily divided in others. Grey sandy soil was in evidence throughout the layer, being much softer than in 2. The area around lines 2, 3, and 4 contained numerous small pebbles. Cultural material was more common and less fragmented. A large concen-



Plate 5

Schroda Area 2. General view of original excavation showing stone semi-circle B1.1.1 with the stone wall A1.1,1 in the middle



Plate 6

Schroda Area 2: Aerial view of the wall A1.1.1 extending across the excavation.

Table 24

Schroda area 3: Percentages of stamped and incised decoration.

Level	Stamped		Incised	
		∞		∞
1	10	90,9	1	9,1
2	11	78,6	3	21,4
3	17	73,9	6	26,1
4	33	75,0	11	25,0
5	26	68,4	12	31,6
6	19	90,5	2	9,5

Percentages are expressed as part of the total of each individual level.

Figure 28

Schroda area 3: Results of table 24 expressed in graphic form.

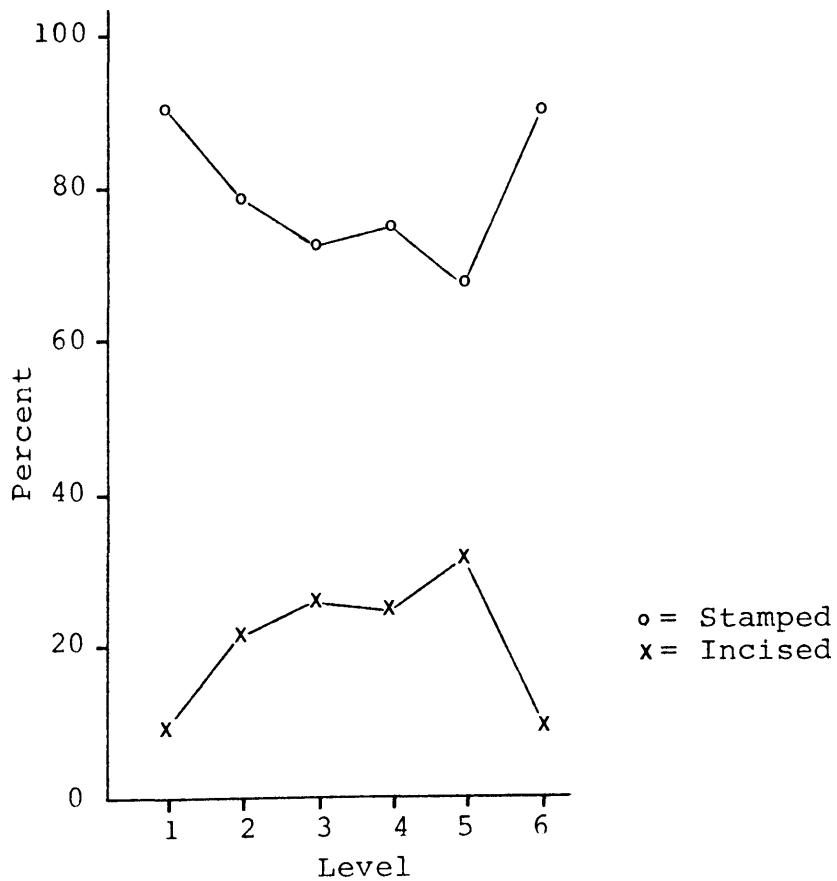


Table 25

Schroda area 4: Percentages of stamped and incised decoration.

Level	Stamped		Incised	
		∞		∞
1	203	69,3	90	30,7
2	230	77,2	68	22,8
3	44	80,0	11	20,0

Percentages are expressed as part of the total of each individual level.

Figure 29

Schroda area 4: Results of table 25 expressed in graphic form.

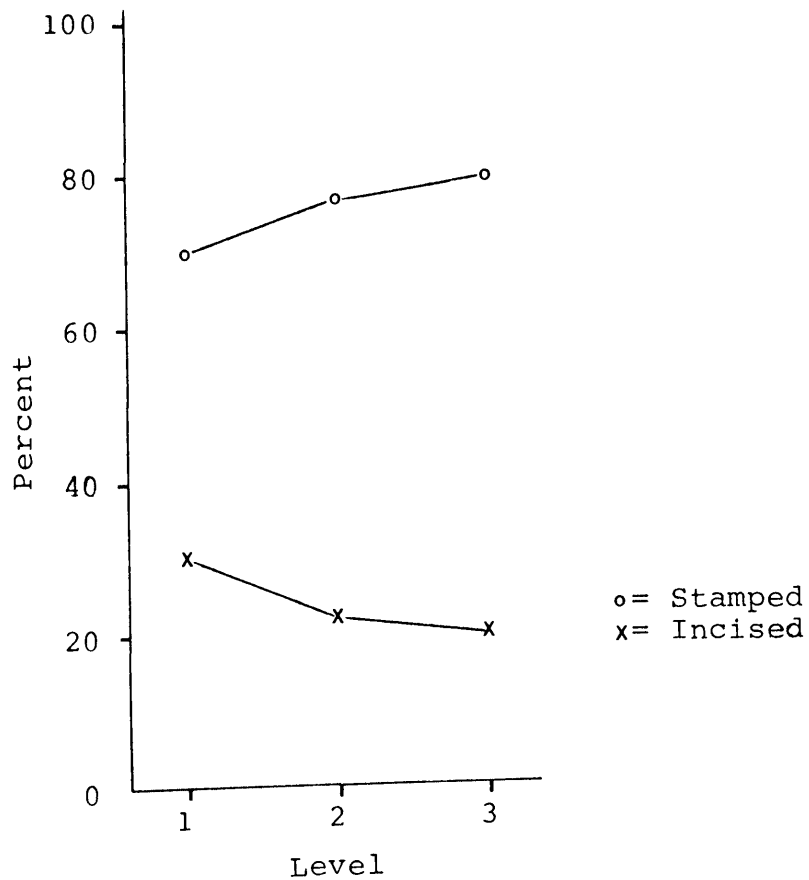


Table 26

Schroda area 5: Percentages of stamped and incised decoration.

Level	Stamped	%	Incised	%
1	19	61,3	12	38,7
2	28	80,0	7	20,0
3	151	54,1	128	45,9
4	194	61,4	122	38,6
5	245	69,0	110	31,0
6	127	77,4	37	22,6
6i	31	81,6	7	18,4
6ii	21	84,0	4	16,0
6iii	51	68,9	23	31,1
7	137	74,5	47	25,5
7i	5	100	0	0
7ii	2	50,0	2	50,0
8	124	79,0	33	21,0
9	97	78,2	27	21,8
10	48	81,4	11	18,6
10i	12	75,0	4	25,0
11	25	86,2	4	13,8
12	26	92,8	2	7,2

Percentages are expressed as part of the total of each individual level.

Figure 30

Schroda area 5: Results of table 26 expressed in graphic form.

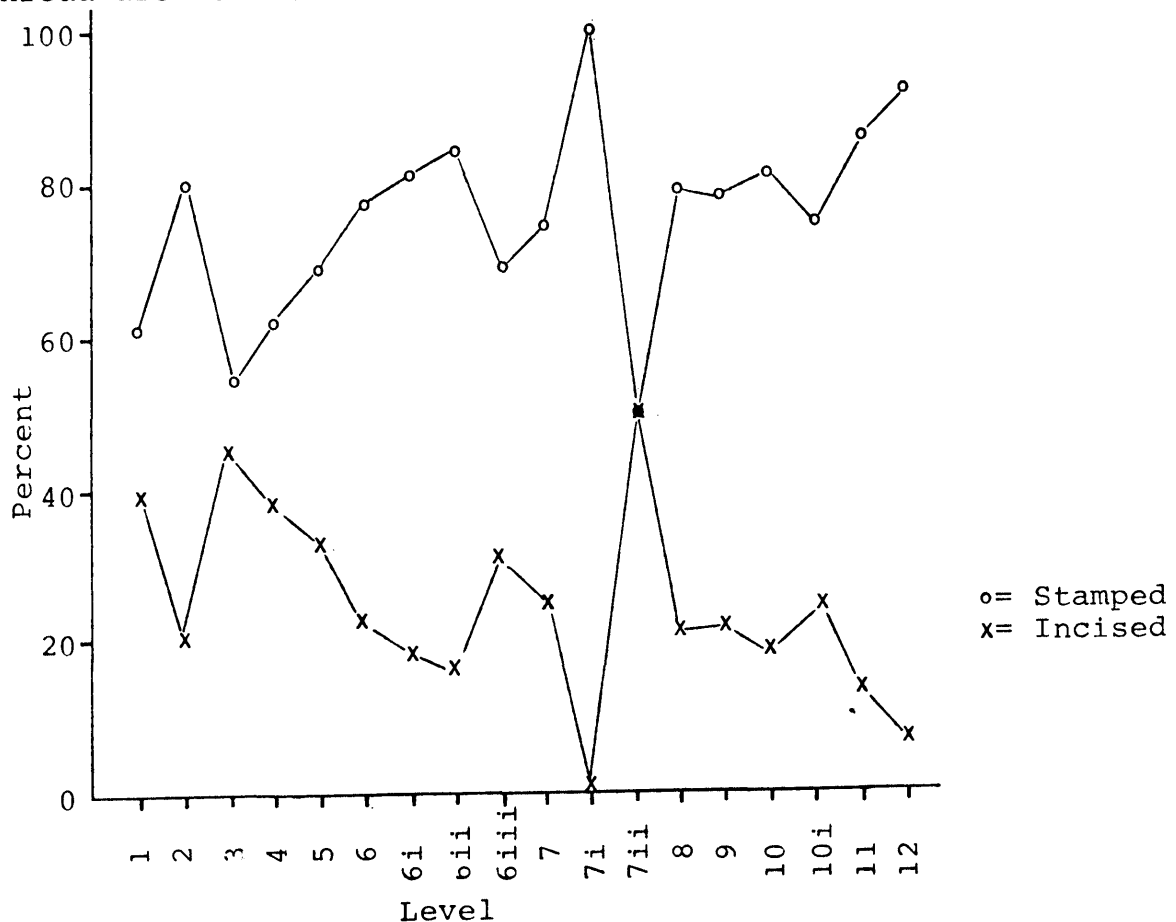


Table 27

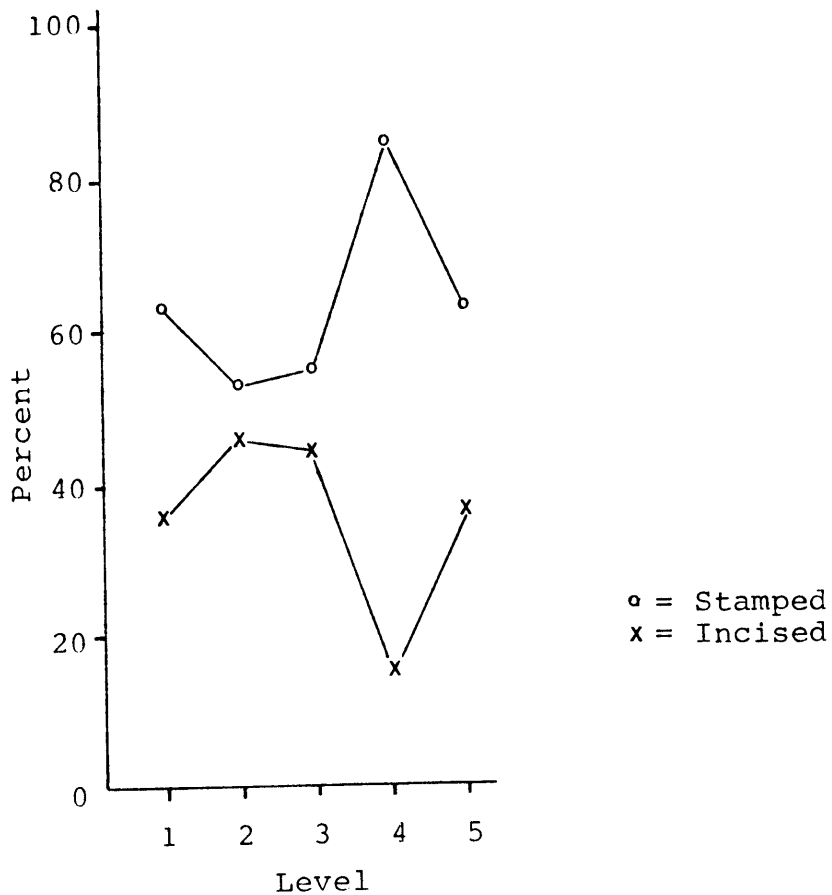
Schroda area 6: Percentages of stamped and incised decoration.

Level	Stamped		Incised	
		o/o		o/o
1	7	63,6	4	36,4
2	51	53,1	45	46,9
3	27	55,1	22	44,9
4	17	85,0	3	15,0
5	10	62,5	6	37,5

Percentages are expressed as part of the total of each individual level.

Figure 31

Schroda area 6: Results of table 27 expressed in graphic form.



Dentate stamping	A	31
Bangle stamping	B	9
Dentate stamping and incision	C	17
Bangle stamping and incision	D	4
Incision	E	66

Just under half (48%) of the motifs were stamp decorated. The totals of each individual type of motif have been tabulated, but the tables have not been included, as little information is forthcoming. The greater majority of the motifs were identified from single examples.

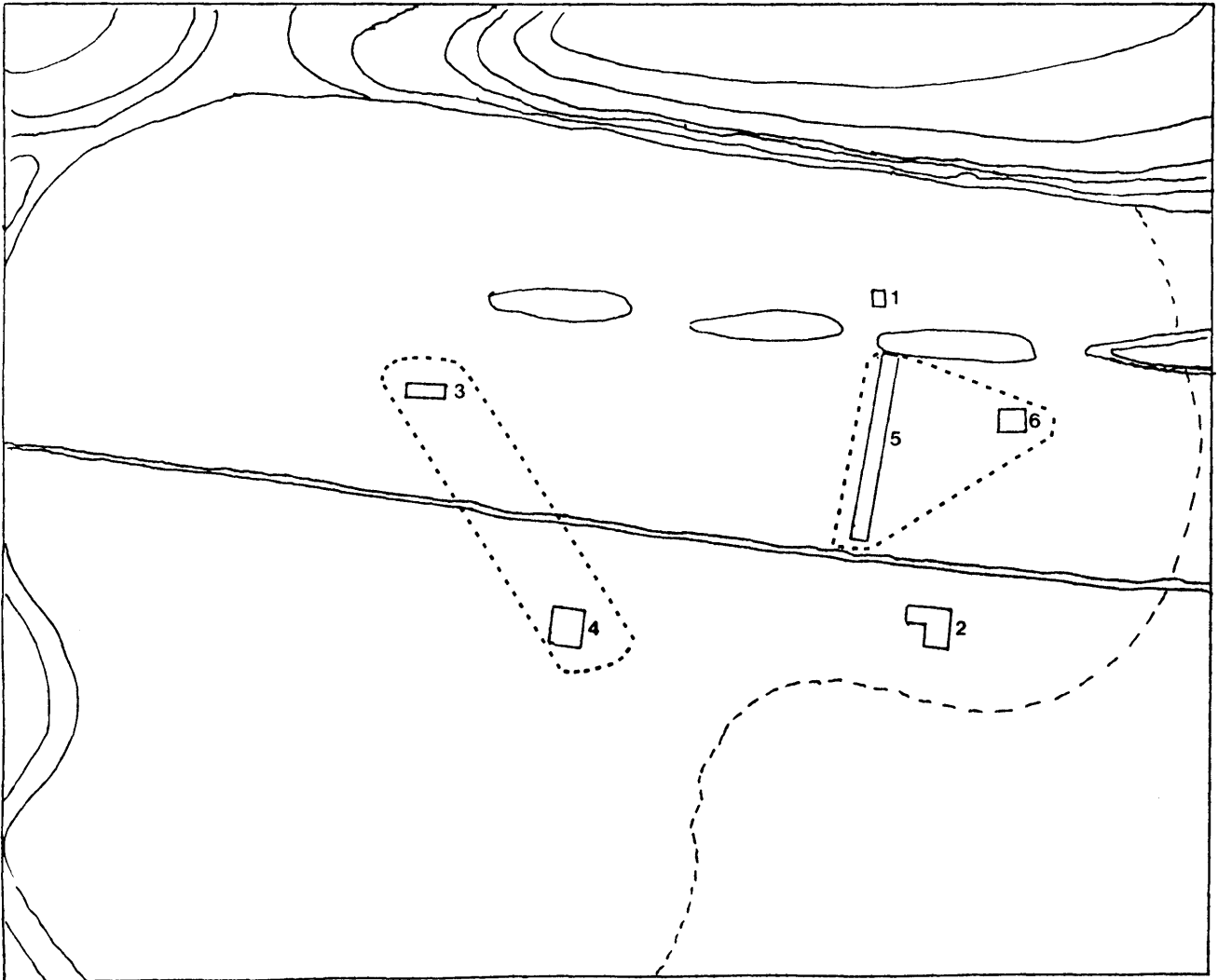


Figure 32

Map of Schroda showing clusters indicating possible activity areas

The most common motif at Schroda is the single stamped line A1.1 (□□□□□), followed by A5.1 (□□□□□□□□), A4.1 (□□□□□□□□□□), E1.1 (—), B1.1 (▧▧▧▧▧), E4.11 (▨▨▨▨▨) and A6.1 (□□□□□□□□□□) in that order. Complete tables giving the total numbers of each type of decoration are available, but have not been included.

Six different types of stamp were distinguished, and varied from rectangles to trapeziums and triangles (See figure 33). This suggests that the instrument used in the making of the decoration was a piece of calabash or similar material into which teeth of any shape and size could be cut. No clay stamps of the type found in Rhodesia were excavated. A single sherd with a combination of different stamp shapes was found.

Figure 33

Schroda: Different types of stamp pattern
(left) and combination of two types (right)

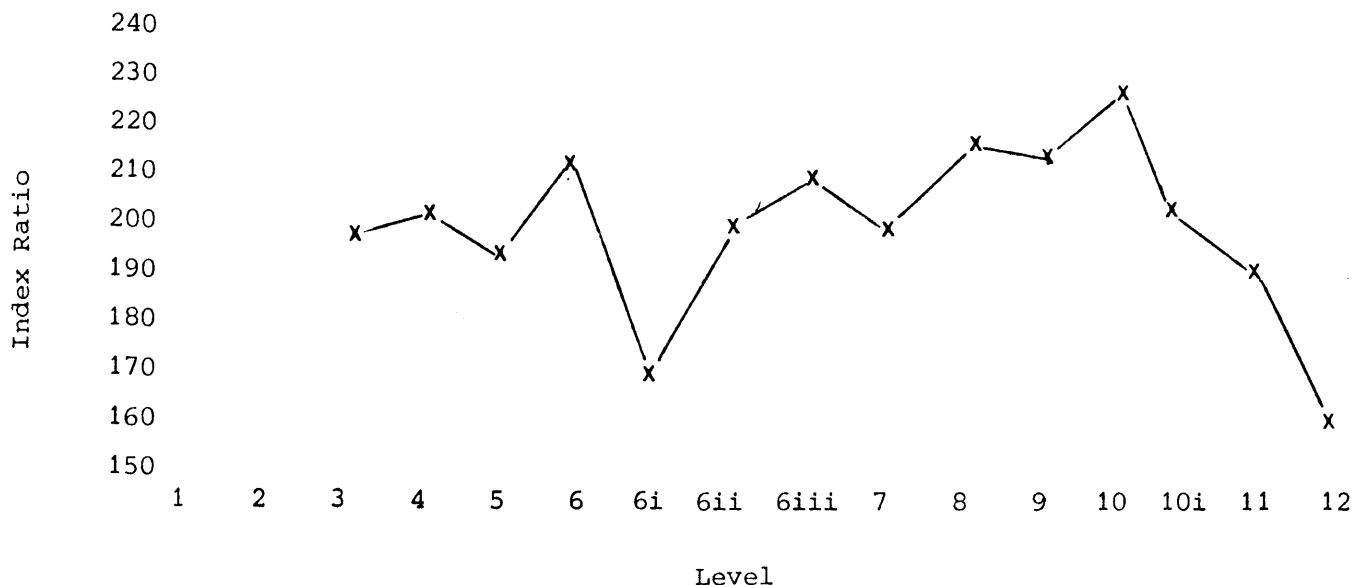


The variation of neatness, size and depth of individual stamp impressions was investigated, with a view to determine whether changes took place within the site. To do this, the width, length and depth measurements of 5 individual impressions were taken, and were respectively added up and averaged. In per sherd addition the number of impressions over a distance of 2 centimetres for two separate rows was counted and averaged. This was intended to give a coarseness ratio.

A length/width index figure was worked out ($\frac{\text{length}}{\text{width}} \times \frac{100}{1}$) and plotted for area 5. A clear trend did occur, as can be seen in figure 34.

Figure 34

Schroda Area 5: Length/width index for stamp impressions



A high index reading indicates long narrow stamp impressions, while a low figure shows an almost square shape. From levels 12 to 10 there is a sharp increase in the index figure, showing a change from nearly square impressions to elongated ones. From levels 10 to 6(i) there is a more gradual decrease back to the nearly square shape. From 6(i) to 3 the index ratio increased again. Three periods of change are indicated. It is conceivable that these indicate the presence of different potters on site over a period of time, or population movements, i.e. new inhabitants of the same stock living in the village.

Incision is present in all levels, and little change in quality was observed. It varied in depth and width. Much of what was found, could be classified as broad line incision, but for the purposes of analysis, no distinction was made.

Layout

Seven categories for the combination and position of decoration were distinguished in the Schroda sample, namely on rim, under rim, neck, neck/shoulder, rim/shoulder, rim/neck/shoulder, and shoulder. No vessels were decorated along the base.

The layout positions were combined with vessel shape and decoration

as is necessary to form classes. As individual decorative motifs were too few per vessel shape to be meaningful, the motifs were grouped according to basic technique, namely stamping and incision. Tables 28 to 33 give the vessel shape, decoration and layout combinations for each level in all areas.

Table 28

Schroda Area 1: Vessel shape and decoration combined with layout position

Position	Shoulder	Under Rim			Neck	
Level	<u>Vessel Shape</u>	<u>Vessel Shape</u>			<u>Vessel Shape</u>	
	S Pot Indt	S	I	Indt Pot	S PotS Indt	I PotI Indt
1						
2	2	1	1			
3	1					1
4					1	
4i				1		
4ii	2			1		
5						

S = Stamped

I = Incised

It is clear that there is no clustering taking place at all in any area, and therefore all areas must be combined. This is not easy, as one cannot expect two excavations some 300 metres from one another to be similar (Areas 3 and 6). Two approaches were used to try to overcome this problem.

Firstly an attempt was made using the stratigraphy to combine areas. This was only partly successful, as only areas 3, 5 and 6 could be combined on the basis of an ill-defined dung level occurring close to the bottom of each area. Dung was present in areas 1 and 2 but in different relative positions, which excluded them from being included in the combination.

Table 29

Schroda Area 2 : Vessel shape and decoration combined with layout position

Position	Shoulder			Under Rim			Neck			Neck/Shoulder		Rim/Neck/Shoulder	
	<u>Vessel Shape</u>			<u>Vessel Shape</u>			<u>Vessel Shape</u>			<u>Vessel Shape</u>		<u>Vessel Shape</u>	
Level	S	I		S	I		S	I		S	I	S	I
	Indt Pot	Indt Pot	Indt Bowl	Indt Pot	Indt Pot		Indt Pot	Indt Pot		Indt Pot		Indt Pot	
1				1	16		1			5			
2	3				2								
3	1	1											
3i	11		1		3		1	6		1	1		
3ii						1							
4	6	2			1	1	4	1					
5	4	1		1		2	1					1	1

S + Stamped
I = Incised

Table 30

Schroda Area 3: Vessel shape and decoration combined with layout position

Position	Shoulder	Under Rim		Neck		Neck/Shoulder	Rim/Neck/Shoulder
Level	<u>Vessel Shape</u>	<u>Vessel Shape</u>		<u>Vessel Shape</u>		<u>Vessel Shape</u>	<u>Vessel Shape</u>
	S Indt Pot	S Indt Pot	I Indt Pot	S Indt Pot	I Indt Pot	S Indt Pot	S
1							
2		1			1		
3				2	2		
4	5		1	2	1	1	
5				1	2	1	
6		1	1	1	1		1

Table 32

Schroda Area 5: Vessel shape and decoration combined with layout position

Position	Shoulder		Under Rim				Neck				Neck/ Shoulder		Rim/ Shoulder		On Rim				
	Vessel Shape		Vessel Shape				Vessel Shape				Vessel Shape		Vessel Shape		Vessel Shape				
Level	S	I	S		I		S		I		S	I	S	I	I				
	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot	Indet Bowl	Indet Pot				
	16	28	1	1	1	3	5	11	21	3	38	1	5	1	3	7	1	7	1
1																			
2	2		1						2										
3	12		4		1				4		6		1	7	1	8			1
4	13		4						5		4		3		8				
5	19		6		1				5		5		1	12		5			1
6	11		4			1	1		7		1		1	12	1	3		2	1
6i	4		1										3		1				
6ii	2				1						1					1	1		
6iii	5		2					1	2		2		5		3	1			
7	1	13	1						5		3		20		3	1	1	1	1
7i													1						
7ii					1														
8	1	6	1						5	1	1	6	14	1	1	3	1	1	
9		10	2						4		2		13		3			1	
10		7		1					3		2		6		3				
10i			2								1		2					1	
11		5							1										
12		1							1				2						

Table 33

Schroda Area 6 : Vessel shape and decoration combined with layout position

Position	Shoulder		Under Rim		Neck			Neck/Shoulder	Rim/Neck/Shoulder	
Level	<u>Vessel Shape</u>		<u>Vessel Shape</u>		<u>Vessel Shape</u>			<u>Vessel Shape</u>	<u>Vessel Shape</u>	
	S Indet Pot	I Pot	S Indet Pot	I Pot	S	I	S	S		
	7				1	2	5	4	11	1
1		1								
2	4	1	1	1			3	1	1	1
3	4		4	1		1				
4	5				1		1	1		
5	3		1							

S = Stamped
I = Incised

Area 4 contained no dung. The results of this exercise are shown in tables 34 to 37.

No conclusions could be reached, mainly because the sample remained too small.

The second approach was to divide all excavations arbitrarily into equal groupings of levels. This was based on area 4, which had the lowest number of levels, namely 3. This division was based on the assumption that rates of deposition throughout the site were the same, irrespective to the final depth of deposit.

Tables 38 to 42 give the details.

Several facts came to light with this grouping. The most common position for stamped decoration is on the shoulder, followed closely by decoration in the neck. The 'under rim' position is also frequent.

Incision on the other hand is most frequently found in the neck of a vessel, then under the rim and thirdly on the shoulder.

Combining vessel shape and decoration, a clear trend emerges, in that shape 1 is common to most layouts, the apparent exception being layout position 'shoulder'. The other vessel shapes are limited to a few examples of each.

Rims

A classification list for rims was started, but on analysis of the rim shapes it became clear that a very large percentage of the rims rest on two types, i.e. one with a round profile, and another with a flattened profile. The study was stopped when it was noticed that these two shapes occurred frequently on the same vessel. It is obvious that a variety of clearly different rims does exist, but in view of the variability within a single vessel it seems doubtful whether any meaningful results will be found at Schroda.

The classification lists as well as the tables have therefore not

Table 38

Schroda All areas: Distribution of attributes combined with layout position 'shoulder'

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Stamped												Indt Pot	Indt Bowl	Incised												Indt Pot	Indt Bowl	
							1	2	3	4	5	7	11	16	21	24	28	1			2	3	4	5	6	7	10	13	16	38					
L E V E L	1	1	1		1												2																	1	
					2	1											23	1	1															8	
	2	2	2		4												13																	4	
					5													24																	6
					6													11																	4
	3	3	3		6i												4																1		
					6ii	2											8																	2	
	4	3i			6iii		2										25																	2	
	4i		4		7												1	24	1															6	
		3ii			7i	3											9																	1	
	4ii				7ii																													1	
		4	5		8																													1	
					9	4												23																4	
					10		3											7																1	
					10i													3	1															2	
	5	5	6		11	5												8																	1
					12													1																	

Table 39

Schroda All areas: distribution of attributes combined with layout position 'under rim'

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Stamped										Indet pdt	Incised										Indet pot				
							1	2	3	4	5	7	11	16	21	24		28	1	2	3	4	5	6	7	10	13		16	38		
L E V E L	1	1	1		1												2														9	
					2	1											9														4	
	2	2	2		5												8	1													9	
					6												7															1
						6i																										
	3	3	3		6iii	2											1														4	
					7												2														2	
	4	3i			7i												15	1													7	
					7ii	3											4														1	
	4i	3ii	4		7iii												1														2	
						8																										
	4ii	4	5		9												5														6	
				10	4											5														4		
				10i												3														2		
				11												2														1		
5	5	6		12	5											5														1		
																1														1		

Table 40

Schroda all areas: Distribution of attributes combined with layout position 'neck'

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Stamped										Indt Pot	Incised										Indt Pot			
							1	2	3	4	5	7	11	16	21	24	28	37		1	2	3	4	5	6	7	10	13	16	38	
L E V E L	1	1	1		1	1												1	19												8
				1	2		4	1											3												4
	2	2	2		4		1	2											13												7
					5		1												12												1
					6																										
	3	3	3		6i	2													3												14
					6ii														8		1										2
	4	3i			6iii		1												5												15
				2	7														47								1				
	4i	3ii	4		7i	3	1		1										1					1							1
					7ii																										
	4ii	4	5		8	4													14		1										1
				9		1		1										19	1											4	
				10														6												2	
			3	10i														2	1											1	
5	5	6		11	5													2												1	
				12						1								2													

been included in this study but are available to any interested persons.

Quality

The quality of finish and of decoration was also examined on individual sherds. The spatial spread of the excavated areas makes combination of levels difficult. For this reason, emphasis will be placed on the results of Area 5, which appears to be representative of what has occurred on site in the past.

Table 43 gives the details on quality from Area 5.

TABLE 43

Schroda Area 5: Table showing clustering of attributes used to determine quality of finish and quality of decoration

LEVEL	Quality of Decoration Degree				Quality of finish Degree			
	1	2	3	4	1	2	3	4
1								
2		1	2	2	1	4		
3		1	28	18		41	6	
4		1	27	10	1	30	7	
5		5	43	11	3	55	1	
6		4	29	12	3	40	2	
6(i)		1	8	1	1	9		
6(ii)			1	5	1	4	1	
6(iii)		2	14	5	1	18	2	
7		4	35	11	4	39	7	
7(i)			1	1		2		
7(ii)			1			1		
8		3	25	15	1	40	2	
9		1	22	13	3	31	2	
10		1	14	7		22		
10(i)		1	2	3		4	2	
11		1	5			6		
12			3	1		4		
TOTAL		26	260	115	19	350	32	

From Table 43 several points come to light. The majority of vessels are finished to degree 3. From level 9 on, there was slight improvement in the quality of finish.

At the same time, looking at the quality of decoration, again

one finds that the majority of decorations falls into degree 3. Looking at degree four, it can be seen that there is an increase towards the upper levels.

When viewed together, these facts suggest that with the increase in incised decoration, the quality of the decoration of the total assemblage decreased slightly. The finish, however, appears to improve slightly. By implication this would mean that the entrance of people bringing incised ware (L.K.A?) caused a slight decline in the decoration quality. It would appear, in fact, that the incised decorations were of a poorer standard, while the Zhizo remained constant.

Classes

The decoration sample would appear to be too small to seriate into classes according to vessel shape, layout and motif. Fragmentation of the pottery appears to be the reason for this. A further problem is that in many cases only a single example of a motif was recorded against a particular vessel shape. To overcome this problem, the motifs were divided into basic techniques namely stamping and incision. These categories were compared to vessel shape and layout position. Referring back to tables 38 - 42, certain trends are clear. Vessel shape 1 combined with stamp decoration under the rim apparently occurs throughout. Vessel shape 1 combined this time with stamp decoration in the neck also occurs throughout. The third trend is that vessel shape 1 combined with stamp decoration on the rim, neck and shoulder tends to occur in the middle and lower levels. These are summarized in table 44.

TABLE 44

Schroda: Decorated Class Trends

	Vessel shape	Decoration	Layout
Trend 1	1	Stamp	Under Rim
Trend 2	1	Stamp	Neck
Trend 3	1	Stamp	Rim/Neck/ Shoulder

Type series

No clear type series can be proposed for the Zhizo site at Schroda. Stamp decoration is predominant over incision. The major decorated vessel shape is 1, but other pots, bowls, beakers and beaker bowls are to be found.

The typical Zhizo vessel from Schroda is a globular pot with everted rim with stamped decoration under the rim or in the neck. Single bands on the shoulder of vessels are common, but the typical rim/shoulder or neck/shoulder layout is rare. In addition there are numerous plain bowls and several plain pots.

Red and black ware is present at Schroda, but in a very small proportion. It is definitely less common than in Rhodesia.

ii) Clay figurines

Fragments of clay figurines were by no means scarce at Schroda. Each area excavated presented several fragments. With the exception of area 6, the larger the area dug, the more fragments were found. Area 6 represents a special feature, and should be discussed by itself.

Excluding area 6 then, a total of 31 figurine fragments were found. Tables 45 - 49 show the spread of the fragments through the various levels of each area.

Table 45

Scroda Area 1: Clay Figurines

Level	SQUARE	
	A1	B1
1	x	
2		x
3		
4 (i)		
4 (ii)		
5		

Table 46

Scroda Area 2: Clay Figurines

Level	SQUARE													
	A1	B1	1B	1A	1AA	1BB	2BB	2AA	2A	2B	3B	3A	4A	4B
1														
2														
3									x					
3 (i)				x				x						x
3(ii)														
4								x					x	
5														xx

Table 47

Schroda Area 3: Clay Figurines

Level	SQUARE		
	A1	B1	C1
1			
2			
3			
4			
5	x		
6			

Table 48

Schroda Area 4: Clay Figures

Level	A1	B1	C1
1			xx
2		xxx	
3			

TABLE 49

SCHRODA AREA 5 : CLAY FIGURINES

Level	SQUARE										
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1	K1
1											
2											
3										X	
4	X	XX	X			X					
5				X							
6	X							X			
6(i)					X						
6(ii)											
6(iii)				XX	X						
7		X									
7(i)											
8											
9		X									
10											
10(i)											
11											
12											

It can be seen from the above tables that figurines were found in virtually every level, and that the spread was fairly even. There was no tendency to cluster in any particular level. It can therefore be assumed that the manufacture of clay figurines remained constant throughout the time span that the site was occupied.

Some of the pieces could be identified, and table 50 shows the

various categories as well as the numbers of each.

TABLE 50

SCHRODA : CLAY FIGURINE IDENTIFICATION

CATAGORY	NUMBER	%
Animal	1	3.2
Human	7	22.6
Possible Phallic Objects	3	9.7
Unidentifiable (complete	4	12.9
Fragmentary	16	51.6
Total	31	100%

The single animal figurine could be identified as a clay ox. The human figurines were not all complete, and were identified by body pieces with breasts or buttocks or a navel.

The possible phallic objects were three conical objects, one of which had a line of holes pricked into it. The unidentifiable category was used for objects that were virtually complete in form but could not be satisfactorily placed in any of the other categories.

The fragmentary peices were those which were too small to be of use. The human figurines appear to have a slight emphasis placed on their manufacture. In all cases, these appear to be stylized, such as the nearly complete one recovered from area 4 (C1.1.2).

One can assume that most if not all of these stylized humans were female. Arms were rudimentary bulges, while the faces usually had a few lines for features. The buttocks were steatopygic, and a prominent navel is found. Some pieces have scarification marks, and in one case, from area 5, square C1 layer 7, a groove in the back indicating the spinal column was coloured with red ochre.

The cache of figurines found in area 6 has been described elsewhere. (Hanisch, in press). The basic facts are the following:

Over 400 fragments of figurine were recovered from a depth of between 40 and 50 cm below the surface. They had been broken prior to burial, and three clusters could be seen. One cluster (A1.2.1.4) was in the form of a small pit dug into the soil in which fragments of several figurines were crammed. The broken half of a pot covered this feature.

Table 51 gives the different types of figurine as well as the totals. From this table it can be seen that the emphasis lies heavily on the stylized birds, semi-human shapes being the next most popular category.

When the collection of figurines from area 6 is compared to that from the rest of the site a distinct difference emerges. The elongated human figurines do not occur in the cache, nor do the stylized birds, which are so common in area 6, occur elsewhere on site. This suggests in turn that the two groups may have had different uses and associations. At present there is too little information about the context of the figurines from Area 6. In particular one would like to know if there are any other features such as huts, with which they can be identified, before a theory is propounded.

The elongated human figurines have always been considered typical of Leopard's Kopje A, but at Schroda they form part and parcel of the site occurring as they do through out the deposit (i.e. level 4 in Area 2; level 1 in Area 4; and levels 5, 6, 6(i) and 7 in Area 5). In all cases they can be associated with Zhizo pottery, and therefore are part of the Zhizo tradition. This then was taken over by the

160a

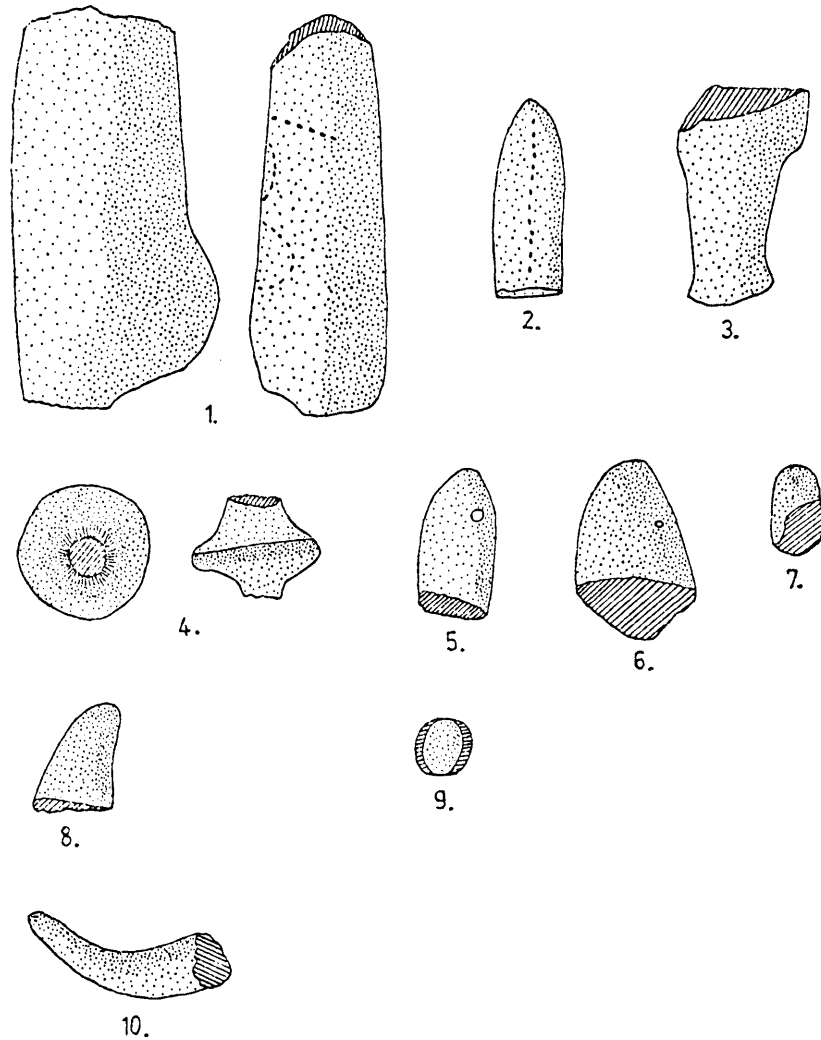


Figure 34a

Clay objects from Schroda (Areas 2 and 3)

1. Fragment of human body from area 2, square 1A, 1A.3(i) .4
2. Unidentified fragment from area 2, square 2A, level 4
3. Section of a leg from area 2, square 2A, level 3
4. Unusual knob from area 2, square 2AA, level 3(i)
5. Unidentified fragment from area 2, square 4B, level 3(i)
6. Unidentified fragment from area 2, square 4B, level 5
7. Unidentified fragment from area 2, square 4B, level 5
8. Unidentified fragment from area 2, square 4A, level 4
9. Garden roller bead mould from area 2, square A1, level 1
10. Probable horn from area 3, square A1, level 5

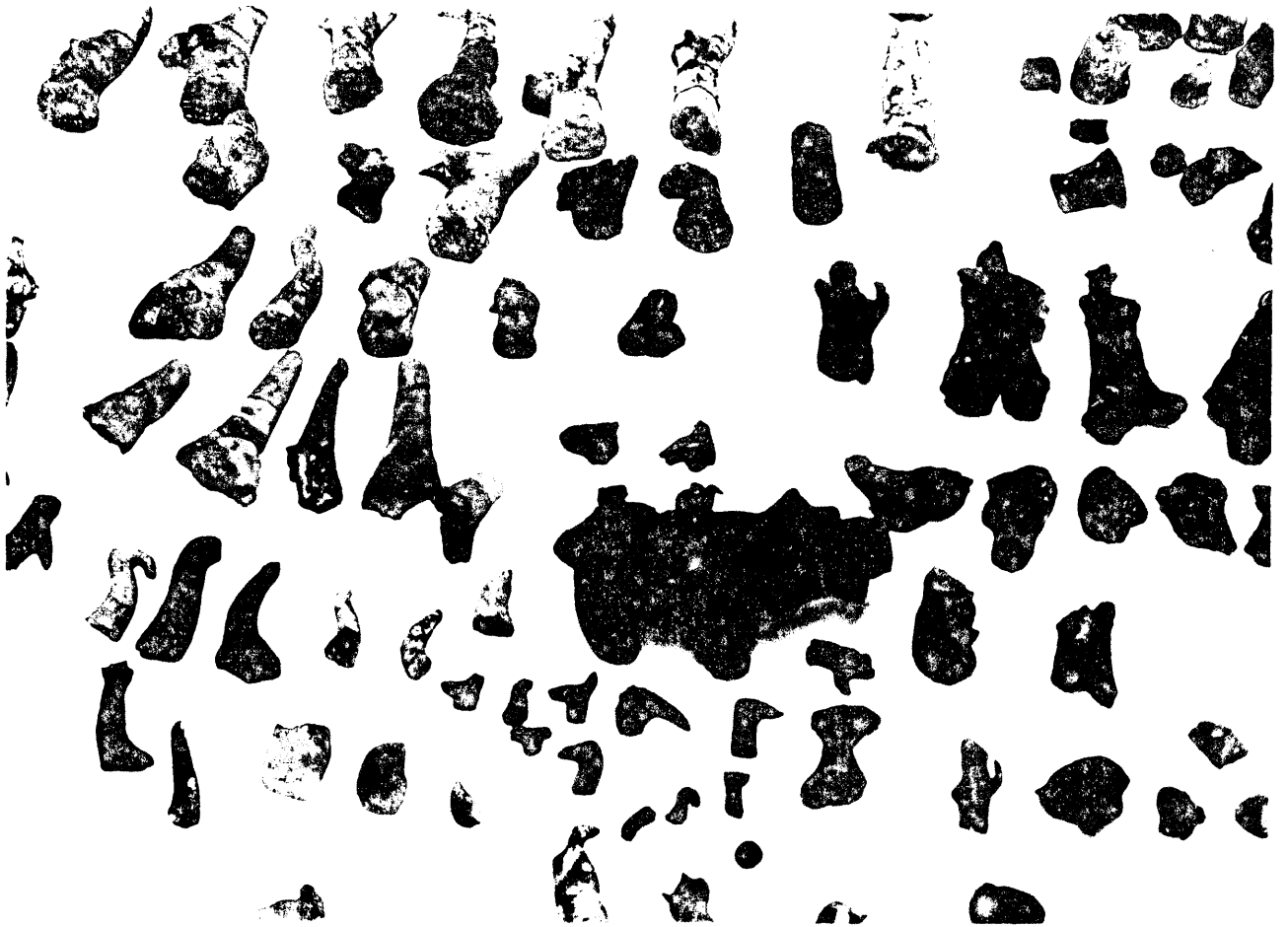


Plate 27

Some of the reconstructed clay figurines from Schroda.



Plate 28

Schroda : Examples of clay figurines

- 1) Hump-backed ox from area 6.
- 2) Young ox from area 6.
- 3) The largest and smallest bird figurines from area 6.
- 4) A bird figurine with its head turned back. From area 6.
- 5) A stylized human figurine from area 4. Note the similarity to K2 figurines
- 6) An unusual eight-legged double-headed creature from area 6.

TABLE 51

SCHRODA AREA 6 : CLAY FIGURINES

SHAPE	NUMBER	%
Stylized Birds.....	34	11,8
Human	1	0,3
Semi-Human	10	3,5
Baboon	4	1,4
Cattle	4	1,4
Sheep	5	1,7
Elephant	2	0,7
Frog	1	0,3
Hippopotamus	1	0,3
Rhinocerus	2	0,7
Warthog	1	0,3
Double-headed eight-legged creature	2	0,7
Phallic objects	5	1,7
Cat-like creature	1	0,3
Bear-like creature	4	1,4
Giraffe	1	0,3
Hyena-like creature	1	0,3
Unidentifiable buck	1	0,3
Unidentifiable bodies	9	3,2
Fragmentary	201	69,4
	290	100,0%

later Leopard's Kopje A people.

iii) Other

Garden Roller Bead Moulds

Two halves of very neat garden roller bead moulds were recovered, namely from Area 2, square A1, level 2 and from Area 4, square B1 level 1.

Such bead moulds have also been considered to be characteristic of Leopard's Kopje A settlements. At K2 in particular, large numbers of these moulds have been recovered. Admittedly the moulds have been found in the upper levels of Schroda, but the associated pottery remains predominantly Zhizo. Once more this is a feature that appears to have originated earlier than has hitherto been assumed.

Abraded Potsherds

Numerous abraded potsherds were found, and could be divided into two basic categories. The first category is potsherds that have been abraded round to form discs, similar to those used by present day Africans for plugging holes in pots during the manufacture of thick milk.

The second type is of indeterminate shape, with one or two sides abraded. They might have been used for the working of skins.

b) Metal Working

No direct evidence of copper or iron smelting was found. There was no abundance of ore, nor signs of slag heaps or remains of furnaces, but fragments of tuyère and pieces of slag were picked up on the surface of the site and were also excavated. Neither was very common, and the type and size of the remains is more suggestive of the reworking of metals such as is done by a smith.

The slag remains were not analysed but probably are from copper and iron working, as both metals were found on site in various forms. Several pieces of slag showed the typical green discoloration of copper, and several potsherds were recovered showing vitrification with adhering copper nodules. Stuyt (1968 pp. 64 - 65) refers to copper smelting and resmelting amongst the Lemba and Venda, "The copper was left to cool and then hammered into small cobbles and resmelted in a potsherd about 7 inches in diameter, which was put over the impression in the ground, so that the molten copper could be manipulated easily and poured out into the moulds prepared for it."

Seven tuyère fragments were recovered from areas 4, 5, and 6.

The single fragment from area 4 was the upper or 'funnel' end of the pipe, while the others were the lower ends which had been exposed to the heat of a furnace or forge. Küsel (pers. comm.) suggests that this predominance of end pieces shows that most tuyéres were not fired but only sundried. The sections that were exposed to heat were baked solid while the funnel, which did not receive much heat, disintegrated in the ground after having been discarded.

In total 405 pieces of metal were recovered, which can be divided into weapons, tools, ornaments and unidentified pieces. Table 52 shows the spread of metalwork throughout the excavated areas. Metal beads although included in the above total have been left out of this table and will be discussed in a following section.

From table 52 it can be seen that with exception of the copper ferrule, all tools and weapons are made of iron while copper was reserved for ornaments. Thirty-one pieces of iron were unidentifiable because they were either too fragmentary or were too rust coated. A single fragment of iron from Area 5 level 4 had indications that it had been coated or covered with copper. At Pont Drift TPD 1/2 the excavation produced an iron bangle covered with green oxide, while an iron bangle covered with copper spiral was found on the surface of Parma Hill. This is in the collection of the National Cultural History Museum.

i) Weapons

Only three objects could be identified as weapons. A well preserved spearhead was found in Area 4 level 1, while two rusted arrowheads were recovered from Area 5 in levels 5 and 6(iii).

ii) Tools

More tools could be identified than weapons. Area 4 level 1 contained 2 iron sweat scrapers, 1 iron adze and 2 iron awls. In Area 5 an iron hoe was recovered from level 5, while an adze appeared in level 10. An unusual object from level 4 in Area 5 was a copper ferrule such as would have been used for securing an arrowhead into a wooden shaft. The ferrule showed definite flattening through hammering. Two awls were found in levels 1 and 4

TABLE 52
 SCHRODA: DISTRIBUTION OF METALWORK

LEVEL	WEAPONS		TOOLS				ORANAMENTS			UNIDENTIFIABLE	
	Spearhead	Arrowhead	Hoe	Scraper	Adze	Awl	Copper	Bangle	Copper: Spiral	Copper covered iron	Iron
Surface of site											1
Area 1: 1 2 3 4i 4ii 5											
Area 2: 1 2 3 3i 3ii 4 5							1	1 3	1 3		1 1
Area 3: 1 2 3 4 5 6								3 1			1
Area 4: 1 2 3	1			2	1	2		5 1 1			
Area 5: 1 2 3 4 5 6 6i 6ii 6iii 7 8 9 10 11 12		1 1	1				1	3 17 21 16 5 1 3 6 1 1	1	4 3 5	2 2 3 5
Area 6: 1 2 3 4 5						1 1		1 1			1 1

of Area 6.

Some idea of the activities on site can be gathered from the above information, albeit little.

The hoe suggests agricultural activity, which is borne out by the appearance of fragments of charred domesticated grain from certain areas. The adzes indicate wood working while the awls might have been used for leather work.

iii) Ornaments

Numerous pieces of copper spiral were found in all areas except Area 1. These were manufactured from thin copper strips which had been wound around a fibre core. This core had normally disintegrated. In most levels only small fragments were found, but Area 4 level 1 returned an unusually long piece of spiral 74 cm in length. On removal from the ground it broke into numerous pieces. The thickness of the strips varied between 0,35 and 0,84 mm., the width between 1,5 and 2,5 mm and the diameter of the spiral between 3,7 and 5 mm.

Three other ornaments in the form of iron bangles were excavated from Area 2 level 3(i) and Area 5 levels 7 and 10. All bangles were made from solid iron bars which had been bent into a circular shape. All were fragmented, but the bangle from Area 2 could be completely reconstructed, and had an inside diameter of 6 cm. The bangles were all of a relatively small size, such as would be worn around the wrist. The decorative function of the spirals is more difficult to assess, as a result of their fragmented nature. It is conceivable that some might have been used as bangles, but the length of the piece C1.1.5 from level 1 of Area 4 shows other uses like a necklace, or a decoration around the waist.

No indications were found of the methods used for manufacturing copper sheets and cutting these into strips for use in the making of the spirals. It is also likely that the copper stained iron fragment was covered in spiral rather than coating introduced by copper plating methods. Under normal circumstances, copper remains better preserved than iron in an archaeological site, and it is

interesting to note that in this case, as well as at Pont Drift, it is the copper that has disappeared leaving behind the iron core. It is conceivable that the action between metals under suitable moist circumstances could lead to the electrolytic oxidation of the copper, but this hypothesis needs further looking into.

c) Beads

A bead analysis form was compiled and used throughout. Information pertaining to type of bead, colour, condition, shape, diameter, thickness and size of perforation was recorded for each individual bead. From this information summaries were compiled.

i) Glass

In total 667 glass beads were recovered from the site. More than three-quarters of these (76,9%) were so heavily patinated that the original colour could not be determined. In beads that had been damaged during retrieval, it was noticed that the colour deterioration extended throughout the whole bead, and was not just limited to the surface. The beads usually had a dark blue-black surface colour becoming white inside. They were normally fairly brittle, with a clear crystalline structure when freshly broken surfaces were examined. This structure was very clear under a low magnification (hand lens). Eight different colours could be determined, with turquoise being the most common, as can be seen from Table 53.

The diameter of the beads varied from 1 to 12 mm with the greater majority (79,48%) falling between 3 and 5 mm. The thickness of the glass beads varied from less than 1 mm to between 8 and 12 mm. with the majority between 2 and 3 mm in size. Tables 54 and 55 give the details. Area 6 has not been included. From the tables it is noticeable that the beads tend to be small and that there is not a great variety of colour.

Four basic shapes were distinguished and the beads divided into these categories, namely cylindrical (diameter less than thickness), flattened (diameter greater than thickness), disc (similar to shell beads) and garden rollers (home-made barrel beads like those found at K2). Out of the 585 glass beads used, 351 (60%) were cylindrical, 232 (39,7%) were flattened, while 1 disc and 1 garden

TABLE 53

SCHRODA : BEAD NUMBERS

Colour	Number	Percentage
White	48	7.20
Turquoise	52	7.80
Light Blue	6	0.90
Dark Blue	10	1.50
Light Green	15	2.29
Dark Green	2	0.30
Black	2	0.30
Yellow	19	2.85
Uncertain	513	76.91
Total	667	100.00%

roller were excavated. The garden roller which came from Area 5 square C1 level3, is of interest, particularly when combined with the bead moulds which have been described under ceramics.

This single bead was very weathered with a deep patination and was in worse state of preservation than those recovered from Pont Drift and K2, in turn suggestive of greater antiquity than those recovered elsewhere.

ii) Ostrich Eggshell

Disc beads are usually referred to as ostrich eggshell beads, but out of the total number of beads recovered from the site, only 810 or less than 13% were made from ostrich eggshell. Most of these beads showed little or no weathering, with only 25 showing

TABLE 54

SCHRODA : GLASS BEAD DIAMETER

Diameter (mm)	Number	Percentage
0-1	0	0
1-2	2	0.34
2-3	100	17.09
3-4	281	48.03
4-5	184	31.45
5-8	13	2.22
8-12	4	0.68
12	1	0.17
Total	585	100.00

heavy weathering, and a further 59 that had signs of burning. The thickness of the beads was generally between 1 and 2 mm. Diameter of the beads varied between 2 and 12 mm, with the emphasis on the larger sizes. More than 90% were between 4 and 12 mm in size, as can be seen from table 56.

The diameter of the perforation was also measured, something that could not easily be done with the glass beads. No obvious pattern was observed with the drilling of the perforation, i.e. there was no preferential side from which the hole was drilled and in many cases, the drilling had been done from both sides. The size of the holes varied between less than 1 mm and 4mm, with the majority

TABLE 55

SCHRODA : GLASS BEAD THICKNESS

Thickness (mm)	Number	Percentage
0-1	5	0.85
1-2	185	31.62
2-3	279	47.69
3-5	109	18.63
5-8	5	0.85
8-12	2	0.34
12	0	0
Total	585	100.00

falling between 1 and 2 mm. Three beads were unpierced. The details are contained in table 57.

iii) Achatina

The remainder of the disc numbered some 4733 specimens or 74% of the total. These were made from the shell of the large land snail (*Achatina* spp.).

These land snail shell beads tend to be more durable than the ostrich eggshell beads. In the sample only 1,4 % showed signs of heavy weathering compared to the 3% of the ostrich eggshell beads, while 11% of the *Achatina* showed light weathering compared to 37% of

TABLE 56

SCHRODA : DIAMETER OF OSTRICH EGGSHELL BEADS

Diameter (mm)	Number	Percentage
0-1	0	0
1-2	0	0
2-3	2	0.25
3-4	40	4.94
4-5	300	37.04
5-8	265	32.71
8-12	203	25.06
12	0	0
Total	810	100.00

TABLE 57

SCHRODA : OSTRICH EGGSHELL BEAD PERFORATION SIZE

Diameter (mm)	Number	Percentage
0-1	35	4.32
1-2	672	82.96
2-3	99	12.22
3-4	1	0.13
4	0	0
Undrilled	3	0.37
Total	810	100.00

the ostrich eggshell beads.

The diameter of the disc varied normally between 2 and 12 mm, with a single bead of less than 2 mm in diameter and 4 beads greater than 12 mm.

The size of the achatina shell perforation is very similar to that of the ostrich eggshell beads, with over 87 % of the discs having perforation of between 1 and 2 mm. Again there was no preference to which side had been perforated first, and many had been done from both sides. Table 59 gives the details .

Minimal numbers of other types of beads were found, all of them coming from Area 5.

TABLE 58

SCHRODA : ACHATINA BEAD DIAMETER

Diameter (mm)	Number	Percentage
0-1	0	0
1-2	1	0.02
2-3	228	4.82
3-4	603	12.74
4-5	1355	28.68
5-8	2032	42.92
8-12	510	10.75
12	4	0.07
Total	4733	100.00

Table 59

Schroda : Achatina bead perforation diameter.

Diameter (mm)	Number	Percentage
0-1	272	5.74
1-2	4154	87.77
2-3	280	5.92
3-4	0	0
4	0	0
Unperforated	27	0.57
Total	4733	100.00

iv) Metal

Two metals were used in bead manufacture at Schroda namely copper and iron. In turn two types were distinguished namely disc and cylindrical beads. The former type contained two shapes in both metals - firstly a round ring, and secondly a nearly square ring with a circular hole.

The round rings were in the minority, and since most of them were badly rust coated, it was difficult to measure the size with any accuracy. The five copper rings had outside diameters of about 12 mm and inside diameters of 8,5 mm.

The 'square' rings were copper and well preserved although a large number of them had very thin sides. The size showed very little variation. The diameter across the shortest axis (i.e. the two parallel sides) was between 10 and 11,5 mm, while across the longest axis the diameter was between 13 and 14 mm. The inside diameter lay between 8,5 and 9 mm.

Twelve cylindrical beads were recovered, of which four were iron.

Areas 3 and 5 contained two fragments of strings of iron beads, which had rusted together and the individual beads could not be separated nor counted with accuracy.

Table 60 gives the details of the metal beads as found on the surface and in each area according to the level excavated. From the table it can be seen that the metal beads occur in all levels of the site, and are therefore not a later introduction. It would seem that there is an increase in the numbers of beads found towards the upper levels. Individual high counts should, however, not be taken into consideration as the tallies depend on the thickness of the level and whether they spread through all squares that were excavated. No significant difference in shape or size was noted throughout the levels. The method of manufacture of the 'square' beads is not easily determined. Many were found to have a sand coating adhering firmly to them as would be expected had they been cast in sand. The fact that they are so similar in size and shape seems to preclude this possibility. It

SCHRODA : DISTRIBUTION OF METAL BEADS

	Disc		Cylindrical		
	Copper	Iron	Copper	Iron	Rusted iron Bead string
Surface of Site	2	2			
Area 1: 1 2 3 4i 4ii 5	1		1 1		
Area 2: 1 2 3 3i 3ii 4 5	1 1 1		1 1 1		
Area 3: 1 2 3 4 5 6		1			1
Area 4: 1 2 3	4 4	3 3			
Area 5: 1 2 3 4 5 6 6i 6ii 6iii 7 8 9 10 10i 11 12	1 1 14 12 24 8 18 2 8 81 6 1 1 1	5 7 10 2 1 26 1	2 1	3	1
Area 6: 1 2 3 4 5		1		1	

seems more probable that a bar or ingot was cast, and worked or hammered into the required shape. Segments or 'slices' could then be cut off to form the individual beads, which then could be threaded onto a fibre core and worn as bracelets. In view of the comparative rarity of these beads, it is also possible that they were worn on the same strings as other beads, such as the shell disc beads, to add variety to the necklace or bangle.

Minimal numbers of other types of beads were found, all of them coming from Area 5.

v) Bone

Two incomplete bone beads were found, both with signs of burning. One was cylindrical in shape, the other a disc. Diameter in both cases was between 5 and 8 mm. The thickness of the cylindrical bead was between 8 and 12 mm with that of the disc between 2 and 3 mm.

vi) Ceramic

Two cylindrical ceramic beads were recovered, with diameters of 3 - 4 mm and 8 - 12 mm, and widths of 3 - 5 and 8 - as mm respectively.

vii) Soapstone

Three interesting soapstone beads were excavated from different levels, two of which were cylindrical in shape, while the third was flattened. Diameter varied between 4 - 5 mm and 5 - 8 mm, while thickness varied between 3 - 5 mm and 8 - 12 mm.

viii) Tooth

Two complete beads made from teeth were found to be identical in shape, diameter and thickness (i.e. cylindrical) 3 - 4 mm and 2 - 3 mm respectively.

Tables 127 - 133 contain the results of the Schiroda bead analysis according to Area and level. The metal beads have already been discussed in detail and are therefore not included. Area six has not been included in detail because of incomplete data.

Looking through the individual levels in each area, it can be seen that glass, ostrich eggshell and achatina beads have a

fairly even spread throughout the deposit, nor do any significant change in size or preference take place. Viewed in this perspective then, it would appear that the site forms a single component.

The information contained in the above tables can be summarized in table 61. In total 6398 beads were recovered from the excavations. When converted into percentages the following picture emerges:

TABLE 61

Schroda all areas: Total numbers and percentages of beads

TYPE	NUMBER	%
Glass	667	10,43
Ostrich Eggshell	810	12,67
Achatina	4733	73,97
Metal	179	2,79
Bone	2	0,03
Ceramic	2	0,03
Soapstone	3	0,05
Tooth	2	0,03

Achatina beads are the most profuse, forming nearly three quarters of all the beads found on site.

Assuming that an average of 15 beads with an average diameter of 6 mm could be made from a single shell, bearing in mind that some shells are considerably smaller than others and that not all of the shell is suitable for bead manufacture, then 316 land snails could possibly have been utilized.

Three categories of beads, namely glass, metal and soapstone are not indigenous to the site or its surroundings and consequently must have been traded in.

Only one type of glass bead, namely the garden roller was manufactured on site, as can be seen from the bead moulds. The garden roller bead that was found in site was too heavily patinated for identification of the colour, but it seems likely on the grounds of the colour

of other known garden rollers that the turquoise beads were resmelted, and cast into moulds. It is interesting to note that the garden roller from Area 5 came from the level with the highest number of turquoise beads.

d) Stone Artefacts

A notable feature in the site was the very large number of pebbles that was collected from each level. Size was generally small, averaging about 3 cm in diameter. Pebbles were not kept from all the areas, and only in Area 5 was a record kept, showing 785 pebbles. The nearest source of supply was, of course, the Limpopo River. The use of the pebbles is uncertain, but could possibly have been the pieces used for games such as isifuba.

The major type of stone artifact was a combination hammerstone/ rubbing-stone, of which 20 were excavated in Area 1, 2 and 5. Areas 3, 4, and 6 did not produce any. Several of these combination tools had dimples on one or both sides. Similar stones have been described from the North-western Transvaal as having been used for the cracking open of marula nuts as well as for the sharpening of lower grindstones (Boshier 1965).

Eight hammerstones were found, six of which came from Area 2 and the remainder from Area 5. These did not have dimples nor did they have any indication of having been used for grinding.

A single rubbing stone came from level 9 in Area 5. This is similar to stones in the ethnology collection of the National Cultural History Museum, and which were used by present day Africans for smearing and smoothing of clay hut floors.

From Areas 2, 4, 6 in levels 3, 2 and 2 respectively, came three large stones which had pock marks on both sides, the number of pock holes varying from stone to stone. All stones were very similar in size averaging out at 23.3 cm in length, 18.5 cm in width and 10.8 cm in thickness. It is probable that these stones were used as anvils for the breaking open of nuts such as marulas, the holes serving to prevent the nut from springing away when struck with the hammer.

Grindstones were few, and no grindstone of the type commonly used by the traditional black peoples today could be identified. Three fragments of grindstones with sections of small hollows were recovered, one from the surface, one from level 1 in Area 2 and the other from Area 6. Two complete stones with elongated grinding hollows approximately 20 cm long, 6 cm wide and 3 cm deep were found. The first came from feature 1BB.3(ii).1 in Area 2 and had two parallel grinding hollows on its upper surface. Forming part of the same feature was a large broken stone with a small circular hollow that had been broken right through. These formed part of a hut floor complex and will be discussed in detail later on.

The second complete grindstone had a single elongated grinding hollow and came from feature A1.2.1.7 in Area 6. The length for the hollow was 20 cm, width 10 cm and depth 3 cm.

None of these grindstone fragments was associated with any discernable activity, and only the one from feature 1BB.3(ii).1 in area 2 was associated with the hut remains.

Two sharpening stones, presumably used for the sharpening or shaping of iron tools and weapons were found, one from Area 2 feature 2AA.3(i).2 and the other in square C1 level 2 in Area 4. This latter stone fragment had shallow but clear V-shaped grooves on both sides, which were 2,5 cm wide and 0,2 cm deep on one side, and 1,5 cm wide and 0,4 cm deep on the other. No other stones that might have been used in iron working were found.

e) Structures

i) Clay and Gravel

Only two structures in the form of hut remains and adjacent floors were excavated. Many levels contained pieces of burnt hut rubble, but the remains of these structures were not unearthed, nor were any daga walls or curbs.

In Area 2 a large section of level 4 was sealed off from 3(i) by a red gravel floor which extended in an area from Squares A1 and B1 through to 1BB. This floor was designated V1 and varied in thickness from about 1 cm to a maximum of 5 cm. In many sections it was

friable and had eroded away so that the true form and spread could not be established. The surface was undulating, and was in sections clearly smoothed.

Joining up to this gravel floor was a second smaller floor (V2) which formed a semi-circle along line A1 - BB1 (See figure 35). The floor was thin and friable, being made of a coarse brown sand. Maximum thickness was 2 cm. At the point where floor V2 met floor V1, a concentration of stones existed, consisting of two large flat stones and several smaller ones (feature 1BB.3(ii).1). Both these stones have been described under stone artefacts. The stone with the grinding hollows had been placed upside down, while the adjacent stone had the hole facing the interior of floor V2. The red gravel had been plastered up against these stones, i.e. the stones were not lying on top of the gravel floor. Floor V2 also appeared to be against the stones, but because of the poor preservation this cannot be said with any amount of certainty. However, the soil under the stones was not of the same colour and texture as that of the sandy floor (V2). The two large flat stones were very neatly placed on the perimeter of the circle formed by V2. The width of that part of the circle along A1 - BB1 was 2,52 metres. Extrapolation of the circle gives an approximate diameter of 2,80 metres.

From the plan drawing it is obvious that these are the remains of a hut with an outside or lapa floor. There was no indication of charred posts, nor that either one of the floors had been exposed to heat. No trace of post holes or a trench in which posts had been planted was found.

The flat stones and associated smaller stones (1BB.3(ii).1) are somewhat enigmatic, but their position suggests that they have been placed at the entrance to the hut. In spite of both stones showing signs of use, it is certain that their period of use was prior to their installation as part of the hut, otherwise the gravel floor would not have been moulded up against the stones. The stone with the broken hole may have had a function in that it may have formed part of the lower mounting of a solid wood door on a raised hinge, similar to the types found in use amongst the Venda (Stayt 1968) and the Thonga (Reynolds 1968), although these were

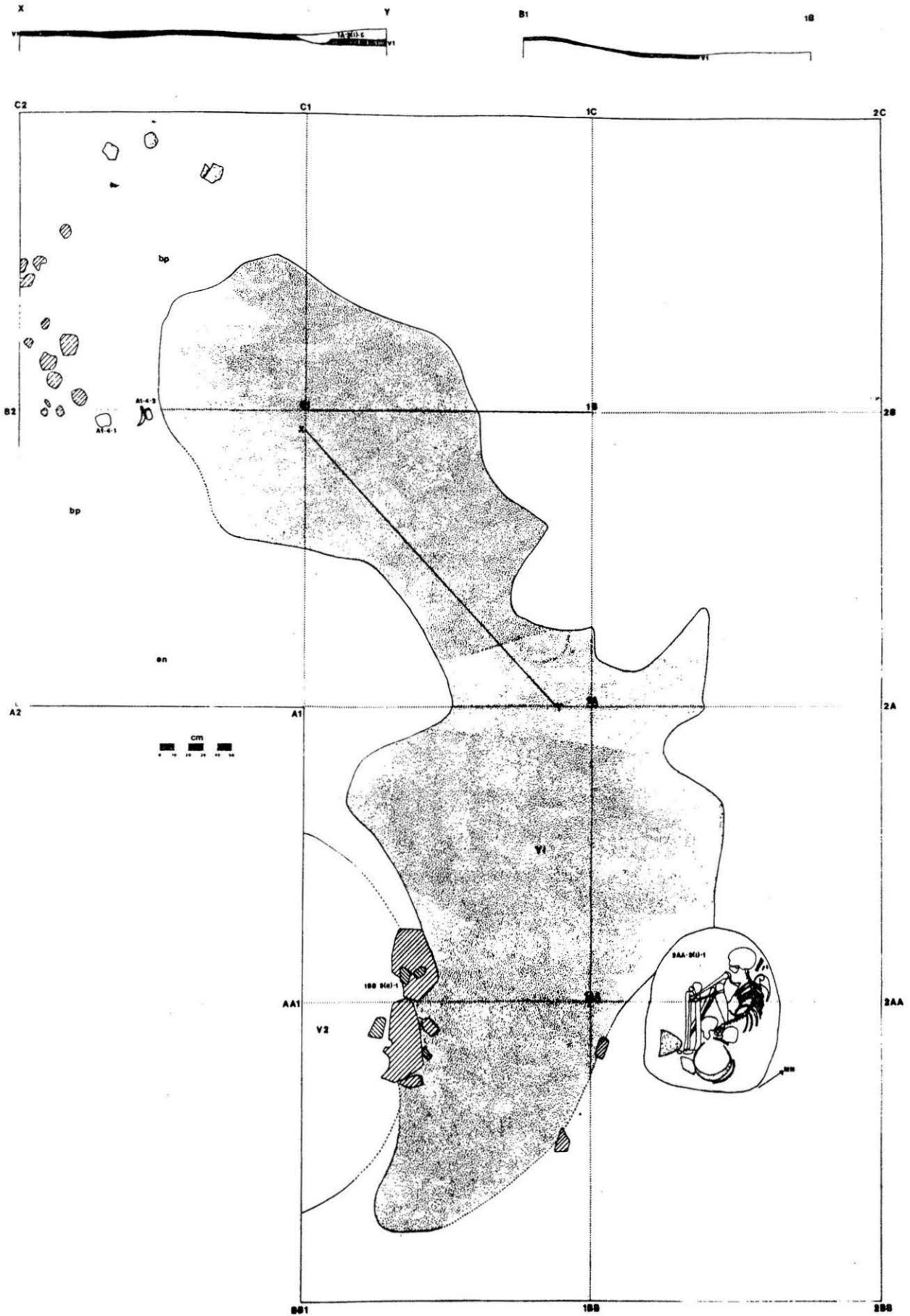


Figure 35
Schroda Area 2 level 3(ii): Plan and Profiles of
gravel floor V1 and plan of sand floor V2

usually mounted in wood. No associated cultural remains were found on either of the floors. The skeleton 2AA.3(i).1 comes from an upper horizon.

The picture one gathers from the information, is one of a hut with a surrounding gravel floor extending only around the front half of the hut. At some stage the hut was voluntarily deserted, and all utensils removed. The reason for leaving cannot, of course, be satisfactorily determined, but it seems probable that the hut might have fallen into such decay that repairs no longer sufficed. Had the hut been left as a result of the death of its occupant, then one would expect a few tangible objects in the form of ceramics or metals to have remained behind, assuming of course that not all the utensils and tools were buried with the deceased. This latter postulation seems rather unlikely because the graves that were excavated at Schroda and elsewhere did not contain the variety of grave goods that would have been found in the possession of the deceased. The hut is assumed to be a residence and not a kitchen or storage hut because of its size.

The type of red gravel used in the making of floor V1, is not found on site, nor in the hills immediately surrounding the site, although can be gathered nearby. The mudstone underlying the sandstone that forms the hills in this part of the Limpopo/Shashi Valley is of the same colour and texture as floor V1, and is almost certainly the source for this and similar floors.

It must be mentioned that this was the only lapa floor to be identified. In areas 1, 3, 5 and 6, fragments of floors were found, but all were small and not of the same material and quality. These fragments have been mentioned in the level descriptions and having no other associations or information will not be discussed in this section.

Area 5 At the base of squares F1 and 2 F a large mound of burnt hut rubble was uncovered, some 15 cm deep in the centre and tapering off to the sides (See profile H1 - F1). Underneath this, the well preserved remains of a hut floor and accompanying charred posts were found.

The wall of the hut was very clearly marked by a series of well preserved charred posts, many of which were remarkable for their size. The posts had been planted in a definite manner, with the spaces between the larger posts being filled by a series of smaller ones. Distances between the larger posts varied, and consequently the number of smaller posts required for filling also varied. The majority of the larger posts were between 10 and 12 cm in diameter, with the largest size being 15 cm. The smaller posts varied between 2 and 5 cm. From the charred remains, it was clear that many of the larger posts had been partially shaped, and it could be seen that one particular post had been 'quartered', i.e. that parts of the sides had been chopped away until only a quarter of the original shape was left. Several of the smaller posts were removed as radiocarbon samples, while the larger posts were treated with a consolidant and removed for identification. Unfortunately the National Herbarium considered the task of cutting thin slides from the fragile charcoal samples for microscopic identification to be very difficult and was not willing to undertake this work, resulting therein that the samples have not been identified.

The hut was slightly oval in shape, its length being 2,50 metres against 2,10 metres at its widest point. The entrance was facing magnetic north, where several flat medium-sized stones had been placed. On looking into the hut, on the right-hand side almost directly adjacent to the entrance was a moulded fireplace, which was raised slightly above the floor level. The raised area was in the shape of a semi-circle running up against the wall of the hut. Its approximate diameter was 85 cm. Slightly off-centre in this raised area was a circular depression, 20 cm in diameter and 3 cm deep which formed the actual fireplace, and was covered with a layer of white ash, which was not found elsewhere.

A daga curb had been moulded against the posts in the interior of the hut, but it was noticeable that several of the larger posts stuck out beyond the moulding. The floor was made of sand, the surface of which had been burnt black. A single springhare tunnel went through the floor. A cross-section of the floor taken along line G1 - F1, showed the floor to be composed of five different layers, the basal layer resting directly on sterile soil. All five layers

were sand, and due to the heat from the burning hut had changed colour. The total thickness of the floor was 18 cm.

Outside the entrance was small section of sandy floor, the section of which closest to the hut had been burnt black. Care was taken with the excavation of this floor section, as it was thinner and more friable than the main floor in the hut, but there was no indication of it extending much further than the width of the door.

Little in the line of cultural material was recovered from the hut. A single large bone was found on the outside floor close to the entrance, while a heap of potsherds belonging to the same vessel lay between the entrance and the fireplace. Towards the back of the hut, also against the wall was a hammer/grinding stone.

This hut was one of the earliest to be built at Schroda, and appears to have been a sturdy structure that remained in use for many years, during which period the original floor was resurfaced at least four times. The small size, combined with the fireplace suggests that this may have been a cooking hut, although it is not inconceivable that a person could sleep in it, while lying curled up.

ii) Stone

Features containing stones were common, nearly every level having at least one. A great many of these consisted of a number of small to medium sized stones that had been placed together in small heaps with no associated material, nor did they seem to form part of any structure. As these heaps consisted of only a few, stones, and cannot truly be called structures, they will be left out of the discussion.

Many of the structures were only partially excavated, and although attempts will be made to interpret their **meaning and context**, one **must** remember ~~that~~ only a small part of a very large complex is being dealt with, and only through horizontal excavation can the context be fully interpreted.

Surface

Surface structures were not easily discernable due to the many thickets of *Acacia tortillis* and *Abutilon pyncrodon* that covered the site, as well as a result of several seasons of good rains that ensured a good grass and weed covering. Refer to the site plan for details and position of the various surface structures.

The most obvious stone structure is that of the foundation of the European-built house which lies to the south of the farm track and about half-way along the length of the site. Medium sized flat stones were used with a grey clay as mortar. The house measured approximately 7 x 9 metres and was divided equally into two rooms across its width. Some 4 metres to the north were the remains of a semi-circular cooking shelter with a diameter of 3½ metres. These remains were in the form of a semi-circle of fairly large roundish stones, which presumably served as the base for a wooden structure. The open side was to the west, out of the direction of the prevailing wind. Radiating out in different directions from the house several paths, consisting of parallel lines of stones. It is not clear to what these paths may have been leading. Around the Baobab tree to the north of area 3, are several crude paths, also consisting of parallel lined of stones. In places these were interspersed by stone squares with crosses in them. These latter paths appear to be of the same age as the house remains, and give the impression of having been made by children during play.

At several points in the track, sections of packed stone have been exposed by passing traffic, suggestive of walls. Only one of these could be identified without doubt and followed for nearly 130 metres, beginning near Area 6 and passing through the excavated section of Area 2 in a north easterly direction for some 25 metres, after which it turned eastwards for 80 metres, passing through Area 4, before becoming indiscernable in stony ground. The wall consisted mainly of a double row of large stones imbedded in the ground, giving the impression of being intermittently spaced. Several stones particularly in the section running east, had been placed on edge.

During a subsequent visit to the site, several other possible walls

were noticed in the same general area but time and funds did not permit the necessary clearing of brush to determine their extent.

It is obvious that these walls were low, and that they were not built to serve any defence needs. It is possible that the stones served as a foundation for a wooden stockade, but where sections of wall were excavated in Areas 2 and 4, no indication of any post holes was found. A more likely explanation, is that they served as 'terrace' walling. The general direction of water run-off on the site is towards the north-west, that is, in the direction in which these walls are located. The deposit has eroded away in many parts, and bedrock is very close to the surface.

Where the wall crossed Area 4, it was found that the soil above the wall contained more cultural material than directly below, most of it being small and of the size that one would expect to be washed along by water. Elsewhere on site, where the deposit is thicker, no retaining walls have been found.

In the north-eastern corner of the site, three low mound of small to medium sized stones can be seen in a straight line running east west. The diameter of each of these heaps is between 3 and 4 metres, with about 5 metres separating them. The shape and shallow depth of the mounds suggest a series of collapsed low cairns.

Slightly to the west are two stone circles, which are similar in size to the bases of present-day grain bins. The first of these consists of a circle of stones about 1½ metres in diameter. The circle is filled with stones, all standing on edge. The second circle is just over a meter in diameter, and contains only one medium sized flat stone, in addition to the circle of stones standing on edge (See plate 29).

It is conceivable that these latter structures represent the last phase of habitation of the site. In view of the lack of pottery other than Zhizo it seems safe to assume that these then belong to the final phase of the Zhizo settlement.

Area 1



Plate 29

Schroda: A surface feature in the northern parts
the site. The circle of stones is probably the
base of a grain bin. Scale in decimetres.

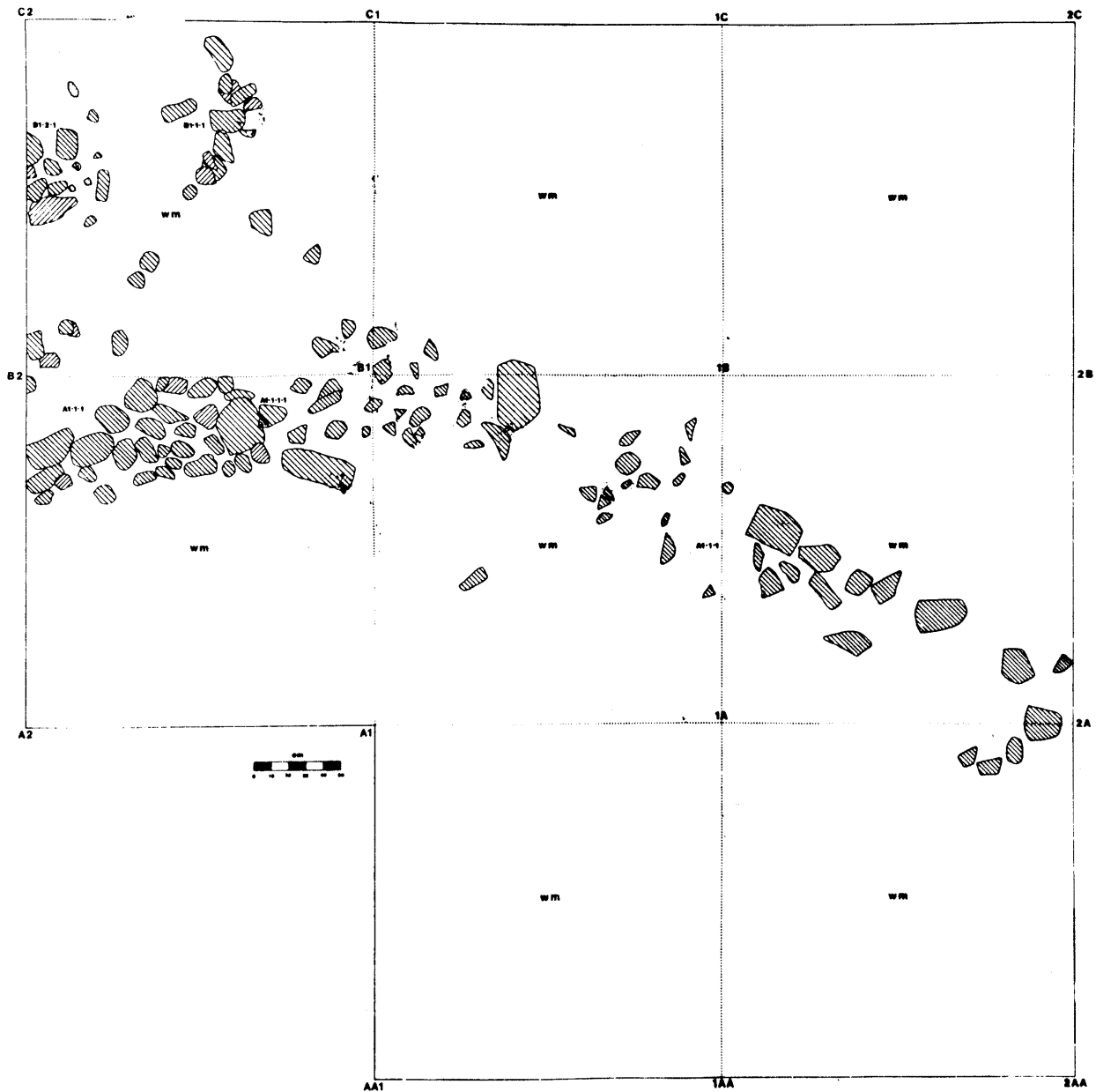


Figure 36

Schroda Area 2 level 1: Plan of stonewall A1.1.1

Only a single concentration of stones was found that can be described as a simple structure. Found in square A1 level 1 and numbered A1.1.1, this feature consisted of nine medium-sized to large stones, placed together in a 2 meter wide row with a slight curve to it. It lay close to corner A1, and the line of stones disappeared into the wall of the trench about midway between A1 and B1. There were no associated finds, and no explanation can be given for the nature of this structure.

Area 2

It has already been mentioned that part of a stone wall passed through Area 2. The section that was opened up was numbered A1.1.1 (not to be confused with A1.1.1 in Area 1). The line of stones varied between 40 and 50 cm in width, beginning close to B2 along line A2 - B2, going towards peg B1, then swinging away towards peg 2A where the wall left the excavated area (See figure 36). Numerous stones were visible on the surface, but many more were uncovered during excavation, to a maximum depth of 20 cm under the surface, although the base of most of the wall appeared to be about 10 cm deep. In square A1 smaller stones had been more proliferously used in the building of the wall.

Adjacent to the wall, a semi-circle of stones B1.1.1 was excavated beginning 1½ metres from peg C1 along C1 - C2 and curving towards peg B2. Apart of this circle consisted of a single row of stones. On the inside of the circle, a cluster of stones was found (B1.2.1) with a few odd potsherds inbetween the stones. The cluster extended into wall B2 - C2, and appeared to be lower than the circle by some 8 cm, suggesting thereby that the two structures might not be directly associated. No indication of the use was found, but it must be mentioned that the stone circle was a light structure in places.

Area 3

No stone structures were found in this area.

Area 4

From the map of the site, it can be seen that the stone wall that was discussed in Area 2 extends into Area 4, where it was excavated

in square C1. Here the wall was more densely packed, with numerous medium-sized stones amongst a few large ones. Width of the wall was between 50 and 70 cm, with a maximum depth of 25 cm. Several of the large stones were visible on the surface.

This wall has undoubtedly collapsed and the stones spread over a wider area than was observed from the surface. Again no indications were found of secondary building with wood. Once more the impression was gained of a terrace or retaining wall.

Also in square C1 the remains of another wall running parallel to the first were found 10 cm under the surface, and continued down to bedrock. The stones used in this wall were all medium-sized. The width was about 60 cm.

It would appear that the wall described first was built after the above, as it was some 7 cm above bedrock. However, there is no doubt that it must have been erected shortly afterwards, and that a passage of some 50 cm must have existed between the walls. No other associated structures were found, and the amount of cultural material suggested a midden that developed against the wall or had been washed up against it.

Area 5

Other than several loose scatters of stone, no evidence for the use of stone for the building of structures was found.

Area 6

Five stone structures were excavated in different levels. Three of these structures were similar in shape.

In square B1 level 2, a cluster of stones (B1.2.1) was found, partially heaped on one another. B1.2.1.1 was a large flat stone, pitted with little holes and could possibly have been used for cracking open marula nuts. No cultural material could be directly associated with the cluster, which appeared at about 22 cm under the surface and ended at 41 cm below p.s.1.

Square B2 level 2 yielded a vast concentration of stones of various

sizes, piled on top of one another. The stones appeared at about 12 cm under the surface and continued to a depth of 30 cm. Two clay figurine fragments were found amongst the stones, and as no signs of disturbance were noted, are probably of the same period. The perimeter contained more small stones (about 10 cm in size) than did the inside of the concentration, while many pieces of burnt hut rubble could also be found. No explanation can be given for this feature, but there seems little doubt that it forms part of the clay figurine complex.

The three similar structures can best be described as stone lined pits and were all discovered in B1 level 3 within 1½ metres from each other. Individual numbers were B1.3.1, B1.3.2 and B1.3.3. In essence these pits consisted of a hole some 30 cm in diameter with a large flat circular stone placed at the bottom of the hole, the depth of which was difficult to measure owing to the collapsed nature of the pits. The deepest pit (B1.3.2) measured 26 cm but can be deeper as is shown by a similar structure from Pont Drift TPD 1/2 which will be discussed later on.

f) Fauna

i) Animal Remains

On the surface, the greatest number of bones were found around area 5, many of them having been exposed by springhare activity. The area 5 trench when analysed produced proportionally the largest number of faunal remains.

The total excavated sample has not yet been completely analysed. Preliminary reports exist on areas 1, 2, 4 and part of 5. Voigt (pers. comm.) considers the sample thus far analysed to be adequate, and representative of what is found at Schroda to within one to two species.

Each area will be discussed separately, with Table 62 showing the total list of species identified at Schroda with minimum individual numbers.

Area 1

2433 Pieces of bone came from this excavation. Of this 14,1 % were identifiable. Bone flakes formed 23,3 % of the assemblage, while other skeletal parts formed 62,6 %.

The remains of a minimum of 60 individuals were found, of which 36 were non-domesticated. The 24 domesticates represented cattle (7), sheep (2) and sheep/goats (15).

It is of interest to note that more than 20% of the sample from all levels except 4 shows signs of burning. Level 1 has the highest percentage with 40,6%. Voigt (unpublished preliminary report) suggests that this is indicative of the assemblage having come from a midden area, where burnt debris and hot ash were dumped.

Area 2

A complete analysis of all the faunal material has not yet been done, with only a list of the identifiable remains available. 122 Individuals were identified, of which 56 were domesticated. This included 18 cattle, 2 sheep, 2 goats and 34 sheep goat. The presence of a single porcupine was recorded, while fish and land snail (achatina sp) are well represented.

Area 3

No analysis has been made of the fauna from area 3 with exception of a beast burial B1.6.1, which was described earlier on. The remains of three individuals were buried with the two pots. One specimen was the nearly complete skeletal remains of a juvenile Ovis/Capra. The other remains were scapula and metapodeal fragment of an older ANT II animal, and the ribs of an ANT III animal. The sheep/goat remains fit into the 4 - 9 month age group. However, comparison with juvenile specimens produces a very close match with a specimen of 5½ months of age. This is therefore likely to be the approximate age of the specimen.

On the basis of a photograph clearly showing the position of the bones as excavated, Voigt was able to make several statements on the deposition of the bones (Voigt 1976 unpublished report).

1. The vertabrae in vessel no. 1 (small pot) were articulated when placed in the pot.
2. The thoracic vertabrae lying against vessel no. 2 (large pot) were articulated when placed in the soil.
3. Three ribs lying alongside the juvenile skull were probably articulated when placed in the soil.
4. The remains of the juvenile Ovis/Capra were found to be so scattered as to suggest complete dismemberment.

It is without doubt that the remains were deliberately buried with the pots. There was no indication why the animals or pots there of had been buried, apparently still with the flesh adhering. Beuster describes a similar ceremony amongst the Venda, in which if the body of a deceased person cannot be found, then the bones and head of a sheep replace the bones of the deceased during burial. "Bei Todesfällen werden die seelen der Verstorbenen durch Zauberwürfel über die von ihnen gewünschte Art der Bestattung befragt. Da aber in vielen Fällen ein Nachsuchen nach den Gebeinen des Verstorbenen vergeblich sein würde, so vertreten Schafknochen dann die menschlichen Gebeinen und der Kopf des Thieres muss den menschlichen Schädel ersetzen" (Beuster 1879 p. 238).

Area 4

Again only identifiable remains have been analysed. A limited range of species was identified, with 89 individuals. Of these 56 (62,9%) were domesticated, comprising 36 cattle and 20 sheep/goat. One of the cattle was identified as an Africander breed. Looking at the proportion of cattle to sheep/goat, it can be seen that the number of cattle is nearly double that of sheep/goat, which is very unusual.

Area 5

Area 5 was examined in detail, although at the time of writing the analysis of all the levels had not yet been completed. The six upper levels have been classified in detail, while in the lower levels 7 - 12 only the teeth and remains identifiable to genetic levels have been included.

These lower levels yielded about 2000 identifiable remains, while

levels 1 - 6(iii) produced a massive sample of 83 839 pieces. Of these, 7064 (8,4%) were identifiable.

Carnivore damage was more common than rodent damage to the bones, but together with human damage, were in fact not at all common, averaging out as well under 1% of the sample. The degree of burning present is similar to that of other samples analysed from elsewhere, and considerably less than in area 1. Between 6,6 and 7,6% of the sample was burnt from most levels with exception of level 4 (17,8%) and level 6(ii) (10,2%) but this may be attributed to small samples. In feature B1.3.1 46, 4% of the sample was burnt, although this was not the reason why this feature was defined. It is of interest to note that square B1 is the closest to area 1 where average burning was more than 20%.

A large variety of species is present, including some unusual individuals.

A large number of carnivores (41) including 5 domestic dogs is present in the assemblage. Bat-eared fox, Cape wild cat and leopard are some of the others, and Voigt (1979 unpublished report) suggests that the wild carnivores were hunted for skins. Remains of five hippo were found, implying that these were hunted and not scavanged. The same applies to the three crocodile found.

Smaller prey in the form of hares, dassies, springhares, tortoise, veranus and snake, are well represented.

40,2% Of the identifiable species were cattle, sheep or goats. Humped cattle were present, as is indicated by the thickened dorsal spines of thoracic vertabrae. Six well-preserved skulls (TSR 5/3865, 3866, 4031, 4032, 4033, and 4402) showed the slightly undulating frontal profile characteristic of Sanga breeds. The presence of the Africander cattle breed is shown by several thin-walled, dense structured horn cores with characteristic morphology and curvature .

Sheep and goats were identified on the basis of horn cores, with the emphasis falling on goats (14:1).

TABLE 62

Schroda: Complete species list excluding area 3 and 6

SPECIES	Area				Total
	1	2	4	5	
<u>Domesticated</u>					
<i>Canis familiaris</i> (domestic dog)				5	5
<i>Bos taurus</i> (domestic cattle)	7	18	35	124	184
var Sanga				6	6
var Africander			1	4	5
<i>Ovis aries</i> (sheep)	2	2		1	5
<i>Capra hircus</i> (goat)		2		14	16
<i>Ovis/capra</i>	15	34	20	175	244
<u>Non Domesticated</u>					
<i>Papio ursinus</i> (baboon)				1	1
<i>Otocylin megalatis</i> (bateared fox)				3	3
<i>Ichneumia albicauda</i> (white tailed mongoose)				1	1
<i>Mungos mungo</i> (banded mongoose)				1	1
<i>Felis lybica</i> (Cape wild cat)				1	1
<i>Panthera pardus</i> (leopard)				1	1
Large felid (?lion)				1	1
Canid		1			1
Hunting dog - sized canid			1		1
Small canid		1			1
Indeterminate carnivores			1	28	29
Medium sized carnivore		1			1
Small carnivore		2		1	3
<i>Loxodonta africana</i> (elephant)	*			*	*
<i>Procavia capensis</i> (rock lyrax)	1	1	1	8	11
<i>Heterohyrax brucei</i> (yellow spotted dassie)				2	2
Indeterminate dassie				2	2
<i>Equus burchelli</i> (Burchell's zebra)	1	3	5	11	20
<i>Phaeochoerus aethiopicus</i> (warthog)			1		1
<i>Potamochoerus porcus</i> (bush pig)				1	1
<i>Hippopotamus amphibius</i> (hippo)				5	5
<i>Giraffa camelopardus</i> (giraffe)			1		1
<i>Sylvicapra grimmia</i> (grey duiker)		2		6	8
<i>Raphiceros campestris</i> (Steenbok)				1	1
<i>Oreotragus oreotragus</i> (klipspringer)				4	4
<i>Aepycerus melampus</i> (impala)				2	2
<i>Syncerus caffer</i> (buffalo)				2	2
Bov I	4	1		16	21
Bov II				7	7
Bov II not Ovis/Capra				3	3
Bov II b				7	7
Impala-sized bovid				2	2
Bov III	3			5	8
Bov III not Bos taurus				2	2
Bov IV				1	1

* Present

Continued

TABLE 62 (Continued)

SPECIES	AREA				Total
	1	2	4	5	
Large artiodactyl (?giraffe)				2	2
<i>Lepus</i> species (hare species)	4	5		25	34
<i>Pedetes capensis</i> (springhare)	2	1		14	17
<i>Thyronomys swinderianus</i>	1	1			2
<i>Hystrix africae-australis</i> (porcupine)		1			1
Indeterminate shrew		1			1
Indeterminate rodent	3	3		16	22
Indeterminate small mammal				4	4
<i>Struthio camelus</i> (ostrich)	1	2	3	8	14
Guineafowl-sized bird	1	1	1	9	12
Indeterminate bird		2		8	10
<i>Geochelona partalis</i> (leopard tortoise)				2	2
Tortoise	4	4	4	23	35
Veranus sp		2	3	13	18
Lizard				3	3
Indeterminate snake	1			10	11
<i>Crocodylus niloticus</i> (crocodile)				3	3
Frog/toad		2		3	5
Claras sp	1	1		28	30
Synodontis sp		4	1	23	28
Indeterminate fish	1	1	1		3
<i>Achatina immaculata</i> (large landsnail)		20	8	129	158
Small land snail				25	25
<i>Achatina</i> sp	6				6
<i>Cypraea</i> sp				3	3
Unis/Aspatheria sp (river mussel)		1		13	14
<i>Carbicula africana</i>				2	2
Large freshwater bivalve	2	1	2		5
Freshwater bivalve		1			1
Total min. Individuals	60	122	89	821	1092

Table 62 shows the complete list of species at Schroda as analysed, but excludes area 3 and 6. In total 1092 individuals were found. Of these 465 (46,6%) were domesticated species.

It is interesting to note that the total number of cattle is 195 individuals of which six are Sanga and five Africander. The sheep/goat class contains 265 specimens of which only 5 sheep and 16 goats could be positively identified. The ratio of cattle to sheep/goat is rather high, 5:7, bearing in mind that the more usual ration is 1:2.

Several other more unusual species were found with such frequency to suggest that they were part of the diet; 37 tortoises, 18 veranus, 11 snakes, 61 fish and 189 landsnails. The fish were present in nearly all levels, and when combined with the 22 river mussels and freshwater bivalves, shows that the Limpopo was being well utilized.

The large number of achatina were a source of raw material for bead manufacture, but it is likely that the snails formed part of the diet.

Elephant are represented only by their ivory in raw as well as worked form. There is no indication at present that these animals were deliberately hunted, and it is conceivable that the ivory was either scavanged or traded.

ii) Bone and shell implements

Bone tools were basically divided into formal and informal bone tools. Seven categories of formal tools could be identified, although the sample tended to be rather small. The greater majority of these formalized tools came from area 5.

Only one category of informal bone tools was recognized, again with the majority coming from area 5. These informal tools consist of irregular bone flakes, usually small in size, with small abraded or polished sections to which no specific function could be attached.

Area 1

No formal tools were recovered, only two informal bone tools were found. Table 63 shows the levels and squares from which they were recovered.

TABLE 63

SCHRODA AREA 1 : INFORMAL TOOLS

LEVEL	A1	B1
1		
2	X	
3		
4i	X	
4ii		
5		

Area 2

Two types of formal tool came from here, namely one awl and one needle. The awl is made from a piece of bone with one end sharpened to a point. Table 64 shows the level and square from which it was recovered.

The needle is made from a piece of flat bone (rib?). It has a single eye. The point is missing. Table 64 shows the level and square from which it came.

Four informal bonetools were recovered. The positions in which they were found are shown in table 65. It can be seen from the tables that no bone tools were recovered from levels 1 and 2. This does not seem to be significant as the upper levels of area 5 did contain tools.

Area 3

No bone tools were found

TABLE 64

SCHRODA AREA 2: FORMAL BONE TOOLS

LEVEL	SQUARE													
	A1	B1	1B	1A	1AA	1BB	2BB	2AA	2A	2B	3B	3A	4A	4B
1														
2														
3		o												
3i														
3ii														
4													X	
5														

X awl
 O needle

TABLE 65

SCHRODA AREA 2: INFORMAL BONE TOOLS

Level	SQUARE													
	A1	B1	1B	1A	1AA	1BB	2BB	2AA	2A	2B	3B	3A	4A	4B
1														
2														
3														
3i					X					XX				
3ii														
4														
5										X				

"Spatulas"

Bone splinters of medium length in which one end has been abraded and polished to form a blunt or spatulate end. The use of such tools is uncertain. Table 67 shows the levels and squares in which these tools were excavated.

TABLE 67

SCHRODA AREA 5 : DISTRIBUTION OF "SPATULAS"

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4										
5										
6	1	1			1					
6i										
6ii										
6iii										
7				1	1					
8										
9										
10										
10i										
11										
12										

Abraded Astralagi

These are astralagi of different sizes with one or both flat sides abraded and polished. Seven of these unusual items were recovered, some of them bearing longitudinal striations. Their use is unknown, and have not been recovered from any other site.

Table 68 gives the positions of discovery in the excavation.

Needles

A pointed fragment of bone, usually polished, and pierced with one or two holes at the end opposite to the point. A single needle was

TABLE 68

SCHRODA AREA 5 : Abraded astralagi

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4										
5									1	
6	1									
6i										
6ii										
6iii						1	1			
7										
8					1					
9		1								
10				1						
10i										
11										
12										

was found in area 5. See table 69 .

The following categories are more formal than the aforementioned, in that they are completely worked or polished, and that the original type of bone cannot be identified.

These implements are all parts of composite arrows, being either fore-shafts or arrowheads. A third category was distinguished namely that of broken foreshafts/arrowheads, i.e. where the section resembles part of an arrow, but cannot be identified in detail.

TABLE 69

SCHRODA AREA 5 : Needles

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4	x									
5										
6										
6i										
6ii										
6iii										
7										
8										
9										
10										
10i										
11										
12										

Arrow-heads

Six arrow-heads were identified. These were worked to an even sharp point, while the other end remained blunt. Length varied between 5 and 13½ cm.

Table 70 shows the square and level from which they were recovered.

TABLE 70

SCHRODA AREA 5 : Bone arrowheads

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4										
5										
6										
6i										
6ii										
6iii				1	1		1			
7							1			
8							1			
9										
10			1							
10i										
11										
12										

Foreshafts

The second or middle bone point in a composite arrow is known as the foreshaft. They are generally shorter, thicker and blunter than the arrow-heads. Ten such foreshafts could be identified from Schroda and their position in the excavation is shown in Table 71 .

Foreshafts/arrowheads

This category includes all damaged bone points that are clearly parts of composite arrows, but cannot be individually identified. 21 such sections were found throughout area 5. Their distribution is seen in Table 72 .

TABLE 71

SCHRODA AREA 5 : Bone foreshafts

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4						1				
5							1			
6		1								
6i										
6ii										
6iii						1				
7		1				1				
8							3	1		
9										
10										
10i										
11										
12										

The foreshafts and arrowheads are of particular interest. They have not been found elsewhere in conjunction with Zhizo sites, and are usually considered to be part of the Mapungubwe complex of sites. In particular foreshafts are found at K2, the Southern Terrace, and Mapungubwe Hill (Voigt 1978 p.288. Voigt incorrectly refers to the foreshafts as a linkshaft). Arrowheads of different types are found at each site. In other words until now arrowheads and foreshafts have been solely associated with Leopard's Kopje A and B cultures south of the Limpopo. There is no doubt of their association with Zhizo pottery at Schroda, as it is shown in tables 71 and 72 that their distribution lies through out each level in area 5

TABLE 72

SCHRODA AREA 5 : Foreshafts/Arrowheads

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2	1									
3								1		
4					1					
5				1				1		
6		2								
6i		1								
6ii										
6iii					2	1				
7		1						2		
8	1							1		
9										
10			1	3						
10i										
11				1						
12										

Informal bone tools

Informal bone tools as a single category were more numerous than other categories, with 41 being recovered. The greater majority of these were small bone flakes with abraded ends or polished surfaces. No definite function could be ascertained. Table 73 indicates the spread throughout the excavation. No informal tools were recovered in the lower levels 10 - 12. There is a peak reached in levels 5 and 6, but this is not reflected amongst the formal bone tools.

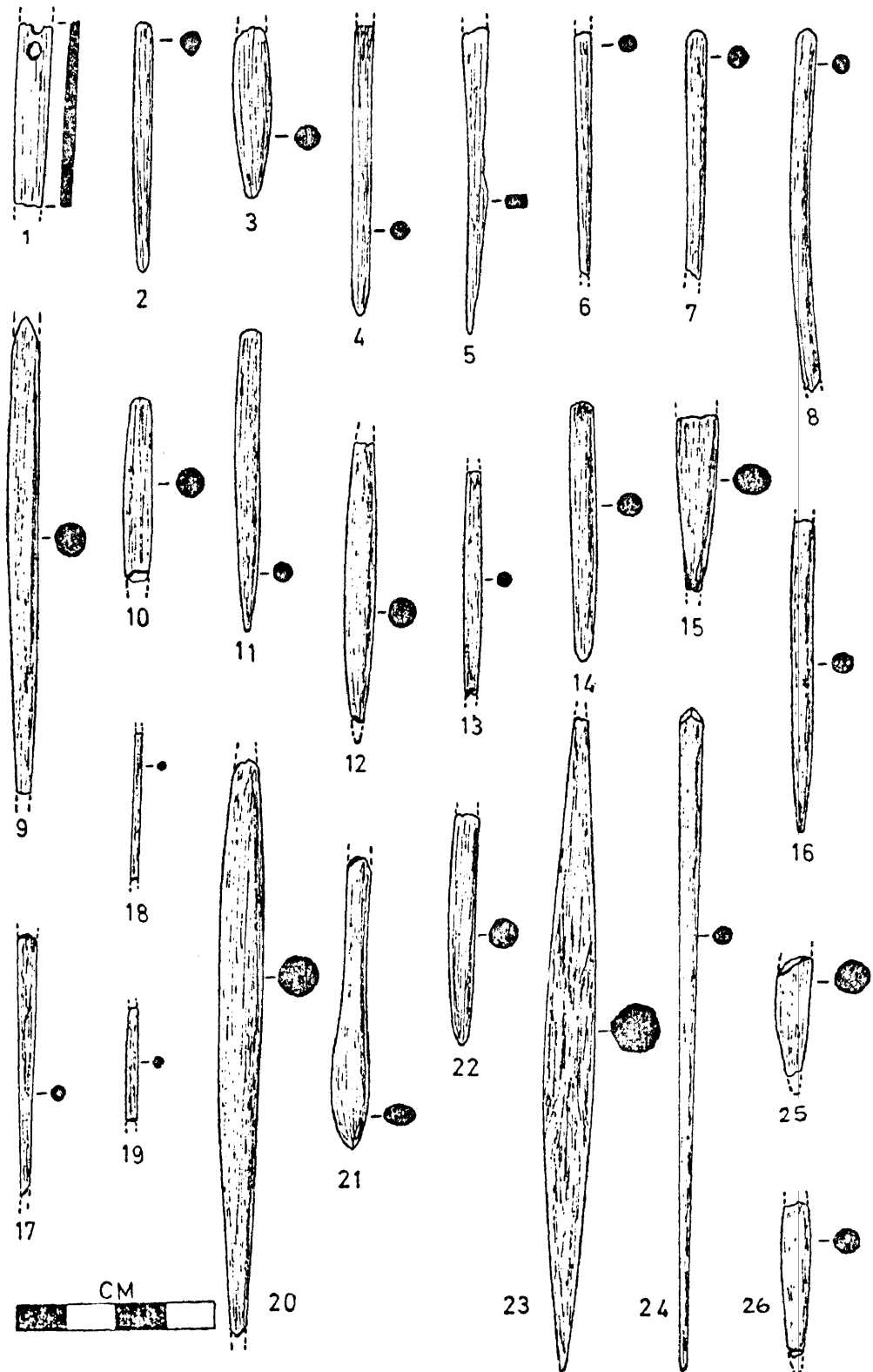


Figure 37

Bone arrowheads and foreshafts from Schroda

See page 203 for details where found

Schroda Area 5: List of bone foreshafts and arrowheads

	Square	Level
1	B1	4
2	C1	6
3	C1	C1.6.2
4	C1	7
5	D1	5
6	D1	10
7	E1	10
8	E1	10
9	F1	6(iii)
10	F1	6(iii)
11	2F	4
12	2F	6(iii)
13	2F	6(iii)
14	2F	7
15	G1	5
16	G1	6(iii)
17	G1	7
18	G1	7
19	G1	7
20	G1	8
21	G1	8
22	G1	8
23	G1	G1.8.1
24	G1	G1.8.1
25	H1	5
26	H1	8

TABLE 73

SCHRODA AREA 5 : Informal bone tools

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3	1					1				
4			1							
5	1	1	6		1		1			
6	4	4	1	4			4			
6i										
6ii					1					
6iii					4					
7		1			1					
8	2									
9		1		1						
10										
10i										
11										
12										

Both formal and informal tools have been recorded from many sites. The very formalized tools do tend to vary from site to site, although certain resemblances are noticeable between Mapungubwe K2 and Schroda. The less formalized bone tools appear to have less variation, and therefore the few that have been recovered from Schroda can be more easily compared to those from other sites.

iii) Ornaments

Bone and shell ornaments other than shell beads are rare at Schroda. Ivory was worked and several fragments of ornaments in the making were recovered.

Bone

A bone bead, 2,5 cm long and 1,3 cm wide was found in area 2 square

All pieces except two were fragments of bangles. Level 7 in square E1 produced a piece of ivory 22 cm long and 5,2 cm wide. One end had been neatly cut at nearly right angles to the length of the tusk, while the other end had been shaped to a rough point. One side showed clear cut marks, while the other was broken. It would appear that the piece had broken while being shaped and was consequently discarded.

An interesting piece was recovered from D1 level 9. This was half of a cross-section of a tusk, with both sides evenly cut. A groove had been cut into this piece along the length of its circumference, indicating the manufacture of a bangle. The groove was V-shaped and cut to a depth of about 8 mm. (See figure 38). A series of striations running at different angles to one another are visible both in the groove and on the outside of the section. The shape and direction are strongly indicative of a sawing action, and not a "hacking" action as one would expect had an ordinary knife been used.

Ivory is a hard material to cut, and even a sharp knife will not make much of an impression on it. I suggest, therefore, that a saw-like instrument must have been used, i.e. an instrument with a serrated edge, other wise ivory working would not have been as profitable as it was at Schroda. The remaining pieces of ivory were all sections of bangles, most of them too small to give accurate dimensions. Two pieces are worthy of mention, however. The first was recovered from E1 level 6 (iii) and consisted of two thirds of a neatly made bangle 11 cm in diameter. In cross-section, the thickness was 8 mm and the width 12 mm.

The second bangle came from G1 level 9. This was broken in half smaller in size and not as neatly made. Diameter was 9 cm, with a cross-section thickness and width of 12 and 1- mm respectively. Both these bangles were probably worn on the arms, judged by their size.

Two other bracelet fragments were recovered, one from Area 4 square B1 level 1 and from Area 6 square A1 level 2. These were rather small and fragmented.

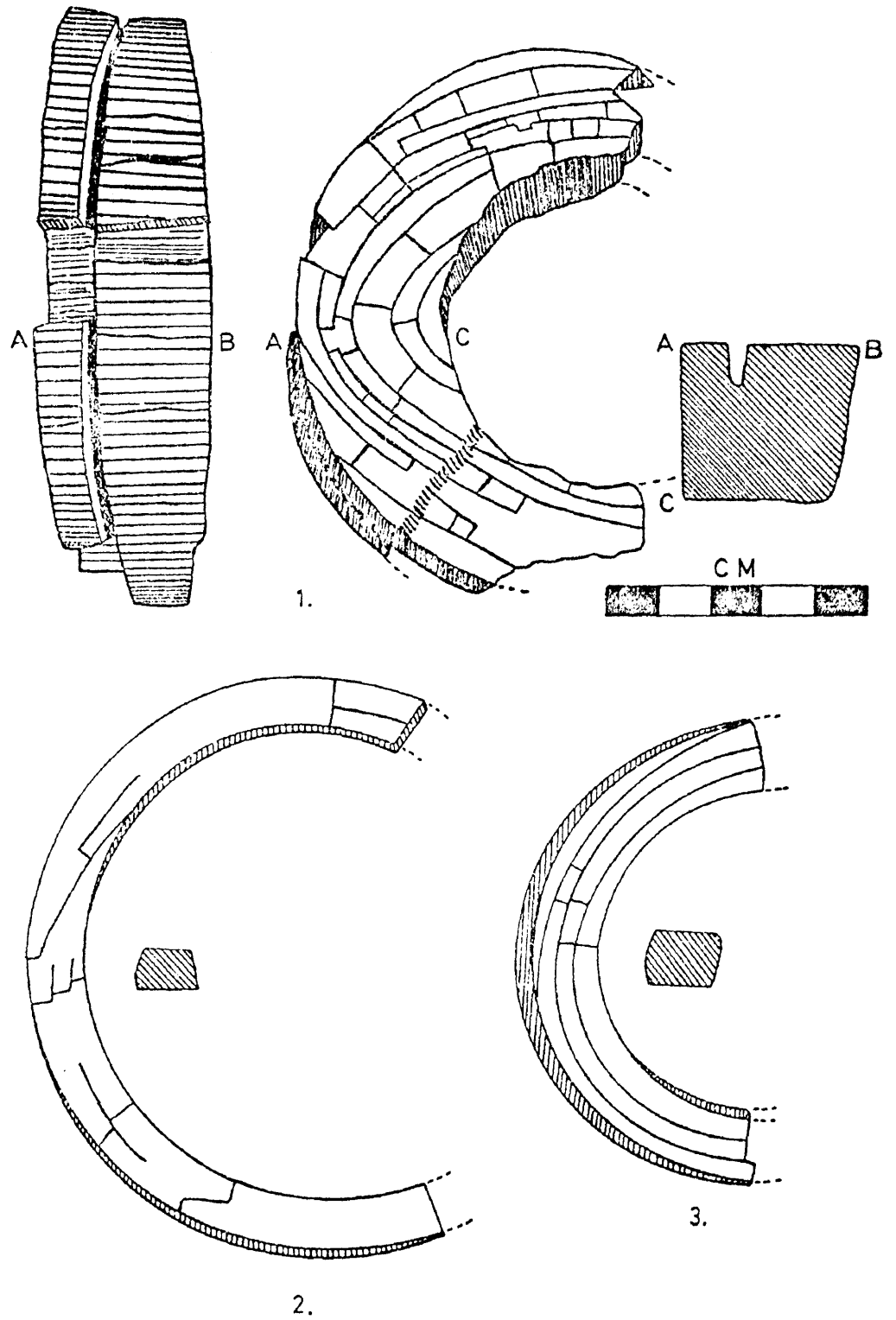


Figure 38

Worked Ivory from Schroda

1. Area 5 D1 level 9
2. Bangle from Area 5 E1.6(iii)
3. Bangle from Area 5 G1.9

Ivory working on a large scale is known from K2. Voigt (1980). has suggested that the ivory working at Schroda was a precursor to the ivory working at K2.

g) Plant remains

Very little was found in the way of plant remains, but this may be due to the method of retrieval. Domesticated grain as well as wild seeds were found, all of them charred. The material was sent to the Department of Botany, University of Pretoria for identification, but unfortunately some of the samples were mislaid.

Domesticated grain

Area 5

H1 level 7 fragments of charred grain. Sorghum?

Area 6

B1 level 4 charred grain. Sorghum?

Wild Seeds

Area 5

C1 level 5 charred seed of *Sclerocarya caffra* (Marula)

C1 level 6 charred seed of *Sclerocarya caffra* (Marula)

E1 level 6(iii) charred seed of *Xanthocercis zambesiaca* (Nyala berry)

C1 level 10(i) numerous charred seeds of *Xanthocercis zambesiaca* and *Sclerocarya caffra*

Table 75 shows the spread of the charred remains throughout Area 5.

The charred grain shows that some agricultural activity must have taken place, however the extent of this cannot be determined.

The wild seeds are only of two types, the Marula and Nyala berry, both of which grow in the vicinity today.

The marula is a well known edible fruit, which is also used for making beer. The nyala berry tree is common in wooded flats and deep sandy soil along rivers. The fruit is a plum-shaped, about 2,5 cm long, 1,3 cm broad with a smooth brown skin enclosing a thin fleshy pulp around a single black seed. The fruit is generally a great favourite with birds, monkeys, baboons, elephant and buck.

TABLE 75

SCHRODA AREA 5 : Charred plant remains

LEVEL	SQUARE									
	B1	C1	D1	E1	F1	2F	G1	H1	I1	J1
1										
2										
3										
4										
5		o								
6		o								
6i										
6ii										
6iii				A						
7								x		
8										
9										
10										
10i		Δo								
11										
12										

x = Domesticated grain

Δ = Nyala berry

o = Marula

In some areas, the pulp is eaten by Africans in time of famine. (Palmer and Pitman 1973 p. 951). The fruit, while edible, is not as pleasant to eat as is the marula, and it is unlikely that it would have been used to make beer.

A tree with edible fruits that is plentiful in the area is the Baobab, but no seeds were found. This does not necessarily mean that its fruit was not eaten.

h) Human remains

Five burials were unearthed at Schroda. These were submitted to

Prof. H. de Villiers, University of the Witwatersrand for identification.

The following is a summary of Prof. de Villiers' report. The complete report is attached in Appendix A.

The burials have been previously described.

Area 1

1.B1.4.1 is the remains of an infant aged between 1½ to 2½ months. The size of the greater sciatic notch suggests that it might have been a female. The metrical and non-metrical features of the mandible and apparent features of the cranial vault and orbit are suggestive of a Negroid infant.

Area 2

The remains of three burials were recovered here.

2.2AA.3(i).1 is a virtually complete skeleton of an adult Negro male aged between 25 and 35 years. The skeleton is that of a fairly robust individual with a living stature of 169,7 cm.

Several unusual features were noted, namely indications of osteoarthritis and undernutrition. The right femur is badly swollen - a sign of chronic osteomyelitis.

The fact that the skeleton was buried under a total of 90 stones suggested at the time that an unusual person had been buried, as it is not the normal practice to place so many stones with the body. On the grounds of the pronounced osteomyelitis, it seems likely that the person showed some physical deformity such as a permanently swollen leg which might have been taken as a sign of bewitching by his fellow men. The very large number of stones covering the burial does suggest that the body (and spirit) was not intended to rise again.

2.2AA.3(i).3 The remains are those of a very young infant, who died at birth or was still born. A large number of the bones have disintegrated.

2.2B.5.2 are the remains of a child of approximately five years of age. The remains of the individual are very fragmentary, and consequently the sex could not be assessed nor the population group identified with certainty, although certain characteristics are suggestive rather of Negro than Khoisan.

Area 6

6.A2.2.1 is the remains of a fairly complete infant skeleton aged between 6 and 9 months. The width of the greater sciatic notch together with certain mandibular features suggest a female negroid infant.

Table 76 gives a summary of the burials and their main characteristics.

TABLE 76

Summary of burials from Schroda

Burial	Age	Sex	Population Group
1.B1.4.1	1½ - 2½ months	? Female	? Negro
2.2AA.3(i).1	25 - 35 years	Male	Negro
2.2AA.3(i).3	Stillborn	?	?
6.2B.5.2	5 years	?	? Negro
6.A2.2.1	6 - 9 months	? Female	? Negro

Not much can be said about the population of Schroda. The people were, as was expected, Negroid. Infant mortality was high.

i) Other important features

On site

A series of games, grinding hollows and dolley holes was found in the rocky outcrops on and around the site. See the site map

for full details.

Games

9 Gaming boards consisting normally of four parallel rows of 8 or more holes each were found at various points around the site. Some of these were extensively weathered, and hardly recognizable. None of these gaming boards were in position where look-outs would be stationed, i.e. they were in low lying areas (See plates 30 and 31).

Dolley Holes

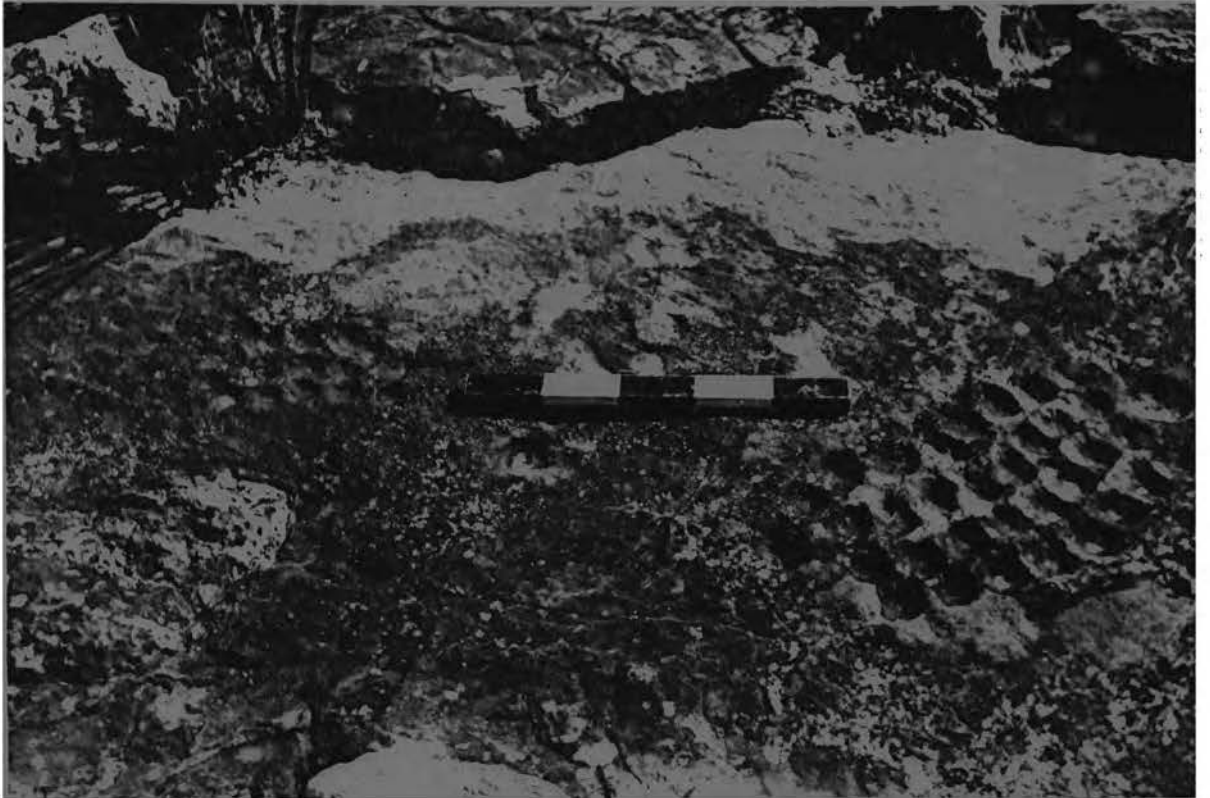
These holes are usually between 10 and 15 cm at their widest point, tapering rapidly as the hole becomes deeper. The depth varies between 2 or 3 cm to about 20 cm. Many of the deepest are distinctly funnel shaped. It would appear that these hollows were used as mortars, presumably for pounding grain. No indication of crushed ore was found in or immediately adjacent to the hollows. (See Plate 32). In total 28 dolley holes were found.

Grinding Hollows

These are numerous elongated grooves in the rock, usually about 6 cm wide and between 20 and 30 cm long. The centre is worn deeper than the ends. Fine parallel longitudinal striations can be seen in many of the hollows. 101 of these hollows were found in groups of various sizes, but now and again single ones can be seen in the rocks. (See plates 33, 34 and 35).

The hollows are enigmatic, and have not been found on any other site. It seems logical that they were used for grinding grain, as the type of hollow formed would not be caused by sharpening metal, bone or wood. However, the position and close proximity to one another would preclude more than two or three woman from using a group at any one time.

There is no doubt that the hollows are associated with the Zhizo occupation of the site, as they have been found in situ in the excavation. (Area 2, 1BB.3(ii).1).



Plates 30 and 31

Game boards at Schroda.



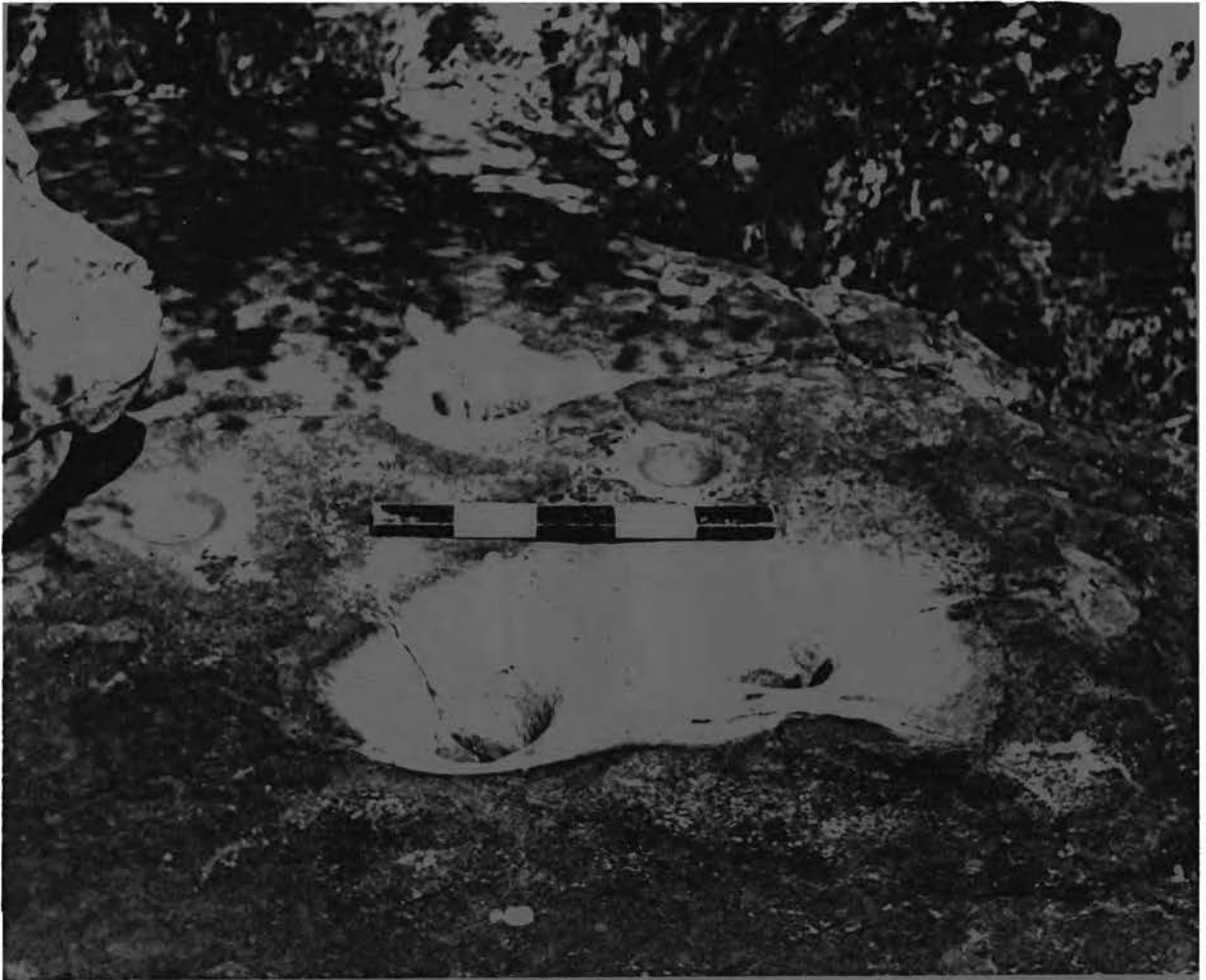


Plate 32

Schroda: Dolley holes in the rocky outcrop near the foundations of the European house. The depth of the holes varies from about 20 cm to less than 5 cm.



Plate 33

Schroda: A large stone with two grinding hollows.
From the northern part of the site, close to the
grain bin base. Scale in centimetres.

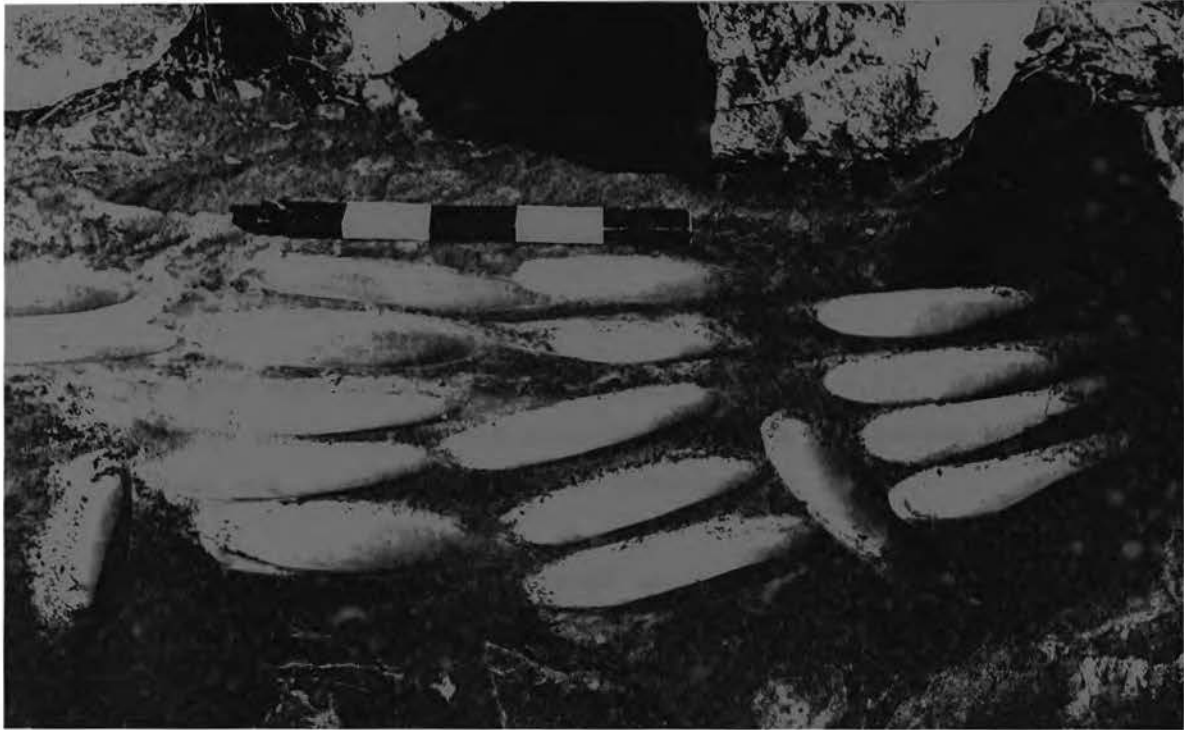


Plate 34
Examples of grinding hollows found at Schroda.

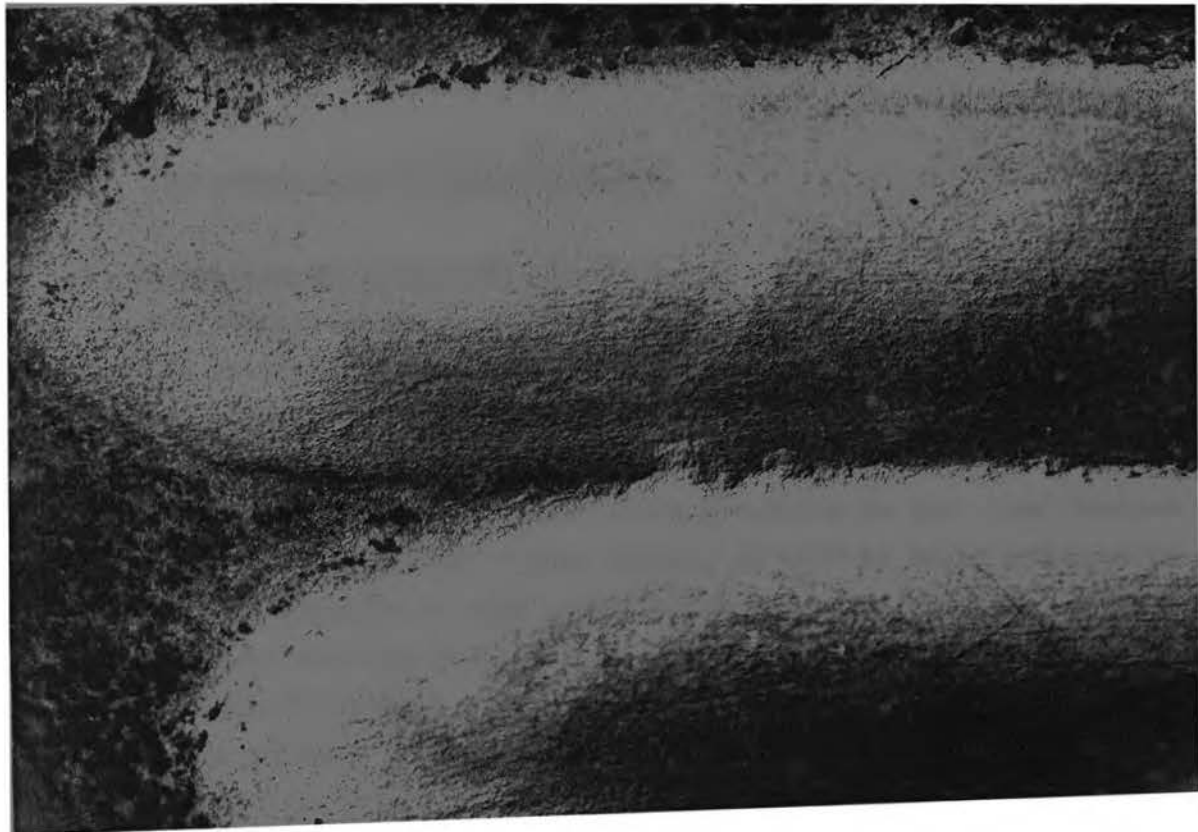


Plate. 35
Enlargement of grinding hollow showing striations.

In the excavation

Pits

These constitute a feature that has been broadly described but not fully discussed.

Two pits were found in area 2 (2B.5.1 and A1.5.1). Both contained several large stones and a single pot with the bottom neatly broken out, in addition to the normal ashy soil.

The purpose of these pits could not be determined. However, similar pits have been found at both Pont Drift sites, as well as having been recorded from numerous Early Iron Age sites. In certain cases such pits have been found to contain refuse, but two found at Schroda did not contain any. The fact that both pits, although not similar in size or depth, contained a single vessel and several large stones, suggests that they may have been used for similar purposes.

4) Summary

a) The composition of the settlement

i) Formation of occupation levels

The plateau on which the Schroda site is found, affords a very suitable situation in which people can live. It is quite well protected from attack, particularly as the high sandstone ridge on the southern boundary forms a good vantage point from which the surrounding country can be watched. Its close proximity to the river ensured a virtually permanent water supply, as well as being a supply of food in the form of game coming to drink, and fish in the water. The fact that the general area on and around the site was used by Stone Age people, the Zhizo peoples as well as later Europeans lends emphasis to the site's suitability.

To make sense out of the settlement at Schroda, two assumptions that have been made first must be clarified. These are:-

- 1) That most of the site was simultaneously used and occupied;
and
- 2) That the rate of deposit build up at one point of the site is proportional to the build up on other parts (this is for comparing levels).

It is difficult to make comparisons between excavations, because of the large distance involved. Consequently living floors cannot be combined with any amount of certainty. The basic colour differences in the deposit, although spread throughout the site, cannot be relied on for our purposes. The only feature which connects some of the excavated areas is a dung level, although not consistent, which is found at approximately the same depth in areas 3, 5 and 6. In area 2 a small concentration of dung was found, which may be of the same age as the above, although it would seem to be slightly younger.

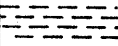



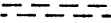



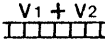
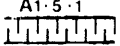
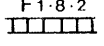
It would seem that at least eight occupation levels can be identified. Although these are spread over several excavations, it is possible to determine positions relative to one another, thereby building up a living floor sequence. Several different features have been used for this, all of them being indicative of a period when people were living on site. These features are hut floors, gravel floors, hut rubble, the clay figurines and the dung levels.

The latter two are the results of activities associated with people at any given time, Hut rubble, i.e. the remains of a hut razed to the ground, is not always found where the event took place, but the fact that the rubble was thrown away, indicates that there were people living on site, and that in all probability, a new hut was in the process of being built.

The occupation level sequence has some breaks in it, particularly between occupations 1 and 2 as well as 5 and 6. The fact that the archaeological deposit continued to grow is evidence that the site was occupied at these times. No clear evidence exists for a break in the deposit formation. The faunal analysis, although not complete for all areas, has not shown a change between levels. The pottery analysis has only indicated that stylistically, a gradual change was taking place in that the percentage of incised ware was increasing. The measurement of the length, width and

TABLE 77

Sequence of occupation levels at Schroda

Occupation Level	AREA						Feature
	1	2	3	4	5	6	
1							Dung
2							Hut Rubble
3							Clay Figurines
4							Dung
5						 B2.4.1	Floor
6		V1 + V2 					Floor
7	A1.5.1 						Floor
8					F1.8.2 		Floor
Sterile Soil							

depth of the stamp impressions indicated two periods of change, but it is uncertain whether this can be combined with any temporary abandonment of the site.

It has been mentioned in the level description of area 5 that micro-layers were found in square B1 layer 7ii. This should not be interpreted as being an indication that the site was abandoned for any length of time, as square B1 is up against a rocky outcrop, and it is very likely that the micro-levels were formed by a heavy shower of rain running off the rocks. Had the site been abandoned at this stage, it seems likely that other indications thereof would have been found elsewhere in the same level.

An interesting fact is that the only preserved floors found were in the lower levels, while dung occurred in the middle and upper levels. The hut rubble that indicated occupation level 2, is proof that huts did exist in the upper levels.

ii) Hut Types

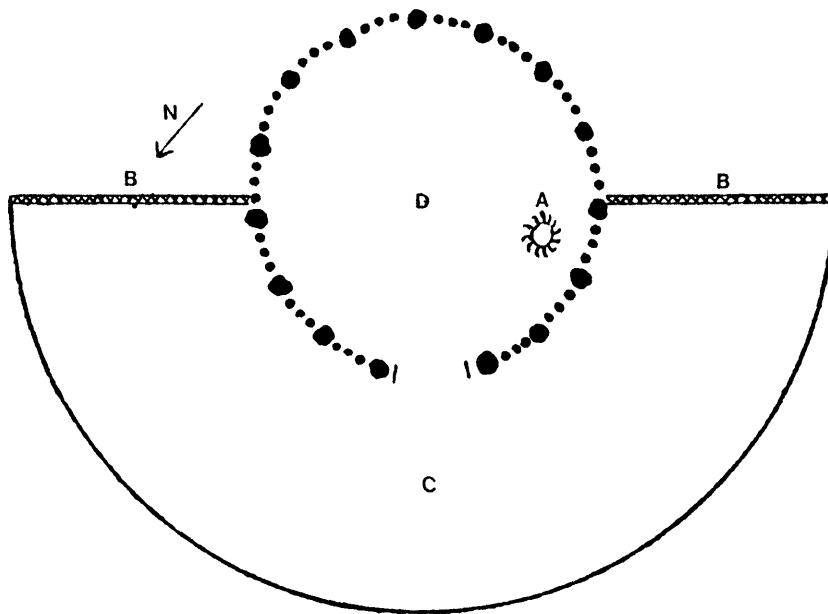
From the remains found, it is clear that the basic hut was a cone-on-cylinder structure, built of a framework of poles which were covered with clay plaster. The poles were planted in the ground in a specific order, namely one thick pole, several thin poles and followed by a thick pole again until the circle was complete. There were no outside poles, and therefore the roof rested on the walls.

The hut diameter varied from 1,20 metres to over 2,60 metres. Fire places were built into the floors of huts, and offset to one side. Entrances faced between the direction of north to west. Gravel lapa floors exist at the front of the huts, extending in a semi-circle around the sides. No indications were found of yard walls, but these probably did exist, even if only as a line of packed branches.

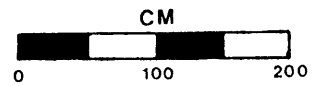
Figure 39 shows a suggested reconstruction of what some of the living huts looked like at Schroda. Obviously this may not be the only type, the remains of others not having been excavated. No

Figure 39

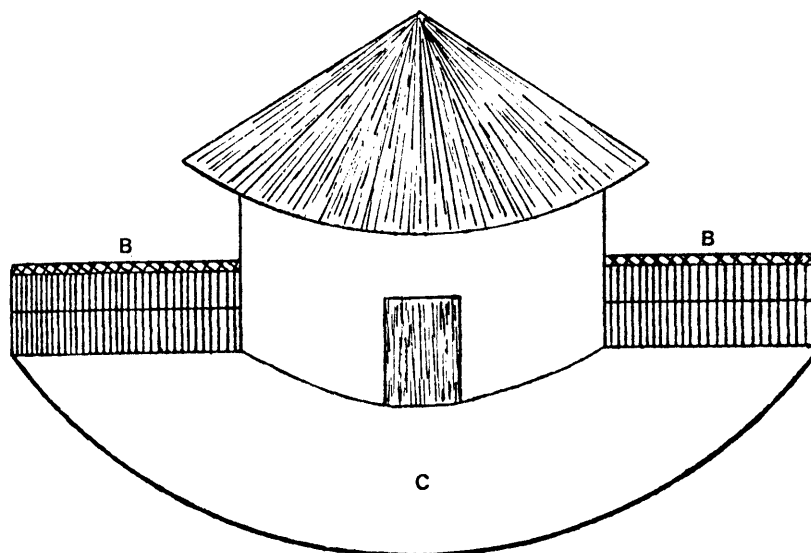
Suggested reconstruction of hut type at Schroda



PLAN



- A FIREPLACE
- B FENCE MADE OF BRANCHES
- C CONSOLIDATED GRAVEL LAPA FLOOR
- D CONSOLIDATED SAND FLOOR IN HUT INTERIOR



FRONT VIEW

storage huts were found; the only type of storage container apparently being large grain bins placed on stones. The existence of these was indicated by surface features.

iii) Settlement pattern

The settlement pattern at Schroda is not éasy to ascertain, as so few huts were uncovered. It seems likely that two patterns can be described, i.e. from the lower levels of the site, and from a combination of the upper levels and the surface.

The lower levels show a spread of hut floors over a large part of the middle and southern sections of the site. There is no indication where the livestock was kept, although from the faunal analysis we do know that large herds must have existed. In all probability, only the middle and southern sections of the site were inhabited (See figure 40).

A series of huts was spread across the site. There was no central livestock area, and either they were kept in small kraals in between the huts or in an area that has not been investigated. The beginning of a central midden is clear, although individual households had smaller refuse dumps as well.

The second phase is clear. The original settlement expanded to form a second village in the northern parts of the site. Rocky outcrops separate the two villages, although it is possible that only one chief reigned over the whole area.

The first village contains a much larger central rubbish dump than earlier. There is a definite tendency to a central livestock area, although smaller kraals are to be found amongst huts. There was no single large kraal, but rather a series of smaller ones in the central area. It is probable that these would from time to time be moved to a place immediately adjacent to the original kraal when the latter had filled with too much dung.

Huts were erected around this central area, thereby protecting the livestock to a large extent from theft.

The second village shows to a large extent the same tendencies, in

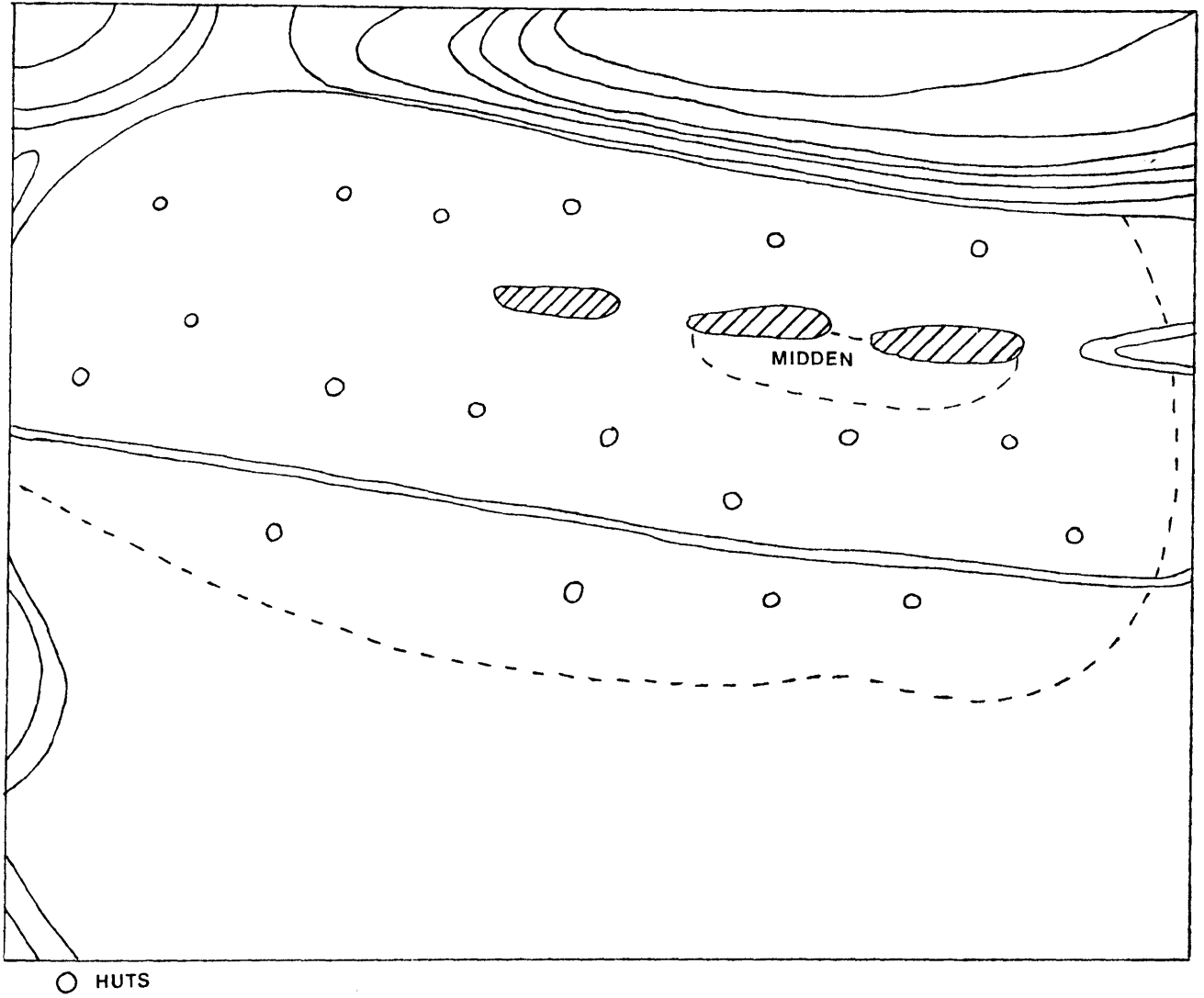


Figure 40

Map of Schroda showing suggested earliest inhabitation of the site. The northern section has not yet been occupied. A central midden is starting

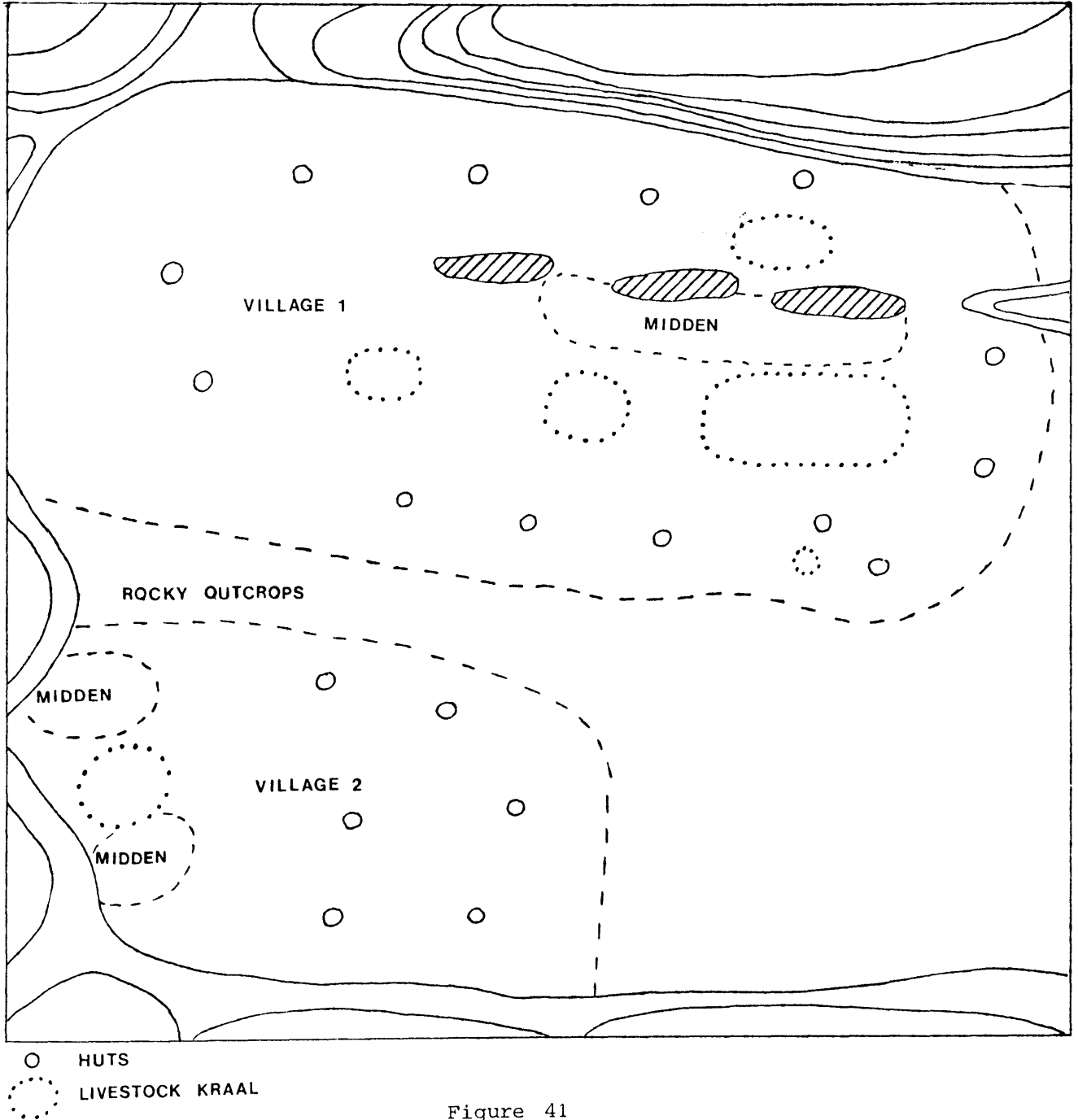


Figure 41

Schroda phase 2, showing extension of living area and clear settlement pattern

that there was a central livestock area, as well as a centralized area for refuse. It differs slightly from the first village in that huts do not totally surround the kraal and midden, but this is because the midden and kraal were placed up against the rock outcrops forming the eastern boundary of the site (See figure 41).

Little land was left for cultivation. While it is possible that small gardens were kept on site, it is likely that any large fields were elsewhere. The closest, most suitable ground is to be found directly to the north in a dead-end valley at the foot of the plateau, less than ten minutes' walk away from the perimeter of the site.

b) Dating

Four samples for radiocarbon dating were submitted to the C.S.I.R. namely charcoal from Area 2, ribs from the beast burial in Area 3 and a charred post and charcoal from Area 5. Only the latter two samples were processed.

The charred post from the burnt hut (F1.8.2) gave a date of A.D. 840 \pm 50 (Pta 1819) while the sample taken from level 10(i) was dated to A.D. 790 \pm 50 (Pta 1967). Both come from close to sterile soil and although they were found in sealed levels, it is safer to link them. This gives a date of A.D. 815 \pm 50 for the lower levels of the site.

The upper levels of the deposit have not been dated, therefore the period of abandonment is difficult to assess. The pottery indicated that changes were taking place gradually and that the incised Leopard's Kopje A ware had not yet become a full Tradition. This places the abandonment prior to A.D. 970, which is given as the approximate beginning of K2 (Meyer 1980 p.296).

Taking the nature of the stratigraphy and deposit at Schroda into account, it seems reasonable to assume that the site was abandoned at the latest at around A.D. 900.

c) Economy

The primary source of food was cattle, sheep and goats. Hunting, snaring and gathering made up a small part of the dietary supply.

One does not know to what extent veld foods were gathered, but it is clear that at least the fruits of certain wild trees were utilized.

Agriculture was obviously a supplementary source of food, and sorghum was grown. It would appear that this was not on a very large scale, as not much was recovered from the excavations. At Greefswald, Meyer (pers. comm) found preproportionally more charred grain than was found at Schroda.

Trade was carried on with the coast, as is shown by the presence of trade beads on site, as well as cowrie shells. Other items that were traded in include copper and iron, not necessarily in the form of finished products, but at least in metal form, which could be heated and forged on site.

Most of the trade has been onto the site, with little indication of what these items have been exchanged for. Voigt (1979) has said that the volume of ivory that must have been worked on site according to the remains found, far exceeds the number of worked pieces recovered.

It is her opinion that ivory items were being manufactured for trading purposes. Thirty-six wild carnivores were identified, and as it seems unlikely that they were killed for their meat, Voigt (1979) has suggested that they may have been hunted for their skins. It is probable that a large percentage of these were intended for trade.

In summary trade appears to have been on a local scale, as well as with the east coast. No direct evidence was found that Arab traders were present on the site, and it is possible that trade items passed from village to village during the course of trading.

CHAPTER 7

PONT DRIFT (TPD 1/2)

1) General Characteristics of the site

The farm Pont Drift M.S. 12 lies on the Limpopo River 95 km west of Messina and 50 km north of Alldays. The site (co-ordinates 29°9'3" E, 22°13'52" S) lies in a raised valley on top of a long 30 metre high sandstone ridge running parallel to the Limpopo, which is about 1½ km to the north, the intervening distance forming part of a flat Mopane/Acacia landscape.

The raised valley is surrounded by sandstone ridges, providing an area well sheltered from attack and the prevailing wind. The site can be reached from the north by climbing a precipitous but obvious path, while on the south-western side the valley opens up, with a good view to the south, which area is characterised by very hilly countryside covered with a mopane vegetation interspersed with *Combretum* and *Acacia* species. A less steep slope with numerous paths trodden into the rock leads down to an oval basin in which the adjacent site TPD 1/1 is located.

A large section of the site has been eroded away, with a gully running across its whole length. Bedrock, littered with thousands of potsherds and bones, has been fully exposed in the south western part of the raised valley. Little vegetation in the form of trees and shrubs is found on the site, being limited to the surrounding rocky ridges, but a thick mat of blue buffalo grass (*Cenchrus ciliaris*) covers the whole deposit. On the northern side a large and obviously old baobab tree (*Adansonia digitata*) is to be seen. Table 78 gives a list of the vegetation found on and immediately around the site.

TABLE 78

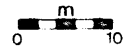
Vegetation at Pont Drift TPD 1/2

<i>Abutilon pycnodon</i> Hochr. <i>Acalypha pubiflora</i> Baill. <i>Adansonia digitata</i> (L) <i>Commiphora edulis</i> (Klotsch) Engl. <i>Croton menyhatii</i> Pax <i>Ficus soldanella</i> (Warb) <i>Grewia bicolor</i> Juss <i>Melhania acuminata</i> Mast. <i>Securinega virosa</i> (Roxb ex Willd) Pax & k. Hoffm.
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Plate 36

A view across the Pont Drift site, showing how the raised valley is surrounded by sandstone ridges. The adjacent site of TPD 1/1 is situated at the foot of the ridge on the right.



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Figure 42

Pont Drift: Site map showing excavation
and cross-section through erosion gully

It is obvious that in the immediate vicinity of the site, there is little that can be utilized for food or firewood, and presumably the ancient inhabitants had to go further afield to find these necessities. To the south and to the north of the ridges there is today a plentiful supply of wood, in the form of Mopane, Leadwood, Acacia and Apple-leaf (*Lonchocarpus capassa*) trees. Diet would have been supplemented by fruit from the Marula (of which a plentiful supply exists) and baobab trees.

When the thick grass covering was partially removed, the uncovered section of the site was noticeably ashy, but little cultural material was found on the surface. The deposit was very shallow on the eastern end of the site, becoming thicker towards the central area, and diminishing in thickness towards the west, mainly as a result of erosion. A cross-section of the site shows that the deposit thickness is drastically reduced around the erosion gully, with a medium slope in this direction, showing that erosion has been taking place (See site map figure 42). In the excavation, the archaeological deposit was between 1,80 metres and 2,20 metres deep, with a further 30 to 50 cm of sterile sand before bedrock was reached.

The pottery analysis showed the site to be double component with an overlap in the centre. Unit 1 contained K2 pottery, while Unit 4 contained Zhizo pottery. Units 2 and 3 contained a mixture of Zhizo and K2 ceramics, with an increase in Zhizo as the depth increased.

No rodent disturbances were noted during the excavation.

2) The excavation

Originally a test trench of 2 x 6 metres divided into 2 x 2 metre squares was dug. It soon became obvious that the various gravel floors found in level 4 could not be satisfactorily explained, and the width of the trench was doubled. As work progressed additional squares were added. Altogether 8½ 2 x 2 meter squares were excavated. Figure 44 shows the layout and the square numbers.

Sixteen levels were dug, some of them arbitrarily, and four main units were identified in the stratigraphy. Table 79 gives a resumé of these levels and their depth, colour and texture.

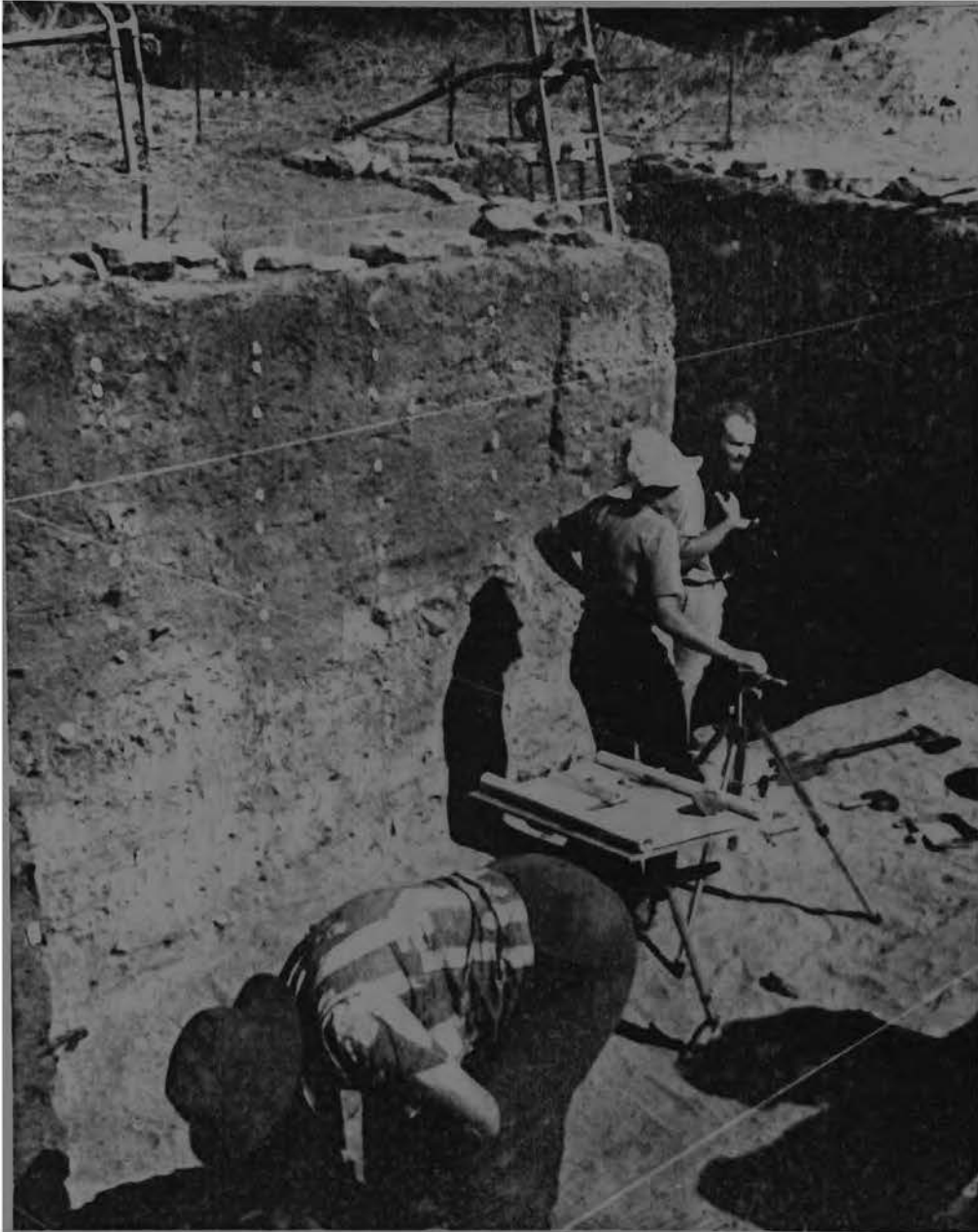


Plate 37

Pont Drift: General view of excavation showing the depth.

(Photo courtesy of Mr. J. Morgan)

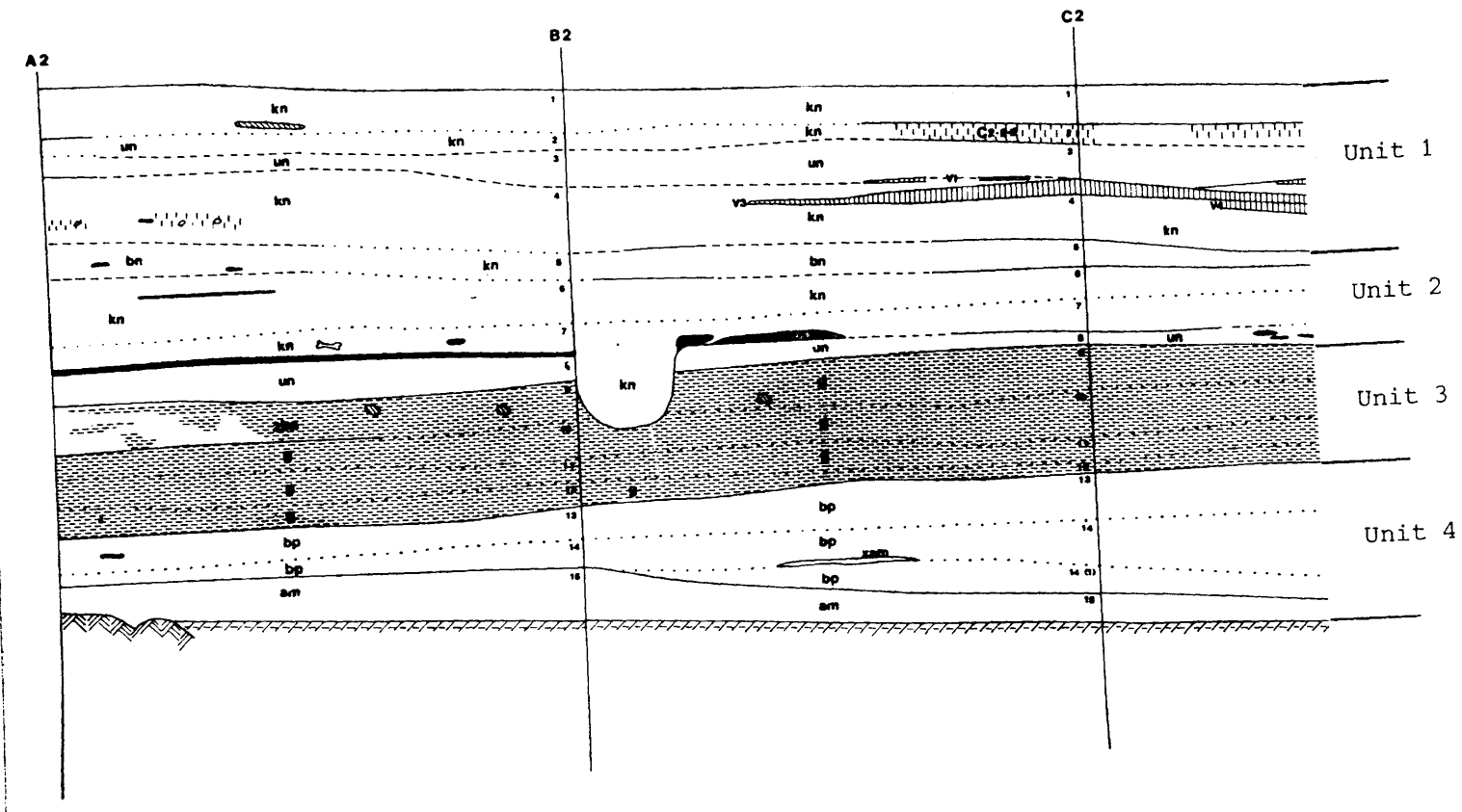


Figure 43

Pont Drift: Basic profile showing division into units

TABLE 79

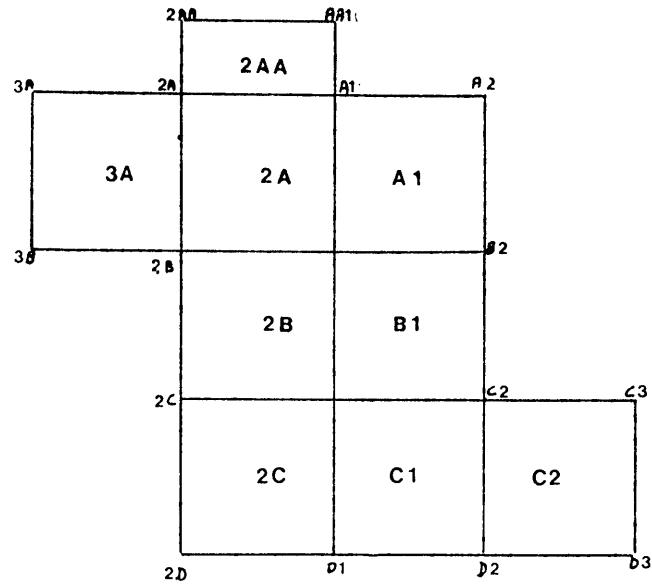
DETAILS OF PONT DRIFT LEVELS

Level	Depth (cm)	Colour and Texture	
Unit 1	1	0 - 7	greyish-brown sandy soil
	2	7 - 16	greyish-brown sandy soil with gravel floors
	3	16 - 31	grey sandy soil with gravel floors
	4	31 - 57	greyish-brown sandy soil with gravel floors
Unit 2	5	57 - 66	grey sandy soil
	6	66 - 76	greyish-brown sandy soil
	7	76 - 86	greyish-brown sandy soil
	8	86 - 105	greyish-brown sandy soil
Unit 3	9	105 - 120	yellow dung
	10	120 - 138	yellow dung
	11	138 - 148	yellow dung
	12	148 - 166	yellow dung
Unit 4	13	166 - 178	grey ashy soil
	14	178 - 196	grey ashy soil
	14(i)	196 - 210	grey ashy soil
	15	210 - 217	white sand
16	217 - 269	sterile white sand	
Bedrock	269		

Part of square B1, and section of C1 close to line C2 - D2 contained loose gravel, that did not resemble part of an unconsolidated gravel floor. Immediately adjacent to this in Squares 2C and C1 lay a concentration of burnt hut rubble (C1.3.1). No other remains were associated with this rubble, other than a number of potsherds and bones. The hut rubble lay with the interior section up, and the polemarks could be clearly seen. All ran in the same direction, i.e. diagonally from C1 to D2. Little charcoal was found in between the daga lumps. The thickness of the level varied between 5 and 12 cm., and there was a pronounced increase in the amount of cultural material.

Figure 44

Pont Drift: Plan of excavation showing square and peg numbers



Level 1 consisted of soft greyish-brown sandy soil with extensive grass roots. Little cultural material was recovered, being pottery, bones and beads. Thickness varied between 5 and 15 cm.

Level 2 contained soft greyish-brown sandy soil and was arbitrarily divided from level 1 in most squares except in parts of A1, B1, C1 and C2. In corner A2, a patch of yellowish-grey sandy soil was excavated, which extended in depth to the surface of level 4.

Squares B1, C1 and C2 contained patches of coarse, unconsolidated gravel (C2.2.2) between 7 and 10 cm thick. The size of individual gravel pieces was between $\frac{1}{2}$ and 3 cm. The main concentration of gravel lay around peg C2. In corner C3 lay a small mound of burnt hut rubble. The edge of the mound ran in a circle about 1,40 metres from corner C3 and lay up against the gravel floor (C2.2.2) along line C2 - C3. The thickest point of the mound was at C3 (about 7 cm). There was an increase in the amount of cultural material recovered, although fewer beads came to light. Thickness of the level varied between 5 and 10 cm.

Level 3 consisted of grey sandy soil with a slightly granular texture

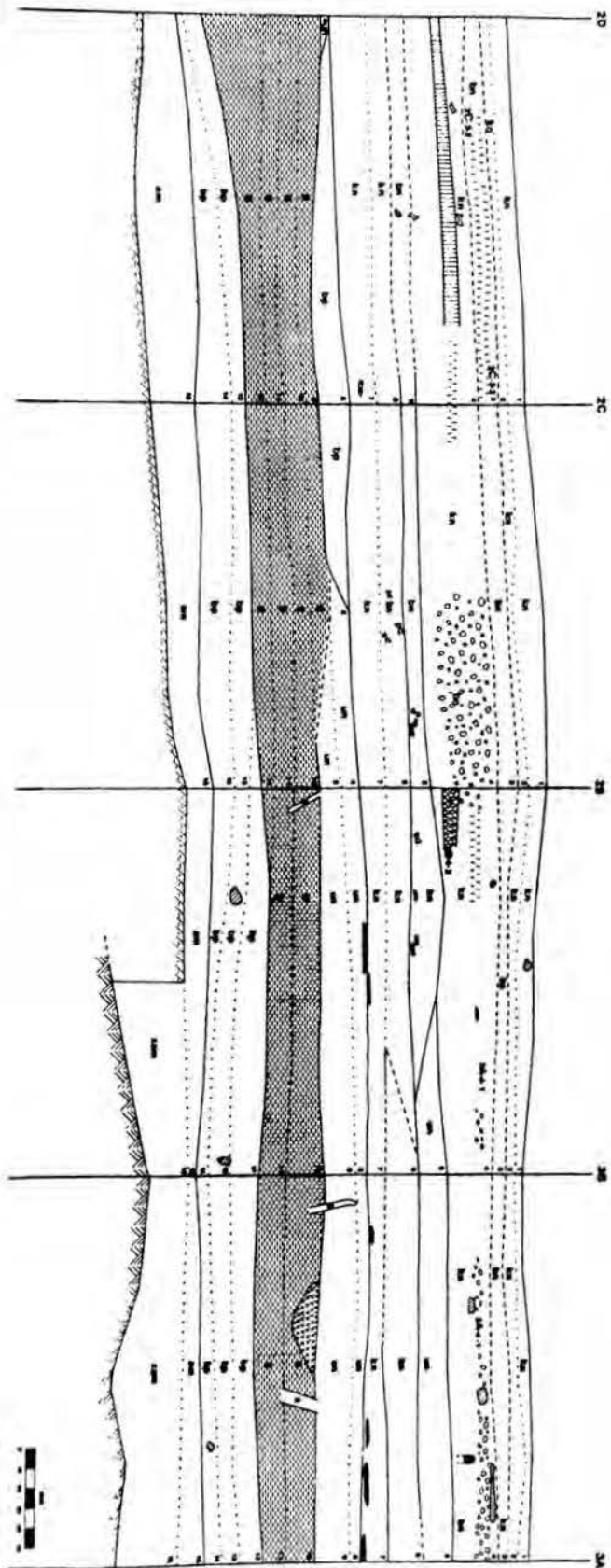


Figure 45

Pont Drift: Profile along wall 2D - 3A

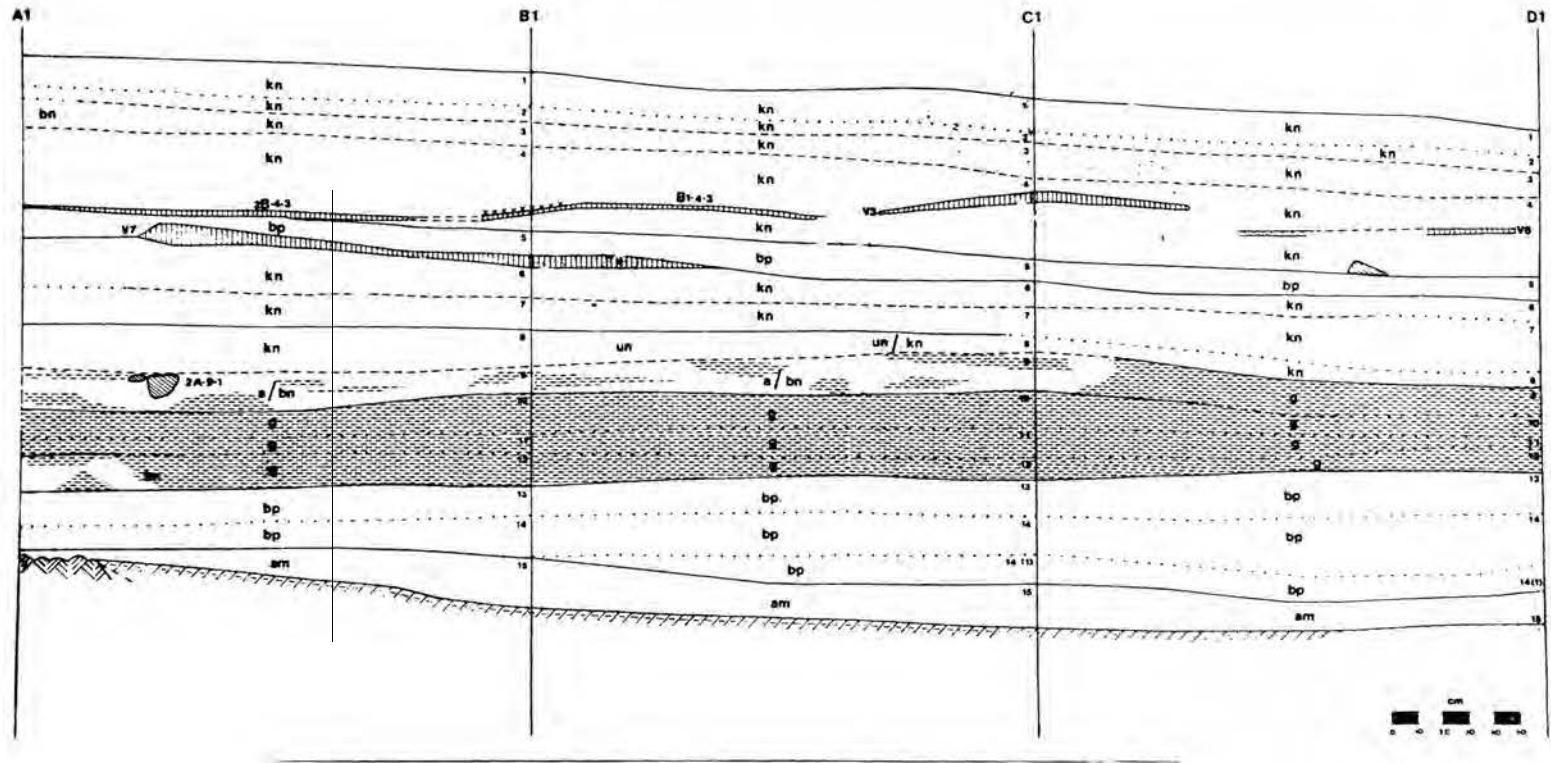


Figure 46

Pont Drift: Profile along line A1 - D1

Level 4 was the thickest level excavated, varying between 25 and 35 cm in thickness. Colour was greyish-brown with a sandy texture becoming granular in places. Various gravel floors were uncovered at different depths within the level, as well as the remains of four huts (See Table 80). The uppermost floor (V1) was a white consolidated gravel floor without a polished surface. It covered squares B1, C1 and C2 completely and extended into parts of A1, 2A, 2B and 2C. Thickness varied depending on the state of consolidation of the gravel, and was between 1 and 7 cm. Two stone structures, (C2.4.1) in corner D3, and (C1.4.1.2) along line D1 - D2, were found in association with the gravel floor.

Directly underneath V1 in squares A1 and B1 lay the remains of a probable hut floor (V2) with charred posts, the latter forming a division between a yellow sandy floor on the interior and a black sandy floor on the exterior. Both had been burnt. The polished surfaces were well preserved. Average thickness was about 3½ cm. The floor had crumbled in places, and a complete outline could not be found.

An unfired clay structure (2A.4.1) was uncovered in parts of squares 2A, 2B, and 3A. It was very friable and difficult to excavate, and consisted of a raised platform with a semi-circular moulded curb about 2 metres in diameter. A fragmentary sandy floor extended away from this structure. Two smooth oval stones, (2A.4.1.1 and 2A.4.1.2) lay together on this floor.

A white gravel floor without a polished surface (V3) was the following to be uncovered in squares B1, C1, and C2, and lay up against the burnt hut remains (2B.4.3 and 2C.4.2). The remains of the former covered squares 2AA and 2A entirely, and large parts of A1, B1, 2B and 3A. Its total diameter was about 4,20 metres. The hut remains (2C.4.2) lay in corner C1 of square 2C and consisted of a circle of charred posts 1½ metres in diameter, with a thin sandy floor that had been burnt brown. Adjacent to this circle, along lines 2C - 2D - D1 was a thick white gravel floor with an unsmeared surface. The area between the smaller hut and the larger hut contained loose pieces of gravel, and appeared to be disturbed. This was proved when a burial was encountered in level 5.



Plate 38

Pont Drift : Floor V2 showing charred posts (at X) with the moulded floor in between. There is no indication of a plastered wall. A similar feature was noted from hut 2B.4.3.

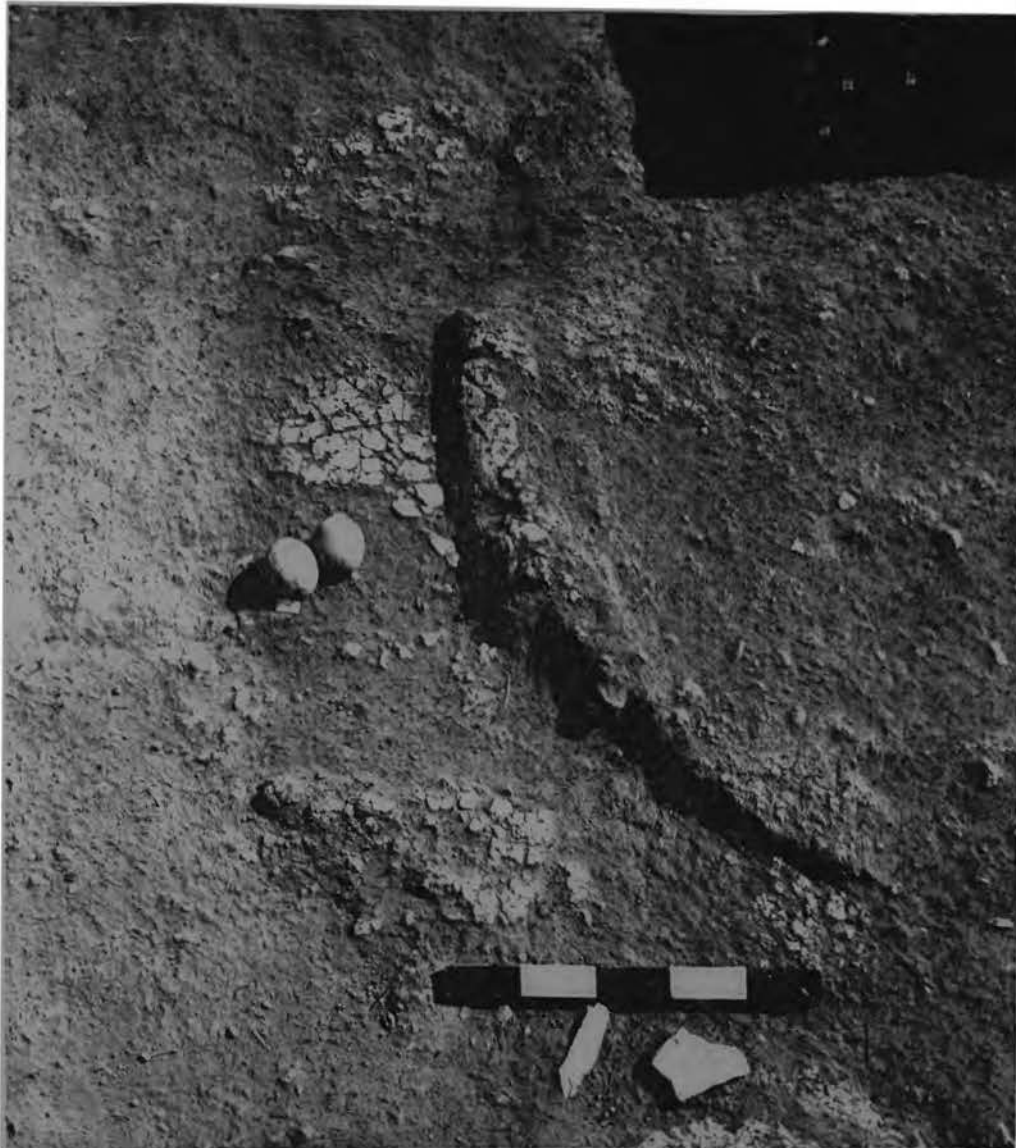


Plate 39

Pont Drift: Platform 2A.4.1 with a moulded daga curb, and a fragmentary floor on which two round stones are resting.

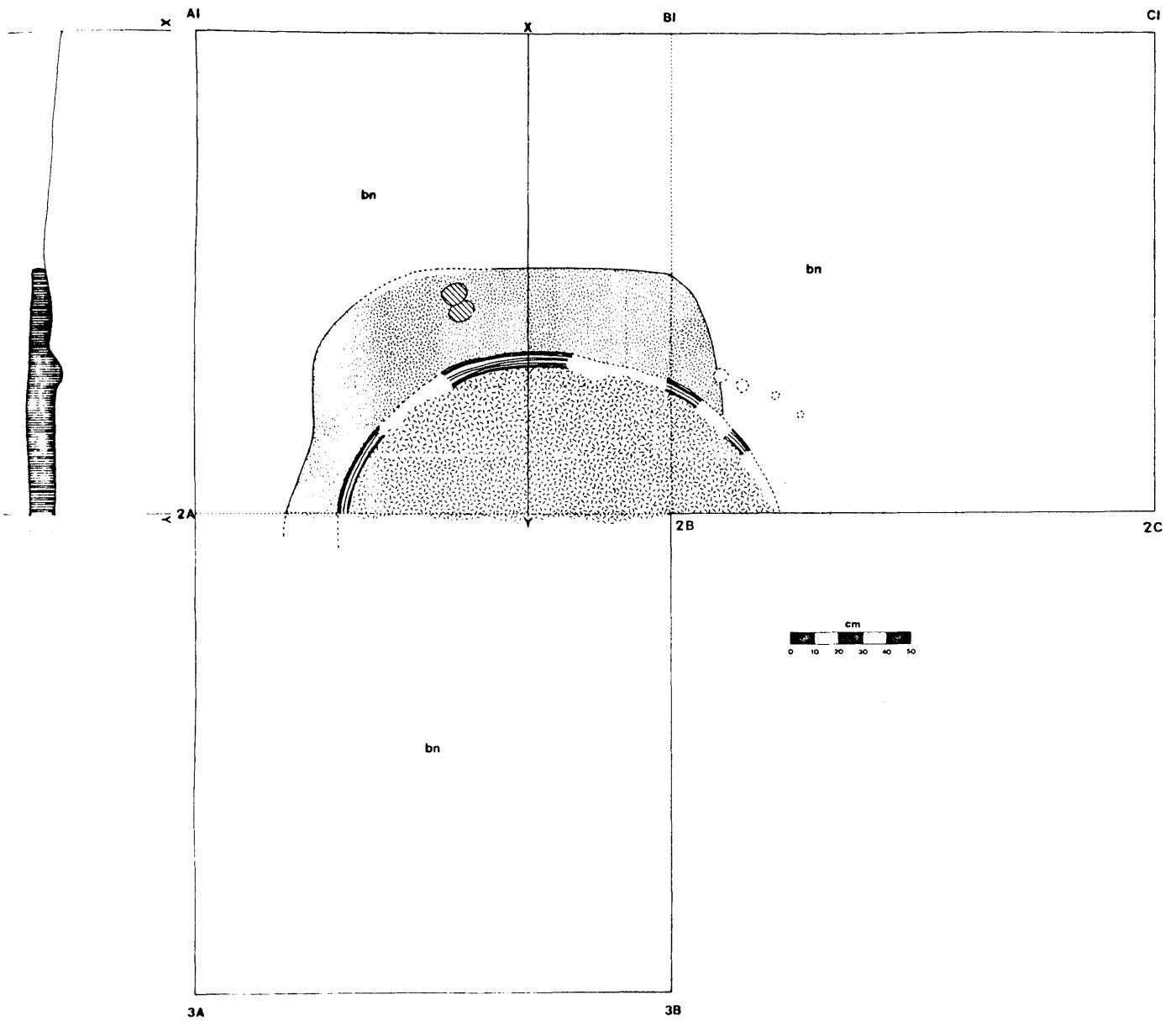


Figure 47

Pont Drift: Plan and cross-section
of raised platform 2A.4.1



Plate 40

Pont Drift: Hut 2B.4.3 with adjacent storage hut 2C.4.2. The huts are surrounded by gravel floors except directly between the two huts, where the burial 2B.5.1 caused a disturbance.

A is the storage hut 2C.4.2. The circle of charred posts is shown by the white cards.

Point B is the step (wall?) separating the rear storage area C from the front of the hut. The difference between the two sections is clear. At the rear (C) the burnt soil is in contrast to the smoothed gravel floor. The moulded floor between the posts of the inner circle at the rear of the hut is clearly visible, whereas at the front of the hut, no indication of the moulding occurs.

D is the entrance to the hut.

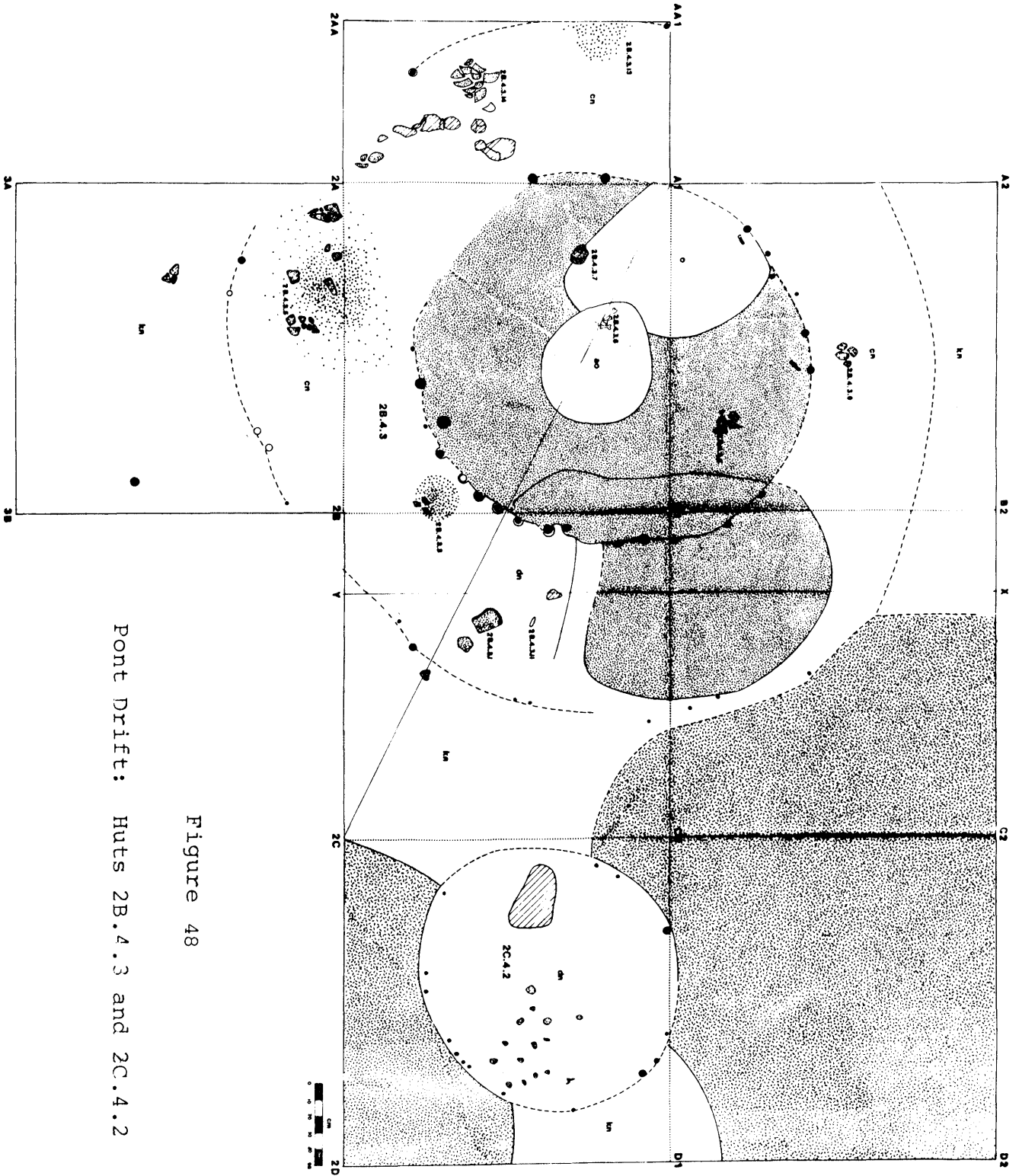
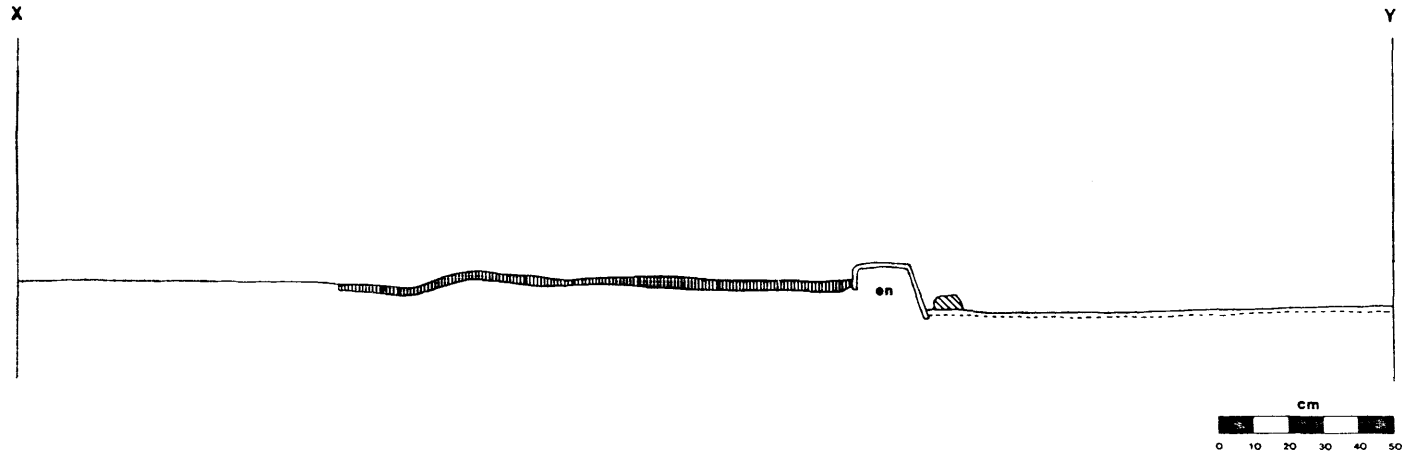


Figure 48

Pont Drift: Huts 2B.4.3 and 2C.4.2



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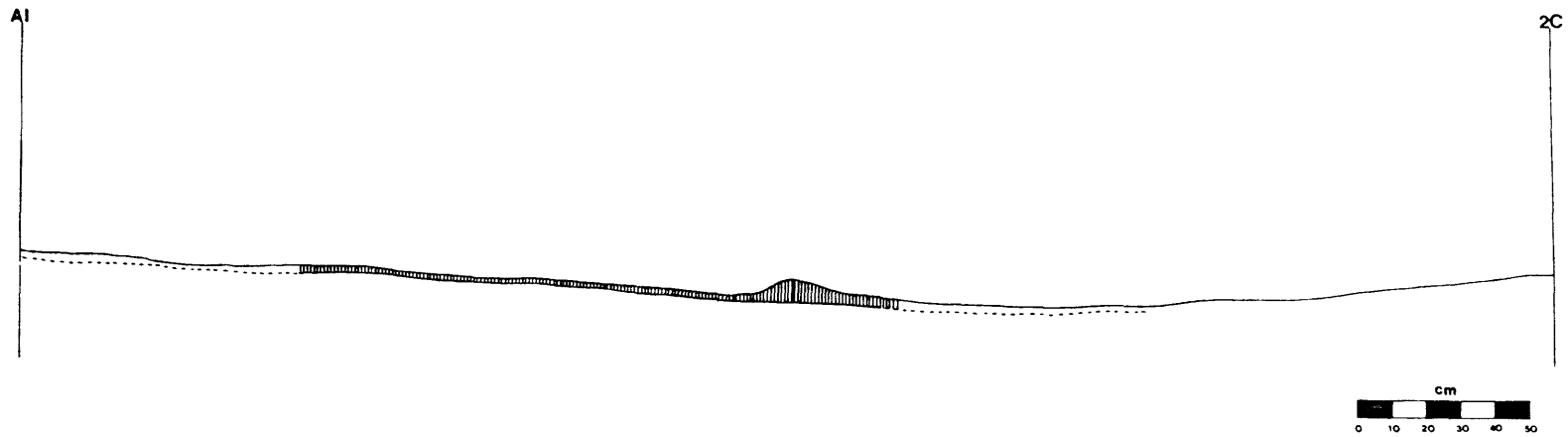


Figure 49

Pont Drift: Cross-sections of hut 2B.4.3

Immediately under floor V3, and covering approximately the same area was another white gravel floor (V4) with a thickness of between 3 and 6 cm.

All these gravel floors were of a similar gravel and consolidation varied within each floor. Certain areas were found to be well consolidated, while elsewhere in the same floor the gravel was loose.

A thin brown sandy floor 2 cm thick was found under floor V4 and covered most of square C2. A small ashy spot was on the surface of the floor. Underneath this, the floor was burnt showing that fire had been made on the floor, and that the ash had not been thrown there.

At the base of level 4, another white gravel floor (V9) was found in square C2, and consisted of two parts. The first was a well consolidated raised step with a polished surface, seven centimetres thick, 1,80 long and 60 cm wide, running in the form of a slight arc and at a slight angle to line C2 - D2. At D2, the corner of the step extending some 15 cm into square C1. The second part consisted of a layer of coarse loose white gravel some 5 cm thick lay around the step with an edge running nearly parallel to the direction of the step (See figure 50 and plate 41). The base of the stone structure (C2.4.1) was on the same level as the floor .

Level 5 varied in colour and texture. In square 3A, towards line 3A - 3B, it contained greyish-yellow sandy soil with material resembling dung in places. This gradually changed to grey ashy soil along line 2A - 2B. In square 2 B, the colour changed to grey sandy soil, as a result of the disturbance caused by the burial. Throughout the other squares the soil remained grey and ashy. Thickness varied between 7 and 19 cm. A depression with a depth of 32 cm in the middle was noted close to point D2, occurring mainly in square C1, but extending into C2 (See Profiles D1 - D3 and C2 - D2). This proved to be part of a pit that had settled. The depression was filled with grey ashy soil. Proportionally more cultural material was recovered than in level 4.

In square 2B, a child burial was found (2B.5.1). The skeleton was well preserved except for the crushed skull, and lay in the flexed position on the right side facing north. Several broken vessels had been placed closely around the body and lay partially on top of the bones. Glass beads were also noted. The grave infill contained numerous

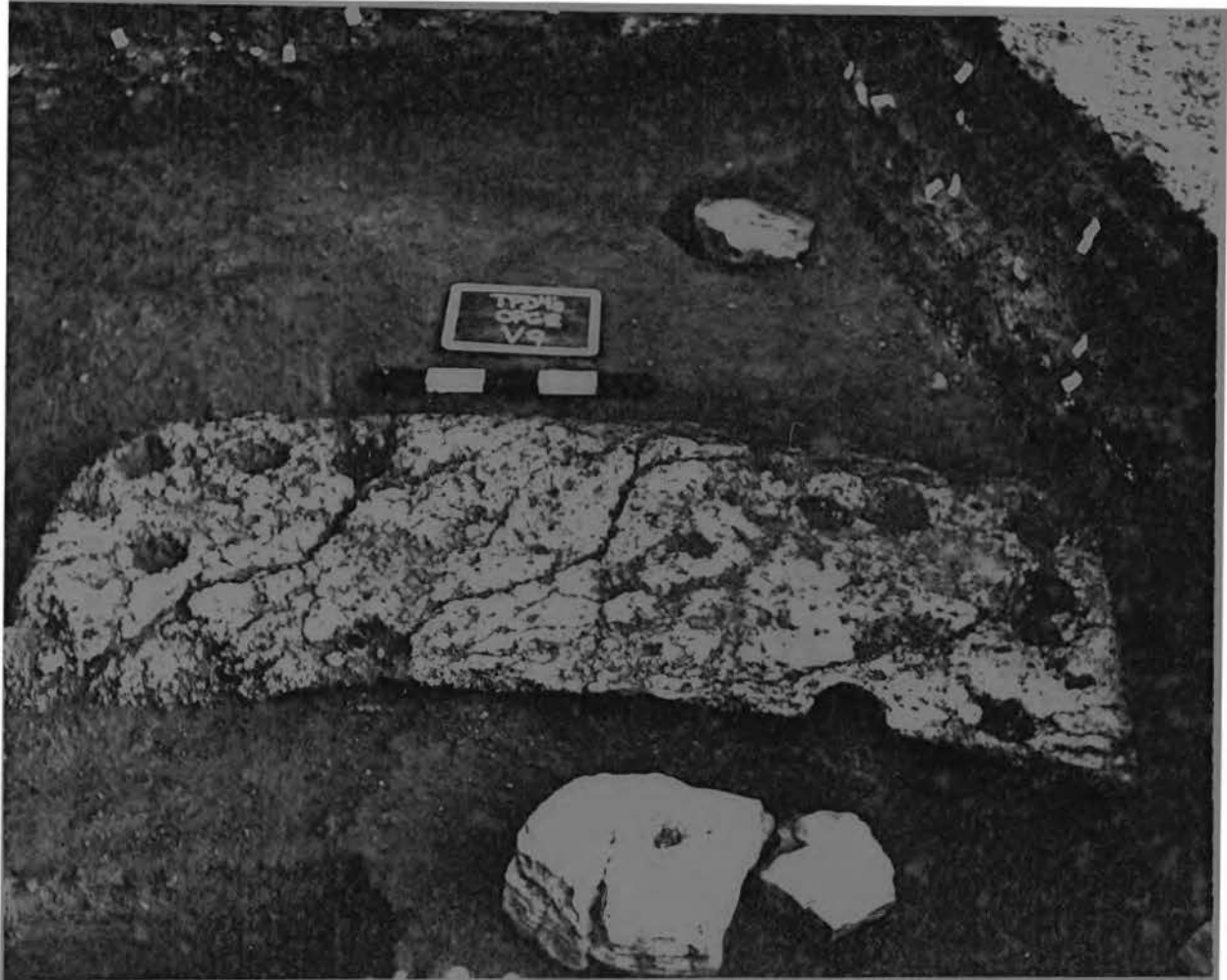


Plate 41

Pont Drift : Floor V9, showing post holes and sharply defined interior edge. The stone in the foreground contains a single dolley hole.

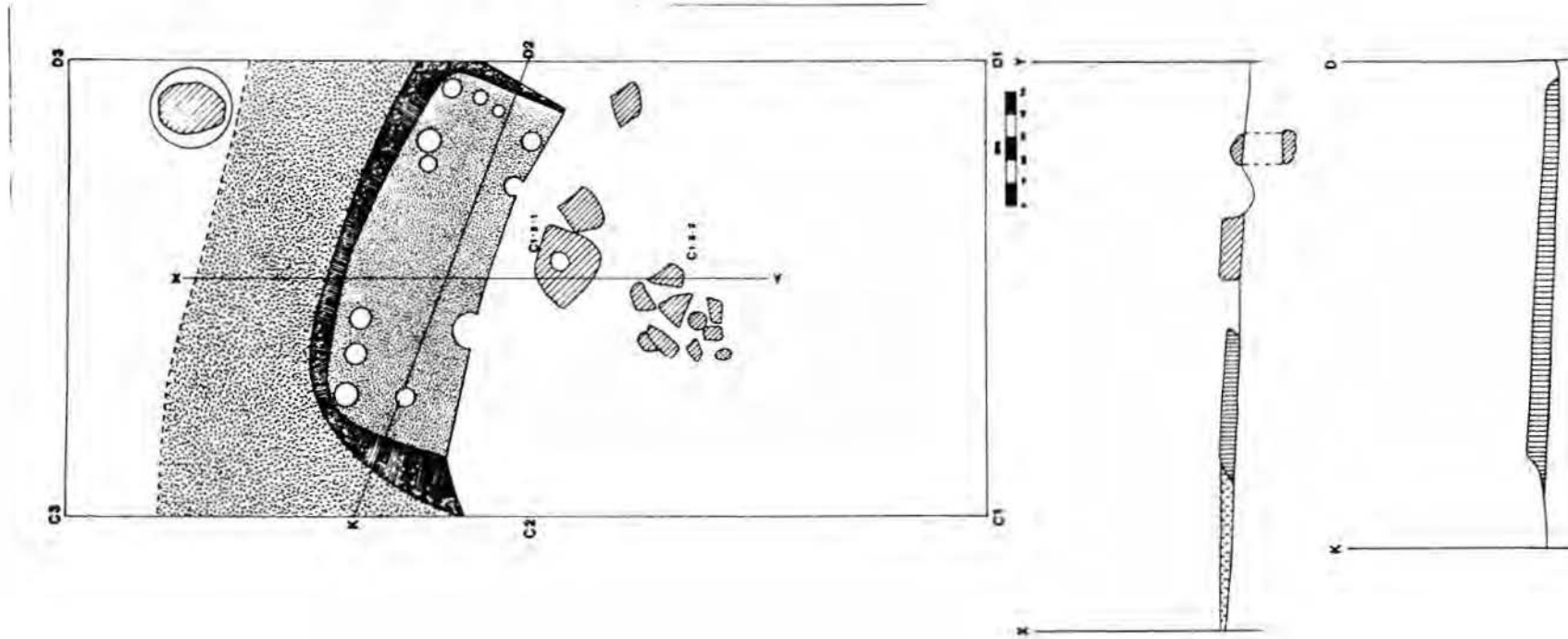


Figure 50

Pont Drift: Plan and cross-section of floor V9 showing close proximity of stone with dolley hole (C1.5.1) and collapsed stone-lined pit. (C1.5.2)

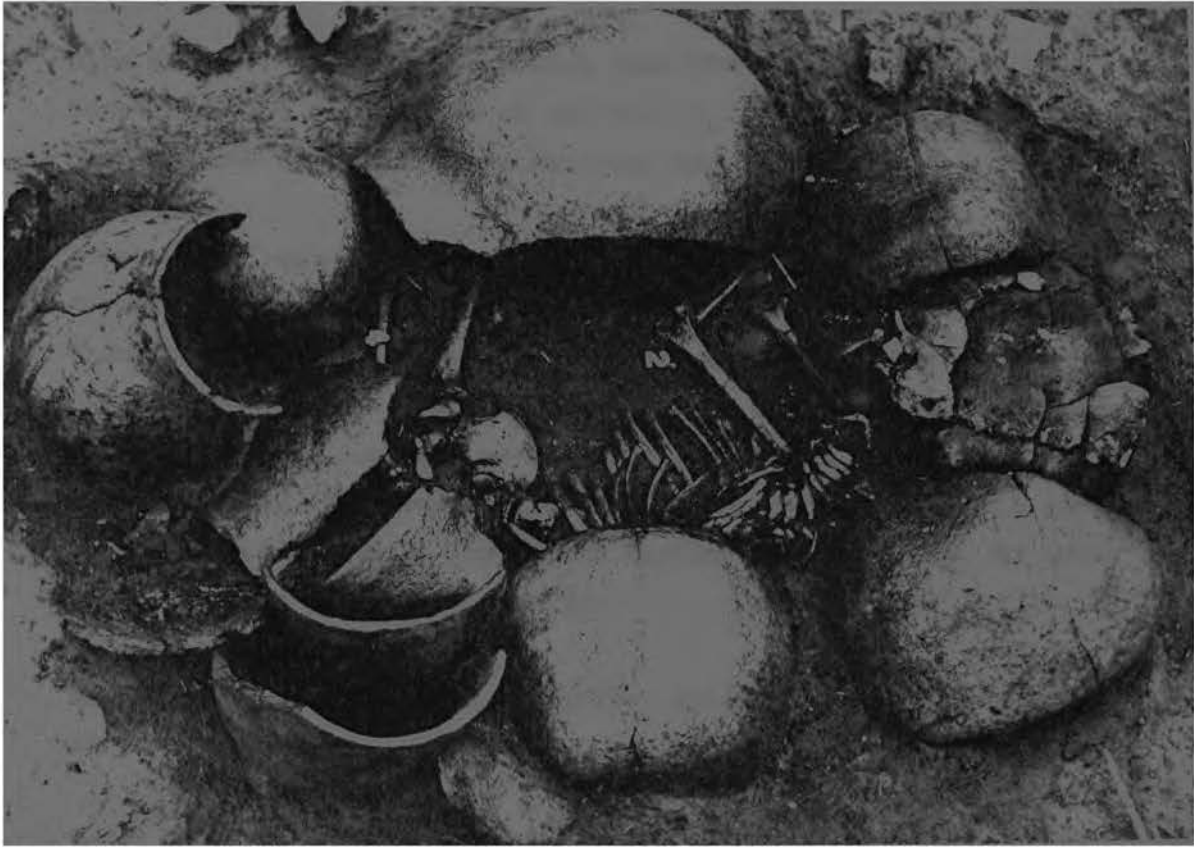


Plate 42

Pont Drift : Burial 2B.5.1 with grave goods.

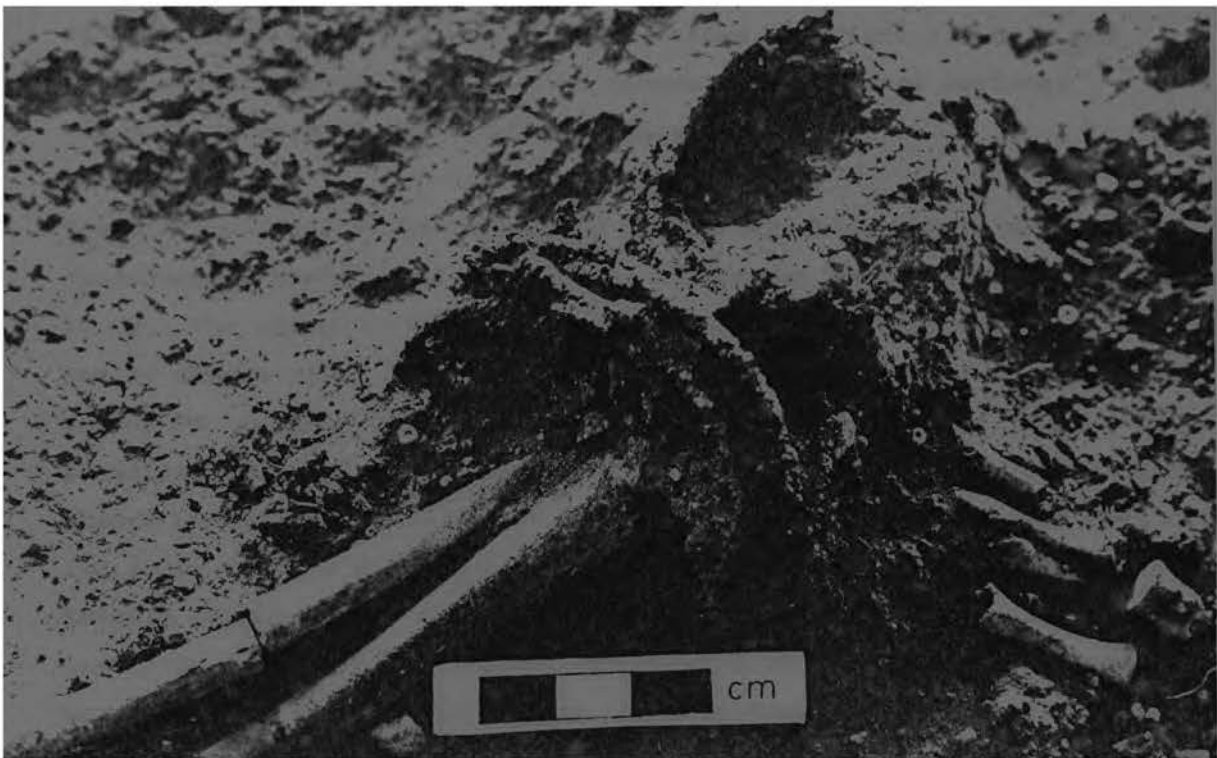


Plate 43

Pont Drift : Burial 2B.5.1 showing details of leg rings and beads.

bits of burnt hut rubble, showing that the burial could not be connected with the remains of hut 2B.4.3 There was no other indication out of which level the grave had been dug.

A coarse bluish-grey gravel floor (V7) formed the base of level 5 in parts of squares 2A, A1 and B1. Thickness varied between 2 and 7 cm, the thickest part being a 58 cm long moulded curb that ran parallel to line A1 - A2 (See profile A1 - C1 for other details). The surface of the floor had been polished, and as a result of it being rather crumbly, the complete outline could not be traced. A single grinding stone (A1.5.2) lay on the surface of the floor. No other finds could be associated with it.

Square C1 revealed a stone structure (C1.5.2) and a single stone mortar.

Level 6 contained greyish-brown sandy soil which was harder than in level 5. Hard patches with burnt surfaces and ash were found throughout this level, suggesting the frequent making of fires. Fewer potsherds and bones were recovered than in level 5, but more beads. Thickness varied between 10 and 25 cm, except in the depression at D2 where it decreased to about 5 cm. A single stone structure (3A.6.1) was found next to point 2A. Two flat stones with polished surfaces (2A.6.1 and 2A.6.2) were found in square 2A.

Level 7 consisted of greyish-brown sandy soil which was in most places considerably harder than in level 6. Thickness varied from 7 to 15 cm. The amount of cultural material remained unchanged. A single row of stones (3A.7.1) was uncovered in the upper part of the level in square 3A, running across the middle of the square more or less parallel to line 3A - 2A (See plate 47). A whetstone (2C.7.2) with a V-shaped groove was uncovered in square 2C, next to a pock-marked flat stone (2C.7.3). In the same square but slightly deeper, a very oxidized and fragile copper-coated iron bracelet (2C.7.4) was removed in a plaster cast. In square C1 the remains of a string of turquoise glass beads was recovered. These lay next to the whetstone (2C.7.2).

In corner C3 a hollow filled with greyish-yellow ashy soil was designated C2.7.1 and excavated separately (See profile C3 - D3). A small pit 30 cm deep and 40 cm wide was found next to point B2 (See profile

A2 - C2). No significant remains were found in either of these hollows.

Level 8 The surface of level 8 was characterized by a thin crust of hard sandy soil burnt dark brown which extended over large parts of the surface. The level contained soft yellow sandy soil, except towards corner D3 where it became greyish-brown. Thickness varied from 5 to 15 cm. In 2AA a large heap of stones was noted.

Level 8(i) was a lens of grey ashy soil that appeared along line 2D - 2B and extended only a short distance into the excavation. Maximum thickness was 15 cm. Few cultural remains were recovered.

Level 9 consisted of a yellow dung layer arbitrarily divided into a 10 cm thickness. Part of the layer was very powdery, particularly around squares 3A and 2A. In the latter but particularly in 2AA, the dung became clearly mixed with grey sandy soil. Less cultural material was recovered, although bone fragments were numerous. In square 2A along line A1 - B1 a concentration of stones (2A.9.1) was excavated extending into square A1 adjacent to that corner,

The stones were not packed on top of each other and consisted of a few large stones with small ones inbetween.

Level 10 contained hard lumpy yellow dung with a dramatic decrease in cultural material. Thickness varied between 10 and 15 cm. In square 2AA and that part of square 2A closest to line 2A - A1 it was noted that the dung did not form a solid level, and was mixed with grey sandy soil. A pile of stones was observed close to the middle of 2AA. On excavating this, an unusual feature (2AA.10.1) was uncovered, consisting of numerous stones, bones, potsherds, and beads lying on top of a circular paved stone floor. This floor was covered by a thin layer of fine, brown consolidated gravel (See figure 56 and plate 48).

Level 11 remained the same as level 10, from which it was arbitrarily divided. There was a slight increase in cultural remains. Thickness varied between 10 and 15 cm. Level 11 was not excavated in 2AA as this square had been opened to uncover feature 2AA.10.1.

Level 12 still contained yellow dung, although it varied in texture from lumps to powdery yellow sandy soil. Thickness varied between 5 and

15 cm, except in corner 2D where a depression increased the thickness over 30 cm. In part of square 3A, the yellow sandy soil changed gradually into grey ashy soil, while in corner 2B of the same square three large stones were found lying on edge. No significance could be attached to this feature. In corner D2 of square C1 a disturbance was noticed and excavated as feature C1.12.1. This proved to be a circular pit containing several large stones and two thirds of a broken bowl (C1.12.1.1). The pit extended into level 14, at a depth of about 185 cm below the surface. On examination of the stratigraphy, it was found that the pit originated from level 8 and had been overlooked due to the mixture of dung in the fill. The depression noted in levels 5 and 6 had obviously been caused by the soil in the pit settling (See profiles D1 - D3 and C2 - D2 as well as Plate 50).

Level 13 consisted of very soft grey ashy soil with a large amount of charcoal. There was no significant change in the amount of cultural material recovered compared to level 12. Thickness varied between 10 and 18 cm.

Level 14 was arbitrarily divided from layer 13 and contained very soft grey ashy soil with a large amount of charcoal. There was an increase in the amount of faunal material, although the amount of pottery remained much the same. Level thickness varied between 5 and 25 cm. In square 2B, running in a slight arc from corner B1 to midway along line 2B - 2C, was a scattered row of small to medium sized stones and three charred posts, whose diameters were 5, 7 and 9 cm each. The two larger posts were removed for dating, and labeled 2B.14.1.2. There were no associated finds.

Level 14(i) was distinguished in squares C1 and C2 and parts of B1, 2B and 2C. Parts of this level were covered by a thin sterile white sandy layer, which appeared to have been washed in, possibly during heavy rain. The thickest part of the level was about 10 cm and contained soft grey ashy soil with charcoal. The amount of cultural material recovered was similar to level 14.

Level 15 contained soft white sand and was excavated to a depth of about 10 cm, when it was obvious that no more cultural material was being obtained. The white sand represents the original surface of the site, into which cultural remains were trodden. In square 2B, an oval pit

(2B.15.1) 1,40 metres by 1,20 metres was found and excavated to a depth of 40 cm. The pit contained three large stones and was filled with a mixture of white sand and grey ashy soil. It has presumably been dug from level 14. No other features or cultural material could be associated with the pit.

Level 16 To ensure that the white sand had not been washed in, two trenches of 1 x 2 metres were dug down to bedrock in squares 3A and C2. In the former, bedrock was reached after 30 cm, while in the latter, a further 70 cm of sterile sand was removed. No cultural material was found.

3) Analysis and Interpretation

a) Ceramics

i) Pottery

The Pont Drift Pottery has been analysed according to the same techniques used for Schroda. All decoration motifs and vessel shapes found, have been sorted into the standard series list of motifs and shapes used for the sites excavated in the Limpopo/Shashi Valley.

A total of 28314 sherds were recovered from the site. Body sherds constituted 25163 pieces or 88.9% of the sample, while undecorated rims tallied 1952 (6,9%) and decorated sherds 1199 (4,2%) pieces. When placed into the stratigraphic units, a clear picture emerges as is seen in table 81

Table 81

PONT DRIFT: Total Pottery sample

	Total	Percent
Unit 1	13779	48.7
Unit 2	6706	23.7
Unit 3	3564	12.6
Unit 4	4265	15.0
Total	28314	100.0

Nearly half of the sherds recovered were found in levels 1 - 4 (Unit 1) while the dung level showed, as could be expected, the lowest percentage.

Thirty-seven different vessel shapes were identified. In many cases only single examples of shapes could be identified. In spite of the low individual count per vessel shape, it was decided to keep them separate instead of combining similar shapes, because it was felt that there was sufficient difference between each individual shape to warrant their separation.

The 1952 undecorated rims were divided into rims that were too small for vessel shape identification, and those whose shape could be identified. The former category contained 867 unidentifiable sherds leaving 1085 that could be identified.

Undecorated Vessels

The 1085 undecorated identifiable sherds were divided into two broad categories, namely those that could be identified according to the vessel shape list, and those that were identifiable only to basic vessel shape, i.e. bowls, beakers, beaker bowls and pots. The two categories were labeled 'identifiable' and 'indeterminate' respectively. Table 82 shows the numbers and percentage of undecorated vessels. The percentage is expressed as part of the grand total.

Bowls made up 61,1% of the undecorated sample, with pots returning 36,2%.

Looking at the individual units, a clear picture emerges as can be seen in tables 83 and 84.

It is noticeable that the percentage of vessels is highest in Unit 1, and drops quickly unit by unit until in Unit 4 it is less than a quarter of that in unit 1.

Another interesting feature is that while beakers and beaker bowls are not an important part of the assemblage, they feature in all Units. The positions of the two pieces recovered from unit four were checked, and it seems unlikely that they were intrusions into the

TABLE 82

PONT DRIFT : Total of Undecorated Vessels

Vessel Shape	Number	%
Identified bowls	195	10,4%
Identified beakers	13	0,7%
Identified beaker bowls	11	0,6%
Identified pots	21	1,1%
Indeterminate bowls	468	23,9%
Indeterminate beakers	2	0,1%
Indeterminate beaker bowls	0	0
Indeterminate pots	375	19,2%
TOTAL	1085	55,6%
Totally unidentifiable	867	44,4%
GRAND TOTAL	1952	100,0%

unit by means of disturbances. This corresponds to what was found at Schroda, namely that beaker-like vessels are found in association with Zhizo pottery.

Twenty-six different vessel shapes were identified other than indeterminate pots, bowls beakers and beaker-bowls. These shapes were comprised of 2 beaker bowls, (7,7%) 3 beakers (11,5%) 15 bowls (57,7%) and 6 pots (23,1%). It is clear that the bowls were considered more important than all the other shapes combined in the Undecorated vessel class.

Table 85 gives a level by level breakdown of the numbers of different vessel shapes identified.

TABLE 83

PONT DRIFT: Totals of Identifiable and indeterminate Vessel shapes (undecorated)

Vessel Shape	Unit 1	Unit 2	Unit 3	Unit 4	
Bowls	246	232	108	77	
Beakers	8	5	1	1	
Beaker bowls	4	4	2	1	
Pots	223	101	40	34	Total
Total	481	340	151	113	1085
Percentage	44,4	31,3	13,9	10,4	100,00

TABLE 84

PONT DRIFT : Undecorated vessels in each unit

Vessel Shape	Unit 1	Unit 2	Unit 3	Unit 4
Identified bowls	51	87	36	21
Identified beakers	7	5	1	0
Identified beaker bowls	4	4	2	1
Identified pots	6	6	5	4
TOTAL	68	102	44	26
Indeterminate bowls	195	145	72	56
Indeterminate beakers	1	0	0	1
Indeterminate beaker bowls	0	0	0	0
Indeterminate pots	217	93	35	30
TOTAL	413	238	107	87

TABLE 85

PONT DRIFT : Total numbers of identified vessel shapes (Undecorated)

Level	Identified pots	Identified bowls	Identified beakers	Unidentifiable	Vessel Shape																											
					Beaker bowl		Beaker			Bowl										Pot												
					43	42	39	40	41	31	30	20	21	29	28	32	22	35	24	27	26	38	25	33	16	18	3	6	17	15		
1	10	8	49		1																											
2	27	26	27				1				2	2	1	1								1										
3	82	72	142		1		1	1			2	4	3	6	3	1	1					1										
4	98	89	1	184	2		3	1			1	4	4	3	4	3	1		1	1	1	1	1		1	2	1					
5	50	55	81		1		1	1			3	2	2	3	8	2		1	1	1	1		3	1			1					
6	18	25	61		1	1			1		2		21	4	4		1			1			1			1						
7	15	38	71			1			1	8		8		1	3	1			1	1					2		1					
8	10	27	49				1						2	1	1					1					2		2					
9	13	24	42		1							1	2	4	3					1		1				1	1	1				
10	9	17	19		1		1					1	4		3	1							1			1						
11	7	14	12										2	2	2				1					1			1					
12	6	17	22										1	1	1			1			1			1								
13	10	22	29									1	2		2	1	1															
14	7	16	1	34		1						2			4					1			1			1	1					
14(i)	6	8	18								1				1																	
15	7	10	27								1	1		1						1					2							
Total	375	468	2	867	8	3	8	1	4		7	22	29	43	32	32	5	2	4	5	4	4	6	1	5	9	8	3	2	1	5	2

Several facts emerge from the table. Beakers and beaker bowls were found in every level from 1 - 10, and again in level 14. Amongst the bowls, several shapes were found extending through most levels, although occurring rather sporadically in the lower levels. Two shapes (25 and 33) did not occur in units 3 and 4. A clear trend was observed in that several shapes disappeared in the upper levels.

A similar trend, but clearer, was found amongst the pots, where only one undecorated shape (16) occurred in all units. The other shapes were found in only the upper or lower levels.

Decorated Vessels

The 323 decorated sherds that were analysed, were also divided as described under undecorated vessels.

Table 86 gives details as to the numbers and percentages of the various categories.

TABLE 86

PONT DRIFT : Decorated Vessels

Vessel Shape	Number	%
Identified Bowls	13	4,0
Identified Beakers	0	0,0
Identified Beaker bowls	3	0,9
Identified Pots	50	15,5
Indeterminate Bowls	2	0,6
Indeterminate Beaker bowls	8	2,5
Indeterminate Pots	236	73,1
TOTAL	323	100,0

Bowls were less prominent than in the undecorated sample, forming only 4,6% of the identifiable decorated sample. Pots formed 88,6% of the sample, while the remaining 6,8% was made up by beakers and beaker bowls.

It can thus be concluded that most pots were decorated, while the large majority of bowls were plain. Decorated beakers and beaker bowls are more common than undecorated, but form an insignificant part of the total.

The numbers of decorated vessels found in the individual units is shown in tables 87 and 88 .

TABLE 87

PONT DRIFT : Number of Decorated Vessels in each Unit

Vessel Shape	Unit 1	Unit 2	Unit 3	Unit 4
Identified Bowls	6	7	0	0
Identified Beakers	0	0	0	0
Identified Bowls	2	1	0	0
Identified Pots	16	19	8	7
TOTAL	24	27	8	7
Indeterminate Bowls	1	0	0	1
Indeterminate Beakers	9	2	0	0
Indeterminate Beaker bowls	8	0	0	0
Indeterminate Pots	82	55	40	59
TOTAL	100	57	40	60

TABLE 88

PONT DRIFT : Totals of Identifiable and Indeterminate Vessel shapes (decorated)

Vessel Shape	Unit 1	Unit 2	Unit 3	Unit 4	
Bowls	7	7	0	1	
Beakers	9	2	0	0	
Beaker bowls	10	1	0	0	
Pots	98	74	48	66	
TOTAL	124	84	48	67	323
Percentage	38,4%	26,0%	14,9%	20,7%	100%

The highest percentage of decorated sherds recovered remains in Unit 1 with Unit 3 registering the lowest percentage.

In units 3 and 4, with the exception of a single bowl (Unit 4) all decorated vessel shapes were pots.

Out of the 323 sherds, twenty shapes were identified other than the indeterminate pots, bowls, beakers and beaker-bowls. The shapes determined were 2 beaker bowls (10%) 7 bowls (35%) and 11 pots (55%)

Table 89 gives a level by level breakdown of the numbers of different vessel shapes identified. A clear picture emerges. Decorated bowls occur only in units 1 and 2. All decorated bowl shapes occur amongst the undecorated shapes.

Pot shapes 6, 1, and 3, are found with sufficient regularity throughout the excavation to say that they are standard vessel forms in both the Zhizo and Leopard's Kopje A levels. Shapes 6 and 3 are found amongst the undecorated vessels, but only from individual

TABLE 89

PONT DRIFT : Total numbers of Decorated Vessels as per level

Level	Unidentified pots	Unidentified beaker	Unidentified beaker bowl	Unidentified bowl	Shape																				
					Beaker bowls		Bowls							Pots											
					43	42	24	28	29	26	25	30	21	6	1	3	14	12	16	15	11	7	2	13	
Unit 1	2																								
1	2																								
2	15	3	4			1	1																		
3	21	1	2	1				1	1																
4	44	5	2		1	1				1	1														
Unit 2	26									2	1														
5	26									2	1														
6	9	1						1	1																
7	12	1						1																	
8	1									1															
Unit 3	15																								
9	15																								
10	9																								
11	5																								
12	11																								
Unit 4	8			1																					
13	8			1																					
14	18																								
14i	14																								
15	19																								
TOTAL	236	11	8	2	1	2	1	2	2	2	2	2	3	1	11	7	20	1	3	2	1	1	1	2	1

vessels found in level 4. This indicated that these vessel shapes were nearly always decorated. Conversely shape 16 which was common in most of the levels in the undecorated class, occurs only in levels 4 and 5 as single decorated vessels. This globular pot without an everted rim was thus seldom decorated.

When the total sample of identifiable decorated and undecorated pieces is examined according to the basic shapes of bowls, beakers beaker bowls and pots, it is of interest to note that the numbers of bowls and pots are virtually equal (48,4% against 48,2% respectively (See table 90). Beakers and beaker-bowls are negligible, forming 3,4% of the total.

TABLE 90

PONT DRIFT : Total of decorated and undecorated Shapes

Shape	Number	%
Bowls	686	48,4%
Beakers	26	1,8%
Beaker bowls	22	1,6%
Pots	682	48,2%
TOTAL	1416	100,00%

The ratio of bowls to pots is high, and compares well to that found at Icon (Hanisch 1979 p.79). It is normally accepted that the bowl/pot ratio is considerably lower as has been demonstrated under the Venda (13% bowls).

Decorative motifs

The master list of decorations compiled for all the sites excavated was used in the identification and coding of the Pont Drift ceramics.

This master list has been divided into various classes according to technique of decoration.

Sherds that were too small to allow the motif to be identified, were classed according to the technique used in decoration. When combined with the identifiable sherds, a clear picture is given of the stamp decoration combinations compared to pure incision. (See table 91). The results of table are given in graphic form in fig 51 .

It can be seen that stamp decorated ware occurs in units 2, 3 and 4. Unit 1 remains pure incision, and is clearly purely Leopard's Kopje A.

TABLE 91

PONT DRIFT : Technique Distribution

Level	Stamped	%	Incised	%
Unit 1	1		56	100
	2		140	100
	3		169	100
	4		229	100
Unit 2	5	1	112	99,1
	6	1	37	97,4
	7	9	46	83,6
	8	4	39	90,7
Unit 3	9	10	39	79,6
	10	7	26	78,8
	11	11	13	54,2
	12	33	8	19,5
Unit 4	13	23	7	23,3
	14	54	18	25,0
	14(i)	53	5	8,6
	15	44	5	10,2

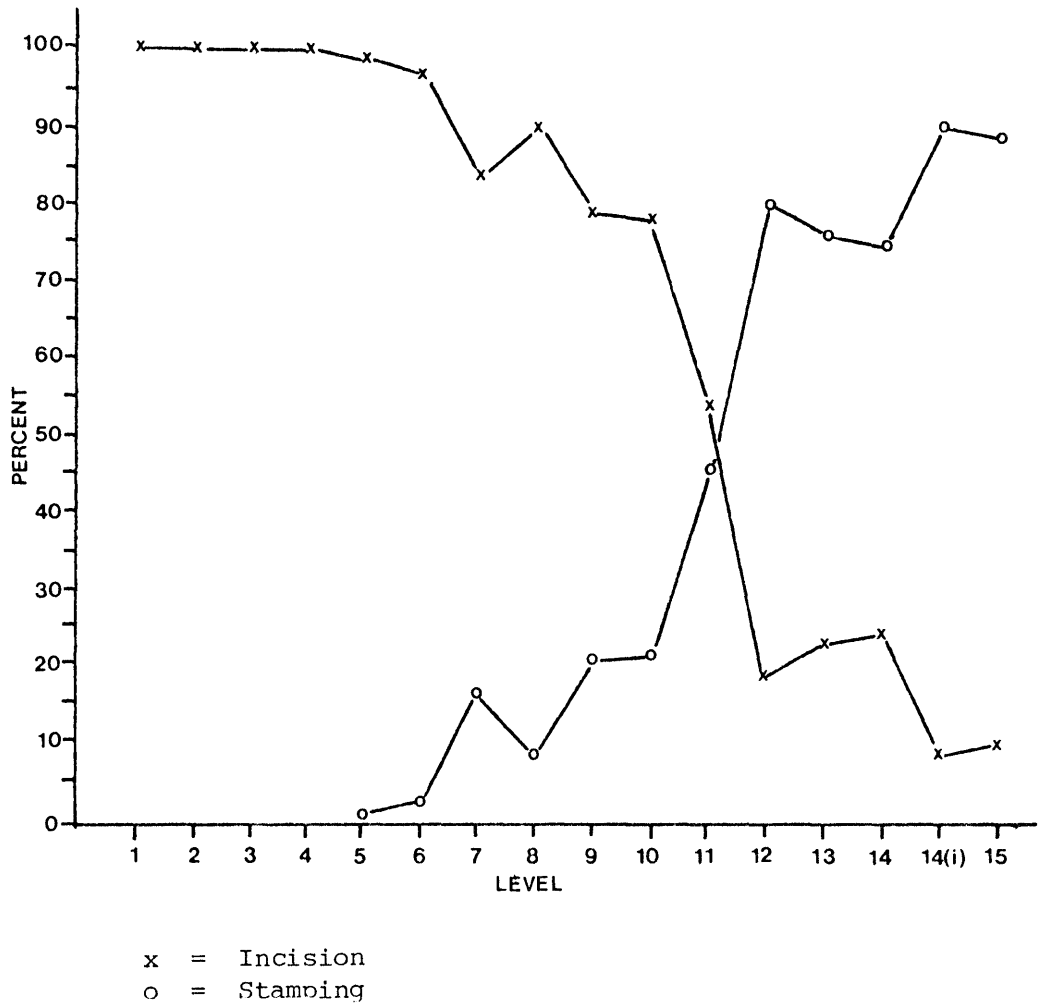


Figure 51

Pont Drift: Change in decoration technique from stamping to incision

Unit 4 on the other hand, contains an average of 83,2% of stamp decorated ware. This would appear to be characteristic of the Zhizo in the Limpopo/Shashi Valley, where incision forms part of the tradition, as has been demonstrated from Schroda. The intermediate levels in units 2 and 3 show the change from the one technique to the other.


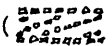
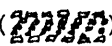
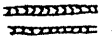
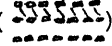
The change-over from stamp decoration to incision occurs in Unit 3, the dung level. The thickness of the dung implies large numbers of livestock, a characteristic normally associated with Leopard's Kopje A. However, the high number of Stamp decorated sherds indicate that the dung unit is connected with the Zhizo. The increase in incised ware in levels 9 and 10 can be attributed to the downwards migration of pottery from level 8.


In total 142 different decorative motifs were identified at Pont Drift, and were made up from the following categories:-



Dentate stamping	(A)	16
Bangle stamping	(B)	6
Dentate stamping and incision	(C)	11
Incision	(E)	109

Less than a quarter (i.e. 23,2%) of the motifs were stamp decoration, indicating that a greater variety of incised motifs occurs.

Table 135 gives level by level detail of the motifs. It is obvious that there are few examples of each type, and in most cases, there being only one example.

The most common motif under the dentate stamping is the single line A1.1 () , followed by A4.4 () and A4.2 () . In the Bangle stamping category, B2.1 () proved the most common. Other types were minimal, consisting of one or two examples. The combination of dentate stamping and incision produced C6.3 as the most popular motif. C6.3 () contains a band of 3 parallel lines of stamping with hatching between the upper two lines. It must not be confused with a neck/shoulder layout.

Amongst the incised motifs E4.9 () is found most frequently,

followed by E11.3 () and E1.2 () E4.9 occurs continuously from level 9 to level 2, while E11.3 is found only in Unit 1. E1.2 occurs from level 5 to level 3. The stamped equivalent of E4.9 is A4.2 and is found from level 15 to 8. It seems probable that the underlying motif has remained unchanged throughout the levels, except for the technique change around levels 8 and 9.

The greater variety of decoration occurs in Unit 1 where 66 individual types could be recognized, all of which were incised.

In the following units, this variation decreased quickly, with only 8 incised motifs coming from Unit 4.

With regard to the dentate stamping, six different types of stamp were distinguished in the clay. These varied from different types of parallelogram to trapeziums and triangles. (See fig. 52). This indicates very clearly that the type of material used was probably a piece of calabash or similar material, into which teeth of any shape could be cut. No indication was found either in the excavation or on the pottery examined, of the use of clay stamps, such as has been recorded in Rhodesia. On three sherds from different levels, combinations of stamps were found. (See fig... 52)

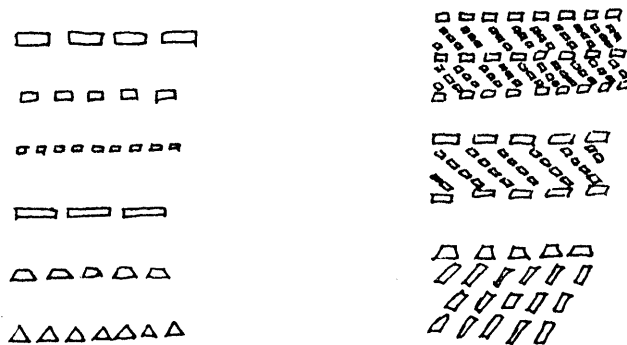


Figure 52

Pont Drift: Different types of stamp and combining thereof

The incision varied in depth and width, but this was rather due to the quality of decoration than to the use of different types of instrument. In units 1, 2 and 3 a few examples of engraved decoration

were noticed, i.e. on fired vessels, but no trend could be established.

Layout

The combination and position of decorations were divided into seven categories for Pont Drift, namely shoulder, under rim, neck, base, rim/neck, rim/neck/shoulder and neck/shoulder.

Table 92 gives a summary of the layout, showing the position of stamp decorated and incised motifs for the various categories, as were excavated in each level.

Several facts come clearly to light.

The neck of a vessel is the most popular position of decoration (54,8%). Stamp decoration in the neck is more common than in any other position. The accepted layout combination for Zhizo, namely rim/shoulder is not present at Pont Drift, but a limited number (1,6%) have a neck/shoulder layout.

Stamped decorations appear on the shoulder only, and vary from single lines to elaborate triangles. The neck remains the most common position, and it can therefore be safely assumed that at Pont Drift, the Zhizo characteristics differ somewhat from those described from Rhodesia.

It is also clear that some of the characteristics found in the lower (Zhizo) levels extend into the upper levels, although there is a change in decoration technique. Incised decoration on the shoulder, normally not associated with Leopard's Kopje A, continues through into Unit 1. Incision under the rim, again not generally associated with Leopard's Kopje A although not totally unknown in the tradition, is common at Pont Drift and appears to be an archaism relating to Zhizo.

Decorations at the base of vessels (normally beakers and beaker-bowls) are found in unit 1, while a single combination of incised rim/neck decoration came from level 4 in the same unit. Another interesting incised combination is found in Unit 2, level 6 where a bellied pot was decorated on the rim, neck and shoulder.

TABLE 92


PONT DRIFT : Layout Distribution

Level	Position of Decoration													
	Shoulder		Under Rim		Neck		Base		Rim/Neck		Rim/Neck/Shoulder		Neck/Shoulder	
	S	I	S	I	S	I	S	I	S	I	S	I	S	I
1		2												
2		4		3		12		7						
3		8		4		21								
4		11		8		35		7		1				
5		4		8		26								
6	1	3		5		6					1			
7		2		6		2	6							
8		3	1	1		1	7							
9			2	3		1	9							
10		1	1	3		1	7							
11	1		1	2		2	1							
12	1	1	3	2		4	2							
13	3		3	1		2							1	
14	5		2			7	5						1	
14(1)	5	1		1		6	1						3	
15	3		5	12										
TOTAL	19	40	18	47	38	138		14		1		1	5	321
%	5.9	12.5	5.6	14.6	11.8	43.0		4.4		0.3		0.3	1.6	100
Combined %	18.4%		20.2%		54.8%			4.4%		0.3%		0.3%	1.6%	100%

S = Stamped. I = Incised.

Similar incised combinations (i.e. rim/neck and neck/shoulder) were found during excavations at two other sites, namely Kommando Kop and Pont Drift TPD 1/1. (Hanisch n.d. unpublished report). Kommando Kop is a Leopard's Kopje A site while at Pont Drift TPD 1/1, the levels from which the sherds come are mixed Zhizo/Leopard's Kopje A.

It is clear that the typical Zhizo layout, while less common than in Rhodesia, has continued into Leopard's Kopje A.

No clear trends emerge from the comparisons of position of decoration and motif, (See table 137), except for motif A1.1 (oooooo) which was the most common on the shoulder of vessels, and motif E4.9 () which occurred frequently under the rim or in the neck of vessels. In particular the latter is accepted as one of the standard layouts in Leopard's Kopje A, and occurred from level 9 through to level 2 at Pont Drift.

When vessel shape is combined with decoration, no trends emerge. There is no preference for a single type of motif for a particular vessel shape. It is conceivable that the sample that could be definitely identified down to individual vessel shapes is too small (66 samples) and that with a larger sample, a clear pattern may emerge. Indeterminate vessel shapes, i.e. sherds that were not complete enough for certain identifications but had the complete decoration present, were also included in the comparison. The shapes used were unidentified pots, beakers, beaker-bowls and bowls. As could be expected no clear pattern was found, other than that more pots were decorated than bowls, beakers and beaker-bowls. Predominant motifs were once again A1.1 and E4.9. (See tables 136).

Rims

On examination of the rims, the same problems that were found in the Schroda sample were encountered, namely that variations in rim shape occurred on the same sherd. For this reason no detailed study was made of the rim shapes. A variety of clearly different shapes exists, particularly among the bowls, but it is my feeling that the information forthcoming from such a study would be misleading.

Quality

Quality of finish and of decoration was also examined on individual sherds Tables 93 and 94 give the actual figures and percentages.

TABLE 93

PONT DRIFT : Quality of Finish

Degree	Level															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14(i)	15
1	1*															
2	4	6	7	3	2	1				1	1	1	2	3	2	3
%	16	18	11	8	14	6				8	14	8	20	13	12	15
3	2*	14	22	43	22	10	10	8	9	5	5	8	6	14	13	14
%	56	64	69	56	63	63	62	60	38	72	62	60	61	76	70	
4	7	6	12	14	4	5	5	6	7	1	4	2	6	2	3	
%	28	18	20	36	25	31	38	40	54	14	30	20	26	12	15	
TOTAL	25	34	62	39	16	16	13	15	13	7	13	10	23	17	20	
%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* Not included

In the graph indicating degree of quality of finish, two points come to light. From level 10 there is a decrease in the quality of finish degree 4 indicating that fewer vessels were poorly finished. At the same time, there is an increase in quality of finish degree 2 from level 8 on.

The greater percentage of vessels are finished to degree 3. This means that in the levels where incision became more popular, the quality of finish improved gradually. The lower levels (Unit 4) remained constant. It can thus be inferred that the quality of finish of the Zhizo pottery remained constant, while the Leopard's Kopje A pottery began with a poor quality of finish, but improved

noticeably in the upper levels.

TABLE 94

PONT DRIFT : Quality of Decoration

Degree	Level																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14i	15		
1 %	1*		2*															
2 %	6 25	5 15	12 17	1 3	2 14	2 14	1 8					2 29	2 15	2 20	2 12			
3 %	2*	16 67	26 76	45 75	31 79	13 80	13 80	11 84	14 93	12 92	4 57	10 77	8 80	20 100	14 82	19 95		
4 %	2 8	3 9	4 6	7 18	1 6	1 6	1 8	1 7	1 8	1 14	1 8				1 6	1 5		
TOTAL %	24 100	34 100	60 100	39 100	16 100	16 100	13 100	15 100	13 100	7 100	13 100	10 100	23 100	17 100	20 100			

* Not included

The quality of decoration shows several clear trends, with changes taking place in unit 3. The lower levels (11 to 15) show a definite decrease in the quality of decoration degree 3, with corresponding increase in quality of decoration degree 2.

This indicates that the quality of decoration on Zhizo vessels was improving. From level 10 upwards a clear change takes place, in that there is also a decrease in quality of decoration degree 3, but is this time coupled with the increase in incision. A corresponding increase is shown in the same levels in quality of decoration degree 2.

A clear break between Zhizo and Leopard's Kopje A is indicated in Unit 3. The quality of decoration and finish of the vessels in the combined Zhizo/Leopard's Kopje A levels was poor, but improved, particularly in Unit 1, which is associated with pure Leopard's Kopje A.

Table 97

Pont Drift: Vessel shape and decoration combined with "neck/shoulder"
 layout

Level	Vessel Shape				
	1	Stamped		6	Indt Pot
		2	3		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13			1		
14				1	
14(i)	1	1			1
15					

Table 99

Pont Drift: Vessel shape and decoration combined with "base" layout

Level	Vessel Shape		
	Incised		
	42	Indet Beaker	Indet Beaker bowl
1			
2		2	4
3			1
4	1	3	2
5		1	
6			
7			
8			
9			
10			
11			
12			
13			
14			
14(i)			
15			

No stamped decoration.

From the tables it can be seen that clustering takes place mainly around the indeterminate shapes, with a spread throughout the defined vessel shapes.

There are, however, exceptions. In table 95 it can be seen that a number of indeterminate beakers are decorated under the rim, while table 99 indicates that the remainder are decorated around the base.

Vessel shape 3 combined with incision in the neck clusters clearly in levels 3 to 6 inclusive. Vessel shape 6 combines with incision in the neck clusters clearly between levels 2 and 8 inclusive. These latter two can be called classes.

Type Series

No clear type series for the Zhizo or Leopard's Kopje A traditions and be described from the limited sample recovered at Pont Drift. In summary, however, the characteristics of the two traditions are as follows.

a) Zhizo

Unit 4 contains what may be described as Zhizo pottery. It is stamp decorated and contains the vessel shapes 1, 2, 3, 6, 13 as well as indeterminate pots and bowls. Layout positions are under rim, neck, neck/shoulder and shoulder. Typically then a Zhizo vessel from Pont Drift is a pot with a single band of stamp decoration under the rim, in the neck or on the shoulder. Combinations of neck and shoulder occur but are comparatively rare.

b) Leopard's Kopje A

Pure Leopard's Kopje A is confined to unit 1, although it occurs predominately in the upper levels of unit 2. Associated vessel shapes are 1, 2, 3, 11, 12, 13, 14, 15, 16 (Pots), 21, 24, 25, 26, 28, 29 (bowls), 42, 43 (beaker bowls) and indeterminate pots, bowl, beakers and beaker bowls. Layout positions are under rim, neck, shoulder and base.

Typical Leopard's Kopje vessels from Pont Drift are pots with incised decoration under the rim, in the neck and on the shoulder; incised decoration under the rim, in the neck and on the shoulder; bowls with incision under the rim or on the shoulder; beakers with incision under the rim or at the base; and beaker bowls with incision at the base.

Two classes can be identified, namely vessel shapes 3 and 6 with incised decoration in the neck.

It is clear that incision under the rim and on the shoulder, play an important role at Pont Drift, and are more predominate than has been hitherto accepted for the southern branch of the Leopard's Kopje A tradition.

ii) Clay figurines

Only 12 figurine fragments were recovered at Pont Drift TPD1/2. Of these, 11 were found in Unit 2 and one in Unit 3. It is noteworthy that level 6 produced more than half of the total number of figurine pieces. Table 100 shows the spread throughout the excavation.

The reason for this preponderance of figurine fragments is not clear, as level six was not abnormally thick nor did it contain proportionally more cultural material than any other level. The pieces did not belong to a single figurine.

All fragments recovered are too small for satisfactory identification. One fragment from square 2AA level 6 resembled in shape and size one of the applied buttocks commonly found on stylized human figurines. Two decorated pieces were found. A cylindrical fragment from square 3A level 6 had two lines of stylus marks at 180° to one another, while the intervening sections were filled crude incised arrow-like patterns. The second piece from B1 level 8 was also cylindrical, but was slightly curved in its length and had a single row of five stylus marks. Both decorated fragments may have been body parts of stylized human figurines.

It would seem that the art of figurine making at Pont Drift existed in the mixed levels, i.e. where Zhizo and Leopard's Kopje A occurred together. It is significant that no figurine fragments were found in the pure K2 levels, bearing in mind that large numbers of figurine fragments were excavated at the K2 site itself.

iii) Other

Abraded Potsherds

A few abraded potsherds of indeterminate shape were recovered, usually with one or two sides showing signs of use. These may have been used for the working of skins.

b) Metal Working

No evidence of iron or copper smelting was found. There was no large amounts of slag or ore, nor did the remains of furnaces come to light.

TABLE 100

PONT DRIFT : Distribution of Clay figurines

Level	Square								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
1									
2									
3									
4									
5							X		
6	X	X			X		XXX		X
7	X		X						
8		X							
9									
10									
11			X						
12									
13									
14									
14(i)									
15									

Tuyère fragments and pieces of slag were recovered from the excavation, and these are indicative of the reworking of metals rather than the smelting there of. Too few pieces were recovered to determine a definite trend, but from table 101 it would seem that there may have been a fairly even spread throughout the deposit.

Four tuyère fragments were recovered. Of these, two were the lower ends and showed vitrification; one was a body section; and the other was a funnel.

In total 56 pieces of metal were recovered, which can be divided into weapons, ornaments and unidentifiable pieces. No tools could be identified. Table 102 shows the spread of metalwork throughout the levels,

TABLE 101

PONT DRIFT : DISTRIBUTION OF SLAG AND TUYERE FRAGMENTS

LEVEL	SLAG	TUYERE
Unit 1 1 2 3 4		X
Unit 2 5 6 7 8	X X	XX
Unit 3 9 10 11 12		
Unit 4 13 14 14i 15	X X	X

excluding metal beads which will be discussed in a following section.

With exception of the copper-coated iron bangle and pure iron bangle, all the ornaments were made from copper. It is interesting that the copper spiral occurs only in the upper levels and particularly in association with K2 pottery in Unit 1. No copper spirals were found in association with Zhizo pottery in Unit 4, which is in contrast

TABLE 102

PONT DRIFT : DISTRIBUTION OF METAL

LEVEL	WEAPONS	ORNAMENTS					UNIDENTIFIABLE	
	Arrow-Head	Copper covered iron bangle	Copper bangle	Iron bangle	Copper spiral	Copper ring	Iron	Iron
Surface of Site					3			
Unit 1 1 2 3 4			1	1	6 6 5		2 2	
Unit 2 5 6 7 8		1			1 1		2 1 6 3	
Unit 3 9 10 11 12						1	1	
Unit 4 13 14 14i 15	1 1						7	

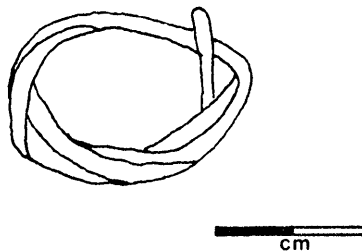
to the Zhizo settlement at Schroda.

All iron was heavily oxidized, and the shapes mostly unrecognizable. When compared to other sites, the number of identifiable pieces seems proportionally rather low, suggesting that conditions for the preservation of iron may not have been very suitable.

Two interesting ornaments were recovered. The first was a copper-covered iron bangle (2C.7.4) from square 2C level 7. This was very heavily oxidized and extremely fragile. The inside diameter was about 11 cm, with a thickness of 1,2 cm, and it appears that it was manufactured by winding an iron strip around a fibre core. A strip of copper was presumably then wound around the iron. This copper strip has disintegrated, but has left the iron with a clear green oxide coating. The second object was in the shape of a ring. It has been made by taking a very fine copper spiral wound round a fibre core, and twining this into the shape of a ring, with an inside diameter of nearly 20 mm and an outside diameter of about 30 mm. (See fig. 53)

Figure 53

Ring made from copper spiral from Pont Drift



c. Beads

The same bead analysis form used for the Schroda beads was used here. Information pertaining to type of bead, colour, condition, shape, diameter, thickness and size of perforation was recorded for each individual bead. Summaries were compiled from this information.

i) Glass

The site produced 626 glass beads. In contrast to Schroda, only 12 (1,92%) were so heavily patinated that their colour could not be determined. The number of glass beads declined drastically in the deeper levels. It was noticeable throughout that the beads were not as brittle and friable as those from Schroda.

Eight colours were determined, and were basically the same as those from Schroda, the exceptions being that no white beads were found at Pont Drift, while Schroda did not have Indian Reds.

As was determined at Schroda, turquoise beads were the most common. (83.2%)

Table 103 shows the different colours and percentages recovered at Pont Drift.

TABLE 103

PONT DRIFT : TOTAL NUMBERS OF GLASS BEADS

Colour	Number	Percentage
Turquoise	521	83,20
Light blue	2	0,32
Dark blue	4	0,64
Light green	28	4,48
Dark green	2	0,32
Black	6	0,96
Indian red	33	5,28
Yellow	18	2,88
Uncertain	12	1,92
Total	626	100,00%

As Pont Drift is not a single component site, each unit must be examined individually.

From Table 104 several facts emerge. Turquoise, light green and yellow beads occur in all units. Indian red beads occur in units 1-3,

TABLE 104

PONT DRIFT. TOTALS OF GLASS BEADS PER UNIT

	Turquoise	Light Blue	Dark Blue	Light Green	Dark Green	Black	Indian Red	Yellow	Uncertain	TOTAL	Percentage
Unit											
1	66	1		5		6	26	1	8	115	18,4
2	425	1		17			4	7	3	457	73,1
3	20		3	5	2		1	7	1	39	6,2
4	9		1	1				3		14	2,3
Total	520	2	4	28	2	6	33	18	12	625	100,00

light blue beads are found in units 1 + 2, while black occurs only in unit 1 (i.e. the pure L.K.A. levels).

It is interesting to note that the Zhizo levels in unit 4 contributed a very low percentage (2,3%) to the total number of glass beads. The 73,1% recorded in unit 2 is as a result of the very large number of turquoise beads found in levels 6 + 7 (99 and 280 respectively).

Of the four basic shape categories provided for, three were filled. There were 392 cylindrical beads, 218 flattened and 16 garden rollers. The highest number of garden rollers came from level 7 where 9 were found, in addition to numerous fragments. Level 6 produced four garden rollers. It is significant that the presence of turquoise garden rollers corresponds with the levels that have large numbers of small turquoise beads, and it would seem that these beads were used in the manufacture of garden roller beads.

TABLE 105

PONT DRIFT : THICKNESS OF GLASS BEADS

LEVEL	Bead thickness in mm.						
	0-1	1-2	2-3	3-5	5-8	8-12	7-12
1		14	16	2			
2		5	2	2			
3		12	12	2			
4	2	25	21				
5		18	12	1			1
6	1	35	61	1			4
7	1	125	145	10		3	6
8	14	14	16	2			
8i			1				
9			9	13			
10			2	2			
11		3	4	1			
12		1	2	1			
13		1	1	2			
14			1	2	1		
14i							
15			1	2			
16		1	2				
Total	4	254	308	43	1	3	12
Percentage	0,6	40,6	49,3	6,9	0,2	0,5	1,9

TABLE 106

PONT DRIFT : DIAMETERS OF GLASS BEADS

LEVEL	Bead diameter in mm.							
	0-1	1-2	2-3	3-4	4-5	5-8	8-12	>12
1			24	7	1			
2			8	1				
3			15	10	1			
4		1	35	12				
5		2	24	6				
6		1	67	29	1			4
7		10	179	91	1		4	5
8			22	10				
8i				1				
9			11	4	7			
10			2	2				
11			6	3				
12			1	2	1			
13			2	1	1			
14			1	3				
14i								
15			2	1				
16		1	2					
TOTAL		15	401	183	13		4	9
Percentage		2,4	64,2	29,3	2,1		0,6	1,4

Another interesting fact is that the garden roller beads were found in levels 5, 6, 7, 11 and 13, that is in units two and three, which are associated with Zhizo pottery. No garden rollers or indication of the manufacture thereof were found in unit 1, i.e. in the pure Leopard's Kopje A levels.

93% of the beads showed no sign of weathering, and light weathering was recorded on 4,95% (31) of the beads. The lower levels (units 3 + 4) did not show an increase in weathering, although the Zhizo levels compare favourably in age to Schroda. It would appear then that deeper deposit protected the glass beads from deterioration caused by rapid and frequent changes of temperature and moisture as would be experienced in a shallower deposit such as that of Schroda.

A series of beads that is not included in the level analysis are those recovered from the skeleton 2B.5.1, as these beads do not belong to the level in which they occurred, but came from higher up.

Sixty-four glass beads were found with the skeleton; 61 of these were turquoise; 2 were Indian reds; and 1 was yellow in colour.

The diameter of the Pont Drift beads varies from 1 to more than 12mm., the larger sizes being garden rollers. The majority (93,5%) lay between 2 and 4 mm. throughout all levels. See table 106 .

Bead thickness varies from less than 1 mm to more than 12 mm, with the majority between 1 and 3 mm in size (89,9%). Most of the garden roller beads were larger than 12 mm. See table 105.

From tables 105 and 106 it can be seen that the glass beads are small in size. There is no significant change within the different units.

ii) Ostrich eggshell

974 Ostrich eggshell beads were recovered from the excavation, representing 38,4% of the total bead sample. This figure was pushed up by 563 beads found in feature 2AA.10.1 from level 10, which may have had a special significance which would not normally be reflected in the site.

TABLE 107

PONT DRIFT : DISTRIBUTION OF OSTRICH EGGSHELL BEADS.

LEVEL	Total	Ostrich eggshell	Complete	Broken	Lightly Weathered	Heavily Weathered	No Weathe- ring	Burnt
Unit 1								
1	21	21	19	2	7	8		6
2	6	6	5	1	5			1
3	32	32	31	1	13		1	18
4	99	99	97	2	70		5	24
Unit 2								
5	36	36	35	1	29		4	3
6	39	39	36	3	35		2	2
7	16	16	16		16			
8	10	10	9	1	3		5	2
Unit 3								
9	47	47	47		4		40	3
10	563	563	563		9	2	563	16
11	15	15	14	1			13	2
12	17	17	16	1	2		14	1
Unit 4								
13	32	32	30	2	8		23	1
14	28	28	27	1	9		19	
14i	2	2	2				2	
15	11	11	11		4		7	
Total	974	974	958	16	214	10	671	79

Table 107 gives the figures for eggshell beads level by level. It can be seen that except for level 10, the spread of ostrich eggshell beads throughout the deposit is fairly even.

Most of the beads (68,9%) showed no signs of weathering, with 22% recording light weathering. Seventy-nine beads (8,1%) were burnt. These came from all levels except 14 - 16. The thickness of the beads varied between 1 and 3 mm, with the majority falling between

TABLE 108

PONT DRIFT : DIAMETER OF OSTRICH EGGSHELL BEADS

LEVEL	Bead diameter in mm						
	0-1	1-2	2-3	3-4	4-5	5-8	8-12
Unit 1	1			1	6	11	3
	2					5	1
	3			1	8	19	4
	4			5	38	54	2
Unit 2	5		1	1	19	14	1
	6			11	18	10	
	7			6	7	3	
	8		1	1	4	3	1
Unit 3	9			2	2	15	28
	10				2	94	467
	11				2	1	12
	12			1	3	3	10
Unit 4	13				5	9	18
	14				3	14	11
	14i				1	1	
	15			1	3	6	1
Total			2	30	121	262	559
Percentage			0,2	3,1	12,4	26,9	57,4

1 to 2 mm (98,5%). Bead diameter varied between 2 and 12 mm, with the emphasis falling on the larger sizes. See table 108.

Perforation diameter was also measured. No preference was observed in the side chosen for drilling, and in many cases the perforation was drilled from both sides. Perforation size varied from less than 1 mm to 4 mm with the majority (91,8%) falling into the 1-2 mm class,

TABLE 109

PONT DRIFT: PERFORATION DIAMETER OF OSTRICH EGGSHELL BEADS

Level	Perforation diameter					NOT DRILLED
	0 - 1	1 - 2	3 - 4	4 - 5	> 5	
Unit 1	1	13	6	2		
	2	2	4			
	3	18	14			
	4	3	86	10		
Unit 2	5	1	28	7		
	6	5	30	4		
	7	1	4	1		
	8		9	1		
Unit 3	9		45	2		
	10		560	3		
	11	1	12	2		
	12		17			
Unit 4	13	1	29	2		
	14		22	5		1
	14i		2			
	15		7	4		
Total	12	894	65	2		1
Percentage	1,2	91,8	6,7	0,2		0,1

as is reflected in table 109 .

iii) Achatina

937 Achatina beads were found in all levels with peaks in level 6, 7, and 8. Of these 649 showed no signs of weathering (69,3%). Only five beads showed signs of heavy weathering, 199 (21,2%) were lightly

weathered, while the remaining 84 (8,7%) were burnt. The spread of burnt Achatina beads appears to be even throughout the levels. (See table 110).

When the amount of weathering on the ostrich eggshell beads is compared to that of the achatina, it can be seen that there is little difference. The difference in the weathering pattern noticed in the Schroda analysis does not apply to Pont Drift. It would seem that the weathering effect on the ostrich eggshell beads is less at Pont Drift than at Schroda, (22% against 37% respectively) while the light weathering of the Achatina beads was greater at Pont Drift than Schroda (21% against 11% respectively). This may be due to a change in the composition of the soil. No tests were done on the acidity or chemical composition of the soil, although soil samples were collected.

If the numbers of ostrich eggshell and Achatina beads are directly compared then it would appear that they were of equal importance at Pont Drift. However, if level 10 with its high number of eggshell beads is ignored, and a direct level by level comparison is made, then the importance of the eggshell beads diminishes, and a relationship of a little more than 2:1 develops. At Schroda, the Achatina outnumber the ostrich eggshell by nearly 6:1. The point is, however, that at both sites the Achatina beads predominate.

iv) Wood

A single well-preserved wooden bead was recovered from level 14(i). It is cylindrical in shape, with a diameter of between 5-8 mm, and a thickness of 8-12 mm. The perforation was made from both sides, and is 3 to 4 mm in diameter. The wood could not be identified without a microscope slide being made. It is darkish in colour, and quite dense. (*Combretum imberbe?*)

As far as could be ascertained, this is the first wooden bead that has been recovered from an Iron Age site in South Africa. Wooden remains are, of course, known from Late Stone Age sites.

TABLE 110

PONT DRIFT: DISTRIBUTION OF ACHATINA BEADS

Level	Total	Achatina	Complete	Broken	Light Weathering	High Weathering	No Weathering	Burnt
1	46	46	42	4	31	4		11
2	23	23	18	5	13		2	8
3	23	23	15	8	15		1	7
4	131	131	127	4	24		77	30
5	41	41	39	2	14		25	2
6	94	94	90	4	29		60	5
7	164	164	156	8	21		139	4
8	117	117	110	7	15		101	1
8i	3	3	3				3	
9	71	71	69	2	4		65	2
10	54	54	51	3	8		45	1
11	34	34	32	2	2		30	2
12	45	45	40	5	5		40	
13	32	32	30	2	4		25	3
14	23	23	23		4		16	3
14i	3	3	3				3	
15	12	12	11	1			11	1
16	21	21	18	3	10	1	6	4
Total	937	937	877	60	199	5	649	84

v) Metal

Only four metal beads were found. One of these was iron and the other three copper. Table 111 shows the position in the excavation from which they were recovered.

It can be seen that the three copper beads were found in the levels

TABLE 111

PONT DRIFT: DISTRIBUTION OF METAL BEADS

LEVEL	<u>SQUARE</u>								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
UNIT 1 1 2 3 4	x								
UNIT 2 5 6 7 8	o								
UNIT 3 9 10 11 12									
UNIT 4 13 14 14i 15 16	o o								

x Iron

o Copper

associated with Zhizo pottery. These beads are disc-shaped, well preserved and measured between 7 and 9 mm in diameter and are slightly smaller than the Schroda copper beads.

The iron bead was cylindrical in shape and measured 6 mm in diameter.

d) Stone Artefacts

River pebbles occurred in most levels and in total 110 were recovered. These pebbles had no direct association with any features, and their use is uncertain, particularly in view of the fact that no gaming boards were found in the rock around the Pont Drift sites. The closest source of supply would have been the two small dry riverbeds, which are only a couple of hundred metres to the west of the site. Such stones could of course have been brought to the site from the Limpopo, which was utilized as is shown by the fish remains in the faunal analysis.

The major stone artefact type is a combination hammerstone/rubbing-stone of which 17 were excavated. Table 112 shows the spread of these tools throughout the excavation. Only a single hammerstone/rubbing-stone had a dimple on one side, possibly for breaking open marula nuts. The lower levels (unit 4) did not produce any such artefacts, although it is known that Zhizo peoples used them, for example at Schroda. The reason for the lack of these tools cannot be explained.

Several other large stone artefacts came to light. A large stone with a dolley hole in its centre was recovered from feature C1.5.1. The stone lay adjacent to a stone structure and a clay floor. The use of the dolley hole is uncertain, and the feature C1.5.1 should be interpreted as a unit.

Two whetstones with various numbers of small sharpening grooves in them were found (2A.6.1, A1.6.2).

An interesting whetstone (2C.7.2) was recovered from level 7 in square 2C. It was broken into three pieces, and had a 38 cm long sharpening groove in it. The groove was triangular in shape, deep on one side and becoming shallower across its length. This was the only sharpening stone of this nature recovered.

From 2C.7.3 came two large flat stones, each with pockmarks on one side only. Seventeen pockmarks were found on the first and twenty-one on the second, with diameters of about 1 cm in all cases. Presumably these stones were used as anvils for the breaking open of marula or similar nuts.

TABLE 112

PONT DRIFT: Distribution of Hammer/rubbingstones

Level	<u>Square</u>								
	A1	B1	C1	C2	2AA	2A	2B	2C	3A
1									
2				x					
3					x			x	
4							xxx		
5	x	xxx		x					
6						x			
7							x		
8									
9		x							
10					xx				
11									
12				x					
13									
14									
14i									
15									
16									

No grindingstone fragments were found, although the nature of marks on some of the hammer/rubbingstones suggests that they might have been employed as upper grindstones.

 e) Structures

 i) Clay and Gravel

Levels 4 and 5 contained the only true clay and gravel features. In level 10, feature 2AA.10.1 contained a gravel floor, but as it formed part of a different feature, it must be described and interpreted

within the context of that feature.

A brief description of the gravel floors and their association has already been given in the level by level description and in table 80

Floor V1. The first floor was a white, consolidated gravel floor covering several squares. It did not have a polished surface, except for a small section around D2. Two stone structures (C2.4.1 and C1.4.1.2), the use of which will be discussed later on, were found in association. There were no other distinguishing features. It would appear that the floor was a lapa floor, outside a hut. There was no indication of burning on the gravel, therefore it seems likely that the associated hut was either torn down or disintegrated naturally.

Floor V2. The second floor was found directly underneath floor V1 in Squares A1 and B1. It consisted of a sandy floor with a polished surface. A semi-circular row of charred posts existed in a section of the floor along line B1-B2. The interior section covering most of square A1 was burnt yellow, while the exterior was burnt black. No burnt hut rubble was found on top of the floor.

The complete hut circle could not be traced, nor could the outline of the sandy floor, as most of it was very friable. (See plate 38) A cross-section of the floor taken across the line of charred posts showed a clear increase of some three centimetres in the average floor thickness at the posts. Another noteworthy feature is that there is no break in the floor around the posts.

The usual practice in hutbuilding is to plant a series of fairly thick posts in a circle in the soil, and fill the gaps with thinner posts which are lashed to the thicker ones. Mud is usually then plastered either on the interior only or on both sides of the wooden framework. The floor is usually one of the last features to be made.

Bearing in mind that the charred posts are between 10 and 30 cm apart, with no indication of smaller posts in between, and that the floor extends up to and in between the posts, it seems likely that no mud wall was built, and that the gaps between the posts were left open. Extra-

polation of the circle formed by the charred posts, gave a diameter of about 2,20 metres.

A second burnt-down hut with a similar feature was uncovered and will be described and interpreted under feature 2B.4.3.

A section of the above floor showing the charred posts was removed in a plaster cast to the Cultural History Museum, where it is available for examination.

Feature 2A.4.1. This feature took the form of a circular raised platform with a moulded daga curb with a polished surface. The diameter of the platform is approximately 2 metres. The whole structure showed no signs of burning, and was consequently rather friable, and could not be completely excavated. Assuming the platform to be circular, then less than half was excavated.

In front of the platform, sections of a polished sandy floor were excavated. Two egg-shaped stones were found on this sandy floor. (See fig. 47 and plate 39).

The platform was raised about 4 cm above the height of the front floor. The moulded curb was raised another 3 cm above this. (See profile X-Y on the plan). To the western side of this, i.e. square 2B, corner 2B, four possible postholes were found. Two of them bordered on to the edge of the front sand floor. Diameter of these two possible post-holes was 5cm each. Two smaller holes of 2 cm each were found adjacent to these. (see fig. 47). Extrapolation of the general direction followed by the line of holes suggests that these may have been a concentric circle of posts around the platform, running some 20 cm away.

The flimsy evidence at hand suggests a raised platform with a sandy floor partially surrounding it, with a wooden structure encompassing the platform, as suggested by the post holes. There is no evidence to show that the wooden structure was covered in clay (i.e. as in a hut) or that it formed a fence. It seems therefore logical to assume that a thatched roof would have been placed on top of the frame. The picture thus sketched shows a thatched roof on posts covering the plat-

form. The entrance could have been laid on the side where the external sandy floor was excavated.

The use again is purely conjectural. It is possible that such a structure was used as shelter against sun or rain during activities that were done outdoors. Küsel (pers comm) found that a shelter was erected over smelting furnaces in Rhodesia, to protect the operators from the sun.

Floor V3 Consolidated white gravel floor without a polished surface. Part of structure 2B.4.3.

Floor V4 Consolidated white gravel floor immediately underlying V3. Part of structure 2B.4.3.

Floor V6 Thick, consolidated, white gravel floor, also part of 2B.4.3.

Feature 2C.4.2. Small hut circle forming part of the total feature 2B.4.3.

Feature 2B.4.3 This feature is a part of a burnt-down hut with two concentric rings of posts with a series of lapa floors around it. The remains of a small burnt-down hut (2C.4.2) were found in this lapa. (See fig. 48 and plate 40).

The large hut was defined by two concentric rings of charred posts. The centre ring was 2,40 metres in diameter, and contained solid posts that varied in diameter between 4 and 6 cm. The outer ring measured 4,50 metres in diameter, and was made up of lighter posts, most of which were 2 to 3 cm. in diameter.

The inner ring contained a layer of burnt daga which was concentrated mainly in one half of the hut, although it was spread across the floor. On removal of this, a friable sandy floor of 2 to 3 cm thick was exposed, and which had burnt different shades of orange and brown. In the centre of the floor was a large circular lens of white ash, some 70 cm in diameter. Several bones were found in this ash (2b.4.3.6).

Approximately a metre separated the inner ring from the outer. No burnt daga was found in this area, only black, sandy soil containing a lot of burnt organic material. A 15 cm high step with a twice polished surface was found on the western side of the inner ring. The top of the step was nearly level with a polished gravel floor with its surface burnt black. The step effectively cut the outer circle in half, and it is assumed that a corresponding step lay in the eastern half of the hut, although no indication was found. The southern section containing the gravel floor appears to be the entrance. A clear break of 80 cm was found in the line of charred posts at that point. The rear section of the hut, i.e. that half below the steps contained a lot of household utensils and food. A pot and two bowls were recovered, (2B.4.3.1, 2B.4.3.5 and 2B.4.3.14 respectively), all of them broken. One bowl (2B.4.3.5) contained charred seeds, possibly beans. Two other heaps of charred seeds were found. 2B.4.3.3 was a heap of charred grain, while 2B.3.13 were small seeds lying loosely about.

In the rear half of the hut it would appear that the wooden framework was not closed by clay. There are several reasons for this assumption; (1) less burnt daga was found in this section of the hut than in the front half; (2) the same pattern found in Floor V2 appears here, namely that the floor has been neatly smeared around the posts; and (3) it is unlikely that household utensils and food would be stored in an area that was difficult to get to. The front half of the hut did not contain any utensils or food.

It is clear that the front section was closed off by a clay wall, as is shown by the amount of burnt hut rubble that was lying here. Also the inner and outer floors did not join up on the same level as was the case in the rear half of the hut.

Adjacent to this hut, and about 1 metre to the west lay a second, smaller hut (2C.4.2) with a diameter of 1,50 metres. A thin brown sandy floor that had clearly been burnt was found, with a few loose potsherds and a large flat stone on its surface. Diameter of the charred posts varied between 2 and 4 cm, indicating a light structure. No burnt daga was found on top of or next to the floor.

Around these two huts lay a series of gravel floors (V3, V4, V6 and V8), the interpretation of which was difficult due to breaks in them caused by disturbances such as the burial 2B.5.1.

It is clear that the floors form a unit that is associated with the huts, in spite of the fact that they were originally excavated and numbered separately. Floor V3 lies up against both huts, and directly on top of V4. In fact V3 is a resurfacing and slight extension of V4. The other floors are of the same type of gravel as V3/V4 and vary minimally in depth. V6 lies up against the other side of hut 3C.4.2. and would join up with hut 2B.4.3 and floor V3 were it not for the disturbance caused by the burial.

In the interpretation and reconstruction of the huts, I suggest the following:

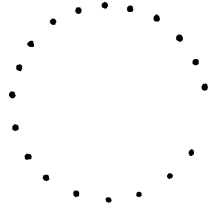
In the large hut it is clear that the outer ring of posts is too light to have been of any constructional value. The inner ring is more solid and could have supported a roof. There is no indication of an outer clay wall enclosing the storage area. Taking the large amount of burnt organic material into account that lay between the rings, it is probable that the grass roof of the hut touched the ground, and formed the outer wall. An opening in the roof would form the entrance, while the front interior/wall combined with a door would keep out rain and wind. It is not clear whether the step excavated was part of a wall blocking off the front from the rear or not. The posts holding up the roof were left open in the rear of the hut, so that the area between the two rings could be used for storage. Fire was made in the hut, as is witnessed by the central ash lens.

The type of hut described above is not unknown amongst present day Black people. An example of one has been erected at the Tsonga Kraal in north Eastern Transvaal. Other examples are known from further north in Africa.

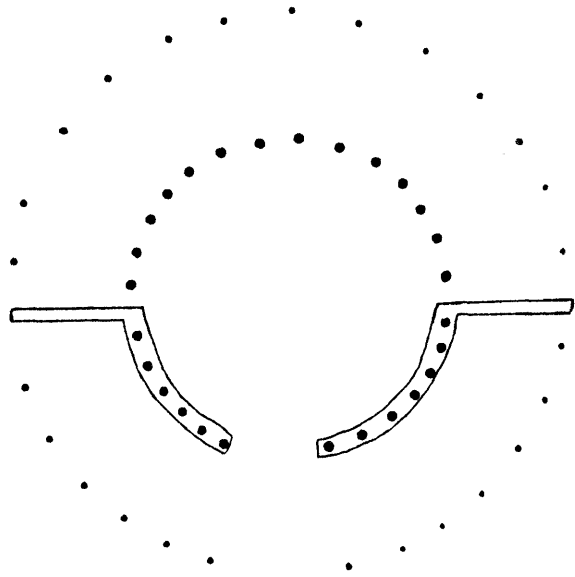
The hut was undoubtedly used by a woman, as is seen by the storage of utensils and food in the hut. The fire suggests cooking, which is a woman's task. A sausage of clay (2B.4.3.11) and a piece of

Figure 54

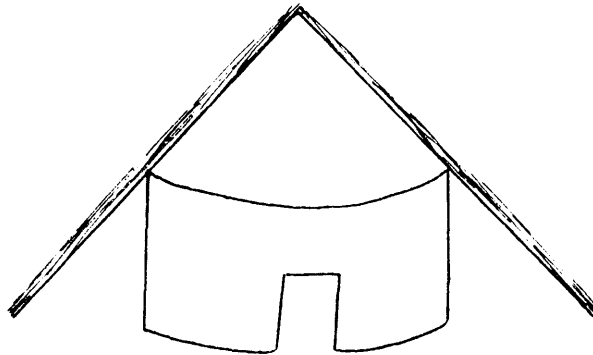
Reconstruction of Pont Drift huts



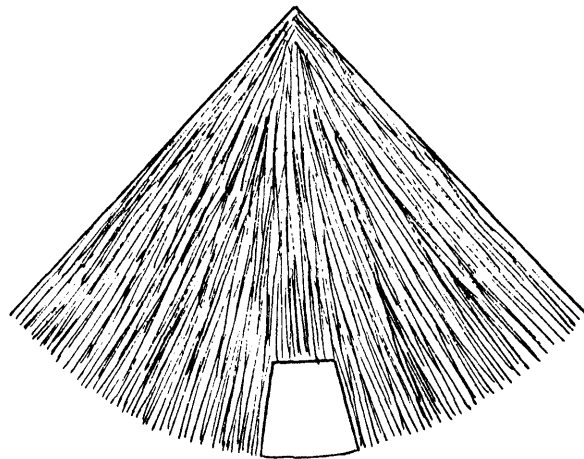
Storage hut C2.4.2



Plan of hut 2B.4.3



Cross-section of suggested
reconstruction of hut 2B.4.3



Front view of hut showing thatched roof touching ground

clay resembling the base of a pot, into which a potsherd had been pressed (2B.4.3.7) were also found, implying that the woman might have been a potter.

The smaller hut is of a light structure. No indication was found of its use. It is possible that it was used for the storage of foodstuffs, but it is equally possible that the hut was used as a chicken coop, although present day practice is to raise the hut on stilts to ensure the safety of the fowls. Of course, with the settlement so high and inaccessible on the ridge, such a practice might have not been deemed necessary.

The picture conjured up then is of a woman's hut with its grass roof resting on the ground, a small, light adjacent hut also with its thatched roof, and a lapa floor around them.

Floor V9 This is the last floor belonging to Level 4, and consisted of a two part white, gravel floor in Square C2. The first part was a well consolidated raised step, 7 cm thick, 1,80 metres long and 60 cm wide. This ran in the form of a slight arc. The shape of the step on the inside, indicated that it was cast up against something. (See fig. 50 profile X-Y).

On top of the step, a series of post holes has been dug into the gravel. Five holes were found at one end, and seven at the other. There had been an attempt to space the holes in a uniform pattern.

The second part extended from the step for about 55 cm towards the outside, and was a coarse gravel floor without a polished surface, 6 cm thick where it lay against the step, but tapering off to 2 cm at its furthest point from the step.

The impression gained is of an entrance to a structure of some kind, that has long since disintegrated naturally. There was no indication of fire. The post holes indicate strongly that there must have been a wooden structure. The size and shape of the structure could not be determined, but the positioning of the postholes in the step suggests that the roof of the structure may have extended over the step.

Several stones in the interior lay on the same level as the base of the step, and were probably associated with the activities within the structure. One stone contained a single dolley-hole (C1.5.1) while another heap of stones (C1.5.2) proved to be a collapsed stone-lined pit. This pit will be discussed in detail in the following section on stone structures.

No further interpretation can be made about V9 and its probable structure.

Floor V7. Although floor V9 is numerically the last floor, V7 is in fact physically the last. It was a coarse, bluish-grey, gravel floor with a polished surface. It proved rather crumbly, and the complete outline could not be distinguished. A section of it has a moulded curb.

There were no indications of burning, nor any associated features. The floor is distinguished from the upper floors by virtue of its bluish-grey colour, the upper floors being made from white gravel.

The use and context of the floor could not be determined. The use of gravel floors appears to be a characteristic of the Leopard's Kopje A culture in the sandstone hills. The sandstone itself is the source of the gravel, and as soon as the sandstone hills are left, one finds that the other contemporary L.K.A. sites do not have these characteristic floors an example of this is Commando Kop. (Hanisch 1979 unpublished Report)

ii) Stone

Several stone constructions were unearthed. Three of these that form the same basic feature will be discussed together, while the rest will be in chronological order according to level.

Features C2.4.1, C1.5.2, and 3A.6.1 These can best be described as a series of stone-lined pits in different stages of disintegration. The basic characteristics are a hole in the ground with a depth of about 30 cm and a width of some 40 cm with a medium-sized flat stone at the bottom. The sides of the pit are lined with small flattish stones.

In all cases, ashy soil containing unburnt, decayed, white organic material was found in the pits. No bones, beads, potsherds or other material was ever recovered from the pits.

C2.4.1 was a complete pit. (See fig. 55 and plate 44). Outside diameter of the stone ring was 43 cm, with an inside diameter of about 23 cm. Depth was 32 cm. A medium-sized stone of about 20 by 25 cm was placed at the bottom of the pit.

C1.5.2 was associated with floor V9, and proved to be collapsed stone-lined pit. (See fig. 50) The structure was in very poor condition, the remaining section comprising two smallish flat stones at the base with three flat stones packed vertically around it. The diameter could not be determined, but the estimated depth was between 25 and 30 cm.

2A.6.2 was in a better state of preservation, having only partially collapsed (See plate 44). Outside diameter was about 35 cm while the inside diameter varied between 20 and 25 cm. A single elongated flat stone lay at the bottom. The depth of the section that had not collapsed was 16,5 cm.

These stone-lined pits are not unique to Pont Drift, others of identical shape and size having been found at Schroda and Commando Kop. Their use is a matter of conjecture, as they were not always found in the same context. In all cases, decomposed organic remains were found, but the nature of the material suggests that woody substances were placed in the pit and not things like leaves or seeds. It seems unlikely that the pits were used for storage of foodstuffs because of their small size. The shape and nature of the surface of the flat stones placed at the base of the pits did not give the impression of having done any work, for example had the pits been used for stamping grain, other seeds or meat. It is not impossible, however, that a small wooden mortar was placed in the hole, the stones serving to hold it in position.

Mortars embedded in the ground are not unknown, having been recorded from the Venda. Such mortars were made from either stone or wood, were usually planted in the ground close to the wall. (Van der Waal, 1977: 100). Plate 46 shows such a Venda mortar in use.



Plate 44

Pont Drift. Stone lined pit (C2.4.1) with
large flat stone at bottom. Scale in cm.

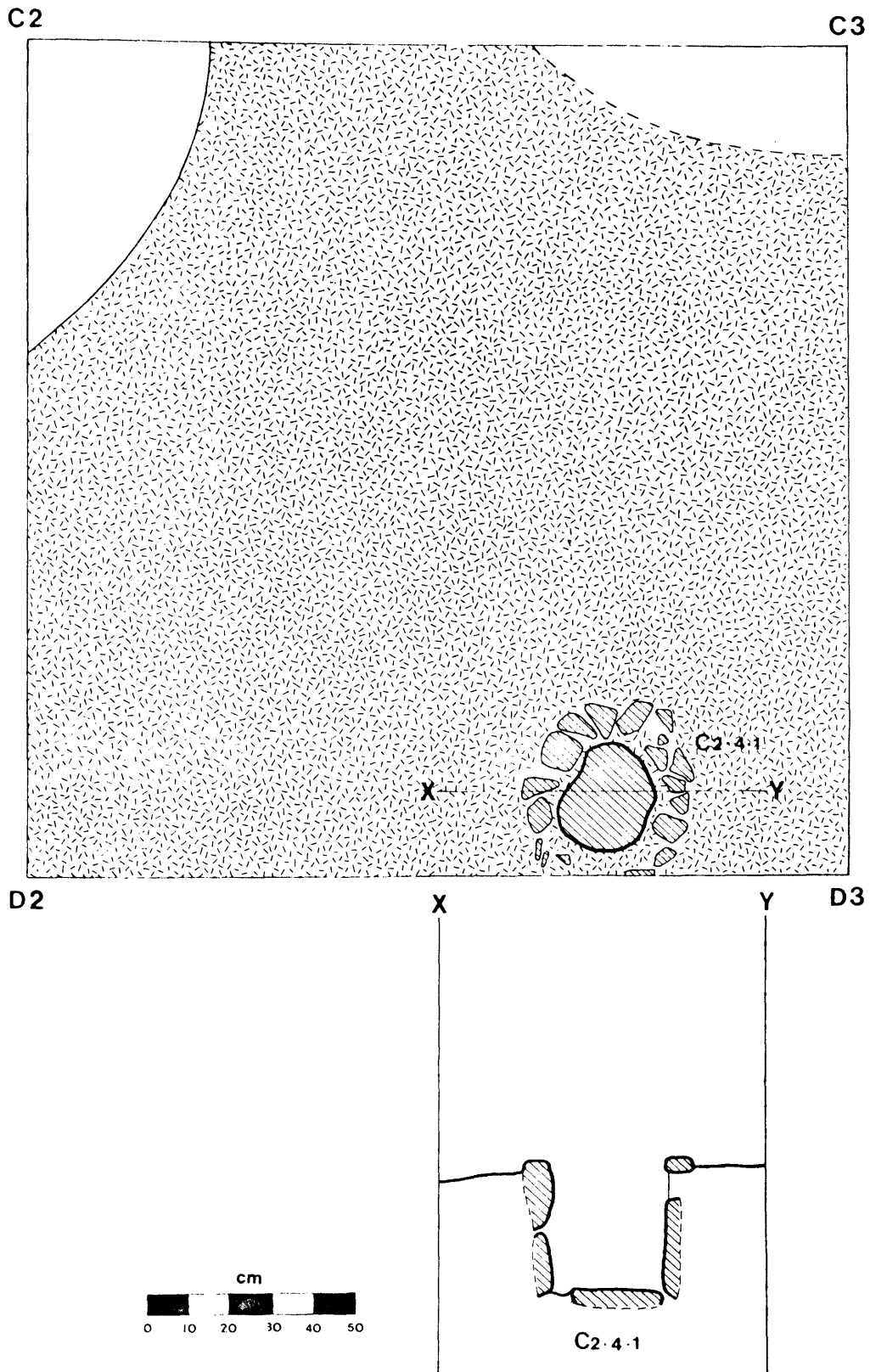


Figure 55

Pont Drift: Plan and Profile of stone-lined pit C2.4.1

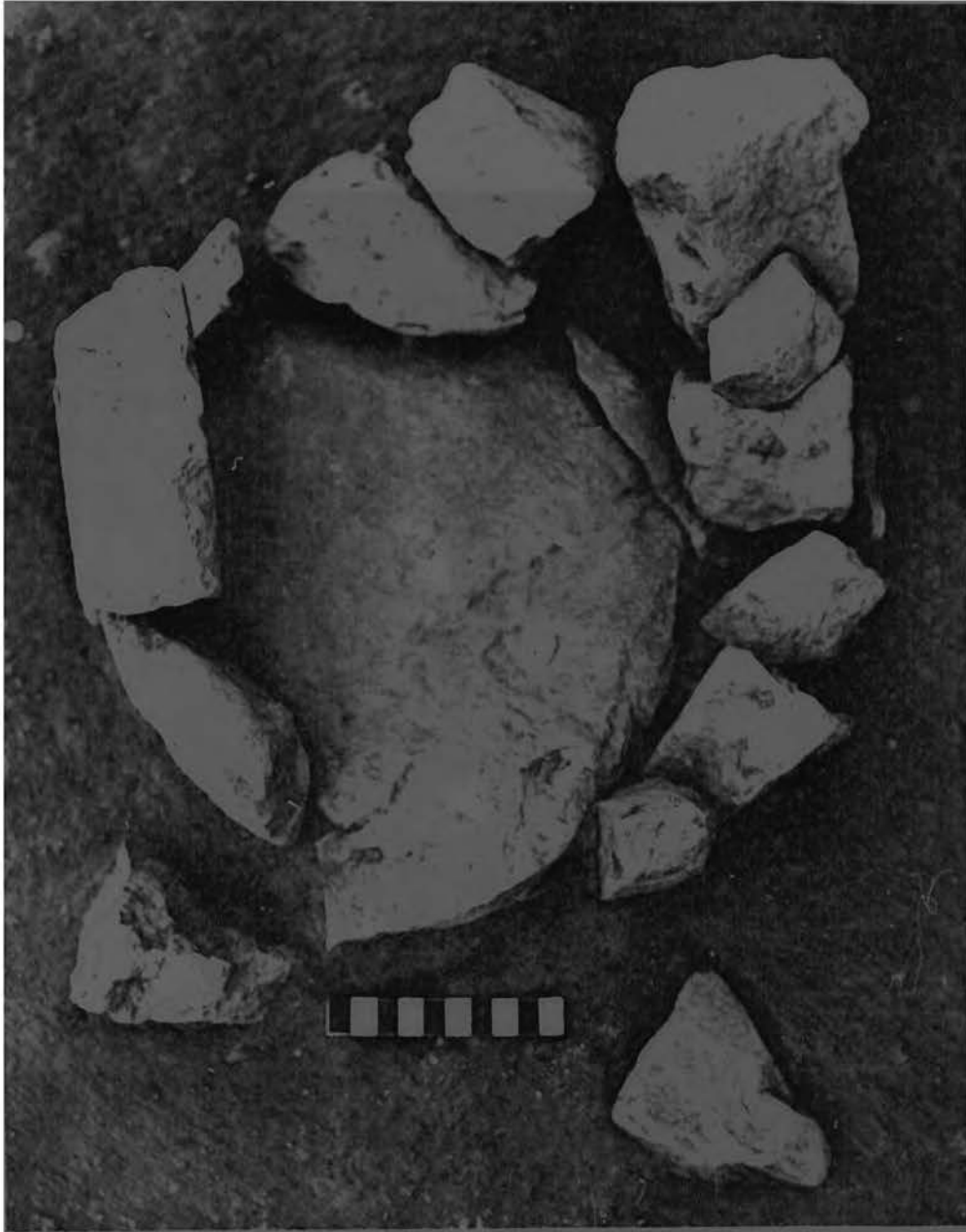


Plate 45

Pont Drift : The collapsed remains of the
stone-lined pit 2A.6.2.



Plate 46

A Venda woman using an old type of mortar which
is recessed into the floor

Feature 2AA.3.1 This consisted of a series of stones, loosely packed in a semi-circle that stretched across square 2AA. There were no associated finds.

Feature C1.4.1.2 was in the form of a crude semi-circle of stones along line D1-D2 in Square C1. Diameter was 50 cm. There were no associated finds, other than the gravel floor C1.4.1 which ran up against the circle.

Feature 3A.7.1 This was a straight line of stones, of various sizes, 1,55 metres in length. The row of stones was not associated with anything, and no explanation for its existence can be given. (See plate 47).

Feature 2AA.8.1 A pile of stones was uncovered in square 2AA slightly towards corner A1. The heap was about 83 cm in length and 45 cm in width, and contained a variety of small and medium sized stones. It would appear that this was associated with features found directly underneath in levels 9 and 10 (. Plate 48).

Feature 2A.9.1 consisted of a 40 - 50 cm broad line of stones curving in a slight arc from close to the centre of square 2A towards corner A1 where it disappeared into the wall of the excavation along A1-A2. Part of this structure reappeared in square 2AA along line A1 - AA1. The structure was made up from medium-sized and small stones, with the latter in the majority.

The structure would appear to be associated with 2AA.9.1, both occurring at the same level. The full context is uncertain, and further excavation would be necessary to explain it.

Feature 2AA.9.1 This took the form of several medium-sized stones packed around a large stone. These lay directly below feature 2AA.8.1, but were separated from one another by a layer of soil. Directly under this lay feature 2AA.10.1.

Feature 2AA.10.1 A strange feature was excavated in level 10, and covered most of square 2AA and nearly half of 2A. It consisted of a

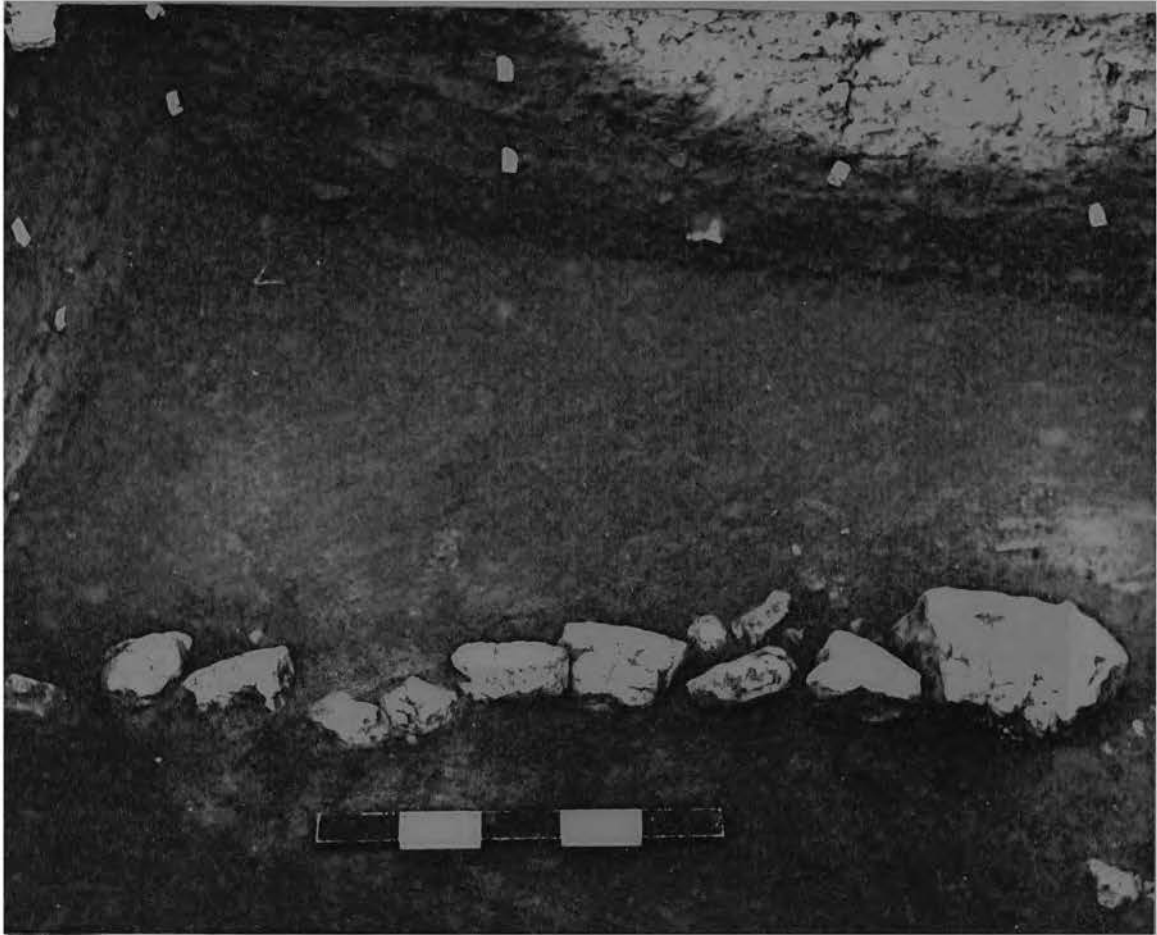


Plate 47

Pont Drift : Feature 3A.7.1. This is a straight line of stones, without any adjacent features.

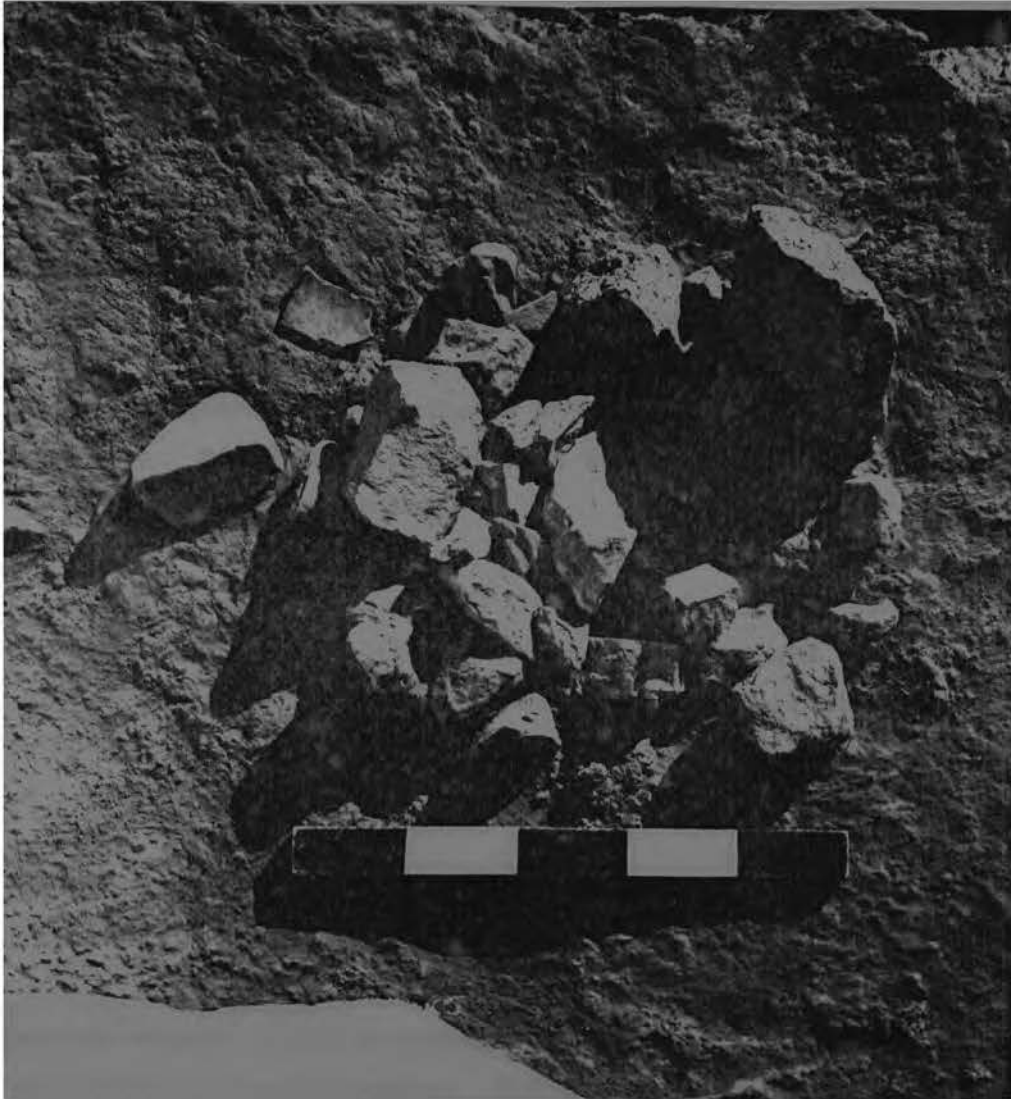


Plate 48

Pont Drift : The heap of stones (2AA.8.1.) that lay directly over the bowl in feature 2AA.10.1.

heap of stones on top of a gravel floor that was littered with potsherds, bones, ostrich eggshell beads and ash. This in itself was unusual, as the surrounding level (10) was pure yellow dung, with no intrusions.

A pile of large flat stones lay directly underneath 2AA.9.1, i.e. in the same position, but again a separating layer of soil was found between the two piles. Underneath these stones, a small hollow came to light containing the sherds of a crushed bowl. Strewn around this pile of stones were numerous potsherds, from several different vessels, as well as many animal bones. The shells of a tortoise and a landsnail were also found here. Mixed with some of this material was a lot of white ash, particularly towards corner AA1.

Underneath this lay a brown gravel floor, varying in thickness from 1 cm to 6 cm. This floor lay in turn on top of a paved floor made from many pieces of sandstone of 4 to 10 cm in size. These filled a rough circle of about 2 metres in diameter. The depression noted above continued into this paved floor.

Figures 56 and 57, and plates 48 and 49 show details of the feature.

No complete vessels could be reconstructed from the sherds, except for the bowl found in the depression. The others, when reconstructed formed less than half of a vessel in each case. A single sherd of an unusual pot was found, with an exceptional and a-typical decoration (2AA.10.1.6)

Numerous bones were found, mainly in groups. An interesting bone tool (2AA.10.1.1) came from one of these groups.

The feature is complex, and to judge by the neat way in which the paved and gravel floors were made, it would seem to have required a certain amount of planning. Every item including the ash was deliberately placed on the floor. A bowl was placed in the depression and the large stones piled on top.

During the excavation, several facts were recorded that did not make sense.



Plate 48

Pont Drift : Feature 2AA.10.1 showing spread of artefacts, pottery, stones and faunal remains.

At point A the stratigraphy indicates the slope of the mound that covered the feature.

B is the pile of stones covering the bowl. It is also directly below the stones shown as feature 2AA.9.1.

C is the bone implement, D is a tortoise shell, and E is the remains of a young

At F, part of the paved stone floor has been exposed.



Plate 49

Pont Drift: The author and his wife documenting feature 2AA.10.1

(Photo courtesy of Mr. J. Morgan)

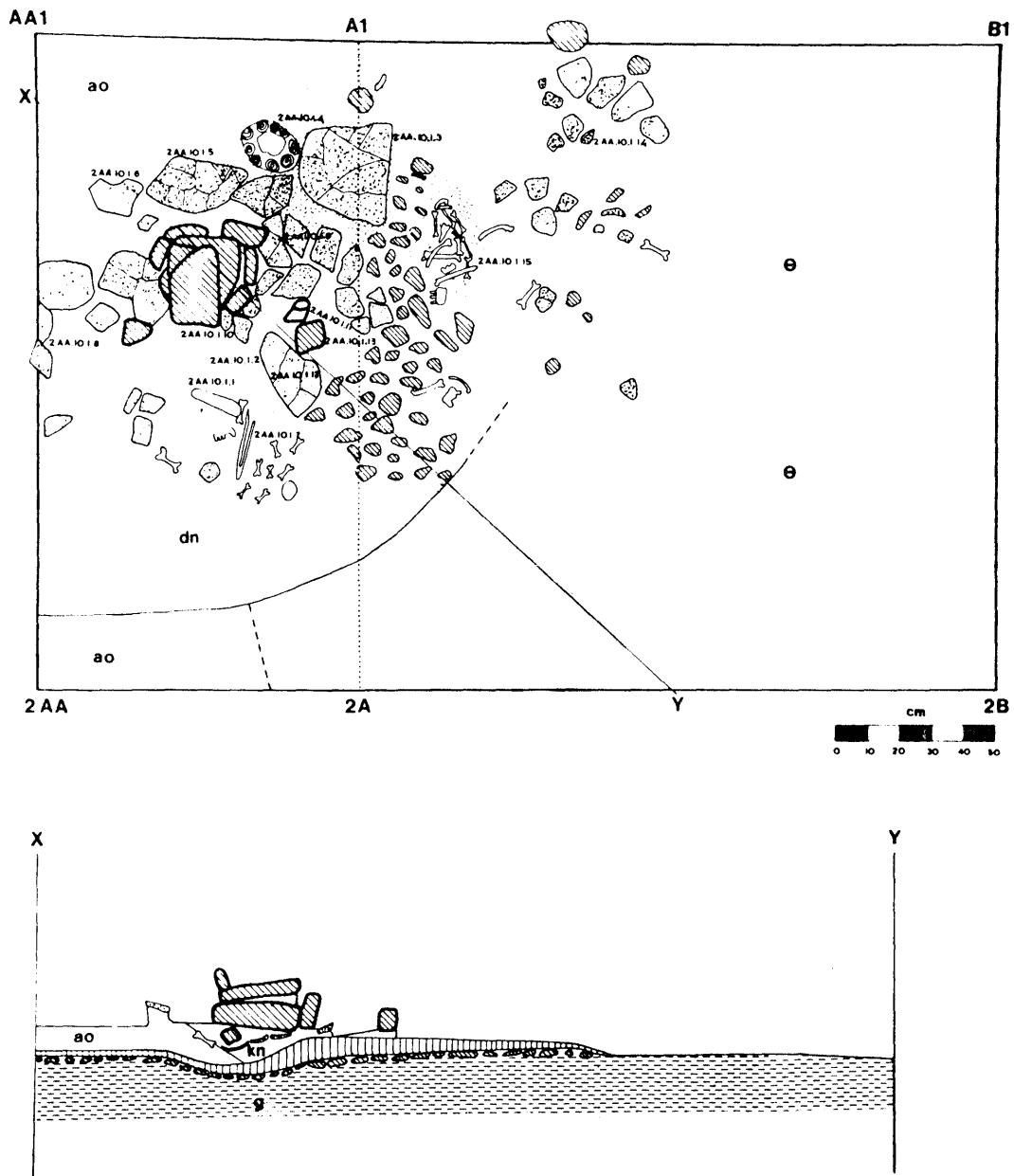


Figure 56

Pont Drift: Feature 2AA.10.1 showing plan and profile

315

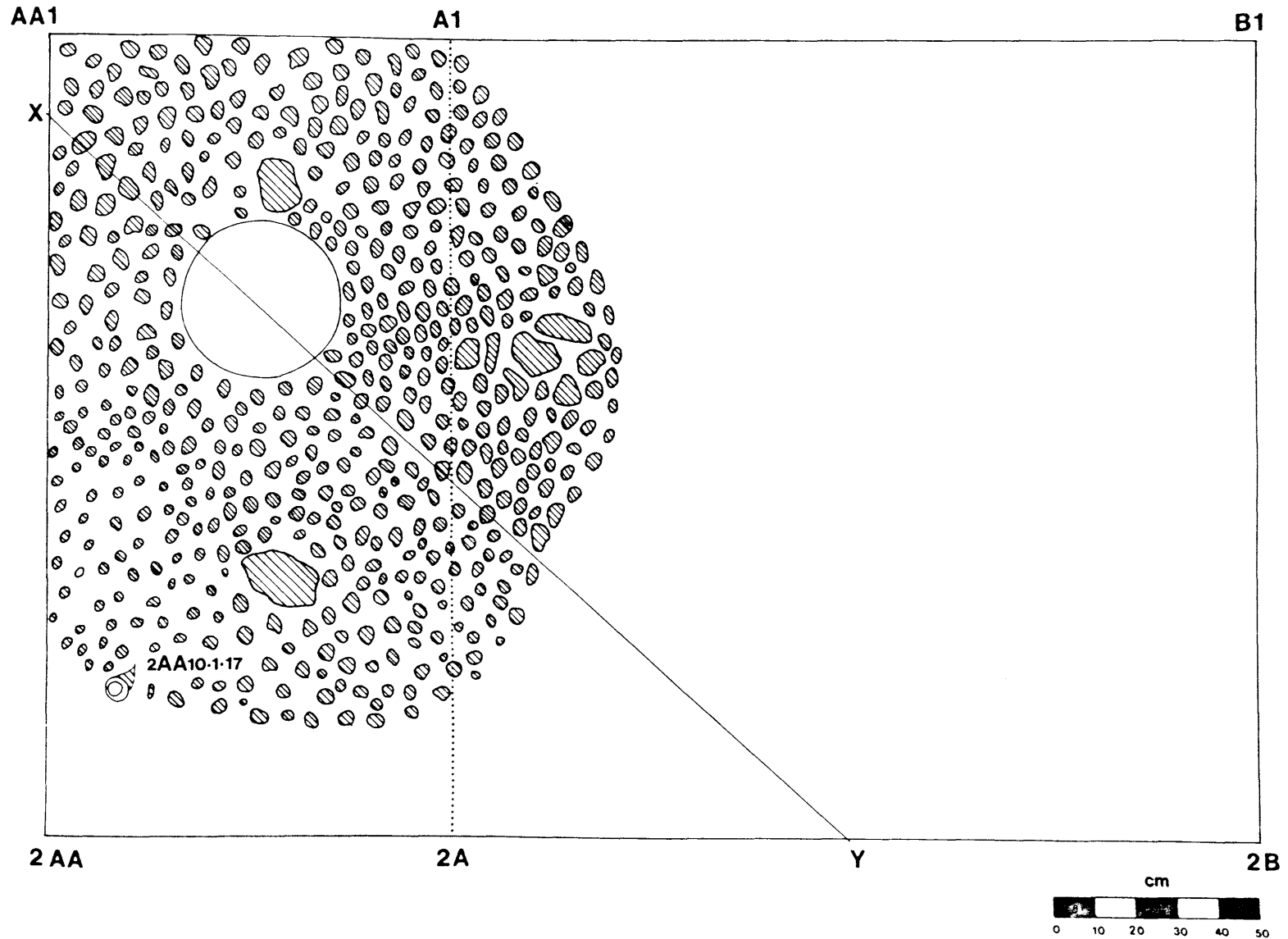


Figure 57

Pont Drift: Feature 2AA.10.1 showing paved stone floor at base.
Central circle is hollow in which the bowl was found.

- (1) The piles of stones that extended from Level 8 through to level 10 showed that at different times people had piled stones on exactly the same point, in spite of each pile being covered by a layer of soil. It seemed unlikely that the stones could have been so accurately placed over a period of time, unless the spot had been marked or the stones placed there at one time.
- (2) The feature lay in a thick dung level, but yet was not covered by dung except at the edges.
- (3) The feature had not been trampled by livestock.
- (4) There was no indication that this was an intrusion from a higher level.

Try to answer these questions, the feature and surrounding stratigraphy was very carefully examined.

The first point noted was that because of indistinct stratigraphy levels 7, 8 and 9 had been incorrectly excavated. The total feature had in fact been covered by a mound extending into level 7 and possibly into level 6 as well. (See Profile 2AA - AA1). The stones had therefore been piled, covered by soil, more stones added, again covered by soil, and then the final pile of stones with the final soil covering to form the mound. In other words, what has been individually described under features 2AA.8.1, and 2AA.9.1 are in fact part of 2AA.10.1.

The feature, then was clearly not an intrusion from a higher level, because the pit would have been totally filled and not have formed a mound. However the fact that it was not trampled or covered with dung was not explained.

On the further excavation of square 2A into level 11 the remains of two decomposed posts were found. Both of these were pointed, and had therefore been driven into the soil from higher up. The positions of the posts corresponded to the edge of feature 2AA.10.1.

It appears likely therefore that an area in the cattle kraal was cleared and the structure erected. To keep the livestock from trampling on it, a wooden fence was erected around it. The little bits of dung found around the edge of the feature would be consistent with the dung that

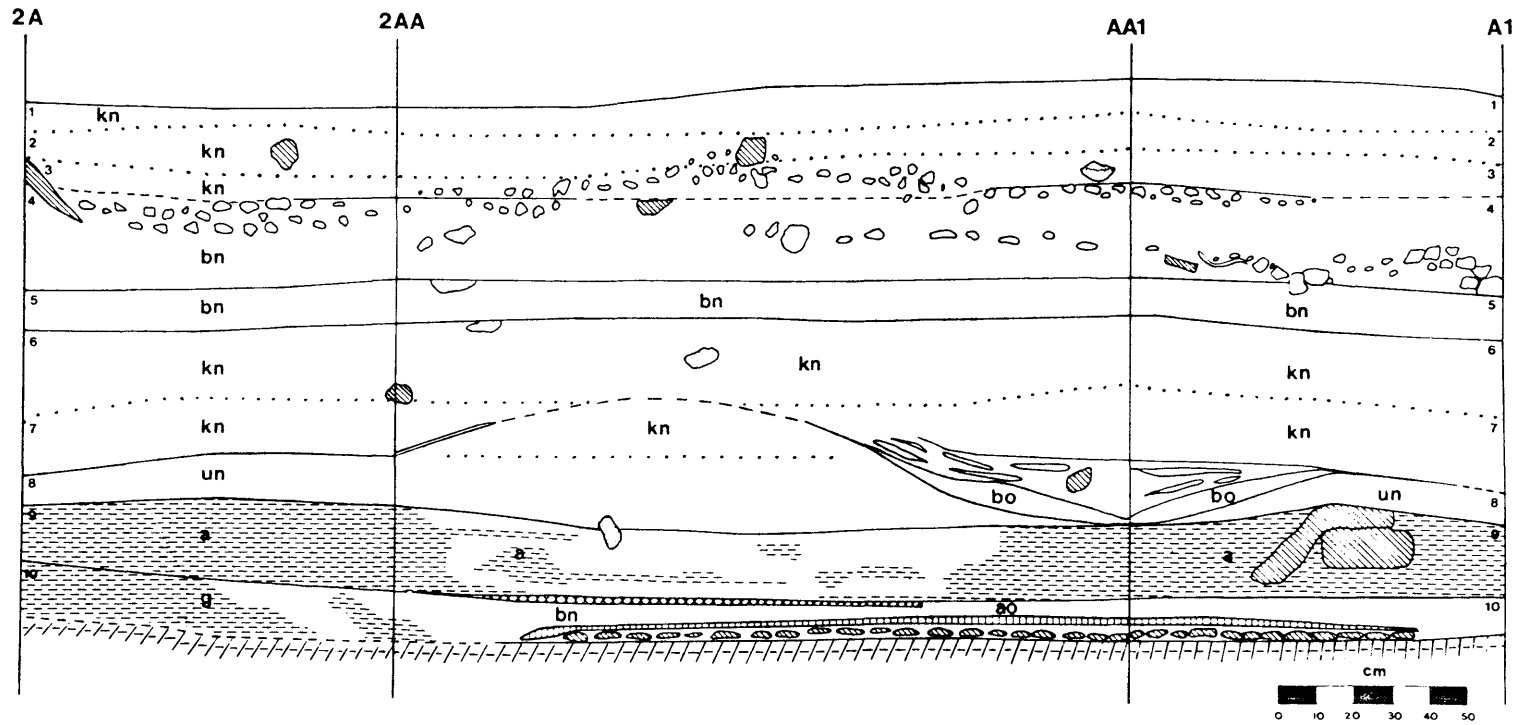


Figure 58

Pont Drift: Profile 2A - 2AA - AA1 - A1 with cross-section of feature 2AA.10.1 showing the mound that covered the feature. Note the disturbed dung level

filters through a livestock fence.

From the care taken with the construction of the feature as well as for its protection suggests that it was of importance. The elaborateness thereof and the positioning in the cattle kraal suggest a religious ceremony. The place would appear not to have been used frequently, otherwise it would not have been deliberately covered, and the state of preservation of certain items suggests that it was probably covered immediately the ceremony was over. It is, of course, likely that offerings were placed on the mound afterwards when ever thought necessary.

f) Fauna

The fauna from Pont Drift was analysed in detail by I. Plug of the Transvaal Museum. The complete faunal report is housed at that institution.

Each level was individually analysed, but the results in each unit were thrown together, as it was thought to be more meaningful.

In total 42404 bones were recovered from the site, of which only 12,4% were identifiable. Of these, just over a quarter showed signs of burning, with the highest individual percentages coming from units 1 (39,2%) and 4 (36,4%). Units 2 and 3 each showed less than 9%. Weathering, carnivore damage, and rodent damage was minimal, being on average in each case less than 2%.

Sixty-three species in total were identified from the faunal sample. When transcribed into the individual units, it become clear that unit 4 had the greatest variety (45 species) while as could be expected unit 3 (the dung level) had the least variety (28 species). Units 1 and 2 were fairly even with 41 and 40 species respectively.

Table 113 gives the total species list. Plug has divided the species into contributors and non-contributors to diet with the minimum number of individuals. The contributors to diet have been further divided into the activities leading to their utilization by man, namely, domesticated, hunted, snared, gathered and fished. The number of minimum individuals as given on the list is a purely arithmetical total and has still to

TABLE 113

Total Species list and Contributors to Diet

Species	Unit 1		Unit 2		Unit 3		Unit 4		Total	
	M. Ind	%	M. Ind	%	M. Ind	%	M. Ind	%	M. Ind	%
A. Domesticated										
<i>Capra hircus</i>	2		4		4		1		11	
<i>Ovis/Capra</i> : adult	27		19		32		21		100	
juvenile	11		14		9		17		51	
<i>Bos taurus</i> : adult	13		15		13		10		51	
juvenile	4		1		5		2		12	
Total domesticated	57	8,23	53	7,79	63	9,09	51	7,34	225	32,47
B. Hunted										
<i>Diceros bicornis</i> (Black Rhino)	1		1						2	
<i>Equus burchelli</i> (Zebra)	3		3		1		4		11	
<i>Hippopotamus amphibius</i> (Hippo)	2		1						3	
<i>Giraffa camelopardalis</i> (Giraffe)							1		1	
<i>Phacochoerus aethiopicus</i> (Warthog)	1		1		1				3	
Indet. suid							1		1	
<i>Sylvicapra grimmia</i> (Grey duiker)	2		5		4		4		15	
<i>Raphiceros campestris</i> (Steenbok)			1		1		1		3	
<i>Oreotragus oreotragus</i> (Klipspringer)	1				1		3		5	
<i>Pelea capreolus</i> (Grey Rhebok)	1								1	
<i>Aepyceros melampus</i> (Impala)	2		1						3	
<i>Antidorcas marsupialis</i> (Springbok)					1		4		5	
<i>Synceerus caffer</i> (Buffalo)	1								1	
Bov. I	3		4		2		4		17	
Bov. II			1				1		2	
Bov. III	3		1				3		7	
Bov. IV			1						1	
<i>Struthio camelus</i> (Ostrich)					1				1	
Total hunted	24	3,46	20	2,89	12	1,73	26	3,75	82	11,93
C. Snared										
<i>Urocyon ager</i> (Antbear)			1						1	
<i>Heterohya brucei</i> (Yellow spotted dassie)	2								2	
<i>Procavia capensis</i> (Rock dassie)			1				4		5	
<i>Lepus</i> sp. (Hare)	1		7		5		5		18	
<i>Phenacomys</i> sp. (Hare)							1		1	
Indet. hare	5						3		8	
<i>Pedetes capensis</i> (Springhare)	5		1		1		12		19	
Indet. squirrel							2		2	
Large rodent							2		2	
Medium-sized rodent	5		10		3		6		24	
Small rodent	8		4		2		3		17	
Heron-sized bird							1		1	
Gull-sized bird	3		4		3		9		19	
Dove-sized bird	3						2		5	
Francolin-sized bird	1								1	
<i>Varanus</i> sp.	3						8		11	
Total snared	36	5,19	28	4,04	14	2,02	58	8,37	136	19,62
D. Gathered										
<i>Achatina</i> sp.	12		26		14		35		87	
Freshwater Molluscs	13		7		7		6		33	
Tortoise	8		5		6		11		36	
Snake	3		3		2		4		12	
Total gathered	36	5,19	41	5,92	29	4,12	56	8,02	162	23,38

TABLE 113 continued

Species	Unit 1		Unit 2		Unit 3		Unit 4		Total	
	M. Ind	%	M. Ind	%	M. Ind	%	M. Ind	%	M. Ind	%
E. <u>Fished</u>										
<i>Clarias</i> sp.	8		4				5		17	
Indet. fish							6		6	
Total fished	8	1,15	4	0,58			11	1,59	23	3,32
Total non-domesticates	104	15,00	93	13,42	55	7,94	151	21,79	403	58,15
Total domesticates and non-domesticates	161	23,23	147	21,21	188	17,03	202	29,15	628	90,62
F. <u>Non-Contributors to diet</u>										
<i>Crocidura silacea</i> (Shrew)	1								1	
<i>Cerco pithecius</i> sp. (Monkey)							1		1	
Small Primate	1								1	
<i>Canis familiaris</i> (Domestic dog)			1		1				2	
<i>Canis adustus</i> (Side-striped Jackal)			1						1	
Indet. Mongoose	1		1						2	
<i>Cynictis penicillata</i> (Yellow Mongoose)							1		1	
Indet. Feline	2								2	
Large carnivore							3		3	
Medium-sized carnivore	3		1		2		4		10	
Small carnivore			1		1		2		4	
<i>Loxodonta africana</i> (Ivory bangles)			2		2		1		5	
<i>Rattus rattus</i> (house rat)			1						1	
<i>Struthio camelus</i> (eggshell)	4		3		2		3		12	
Small lizard	1		1						2	
Indeterminate frog/toad							1		1	
Small Terrestrial snail	2		2				1		5	
<i>Cypraea</i> Sp.	1		3				1		5	
<i>Corbicula africana</i>	1		3		2				6	
Total non-contributors	17	2,45	20	2,89	10	1,44	18	2,69	65	9,38
TOTAL	178	25,70	166	24,00	128	18,49	220	31,79	692	100,00

be adjusted to reflect the absolute minimum number of individuals. The revised tables will be published at a later date.

From the table several facts come to light.

The total number of domesticated individuals was 225 (32,47%) with the various units containing similar percentages.

In the 'hunted' category, several interesting specimens were identified in addition to the normal range of species. The two black rhino (*Diceros bicornis*) from units 1 and 2 are of interest because the black rhino is considered to be more dangerous than the white, and in any case would not be an easy animal to kill. A single grey rhebok was noted in unit 1, while one springbuck (*Antidorcas marsupialis*) was identified from Unit 3 with a further four coming from Unit 4. All these animals are not found in the area today.

An unusual specimen in the 'snared' category is the antbear (*Brycteropus afer*), the remainder being the normal types of animal or bird one would expect to find caught in snares or traps. When the units are compared to one another, it can be seen that the number of individuals increases noticeably in the 'snared' and 'gathered' categories.

It is obvious then, that in the Zhizo levels, there was a greater emphasis on gathering and snaring, while hunting remained the same and the contribution made by domesticated animals dropped slightly.

In terms of actual meat contribution this slight drop is minimal, as can be seen in table 114 .

The contribution made by domesticated animals is high, although not as high as recorded on the Greefswald sites. The dung level does not fit into the pattern of units 1, 2 and 4 in that the percentage of domesticated animals is very much higher than the other culturally related levels. This may in fact indicate an increase in numbers of domesticated animals at the site, and not be a difference resulting from sampling techniques.

TABLE 114

Pont Drift meat weight contributions per unit

CATEGORY	Unit 1	Unit 2	Unit 3	Unit 4
Domesticated	82,8%	81,9%	92,5%	79,4%
Hunted	16,5%	17,1%	7,1%	19,1%
Snared	0,5%	0,9%	0,2%	1,2%
Gathered	0,1%	0,1%	0,1%	0,2%
Fished	0,1%	0,1%	0	0,1%

In spite of the increases shown in unit 4, snaring, gathering and fishing were of little importance to the different cultures concerned. It would suggest perhaps that many of these items were delicacies, rather than standard items of diet.

In all units, the non contributors to the diet formed less than 3% of the total. There were 25 carnivores, of which two were domestic dog, one each from units 2 and 3. Elephant is present on the site only in the form of ivory bangles. Plug (no date) suggests that the absence of bone and unworked ivory may indicate that the bangles were traded in to the site. For this reason, the elephant has not been included as a contributor to the diet.

It will be noticed that the ostrich is included twice on the list, as a contributor and a non-contributor. In the latter case, identification rested on eggshell pieces, which probably came from eggs that were collected from outside the site. The birds were obviously not brought back to the site to lay eggs. In the former case, a single bird was identified in unit 3 from a left femur.

An interesting find was a well-preserved skull of a house rat (*Rattus rattus*) at the base of unit 2 (level 8). This has previously been described (Plug, Dippenaar and Hanisch: 1979).

Rattus rattus is not indigenous to Africa, but has been recorded from sites further north in Africa dating to around 800 A.D. The house rat is found only in close association with human occupation. It is not a burrowing rodent, and as the level in which it was found showed no signs of disturbance, it must be accepted that the rat was directly associated with the inhabitants of Pont Drift.

This is the first record of the domestic rat in South Africa connected with the last phases of the Early Iron Age.

The importance of cattle, sheep and goats in the economy is obvious. The identification of cattle breeds such as was done at Schroda was not possible, however on the relationship of cattle to sheep goats it must be mentioned that the Zhizo levels (unit 4) had a lower than normal ratio (1:3). This contradicts to a certain extent what was found at Schroda, where the ration was 5:7.

ii) Bone and Shell implements

Bone implements were divided into formal and informal tools. Four categories of formalized tools were recognized, while only a single category of informal tools was identified.

Awls: These are splinters or flakes usually of long bones, where one end has been sharpened to a crude point, presumably for piercing. Some of these awls had neatly polished points.

Twenty-three awls were found. Their relative positions in the excavations are shown in table 115, where it can be seen that there was an even spread throughout the levels.

"Spatulas": Bone splinters of medium to large length in which one end has been abraded and polished to form a blunt or spatulate end. The use is uncertain. Eight such artefacts were identified, two of which were exceptional specimens.

The first came from square 2B level, and was numbered 2B.4.4. It was found underneath the gravel floor of hut 2B.4.3 near corner B1. The implement was made from a shoulder blade, with a length of 145 mm, and

a width at its widest point of 52 mm. The 'heel' of the tool is blunt, and fits well into the hand.

Table 114

PONT DRIFT: Awls

LEVEL	<u>SQUARE</u>								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
Unit 1	1								
	2			1					
	3								
	4			1				1	
Unit 2	5		1						
	6		1			1			1
	7	1						1	3
	8			1					1
Unit 3	9		1						
	10					1			
	11							1	
	12							1	1
Unit 4	13								
	14		1	1		1			1
	14i								
	15								

It tapers off to form a fairly sharp working edge. The use is uncertain, but it would be an ideal tool for preparing skins.

The second tool was recovered from level 10 in square 2AA, where it formed part of feature 2AA.10.1, and was given the number 2AA.10.1.1. This was an exceptionally neat implement, made from a large long bone that had been split through the middle, and polished to shape. Length

Flaked Tools: These are bone splinters from which flakes have deliberately been removed in a similar manner to stone tools.

Only two such semi-formalized tools were encountered. There is no doubt that the flakes were deliberately and not accidentally removed. Square A1 level 8 produced a bone fragment in which two notches had been made. Secondary splintering and the size of the notches suggests that the tool had been used as a notched scraper, possibly for shaping and preparing arrow shafts.

The second tool resembles to all intents and purposes a Late Stone Age Smithfield flake, the only difference being that stone was not used. It has an unfaceted platform and a slight bulb of percussion. The upper side shows several flake scars. The nature of this implement is such that it is so typical of a stone tool that it seems unlikely that it seems unlikely that it was made by chance. It was recovered from square 3A level 11, and is therefore about 1000 years old.

This opens the possibility of direct contact of Iron Age people at Pont Drift with Late Stone Age people. There are three Late Stone Age sites in the immediate vicinity of the Iron Age site, all of them less than ten minute's walk away. The closest one borders on to part of an adjacent Iron Age site. It was noticed here that the Late Stone Age scatter lies on top of the surface while potsherds lie embedded in the soil. This suggests, but is not confirmed, that Late Stone Age people inhabited the area after the Iron Age people had left the sites.

The position of the flaked tools are shown in Table 118

Informal bone tools: These consist of irregular bone flakes and splinters, usually small in size with small polished or abraded surfaces to which no specific function can be attached.

Table 119 shows the distribution of the fifteen informal tools throughout the excavation.

Table 118

PONT DRIFT: Flaked Tools

LEVEL	<u>SQUARE</u>								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
Unit 1	1								
	2								
	3			2					
	4			2		1			
Unit 2	5							1	
	6		1	1					
	7								
	8		1						1
Unit 3	9		1					2	
	10								
	11							1	
	12								
Unit 4	13								
	14							1	
	14i								
	15								

No conclusions can be drawn from the bone implements. There is no definite pattern, although it can be seen that fewer tools are found in unit 4 than in the other three. No reason can be given for this tendency.

No direct comparisons can be made with any other site in the Limpopo/Shashi Valley. The less formalized bone tools are similar to what was found at Schroda and other sites. The characteristic arrowheads and foreshafts are entirely lacking at Pont Drift.

Table 119

PONT DRIFT: Informal Tools

LEVEL	<u>SQUARE</u>								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
Unit 1									
1									
2									
3			2						
4			2		1				
Unit 2									
5								1	
6		1	1						
7									
8		1							1
Unit 3									
9		1						2	
10									
11								1	
12									
Unit 4									
13									
14								1	
14i									
15									

iii) Ornaments Bone and shell ornaments other than shell beads are rare at Pont Drift. Ivory was found, but as all ornaments are complete and no fragments were found, it seems likely that the ornaments were traded on to the site and not manufactured in situ.

Bone: A fragment of bone in which three holes had been drilled came from 3A level 8. The complete shape of the ornament could not be ascertained, but it probably was a pendant.

Level 11 in square 3A produced a hoof of a small buck in which two holes had been drilled. It seems likely that this could also have been a pendant.

Tooth: Two modified teeth were found in square C2 level 5 and square B1 level 9. The former was an incisor with a single notch filed into the root, while the latter was also an incisor with two notches filed into either side of the root. Both are animal teeth that are well worn. The reason for the notches is not known, but it seems reasonable to assume that they were for ornamentation rather than a practical use. It is possible, of course, that the teeth were strung in necklaces, and the string was wrapped around the notches to prevent the teeth from slipping out.

Shell: A cowrie shell with its back removed, was found in Square A1 level 5. This is obviously a trade item, and used in a necklace.

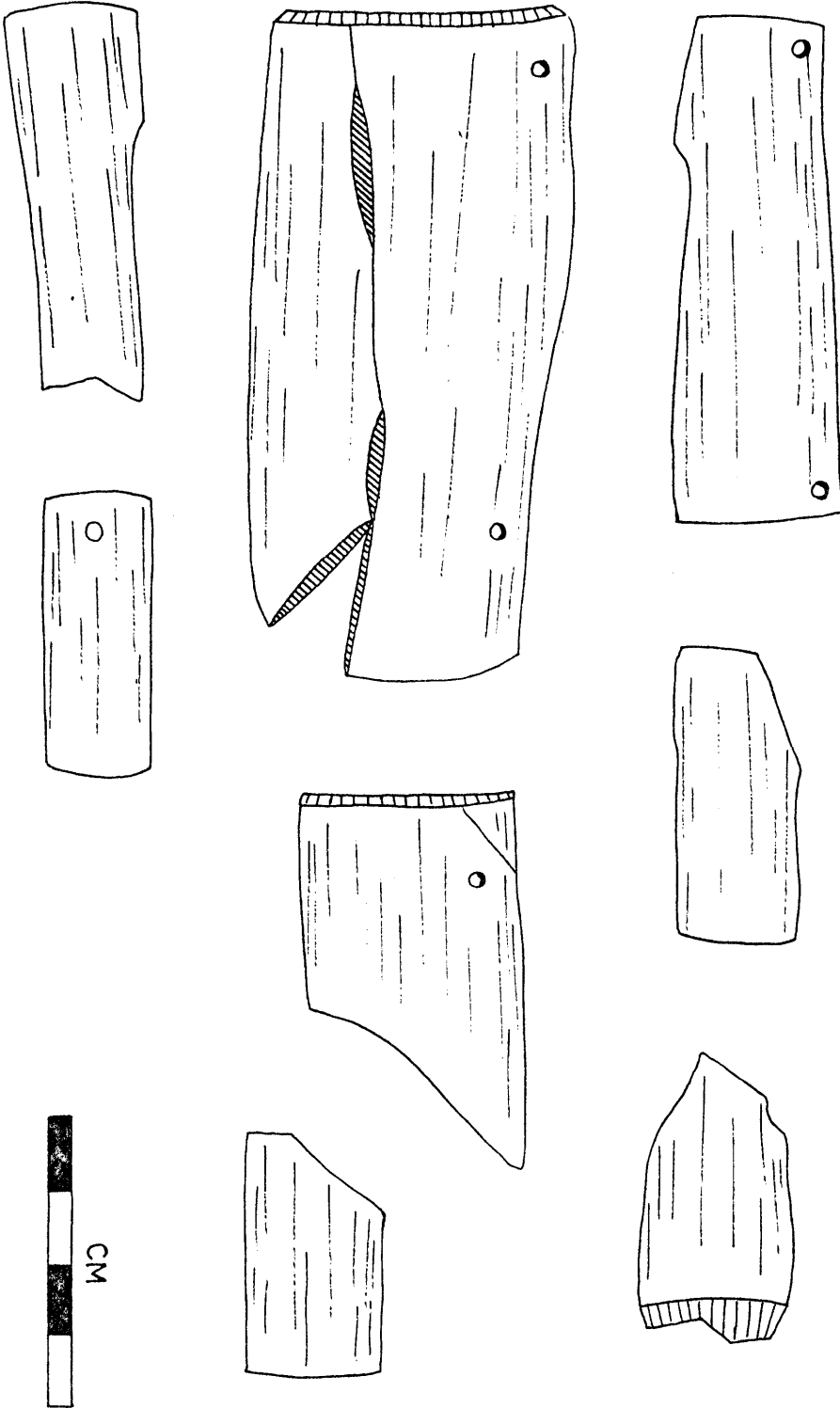
An almost square fragment of Achatina shell was found in 2B level 9 with abraded edges and an incomplete hole. It was probably intended as a pendant.

Ivory: Eight pieces of worked ivory were recovered from different levels. All of them are parts of bangles. All of them are elongated in shape and thin. In many cases holes have been drilled in the pieces. (See fig. 59)

Table 120 shows the distribution throughout the excavation.

All the ivory except one piece, came from levels 7, 8 and 9. The exception came from Square 2C level 13. This piece was the only one where the hole had not been completely drilled through, suggesting that the bangles might have broken and were being repaired on site.

Similar armbands were found at K2. Voigt (1978) discusses these in detail, and suggests that the perforations were not made to repair the armbands, but rather to prevent them from breaking apart when cracks appeared. (pp 293 and 294)



Worked Ivory from Pont Drift

Figure 59

Table 120

PONT DRIFT: Ivory

LEVEL	<u>SQUARE</u>								
	A1	B1	C1	C2	2AA	2A	3A	2B	2C
Unit 1 1 2 3 4									
Unit 2 5 6 7 8							1		2
Unit 3 9 10 11 12	1						1		1
Unit 4 13 14 14i 15									1

Voigt's evidence for this statement is sound, however it does not seem as though the Pont Drift people repaired their bracelets before they broke. The edges of two separate armbands showed signs of abrasion as though they had been repaired, but could move slightly

The diameter of some of the armbands is very small, so that they could only have been worn by children. Here another possibility for the origin of the perforations come to light. It is possible that in order to fit onto a larger arm, that the bracelets were deliberately split

into several pieces which were then joined by leather thongs to give more play in the bracelets, thereby increasing their size to enable adult persons to wear them.

It would appear that the Pont Drift ivory armbands are slightly older than those from K2. At Pont Drift the armbands come from mixed Leopard's Kopje/Zhizo levels, while at K2 they are associated with Leopard's Kopje, although the similarity in type suggests similar origins.

g) Plant Remains

A few charred seeds were recovered from various levels, but the majority came from hut 2B.4.3. The material was sent to the Department of Botany, University of Pretoria, but unfortunately some of the samples were mislaid.

Domesticated grain

All samples of grain came from hut 2B.4.3, and are amongst the missing samples. From the descriptions, two of the types would appear to be *Eleusine* and *Pennisetum* species. The third is unknown.

Wild seeds

Charred seeds of *Sclerocarya caffra* (marula) were found in nearly every level most of them consisting of the little 'eye' covers. No other wild seeds were found.

The charred grain indicates that at least three types of cultivation took place. The area on top of the ridge is too small for this and obviously the agricultural activity must have taken place at another point close by.

h) Human remains

A single skeleton was recovered from Pont Drift. It was surrounded by a series of pots and was removed in a plaster cast to the museum, where the pots were removed so that the bones of the skeleton could be lifted and sent to Prof. Hertha de Villiers for identification.

On removal of half a vessel covering the legs, it was noted that several spiral iron bangles were around each leg, together with numerous turquoise beads. To preserve this, it was decided not to remove the legs and feet for identification. Consequently they are not noted in the report,

which is attached in Appendix A.

The skeleton is crushed and distorted, and represents an infant of 1½ to 2 Years. The facial skeleton was too fragmentary to permit identification of the population group.

Sex could not be determined with certainty, but a wide greater sciatic notch suggests a female. This corresponds to the ornamental evidence found with the burial. Bangles and beads are more often associated with girls and women than with boys and men.

i) Other important features

On Site

Pont Drift does not have the great variety and quantity of features in the surrounding rocks as does Schroda. A single shallow dolley hole was recorded on the northern side of the site, close to the point where the northern ascent ends.

In the excavation

Pits

The pits recorded at Pont Drift have been described, but not discussed. Several small pits were found in the profiles after excavation, having been inadvertently overlooked. No indication of contents was found in the profiles, and it seems likely that these may not have had any great significance.

The single large pit that was discovered, C1.12.1 followed the pattern of those uncovered at Schroda, as well as one found at the adjacent site of Pont Drift 1/1. The pit had been dug in from an upper level, and contained several medium-sized stones and about two thirds of a broken bowl. No other cultural material was found, other than that can be ascribed to having been contained in the infill.

The purpose of the pit could not be determined. It contained no refuse, nor could any usable material, e.g. clay for pot manufacture, be recovered, as the levels into which it was dug contained sandy soil and dung.



Plate 50

Pont Drift : Pit C1.12.1 showing the contents.
The only cultural material recovered was the bowl.

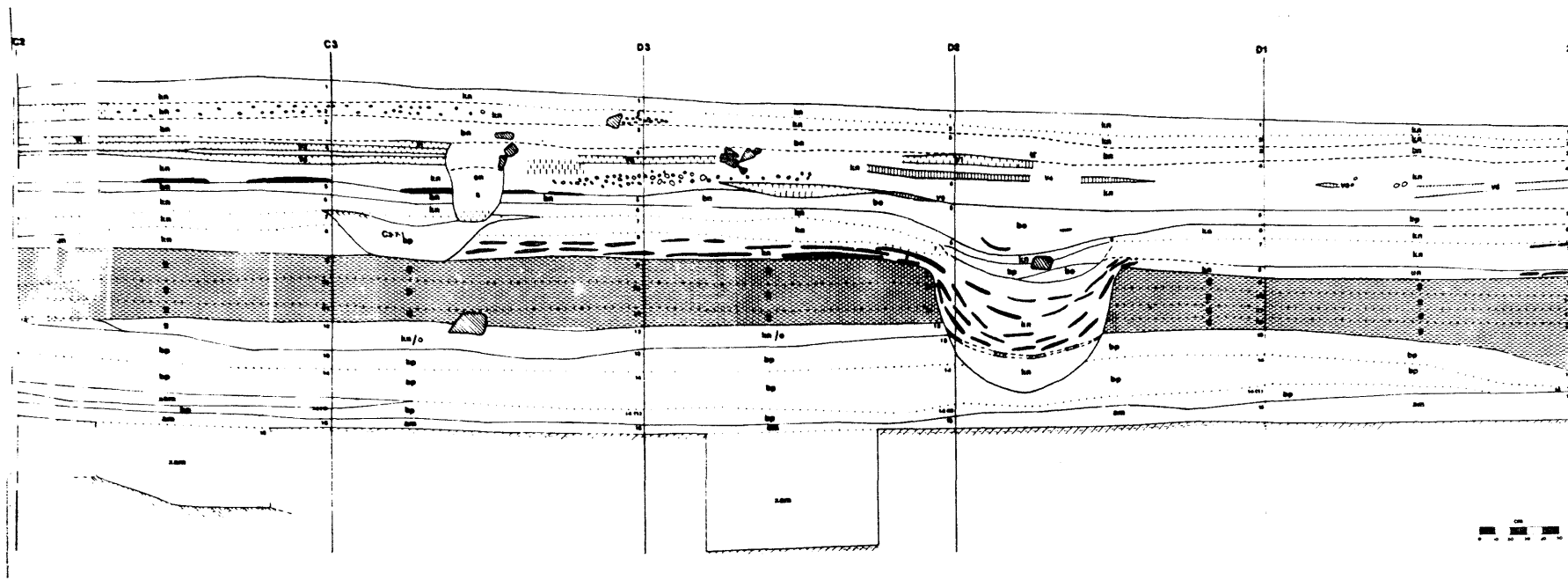


Figure 60

Pont Drift: Profile along wall C2 - 2D.
Gravel floors and pit are clearly visible.

4) Summarya) The composition of the settlementi) Formation of occupation levels


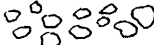

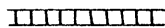
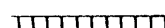
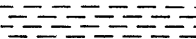

As has been clearly stated before, the Pont Drift occupation can be divided into four units, that span two different cultures. There does not appear to be a break in the sequence, and it would seem that the occupation of the site was continuous.

Seven occupation levels were identified, but as the area excavated was fairly small, it is to be expected that other levels exist, particularly in units 2, 3, and 4. The majority of the occupation levels were found in Unit 1, and formed a clear sequence with few breaks.

Table 121 shows the Pont Drift occupation level sequence.

TABLE 121

Sequence of Occupation levels at Pont Drift

Occupation Level		Feature Number	Description
1		C2.2.2	floor
2		2A.4.1	hut rubble
3		2B.4.3*	floor
4		V9	floor
5		V7	floor
6			dung
7		2B.14.1	charred posts

* 2B.4.3 include the associated gravel floors of V1, V2, V3, V4, V5 and V6 as well as hut 2C.4.2

To arrive at a true conclusion as to the occupation level formation at Pont Drift TPD 1/2, the adjacent sites, particularly TPD 1/1 should be taken into consideration. A trial trench has been dug in TPD 1/1, but no information exists about the other two sites, except

what has been gleaned from surface collections, namely that the sites all contain both Zhizo and Leopard's Kopje A pottery.

The reason why TPD 1/2 was chosen as a village site must lie in the good view that the raised valley has over the surrounding countryside, particularly in the direction of the Limpopo River. All the material forming the deposit was carried up. An interesting point in this connection is the formation of the dung level. From the thickness thereof, it seems probable that it was a cattle kraal, and that the animals were herded through the settlement on the southern side of the ridge and up to the raised valley by means of one of the less steep paths leading to the top.

The lower site, TPD 1/1, contained a small kraal, which was used for sheep and goats, the remains of a young goat having been found in the dung. This implies that there were two separate kraals in existence.

It is difficult to find a reason for the herding of cattle up to the top of the ridge, when there apparently was no problem connected to the keeping of livestock below. The path to the top is steep, but not impossible for cattle. Sheep and goats, however, would have less difficulty in making the ascent and descent.

ii) Hut types

Two hut types were excavated, namely a storage hut and a living hut, in close proximity to one another.

The storage hut was a light structure with a diameter of 1,50 metres. It was of the cone-on-cylinder type, with a thatched roof. The fact that the hut had obviously burnt down but that no burnt clay was found, suggests that the walls may not have been plastered.

The living hut was of unusual type, in that two concentric circles of posts were found. Reconstruction thereof suggests that the thatch reached the ground. The roof construction was supported by the central circle of poles. Only the front section of the central circle was plastered. The rest of the framework was left

open for use as a storage area (see figure 54).

It seems unlikely that this type of hut was the standard type for the Leopard's Kopje A people. At K2 the standard hut appears to be a simple cone-on-cylinder type, with a single circle of posts. Meyer (pers. comm.) did find a single example of two concentric circles, but did not come to the same conclusion. He felt that the outer circle in fact supported the verandah of the hut. No evidence for this exists at Pont Drift, where the outer circle of posts is clearly too light to support any raised structure.

iii) Settlement Pattern

Little can be said about the on site settlement pattern at Pont Drift. It would appear that there were few living huts on top of the ridge, mainly because of lack of living space. These huts had smaller storage huts adjacent to them, connected by gravel lapa floors.

The spatial spread of occupation sites gives a picture of a large village that because of topographical features, has been broken into a series of smaller interlinked sites. These were occupied at the same time as Pont Drift TPD 1/2.

Figure 61 gives an indication of the spread of the sites. It must be mentioned that the total area was not mapped, and therefore the sketch is not completely accurate, nor to scale. Total distance from TPD 1/2 to TPD 1/4 is about 500 metres.

b) Dating

Two dates were processed for TPD 1/2 and one date for TPD 1/1.

At TPD 1/2, the dates came from the Zhizo and Leopard's Kopje A units. A charred post from level 14 in unit 4 gave a date of A.D. 810 \pm 50 (Pta 1959). This fits in very well with the Schroda date, both being associated with Zhizo.

The upper levels (unit 1) were dated to A.D. 1110 \pm 50 (Pta 1818) and are associated with pure Leopard's Kopje A. The sample was taken from a charred post from hut 2B.4.3.

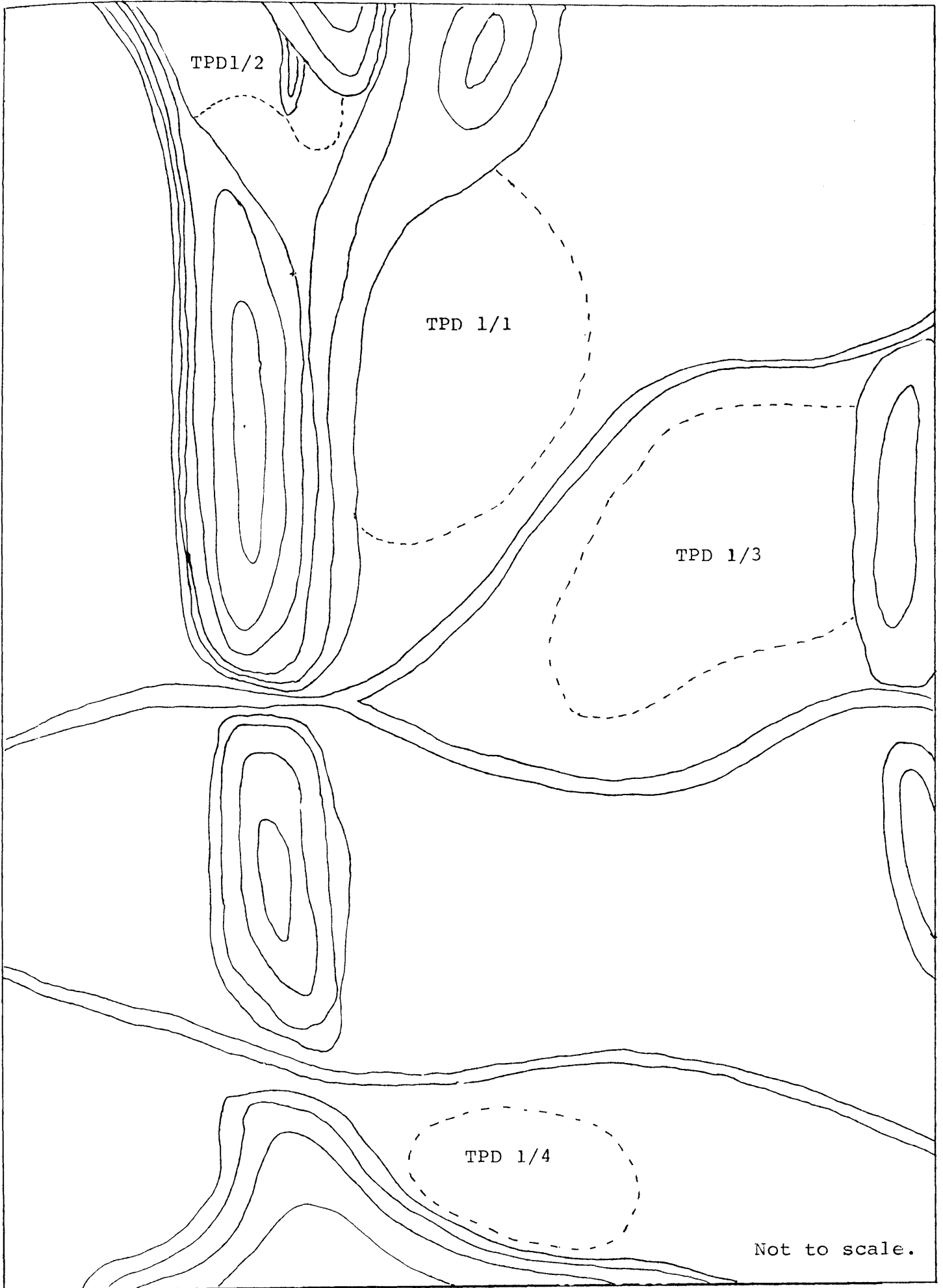


Figure 61
Map of the Pont Drift complex of associated sites.

The third sample, from TPD 1/1, was taken from charcoal in level 5 of the test trench. It is being included as it represents the mixed levels at TPD 1/1 and judging by the pottery analysis is comparable to unit 3 at TPD 1/2. The mixed Zhizo/Leopard's Kopje A level returned a date of A.D. 835 \pm 50 (Pta 1961).

The order at Pont Drift forms a neat sequence, as is reflected in table 122.

TABLE 122

Dating sequence at Pont Drift

Unit	Pottery	Date
1	LKA	1110 A.D.
2	LKA/Z	
3	LKA/Z	835 A.D.
4	Z	810 A.D.

c) Economy

The primary source of food was from domesticates, but hunting, snaring and gathering made up a larger part of the diet. (nearly 20% on average) than was the case at Schroda.

No evidence exists as to what veld foods were gathered, but it can be assumed that with the greater emphasis on hunting and collecting in the faunal analysis, that collecting of veld foods was a primary task. The only wild fruits that appear to have been collected are marulas.

Little difference exists between the Leopard's Kopje unit and the Zhizo unit, nor is there any great change in the mixed levels. The greatest change appears to be with regard to cultivated grain. All samples were recovered from the hut 2B.4.3 in the Leopard's Kopje unit, while the other units did not contain any domesticated plant remains.

Three different types of domesticated grain were found. This shows

that compared to the Zhizo people (e.g. at Schroda) the Leopard's Kopje people had access to a greater variety of domesticated plants.

Trade was confined to the importing of items into the site. No evidence exists that anything was specifically manufactured or collected for bartering. East coast connections are indicated by the presence of trade beads, as well as indirectly by the presence of the house rat (*Rattus rattus*) on site. The rat is not indigenous to Africa, and can only have been brought to the interior through trade with the East Coast. It is unlikely that there were trading connections with other black peoples to the north where *Rattus rattus* has been found (e.g. Zambia).

Other items that were traded in include copper and iron. Slag and tuyère fragments show that forging must have taken place on site, so that the iron and copper items might have been made locally from imported raw materials.

Ivory, in the form of bangles, appears to have been imported. Plug has reasoned that since no fragments other than the bangles were found at either of the Pont Drift sites, no ivory was brought to the site in raw form. Had this been so, then numerous fragments, i.e. 'offcuts' from the manufacturing of ornaments should have been recovered.

Trade appears to have been local in its sphere of influence, except for possible contact with the East Coast. More items appear to have been imported on to the site, than were manufactured or collected for export.

PART III

CHAPTER 8

Synopsis and Inferences

1) The People

a) Who were they?

i) According to identification of skeletal remains

Five skeletons were recovered from Schroda, and one from Pont Drift. Between them they represent the Zhizo and Leopard's Kopje A populations on the sites excavated. Other skeletal material was recovered from Commando Kop and K2, and is representative of the people who are connected to the Leopard's Kopje Culture.

From the Schroda sample, only one skeleton could be identified without doubt as negroid, one could not be identified at all, while the remainder were closer to negroid than any other racial group.

It can therefore be said that the Schroda inhabitants were negroid people. No indication was found of hybridization.

The Pont Drift burial could not be identified, as the skull was too crushed and distorted to permit measurement.

ii) According to cultural traits

The basic cultures from both sites are similar to those found under present day blacks in the rural areas. There is no difference in the settlement pattern or economy to suggest the presence of other racial groups.

At Schroda, however, two elements did suggest contact with Khoisan peoples. The first was the presence on site of composite arrows, which are generally associated with Bushmen hunters. Present day blacks do not use composite arrows, preferring a solid shaft with a fixed head.

Metal arrowheads were recovered from area 5 at Schroda, thereby indicating that solid shaft arrows were known. The second element

is connected to the clay figurines, in particular to the large elongated, stylized, female figurines that are particularly common at K2. These have very pronounced steatopygia, which is a known characteristic of Khoisan women. It seems unlikely that these features would have been modelled in clay, unless numerous women present were in fact built in this manner. It is possible that these were wives taken by force or bartered from the Khoisan people in the vicinity. This physical deformity was clearly admired by the Zhizo men.

This does not mean that the Khoisan element at any stage formed a major part of the culture. It remained a predominantly negroid culture from start to finish, but other elements might have been taken up as a matter of convenience.

b) Where did the people come from?

Based on the available dates, it would appear that the Zhizo peoples were migrating southwards. Rhodesian dates place the Zhizo Tradition between about A.D. 600 and A.D. 850 (Huffman 1974 pp. 128-129), while south of the Limpopo it is dated to approximately A.D. 800 to A.D. 850. There is no indication so far that earlier sites exist, although four other Zhizo sites south of the Limpopo are known. In all cases incised Leopard's Kopje A pottery has been recovered in surface collections.

The spread of the Zhizo people stops a few kilometers south of the Limpopo and does not appear to continue towards the Soutpansberg. The easterly limits are in the vicinity of Schroda, although in Rhodesia, sites that are further to the east have been found.

The Leopard's Kopje A people occupied approximately the same area as the Zhizo people. The boundaries south of the Limpopo are the same, while in Rhodesia, the distribution covered a slightly smaller area which is situated more to the west, i.e. the Fort Victoria area was not occupied.

Huffman(1978) has argued that the Leopard's Kopje A tradition originated in the Eastern Transvaal and that pottery associated with Leopard's Kopje A has been dated to around A.D. 800 near Lydenburg.

The Leopard's Kopje people migrated north westwards, crossing both the Drakensberg and Soutpansberg ranges in the process, to settle in the present area during the 11 th Century. In the area between the Limpopo and the Soutpansberg, the author has traced numerous sites and not a single one of these contains pottery similar to that of the Eastern Transvaal or of the Leopard's Kopje Tradition, nor is there pottery that can be interpreted as containing elements of both types. Prinsloo (pers. comm.) reports the same findings for the Soutpansberg as well as the area to the east of the Louis Trichardt/Messina main road.

In view of these facts, it seems unlikely that such a vast group of people could move without leaving a trace, nor would they have left the Lydenburg area with one type of pottery and arrived in another area with a different type. At the point of departure one would expect to find the characteristic Leopard's Kopje A culture or conversely that at the destination the original culture should be found, which then developed into Leopard's Kopje A.

I am not implying that the Zhizo culture in its entirety developed into Leopard's Kopje. It is clear, particularly from Pont Drift, that new people, bringing with them an incised ware, must have moved into the area, and mixed peacefully with the Zhizo inhabitants. This new group and its pottery type became dominant, but retained several of the Zhizo cultural traits and pottery classes in a modified form. This combination of the dominant incised ware with the stamp decorated Zhizo ware led to the formation of what we know as Leopard's Kopje A.

No evidence exists yet as to who these later people were, but it is clear that they must have moved into the area shortly after A.D, 800. This brings them into line with the period in which Leopard's Kopje A pottery was supposedly starting to develop out of the Klingbeil pottery, and very much earlier than the period in which the northwards movement is thought to have taken place.

c) For what length of time were the sites occupied?

The Zhizo settlement at Schroda probably began shortly before A.D. 800. It is difficult to assess the length of occupation but it would appear that the greater part of the site must have been

occupied for more than one generation, judging by the depth of deposit. A large section of the site, not all of its midden area, has a depth of deposit varying between 75 and 120 cm, with a probable average of very close to 100 cm. Working on the assumption that the deposit increased by 1 cm a year, then the occupation period was for about 100 years. This 1 cm per year ratio does not seem incorrect for the area, as a similar depth of deposit/length of occupation ratio worked out for the Southern Terrace and Mapungubwe Hill gives a result of between 0,75 and 1,4 cm per year.

On the basis of comparing the stage of development of the incised ware at Schroda, it is clear that the development recorded at the beginning of the Southern Terrace and at K2 at A.D. 970 has not been reached, at Schroda, and still must undergo a long period of change to reach the same point as that at K2.

It would appear then that Schroda must have been abandoned at approximately A.D. 900, although it could quite conceivably have been earlier.

Pont Drift is easier to determine, having started prior to A.D. 800 (The sample for dating was taken several centimetres above sterile soil). The final date is after A.D. 1100, the sample coming from level 4.

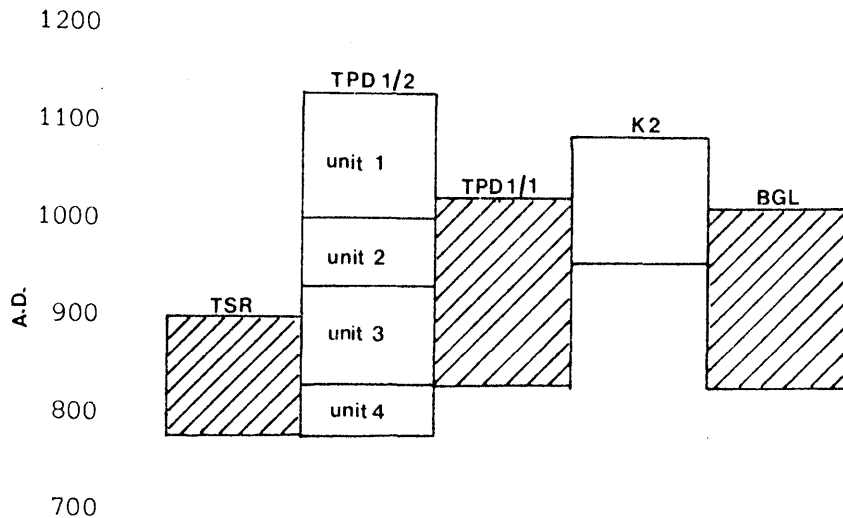
This gives a time span of 300 years, which is rather long for a continuous occupation of the site, although it is not impossible. If there is a break in the occupation, then the logical place for it to be, would be between units 1 and 2, although stratigraphically no indication was found of such a break (c.f. chapter 7).

The period in which the stamp decorated Zhizo pottery disappeared from the scene must be just after the beginning of the K2 sequence, i.e. at around A.D. 970 (c.f. chapter 9).

The Zhizo/Leopard's Kopje A occupation sequence for the Limpopo/Shashi valley is given in table 123. Additional sites like K2, Commando Kop and Pont Drift TPD 1/1 have been added, to give more substance to the table, as well as placing these sites in perspective to one another.

TABLE 123

Sequence of Zhizo and Leopard's Kopje A occupation



TSR = Schroda
 TPD = Pont Drift
 BGL = Commando Kop

A certain amount of overlap in dates between the sites is clear. K2, which has some stamp-decorated ware in the sample, begins in the period where the mixture of Zhizo and Leopard's Kopje A comes to an end.

Zhizo ends at around A.D. 840, with pure Leopard's Kopje A beginning at around A.D. 1000 and ending at approximately 1130 A.D. The intervening period is characterised by a gradual change from the stamp-decorated Zhizo Tradition to the incised Leopard's Kopje. There was no sudden influx of new people wiping out the original inhabitants.

2) Settlement patterns

The on site settlement patterns have already been discussed in the preceding chapters, but it is necessary to make comparisons.

No direct comparison can be made between Schroda and Pont Drift, as in the case of the latter the excavated area was too small to provide the relevant information. A comparison can, however, be made with K2.

Obvious similarities strike one from the beginning. They are both very large sites with a good depth of deposit. At both sites there is a tendency to a central livestock area, as well as a centralized midden, although smaller refuse dumps are spread throughout the site. Huts were spread around the perimeter of the central midden and kraal.

With regard to the spatial distribution of sites, clear clustering of Leopard's Kopje A sites was noted during the reconnaissance prior to excavation. In all cases there appears to be a larger site with a series of smaller sites close by. Presumably these larger sites were villages of petty chiefs, with their underlings in the surrounding smaller villages. Figure 62 shows the clustering of these sites. No further investigations of these sites have yet been made.

No similar pattern has been noticed with the Zhizo settlements, except for the farm Little Muck, where several adjacent sites were found. These do not have the spatial distribution like the Leopard's Kopje clusters, and should perhaps rather be considered as a unit. The sites are marked on figure 62

3) Changes in the economy

Huffman (1974, 1978) has stated that the Leopard's Kopje culture is distinct from earlier cultures on the basis of economic differences, and not just because of ceramic differences. This is based on the evidence found in Rhodesia that the Leopard's Kopje people had larger herds of cattle than their predecessors, and were clearly cattle-orientated.

This characteristic can also be said to be true of the earlier Zhizo culture in the Limpopo/Shashi Valley, where according to the faunal analyses, domesticated livestock played a very important role in the dietary economy.

This is perhaps less obvious at Pont Drift than at Schroda, where Voigt is expecting meat weight ratios for cattle very similar to those found at K2.

This ratio can vary from site to site within the same culture, as is shown by the differences between K2, Pont Drift unit 1 and Commando Kop

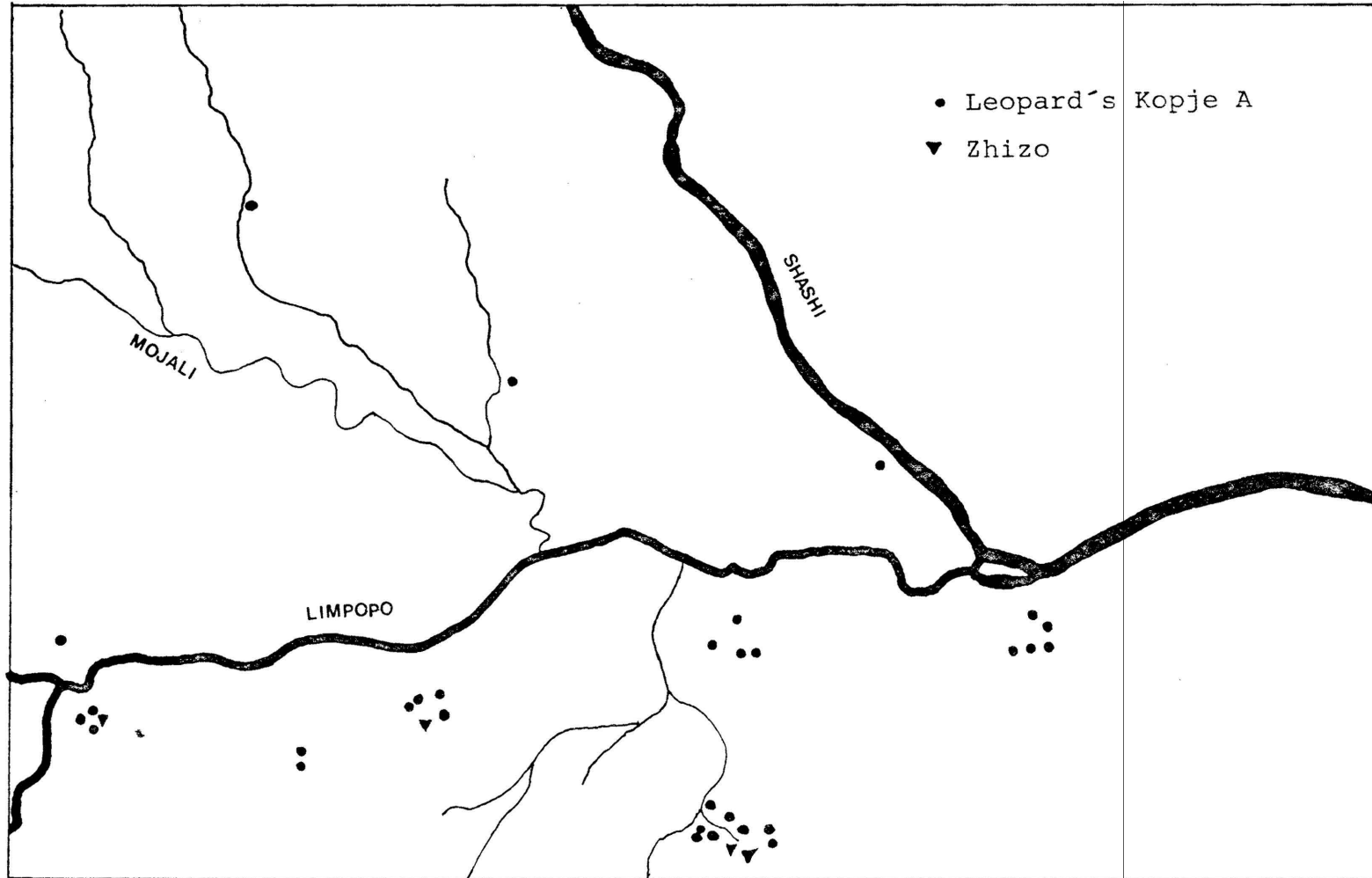


Figure 62
Clustering of Leopard's Kopje A sites.

(88%, 72% and 60% respectively. Voigt 1980).

The cattle orientation is emphasized by the central livestock kraals with their distinct dung levels as is found at Schroda. Cattle figurines are also found.

It seems therefore that on average, depending on which site is being looked at, that there is little difference in the ratio of domesticates, particularly cattle, between the Zhizo and Leopard's Kopje A cultures.

Other facets of the economy, particularly trading showed no great differences, although certain items like glass beads are of a different type.

The change in the type of grain recovered is shown between Pont Drift and Schroda, particularly in that only one type (sorghum?) was identified at Schroda, while in the Leopard's Kopje unit at Pont Drift, three different types of cereal were found.

The changes in the economy are thus not as great as would be expected, were one dealing with two totally different cultures that had no relationship to one another.

4) Change in Pottery

The change over from stampdecorated ware to incised ware at Pont Drift and to a lesser extent at Schroda, has already been pointed out in the relevant chapters.

A comparison between sites and Traditions has been done, and these results are shown in tables 124 and 125.

From the comparison of vessel shapes (table 124) it is clear that the great majority of shapes are common to the Zhizo and Leopard's Kopje A Traditions. Shapes 4, 5, 17, 19 and 37 were found only amongst the Zhizo pottery, while shapes 12, 14 and 40 are purely Leopard's Kopje. This indicates very strongly that little originality exists under the Leopard's Kopje A Tradition, and that most vessel shapes including some of the beakers and beaker bowls can trace origins back to the Zhizo. This is further proof that the Leopard's Kopje origins were not entirely elsewhere, but that vessel shapes were taken over from the Zhizo

TABLE 124

Comparison of Vessel shape from Schroda and Pont Drift

Site	Tradition	Vessel Shape																							
		Decorated																							
		1	2	3	4	5	6	7	10	11	12	13	14	15	16	21	24	25	26	28	29	30	38	42	43
Pont Drift	LKA	x	x	x			x	x		x	x	x	x	x	x	x	x	x	x	x	x	x		x	x
	Zhizo	x	x	x			x																		
Schroda	Zhizo	x	x	x	x	x	x	x	x	x		x			x	x	x			x				x	

Site	Tradition	Vessel Shape																												
		3	6	7	11	15	16	17	18	19	20	21	22	24	25	26	27	28	29	30	31	32	33	35	37	38	39	40	41	42
Pont Drift	LKA	x	x				x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	
	Zhizo						x	x			x	x	x			x	x	x	x	x		x	x							
Schroda	Zhizo		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

TABLE 125

Comparison of layout position from Schroda and Pont Drift

SITE	Tradition	Layout Position															
		<u>Stamped</u>							<u>Incised</u>								
		Under rim	Neck	Shoulder	Rim/neck	Rim/shoulder	Rim/neck/ shoulder	Neck/shoulder	Base	Under rim	Neck	Shoulder	Rim/neck	Rim/shoulder	Rim/neck/ shoulder	Neck/shoulder	Base
Pont Drift	LKA									x	x	x	x				x
	Zhizo	x	x	x				x		x	x	x					
Schroda	Zhizo	x	x	x			x	x		x	x	x			x	x	

The comparison of layout position (table 125) indicates that typically the Zhizo has stamped decoration in the following positions: under rim; neck; shoulder; rim/neck/shoulder; and neck/shoulder. No stamped decoration was found in the Leopard's Kopje A sample.

Incision only, occurs in both the Zhizo and Leopard's Kopje Traditions, although it forms a small percentage of the former. The incised Zhizo sample has the same layout positions as the stamped ware. The Leopard's Kopje ware has only three layouts common to the Zhizo, namely under rim, neck and shoulder. The other two positions, rim/neck and base do not occur in the Zhizo sample, and can be considered to be characteristic of the southern branch of the Leopard's Kopje A Tradition.

The neck layout is generally accepted as being the 'standard' position for decoration on Leopard's Kopje vessels. Decoration under the rim is known, but scarce. The shoulder decoration is peculiar, in that it is not normally associated with incised ware, and is considered to be more characteristic of Zhizo. It would, therefore, appear to be an archaism that originated in the Zhizo and was taken over by the Leopard's Kopje people.

Another combination that appears to have been taken from Zhizo is the rim/neck combination. Typically the Zhizo has had the idea of two separate bands of decoration on two different parts of the vessel. This has carried through to Leopard's Kopje. Other examples of this type of combination have been found at Pont Drift TPD 1/1 and at Commando Kop .

In summary, it is without doubt that many of the vessel shapes and layouts are not original to the Leopard's Kopje A Tradition, and have been taken over from the Zhizo.

CHAPTER 9

CONCLUSION

1. The Zhizo and Leopard's Kopje A cultures in the Limpopo/Shashi Valley

In the preceding chapters a picture has been given of the research work with many references to similarities between the two cultures under review. It must also be mentioned that in turn each culture is clearly representative of a Southern Branch of two separate Traditions. The Southern Branch of Leopard's Kopje has been described elsewhere, but no description has yet been published on a Southern Branch of the Zhizo Tradition.

Before describing the Zhizo Tradition, it is better perhaps, to compare the Zhizo and Leopard's Kopje cultures as known not only from this work, but also that done at Greefswald. Many points must be compared, and this is best done in tabular form.

Many attributes can be listed, but those that seemed to be the most important have been done. It can be seen from table 126 that the characteristics listed are found at both K2 and Schroda, while many of them are lacking from the different components of the Pont Drift site.

Numerous cultural characteristics generally accepted to be part and parcel of the Leopard's Kopje A culture, are clearly shown to be just as much part of the Zhizo Tradition. These elements include beakers and beaker bowls; elongated stylized human figurines; ivory working; garden roller beads and bead moulds; composite arrows; and beast burials.

Looking closely at the evident similarity between Schroda and K2 it would appear that Schroda was the precursor of K2.

With regard to Huffman's suggested reverse flow of the Leopard's Kopje people northwards, I would like in view of the obvious relationship between Zhizo and Leopard's Kopje A, to present an alternate hypothesis to explain the possible similarities between the Eastern Transvaal material and Leopard's Kopje.

SITE	TRADITION	Vessels				Figurines																
K2	LKA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	LKA	X	X	X	X																	
	LKA/Z	X	X	X	X		X															
Pont Drift	Zhizo	X	X	X	X																	
	Zhizo	X	X	X	X																	
Schroda	Zhizo	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Comparison of cultural attributes

TABLE 126

Similarities suggest a common ancestor, and Huffman with his "core concept" analysis has proposed the Eastern Transvaal Pottery as the ancestor to Leopard's Kopje. Might it not be possible that a common ancestor to both Traditions exists elsewhere, but has not yet been fully described, and therefore not recognized for what it is.

The Zhizo in the Limpopo/Shashi valley has several characteristics that distinguish it from the Zhizo described by Robinson (1965, 1966) and Huffman (1973, 1974). The ceramics of the former differ from those of the latter as follows:

- a) Less emphasis on a rim/shoulder of a neck/shoulder layout;
- b) A larger percentage of the pots are decorated on the neck only;
- c) Little decoration on the rim only;
- d) Few carinated vessels;
- e) Very few black and red bowls;
- f) The clear presence of beakers and beaker bowls; and
- g) No "seated" female figurines.

These are, in my opinion, sufficient grounds to separate the tradition into a Northern and a Southern Branch. I would also like to propose that Schroda be referred to as the type site for the Southern Branch, unless a more suitable site be found.

Enough has been said about the Southern Branch of the Leopard's Kopje A culture to give it a suitable definition. The site of K2 has generally been accepted as the type site, and has recently been proposed as such by Meyer (1980).

A word of caution should be exercised at this stage. From the results of the Unit one analysis at Pont Drift it is clear that what can be called pure Leopard's Kopje A contains no stamped vessels. A fair number of these stamped (ie. Zhizo) vessels have been recovered from K2, thereby placing the site in the latter part of the mixed Zhizo/Leopard's Kopje A phases. K2 is therefore not a pure Leopard's Kopje A site, and care should be taken as to what is then being described as Leopard's Kopje A.

2. Recommendations for future research work

Many questions have either not been satisfactorily answered or answered not at all in the course of this dissertation. Future work should concentrate on supplying these answers.

What we now know about the Zhizo culture is based on the results of excavations on only two sites. Other sites should be excavated to check and extend upon results found so far. The unusual and unique clay figures of Schroda must be placed in their proper context. Work is at present underway at Schroda to determine their context on site but this should be carried further to other sites to establish whether the art of clay figurine making was widespread amongst the Zhizo people of the Limpopo/Shashi Valley, or whether it was limited to Schroda because of certain activities that took place there and nowhere else.

The Leopard's Kopje A Tradition, although it has been described from several sites in the area, presents more possibilities for further projects. Most of these are connected to the settlement pattern.

Each cluster of villages should be investigated to determine on site settlement patterns, and each village compared to the others within the clusters to determine activity areas. These clusters can then be compared to one another

The dietary economy of the various sites should be investigated to determine differences between sites and the reasons for them. Although the sites are of the same time period and culture, differences can be picked up, as has been noted between K2, Pont Drift and Commando Kop, where the latter had a different economy from that of K2.

For example, sites where chiefs lived should have more livestock remains, as the chief always has the largest herds. Lower ratios of livestock to wild animals might suggest a cattle outpost.

Further work should also be done on the pottery typology, whereby the results of the analyses of the pottery from all the Leopard's Kopje sites excavated in the Limpopo/Shashi Valley is combined, to enlarge upon the excellent work done by Meyer on the Greefswald Pottery.

As a final thought, it must be said that in depth studies like those

mentioned above, are long term projects that will take careful planning to achieve their goals. The archaeologist wishes to elucidate the mysteries of the past, and form a clearer picture of the people and their style of life. The emphasis should then fall on all aspects of the culture that can be excavated.

Small trenches are at this stage not likely to be of much use to the archaeologist, as the type of information forthcoming from such trenches is basically what has already been discussed by myself and others. Lateral excavations over large areas will give the results desired.

Such excavations take a long period of time to complete, and logically a single person cannot cover all that has been suggested. It is clear, therefore, that much care must be taken in the choice of sites prior to excavation.

Excavation techniques must also be improved and many aids be employed to ensure the maximum retrieval of information within the limited time that the archaeologist spends in the field.

BIBLIOGRAPHY

- Acocks, J.P.H. 1975 Veld Types of South Africa. Memoirs of the Botanical Survey of South Africa, no. 40.
- Beuster 1879 Das Volk der Vawenda. Zeitschrift der Gesellschaft für Erdkunde zu Berlin, no. 14
- Boshier, A. 1965 Effects of pounding by Africans of North-west Transvaal on hard and soft stones. South African Archaeological Bulletin, Vol.20 no. 79.
- Department of Mines Geological Survey 1970 List of Working Mines in the Republic of South Africa and the Kingdom of Swaziland as at December 1968. Government Printer, Pretoria.
- De Villiers, H. No date Human Skeletal remains from Iron Age burials in the Limpopo/Shashi Valley. Unpublished Report. Dept. of General Anatomy, University of the Witwatersrand.
- Galloway, G.A. 1959 The Skeletal Remains of Bambandyanalo. Witwatersrand University Press.
- Gardner, G.A. 1955 Mapungubwe 1935 - 1940. South African Archaeological Bulletin Vol. 10, no. 39.
- Hanisch, E.O.M. 1979a A Preliminary report on Commando Kop, a Leopard's Kopje A site in Botswana. Unpublished report National Cultural History and Open-air Museum.
- Hanisch, E.O.M. 1979b Excavations at Icon, northern Transvaal in Iron Age Studies in Southern Africa. N.J. van der Merwe and T.N. Huffman (ed) Goodwin Series no. 3, South African Archaeological Society.
- Hanisch, E.O.M. No date A preliminary note on Pont Drift TPD 1/1. Unpublished Report, National Cultural History and Open-air Museum.
- Haughton, S.H. 1969 Geological History of Southern Africa. Cape and Transvaal Printers.

- Huffman, T.N. 1968 The Place of the Leopard's Kopje Culture in the Iron Age Sequence of Rhodesia (Paper read at an African Studies Association Annual Meeting, Los Angeles).
- Huffman, T.N. 1970 The Early Iron Age and the Spread of the Bantu. South African Archaeological Bulletin, Vol. XXV, no.97.
- Huffman, T.N. 1971 Excavations at Leopard's Kopje Main Kraal: A preliminary report, South African Archaeological Bulletin, Vol. XXVI, nos. 101 and 102.
- Huffman, T.N. 1973a Test Excavations at Makuru, Rhodesia. Arnoldia, no. 38, vol. 5. National Museums and Monuments of Rhodesia.
- Huffman, T.N. 1973b Radiocarbon dates and Bibliography of the Rhodesian Iron Age. Rhodesian Prehistory, no. 11.
- Huffman, T.N. 1976 Gokomere Pottery from the Tunnel Site, Gokomere Mission. South African Archaeological Bulletin, Vol. XXXI, nos. 121 and 122.
- Lepionka, L. 1977/78 Excavations at Tautswemogala. Botswana Notes and Records,
- Meyer, A. 1980 'n Interpretasie van die Greefswald potwerk. Unpublished M.A. thesis, University of Pretoria.
- Mountain, E.D. 1968 Geology of Southern Africa Cape and Transvaal Printers.
- Palmer, E. and Pitman, N. 1972 Trees of Southern Africa. Vol. II. A.A. Balkema, Cape Town.
- Fike, J.G. 1971 Rainfall over Botswana: in Proceedings of the Conference on Sustained Production from Semi-arid Areas. Botswana Notes and Records. Special Edition no. 1.
- Plug, I. No date The Faunal Remains from Pont Drift, two early Iron Age sites in the Northern Transvaal.

- Unpublished Report, Transvaal Museum.
- Plug, I. 1979 Evidence of *Rattus rattus* (House rat) from Pont Drift, an Iron Age Site in the Northern Transvaal. South African Journal of Science, vol.75.
- Robinson, K.R. 1961 An Early Iron Age Site from the Chibi District, Southern Rhodesia. South African Archaeological Bulletin, Vol. XVI, no.63
- Robinson, K.R. 1965 The Leopard's Kopje culture: a preliminary report on recent work. Arnoldia, Vol. 1, no. 35.
- Robinson, K.R. 1966 The Leopard's Kopje Culture: its position in the Iron Age of South Africa. South African Archaeological Bulletin Vol. 21 no. 81.
- Schofield, J.F. 1948 Premitave Pottery. The South African Archaeological Society Handbook, no. 3
- Schulze, B.R. 1965 Climate of South Africa. Part 8 General Survey. Pretoria Weather Bureau.
- Summers, R. 1950 Iron Age Cultures in Southern Rhodesia. South African Journal of Science, Vol. 47, no. 4
- Van der Lith, A.A. 1972 Die Keramiek van die Venda in Etnografiese Studies in Suidelike Afrika. J.F. Eloff en R.D. Coertze (red). J.L van Schaik, Pretoria.
- Van der Sleen, W.G.N. 1967 A Handbook on Beads. Liege, Musée du Verre.
- Van der Waal, C.S. 1977 Die Woning en Woonwyse onder die Venda. Unpublished M.A. Thesis. University of Pretoria.
- Van Riet Lowe, C. 1955 The Glass Beads of Mapungubwe. Department of Education, Arts and Science, Archaeological Survey, Series no. IX, Government Printer, Pretoria.
- Van Warmelo, N.J. 1935 A Preliminary Survey of the Bantu Tribes of South Africa. Government Printer, Pretoria.

- Van Warmelo, N.J. 1940 The Copper Miners of Musina and Early History of the Zoutpansberg, Government Printer, Pretoria.
- Voigt, E.A. 1976 Unpublished report on Schroda beast burial. Transvaal Museum.
- Voigt, E.A. 1978 The Faunal Remains from Greefswald as a reflection of Iron Age Economic and Cultural Activities. Unpublished M.A. Thesis. University of Pretoria.
- Voigt, E.A. 1979 Schroda: Preliminary notes on the Fauna from Excavation 5. Unpublished Report. Transvaal Museum.
- Voigt, E.A. 1980 Reconstructing Iron Age Economies of the Northern Transvaal. South African Archaeological Bulletin, Vol. 35, no. 131.
- Voigt, E.A. No date a Schroda: Excavation 1. Preliminary note on Faunal Assemblage Unpublished Report. Transvaal Museum.
- Voigt, E.A. No date b Schroda: Excavation 2. Unpublished Report. Transvaal Museum.
- Voigt, E.A. No date c Schroda: Excavation 4 Unpublished report. Transvaal Museum.
- Weare, P.R. and Yalala, A. 1971 Provisional Vegetation Map of Botswana. Botswana Notes and Records. Vol. 3.

TABLES 127 - 138

Many tables were compiled during the course of analysis, from which conclusions were drawn. For obvious reasons, not all of these many tables could be included in this dissertation. Most of the relevant ones have been, unless they were exceptionally large and reduction to suitable size would have made them illegible.

Most of the tables have been incorporated in the body of the thesis, but those that give details and facts relevant to several sections or are summaries of the detail, have been included separately in this section.

Tables not included in this thesis are available for inspection at the National Cultural History and Open-air Museum, Pretoria.

TABLE 135

Pont Drift: Total numbers of decoration motifs found on site

Levels	A19.2	A4.6	A4.2	A7.1	A4.4	A4.5	A2.1	A1.3	A1.1	A8.1	A6.1	A5.1	A13.2	A5.3	A4.1	A5.2	B2.1	B7.2	B2.2	B3.1	B1.1	B5.1	C2.1	C6.5	C14.1	C6.3	C7.1
UNIT 1																											
1																											
2																											
3																											
4																											
UNIT 2																											
5																											
6	1																										
7		1															1										
8		1	1																								
UNIT 3																											
9				1	1	1																					
10			1				1																				
11								1	1														1				
12			1	2					1	1	1						1							1			
UNIT 4																											
13					1				1								2	1	1	1	1			1	1		
14								1	4	1							2	1	1	1	1		1		1	1	
14(i)		1			1				6			1	1												1	1	
15		1	2		2	1			2			1	1	1	1	1	4			1					1		
Total	1	4	5	1	7	3	1	2	15	2	1	2	1	1	1	1	10	1	2	2	1	1	1	2	1	4	1

Continued

Levels	C15.1	C6.4	C12.2	C12.1	C5.4	C8.2	E1.7	E12.13	E4.2	E4.29	E1.17	E4.34	E4.26	E4.32	E1.12	E4.9	E4.11	E13.10	E4.24	E4.4	E2.3	E1.3	E13.3	E13.6	E11.4	E13.13	E11.5	
UNIT 1							1	1																				
1																												
2									1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	1	
3										1						1	1								1		1	
4												2				3	1				1						1	
UNIT 2																												
5											1					1	2					1	1	4				
6																	4							1				
7																												
8						1										2	1											
UNIT 3																												
9																	1							1				
10																												
11																												
12																												
UNIT 4																												
13																												
14																		1										
14(i)	1		1	1	1																							
15						1	1																					
Total	1	1	1	1	1	1	2	2	1	2	2	3	2	1	2	17	6	1	1	1	1	3	2	7	1	3	1	2

Continued

Levels	E13.12	E11.3	E12.2	E1.2	E1.5	E11.2	E3.1	E17.8	E1.9	E17.14	E17.2	E17.4	E9.4	E1.1	E17.5	E1.4	E10.4	E11.9	E12.4	E13.4	E13.9	E14.3	E4.14	E2.2	E1.19	E11.11	E15.1	
UNIT 1																												
1																												
2	1	1	1																									
3	6		2	2	3	1	1	1	1	1	1	1	1	3	1	1	2	1										
4	5	1	3	1	2		1				2		1	1	1	1	3	1	2	1	1	1	1	1	1	1	1	
UNIT 2																												
5			5	3	1																		1		1			
6																												
7																												
8											1														1			
UNIT 3																												
9											1														1			
10												2			1													
11																												
12														1														
UNIT 4																												
13																								1				
14			1																					1				
14(i)														1														
15																												
Total	1	12	3	10	6	6	1	2	1	1	3	5	2	6	3	2	5	2	2	2	1	1	1	2	3	4	1	1

Continued

TABLE 135 Continued

Levels	UNIT 1				UNIT 2			UNIT 3			UNIT 4		Total		
	1	2	3	4	5	6	7	8	9	10	11	12		13	14
E5.7															
E17.1															
E13.11															
E13.8															
E17.19															
E11.7															
E17.25															
E4.33															
E11.8															
E17.9															
E12.10															
E19.5															
E4.43															
E17.16															
E1.16															
E11.1															
E14.4															
E1.10															
E17.18															
E2.7															
E2.13															
E4.16															
E1.14															
E2.9															
E5.2															
E12.18															
E2.14															

Continued

Levels	UNIT 1				UNIT 2				UNIT 3				UNIT 4			Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
E3.2																
E14.2																
E1.6																
E1.18																
E5.1																
E12.12																
E10.2																
E19.11																
E5.8																
E11.10																
E10.3																
E12.1																
E2.19																
E12.8																
E12.16																
E12.3																
E4.41																
E2.12																
E4.8																
E17.20																
E17.7																
E9.3																
E2.4																
E4.23																
E14.1																
E8.1																
E17.15																

Continued

Levels	UNIT 1				UNIT 2			UNIT 3			UNIT 4		Total		
	1	2	3	4	5	6	7	8	9	10	11	12		13	14
E3.6															
E12.6															
E2.5															
E3.10															
E17.26															
E17.22															
E5.5															

TABLE 136

PONT DRIFT: VESSEL SHAPE COMBINED WITH DECORATION

	E1.1	E4.29	E4.34	E4.26	E4.32	E4.9	E4.11	E4.24	E11.3	E10.4	E11.9	E13.9	E11.11	E13.11	E13.8	E4.33
Levels																
1																
2		x	x	x	o		o	o	o	+						
3		o					x				o					
4			x								x	x	o	o	x	x
5																
6																
7							x	x								
8																
9																
10																
11																
12																
13	+															
14																
14(i)																
15																

Unidentified bowl +
Unidentified beaker x
Unidentified beaker bowl o

Level	A4.6	A5.1	A4.1	B5.1	C14.1	C12.1	E1.17	E4.9	E13.3	E11.5	E11.3	F12.2	E1.2	E1.5	E11.2	E17.14	E 1.4	E5.7	E17.9	E1.10	E17.18	E2.9	E3.2	E14.2	E12.12	F19.11	E11.10	E12.8	E2.12	E4.23	E12.6	E17.26			
1																																			
2																																			
3																																			
4																																			
5																																			
6																																			
7																																			
8	v																																		
9																																			
10																																			
11																																			
12																																			
13																																			
14																																			
14(i)	1																																		
15		v																																	

Vessel shape 24 x Vessel shape 6 + Vessel shape 28 o Vessel shape 1 l
Vessel shape 29 e Vessel shape 3 v Vessel shape 14 *

Levels	E4.34	E4.9	E11.3	E12.2	E17.5	E12.4	E4.14	E12.10	E19.5	E4.43	E12.18	E10.2	E12.3
1													
2													
3													
4	e		x		+	x	l	v	x	*			
5				o		x					l		
6		+										e	
7													
8													*
9													
10													
11													
12													
13													
14													
14(i)													
15													

Vessel shape 12 x
Vessel shape 26 +
Vessel shape 43 o
Vessel shape 16 l
Vessel shape 42 e
Vessel shape 15 v
Vessel shape 25 *

Levels	A2.1	A1.3	C12.2	F4.9	E17.5	E12.10	E1.16	E8.1
1								
2								
3								
4								
5								
6								
7								
8								
9								
10	e							l
11		v						
12								
13								
14								
14(i)			e					
15								

Vessel shape 30 x
Vessel shape 21 +
Vessel shape 11 o
Vessel shape 7 l
Vessel shape 2 e
Vessel shape 13 v

TABLE 136 (continued)

Pont Drift: Vessel shape combined with decoration - Unidentified pot

Levels	A19.2	A4.6	A4.2	A7.1	A4.4	A4.5	A2.1	A1.3	A1.1	A8.1	A6.1	A5.1	A13.2	A5.3	A4.1	A5.2	B2.1	B7.2	B2.2	B3.1	B1.1	B5.1	C2.1	C6.5	C14.1	C6.3	C7.1
1																											
2																											
3																											
4																											
5																											
6	1																										
7		1															1										
8			1																								
9				1	1	1																					
10			1																								
11						1			1														1				
12			1		2				1	1	1						1						1				
13									1	4	1						2	1	1	1						1	
14					1			1									2		1				1			1	1
14(1)		1			1			6				1														1	
15		1	2		2	1		2				1		1		1	4			1						1	
Total	1	3	5	1	7	3		1	15	2	1	1	1	1		1	10	1	2	2			1	2		4	1

Continued

Levels	C15.1	C6.4	C12.2	C12.1	C5.4	C8.2	E1.7	E12.13	E4.2	E4.29	E1.17	E4.34	E4.26	E4.32	E1.12	E4.9	E4.11	E13.10	E4.24	E4.4	E2.3	E1.3	E13.3	E13.6	E11.4	E13.13	E11.5
1							1	1			1				1	2	1	1		1	1		1	2	1		1
2																											
3													1												1		1
4																3	1					1	4				
5															1	1						1	1	1			
6								1								1											
7							1										1										
8																1											
9																1											
10																											
11																											
12																											
13																											
14	1																	1									
14(1)		1																									
15					1	1																					
Total	1	1			1	1	2	2	1		1		1		2	9	4	1		1	3	2	6	1	3	1	1

Continued

Levels	E13.12	E11.3	E12.2	E1.2	E1.5	E11.2	E3.1	E17.8	E1.9	E17.14	E17.2	E17.4	E9.4	E1.1	E17.5	E1.4	E10.4	E11.9	E12.4	E13.4	E13.3	E14.3	E4.14	E2.2	E1.19	E11.11	E15.1
1																											
2	1																										
3		4		1	1	2	1	1			1	1	1	3													
4		4		2	1	1		1			2	1	1	1		1	3		1	1		1		1	1		1
5				4	1	1																					
6																											
7																							1				
8												1													1		
9												1													1		
10												2			1												
11																											
12														1													
13																									1		
14																								1			
14(i)														1													
15																											
Total	1	8		7	3	4	1	2	1		3	5	2	6	1	1	4		1	1		1	1	3	4		1

Continued

TABLE 136 (continued)

Pont Drift: Vessel shape combined with decoration - Unidentified pot

Levels	E5.7	E17.1	E13.11	E13.8	E17.19	E11.7	E17.25	E4.33	E11.8	E17.9	E12.10	E19.5	E4.63	E17.16	E1.16	E11.1	E14.4	E1.10	E17.18	E2.7	E2.13	E4.16	E1.14	E2.9	E5.2	E12.18	E2.14	
1																												
2																												
3																												
4																												
5	1	1		1	2	1	1		1					1	1	1	1											
6		1																			3	1	1	1		1		1
7																					2							
8																							1					
9	1	1																										
10																												
11																												
12																												
13																												
14																												
14(i)																												
15																												
Total	2	3		1	2	1	1		1					1	1	1	2	1		6	1	2	2		1		1	

Continued

Levels	E3.2	E14.2	E1.6	E1.18	E5.1	E12.12	E10.2	E19.11	E5.8	E11.10	E19.3	E12.1	E2.19	E12.3	E12.16	E12.2	E4.41	E2.12	E4.8	E17.20	E17.7	E9.3	E2.4	E4.23	E1.4.1	E8.1	E17.15	
1																												
2																												
3																												
4																												
5	1		1	1																								
6				2	1	1																						
7							1		1		1	1	1															
8										1					1		1											
9																			1	1	2	1	1					
10					2																	1						1
11					1																				1			
12																												
13																												
14				1																								
14(i)					1																							
15																												
Total	1	1	4	5	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	

Continued

Levels	E3.5	E12.6	E2.5	E3.10	E17.26	E17.22	E5.5
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11	1						
12		1	1				
13							
14					1		
14(i)						1	
15							
Total	1	1	1	1	1	1	

Table 137

PONT DRIFT: Decoration motif combined with layout position

Level	A19.2	A1.1	B2.1	B7.2	B1.1	C15.1	E1.7	E12.13	E4.2	E4.26	E4.9	E13.10	E4.4	E1.3	E13.3	E11.3	E1.2	E1.5	F11.2	F17.8	E17.14	E17.4	E1.1	E17.5	E10.4	E12.4	E14.3	E4.14
1							1	1				1	1	1														
2									1																			
3										1																		
4											1																	
5															1													
6	1							1			1																	
7																												
8																												
9																												
10																												
11		1																										
12		1																						1				
13		1		1	1																							
14		4																										
14(i)		5																						1				
15		2	1																									
Total	1	14	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	2	1	1	1	3	1	1	1	1	1

Decoration on shoulder

Continued

Level	E17.1	E11.8	E12.10	E14.4	E12.12	E10.3	E12.1	E12.8	E12.16	E12.3	E14.1
1											
2											
3											
4	1	1	1								
5			1	1							
6					1						
7							1	1			
8									1	1	
9											
10											1
11											
12											
13											
14											
14(i)											
15											
Total	1	1	2	1	1	1	1	1	1	1	1

Decoration on shoulder

Level	A4.6	A4.2	A4.4	A4.5	A2.1	A1.3	A5.3	A4.1	B2.1	B2.2	B3.1	C2.1	C6.3	C7.1	E1.7	E4.23	E1.17	E4.26	E4.9	E4.11	E13.3	E11.3	E12.2	E1.2	E17.2	E17.4	E13.9	E2.2
1																												
2																		1										
3																1												
4																												
5																												
6																												
7																												
8		1													1													
9			1	1																								
10					1																							
11													1															
12			2						1																			
13										1	1		1															
14						1								1														
14(i)																												
15	1	1						1	1																			
Total	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	1	2	2	2	1	1	1	1	1

Decoration under rim

Continued

Table 137 continued

Level	E17.19	E17.25	E4.43	E14.4	E2.7	E1.14	E12.18	E3.2	E14.2	E1.18	E5.1	E10.2	E17.7	E9.3	F4.23	E3.6	E12.6	E3.10.
1																		
2																		
3																		
4	1	1	1	1														
5					2		1	1		1								
6					1					1		1						
7					2	1												
8																		
9													1	1				
10											1				1			
11																1	1	
12								1										1
13																		
14																		
14(i)											1							
15																		
Total	1	1	1	1	5	1	1	1	1	2	2	1	1	1	1	1	1	1

Decoration under rim

Level	A4.6	A4.2	A7.1	A4.4	A4.5	A1.3	A1.1	A8.1	A6.1	A5.1	A5.2	B2.1	B2.2	C6.5	C6.3	C6.4	C5.4	C8.2	E1.17	E1.12	E4.9	E4.11	E2.3	E1.3	E13.3	E13.6	E11.4		
1																				1	1	2	1	1			1	2	
2																													
3																													
4																						3	1	1					
5																					1	1	1	1	1	2			
6																						1				1			
7	1																						1						
8	1																					1							
9			1																			1							
10		1																											
11						1	1																						
12		1						1	1					1															
13												2																	
14												2	1	1	1								1						
14(i)	1			1			1			1						1													
15	1	1	2	1						1	1	3			1	1	1	1											
Total	3	3	1	4	2	1	1	2	1	2	1	8	1	2	3	1	1	1	1	1	2	9	4	3	1	3	1	3	

Decoration on neck

Levels	E13.13	E11.5	E13.12	E11.3	E12.2	E1.2	E1.5	E11.2	E3.1	E17.8	E1.9	E17.2	E17.4	E9.4	E1.1	E17.5	E1.4	E10.4	E12.4	E13.4	E4.14	E2.2	E1.19	E15.1	E5.7	E17.1	E13.8		
1																													
2	1		1																										
3		1																											
4				4		2	2	2	1	1	1	1	1	1	2		1	1	1	1	1		1	1	1	1	1	1	
5				3		3	1	1																					
6						3	2	1																					
7																													
8																													
9													1										1						
10													1			1							1			1	1		
11																													
12																													
13																													
14																													
14(i)						1																	1						
15																													
Total	1	2	1	7	1	8	5	4	1	1	1	2	3	1	3	1	2	4	1	1	1	1	2	4	1	3	2	1	

Decoration on neck

Continued

Table 137 continued

Levels	E17.19	E11.7	E17.9	E17.16	E1.16	E11.1	E1.10	E17.18	E2.7	F2.13	E4.16	F1.14	E2.9	E5.2	E2.14	E3.2	E14.2	E1.6	E1.18	E5.1	E12.12	E10.2	E5.8	E11.10	E10.3	E2.19	E4.41	
1																												
2																												
3																												
4																												
5	1	1	1	1	1	1																						
6																												
7																												
8																												
9					1						1																	
10																												
11																												
12																												
13																												
14																				1								
14(i)																												
15																												
Total	1	1	1	1	2	1	2	1	1	1	2	1	1	1	1	2	1	1	2	3	1	1	1	1	1	1	1	

Decoration on neck

Continued

Levels	E2.12	E4.8	E17.20	E17.7	E2.4	E8.1	E17.15	E2.5	E17.26	E17.22	E5.5
1											
2											
3											
4											
5											
6											
7											
8	1										
9		1	1	1	1						
10						1	1				
11											
12								1	1		
13											
14										1	
14(i)											1
15											
Total	1	1	1	2	1	1	1	1	1	1	1

Decoration on neck

Levels	A13.2	B5.1	C14.1	C12.2	C12.1	E4.29	E4.34	E4.32	E4.11	E4.24	E11.3	E17.5	E11.2	E11.11	E13.11	E13.8	E4.33	E19.5	E1.16	E19.11	
1																					
2							x	x	x	x	x		x								
3																					
4							xx					+	x	x	x	x	x	v			
5																			+		
6																					*
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
14(i)	o	o	o	o	o																
15																					

Decoration:

- + On rim
- x Base
- o Neck/Shoulder
- v Rim/Neck
- * Rim/Neck/Shoulder

TABLE 138

SCHRODA: Total numbers of decoration motifs found in each area

Area	A1.1	A6.1	A5.1	A16.2	A1.3	A4.6	A4.5	A4.1	A2.2	A3.2	A2.2	A4.6	A11.1	A4.2	A9.2	A12.1	A7.1	A4.4	A11.3	A4.3	A11.3	A2.1	A14.2	A1.2	A15.1	A11.2	A3.2
1	4	1	1	1																							
2	17	6	3		1	1	1	4	1	1	1	1	1														
3	6						2	1				1	1	2	1	2	1										
4	37	2	13				2	8				4		4		1	1	3	1	1	1	1	1				
5	85	10	25			1	8	23				7	5	7		2	8	6				1		3		4	1
6	13							3		1				1		1	1	1						2	1		
Total	162	19	42	1	1	2	13	39	1	2	1	13	7	14	1	6	11	10	1	1	1	2	1	5	1	4	1

Continued

Area	A17.2	A3.3	A8.1	A14.1	A16.1	A3.1	A19.1	A18.2	A13.1	B2.2	B1.1	B3.1	B4.1	B8.1	B2.3	B6.1	B2.1	B1.2	B1.3	B1.4	B5.1	C5.3	C5.4	C4.3	C9.1	C6.6	C6.1
1																											
2										3	3	1	2	1	1	1						1	1				
3										1																	
4															3		1						3	1	1	1	
5	1	3	2	1	1	1	1	1	1	3	21	9	2		7		6			1	1		3				
6										2									1	2							1
Total	1	3	2	1	1	1	1	1	1	9	24	10	4	1	11	1	7		2	1	1	1	7	1	1	1	1

Continued

TABLE 138 continued

Area	1	2	3	4	5	6	Total
C5.1							8
C8.1							3
C3.2							4
C5.6							1
C6.2							1
C11.1							1
C12.2							2
C5.2							1
C6.7							1
C13.1							1
C5.5							1
C3.1							1
C10.1							1
D3.1							1
D5.1							1
D4.1							1
D4.2							1
D2.1							1
E5.1							12
E5.7							6
E4.9							17
E3.5							2
E1.4							2
E20.2							3
E2.3							1
E2.16							1
E1.16							1

Continued

Area	1	2	3	4	5	6	Total
E1.13							1
E4.11							5
E4.1							1
E4.13							1
E3.11							1
E1.10							1
E4.16							1
E1.21							1
E1.17							1
E19.2							1
E17.23							1
E5.8							1
E20.12							1
E3.3							1
E1.1							2
E4.18							1
E19.1							1
E1.18							1
E5.5							2
E4.20							1
E6.1							1
E1.2							1
E1.7							1
E11.1							1
E1.18							2
E17.10							1
E13.1							1

Continued

TABLE 138 continued

Area	1	2	3	4	5	6	Total
E4.4							2
E5.1							1
E2.11							1
E17.5							1
E1.15						1	1
E20.2						1	1
E4.28						1	1
E13.6					1		1
E19.7					1		1
E2.13					2		2
E3.8					1		1
E11.3					1		1
E1.3					1		1
E20.13					1		1
E1.8					1		1
E3.4					1		1
E7.1					2		2
E1.9					1		1
E1.12					1		1
E1.21					2		2
E3.2					1		1
E10.2					1		1
E4.8					1		1
E4.26					1		1
E4.15					1		1
E19.10					1		1
E18.2					1		1
E2.7					2		2

Continued

Area	1	2	3	4	5	6	Total
E2.6						1	1
E20.11						1	1
E5.2						1	1
E20.1						1	1
E4.22						1	1
E4.10						1	1
E4.7						1	1
E2.10						1	1
E12.2						1	1

APPENDIX

The report covers all skeletal material recovered from excavations in the Northern Transvaal and Botswana. It is included in its entirety as I have felt that it would be incorrect to present an edited version thereof, in case information be left out.

Human skeletal remains from Iron Age burials in the Limpopo/Shashi Valley

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University of the Witwatersrand
Johannesburg

The skeletal remains of at least 19 individuals are included in the present report:

Seven adult and twelve immature individuals.

This latter group includes six infants of less than one year.

The assessments of age are based: in the adult individuals on molar wear (Brothwell, 1963), in the immature specimens on the calcification and eruption of the teeth as well as on epiphyseal growth (Watson and Lowrey, 1969).

It is important to note that even with a group of normal individuals considerable variation in maturation and molar wear may occur. Another complicating feature is that mean differences occur between groups of people throughout the world determined both by genetic and environmental factors - the present assessments are based on standards derived for Caucasoid populations - since to my knowledge none is available for African Negro or Khoisan populations.

Assessments of sex are based on the pelvic bones when present (Genoves, 1959), the femoral head diameter (Thieme, 1957), and metrical and non-metrical features of the skull (de Villiers, 1968).

Estimation of stature (for adult specimens) are based on Trotter and Gleser's (1958) regression formulae devised for American Negroes. These are the most appropriate formulae available at present but Trotter and Gleser point out that it is possible that different equations may be needed even for the same racial group in successive generations.

The platymeric, platycnemic and pilastering indices have been calculated where possible. Flattening of the shafts of the femur and tibia is believed to result from nutritional deficiencies which affect the structure of the femur and tibia and influence the osseous resistance to the stress of locomotion (Lisowski, 1968).

Population affinities are based on comparisons with South African Negro and Khoisan cranial series (de Villiers, 1968, 1973, 1974, 1976; Rightmire, 1970; Drennan, 1937; Wells, 1931).

Measurements are set out in Table I.

A. SCHRODA.

Area 1

TSR 1/1 1. Bl. 4.1

Cranium: The cranium is fragmentary and somewhat distorted: it consists of a fragmented frontal and/or parietal bones, the occipital bone is complete except for the left condylar portion, the temporal and sphenoid bones are likewise complete.

The facial skeleton is represented by the right nasal and zygomatic bones and the greater portion of the palate and alveolar processes of the maxillary bones.

Mandible: The mandible is complete but fractured in the regions of the right second molar. The symphysis and menti is as yet unfused.

Teeth: Maxillary - crowns of the deciduous dentition and of the first permanent molar are present on the left. On the right, the crown of the first permanent molar is missing. This tooth appears to have been lost post mortem.

Mandibular - the crowns of the deciduous dentition and first permanent molar are present.

Postal cranial remains

Axial : sternum, 3 sternbrae
 ribs, 21 and 9 fragments

Vertebrae: Bodies and arch components

Appendicular: clavicle rt
scapula rt
os coxae rt and lt
tibia
fibula rt and lt
talus rt
2 carpal bones
phalanges 9
1 animal tooth

The individual represented is an infant, possibly female (as judged by the size of the greater sciatic notch) of between 1½ and 2½ months (as judged by the calcification of the incisor crowns).

The apparent features of the cranial vault and orbit suggest a Negroid infant as, do the metrical and non-metrical features of the mandible.

Area 2

TSR 1/1 2.2AA.3(i).1

An all but complete skeleton

Cranium: complete, except for the zygomatic arch (right) which is in part missing. The frontal bone is fractured in the midline and on the right - the area of bone between the two fractures has been eroded. The basi occipital and right greater wing of the sphenoid are likewise fractured. These fractures probably occurred post mortem.

Mandible: complete but has been fractured in the region of the right canine, angle and left ramus.

Teeth: Maxillary - all the permanent teeth are present except the right canine which appears to have been lost before death since the socket has, in part, been resorbed.

Mandibular - all permanent teeth are present

The anterior teeth, both maxillary and mandibular, as well as the first molars show marked uneven wear (5) with dentine exposure. The first and second molars show only enamel wear.

3a

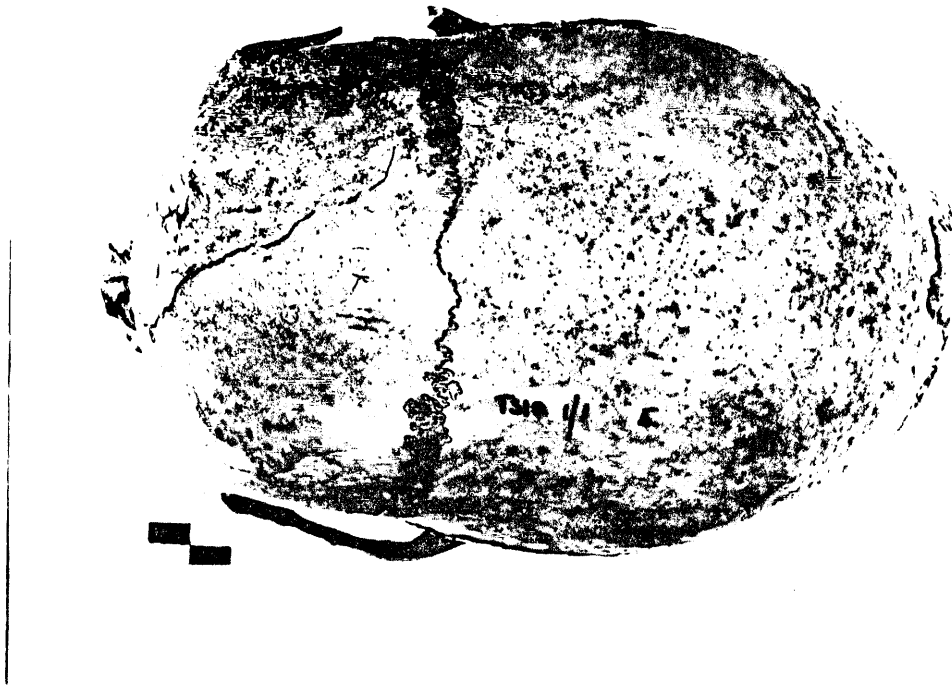


Plate 50

Schroda area 2: Burial 2AA.3(i).1. Topview of skull.



Plate 51

Schroda Area 2 : Burial 2AA.3(i).1. Side view of well preserved skull.

Post cranial remains

Axial: complete vertebral column including sacrum. The lower thoracic lumbar vertebrae are somewhat damaged and fragmented.
manubrium and fractured sternum
50 ribs and rib fragments

Appendicular: Scapulae (damaged)
clavicle (2)
humerus (2)
radius (2)
ulna (rt distal extremity missing, left shaft fractured, distal extremity complete)
8 metacarpal and 15 carpal bones
os coxae (fractured and fragmented)
femur (2) - right diseased
tibia (2) left, more or less complete
right, fragmentary
fibula (2) fractured and fragmented
patella (2)
9 tarsal and 9 metatarsal bones
32 phalanges

Hyoid bones - right greater cornu missing

Animal vertebrae

The individual represented by these remains is fully adult and probably male with an estimated maximum living stature of 169.7 cm (based on length of humerus, radius, tibia and estimated length of femur).

The pelvic bones are too fragmented for accurate measurement but the nonmetrical features of the os coxae and sacrum (i.e. greater sciatic-notch, size of acetabulum, auricular surface of sacrum) are masculine in character. The femoral head diameter is 44.8 mm. In addition, although the mastoid process is small, the supramastoid crest shows marked development and the superior orbital margin is blunt - the latter being features of the male cranium. Age at death, based on molar wear, was between 25 - 35 years.

The skeleton is that of a fairly robust individual and the right femur shows chronic osteomyelitis, the left femur is plalymeric (index 77.1%) i.e. shows flattening associated with undernutrition, the linea aspera, however, is well developed (pilasteric index 111.8%).

The cranial and mandibular characteristics, metrical and non-metrical, correspond closely with those of the South African Negro male.

Unusual features are a bilateral foramen of Huschke, a small mound type torus palatinus confined largely to the palatine bone and osteoarthritic changes in the right atlanto-occipital joint.

TSR 1/1 2.2AA.3(i).3

Cranium: Cranium consists of 2 frontal bones - fractured and fragments of parietal and occiptal bones, greater wing and part of lesser wing (left) of the sphenoid; 2 petrous temporal bones, fragments of maxillae, 2 zygomatic bones.

Mandible: Left half of corpus and left ramus

Teeth: deciduous - maxillary - the crowns of the 4 incisors molars also a small portion of the crown of the left permanent molar (left)

deciduous - maxillary - 2 medial and 1 lateral incisor and 2 molars (1st and 2nd left)

Post cranial

Axial: rib 8 and 10 fragments

Vertebrae: 43 arches (rt and lt)
12 bodies

Apendicular: clavicle (rt and lt)
scapula (lt)
humerus (rt and lt)
radius and ulna (lt)
femur, tibia, fibula (rt and lt)
25 metacarpal/tarsal/phalanges
ilia rt and lt
isschium rt

The remains are those of a very young infant, probably died at birth or was still born -the age estimated is based on observation that only the crown of the incisor teeth have calcified.

TSR 1/1 2.2B.5.2

Cranial remains: the greater part of the occipital bone and the two parietal bones, a fragment of the frontal bone and a fragmented left half of the mandible.

Teeth: Deciduous mandibular molars and canine; these teeth are in part contained in their sockets, an isolated left lateral mandibular incisor.
Permanent mandibular tooth crowns of first permanent molar and left lateral incisor both these crowns are in situ.

Post cranial: fragments of the femora, tibiae and fibulae; fragment of left ilium, fragment of left talus, fragment of humerus and vertebrae also a fragmented scapula and metatarsals.

The remains are those of a child of approximately 5 years of age - this estimation is based on the development of the permanent tooth crowns present in the jaw.

It is not possible to assess the sex of the individual represented.

Although the parietal and occipital bones are somewhat distorted, a reconstruction of the cranial vault show the parietal (chord/arc index 89.9%) and occipital (chord/arc index 85.1%) curvature to be slight. A slight curvature of the vault is a Negroid rather than a Khoisanoid characteristic.

The remains of this individual are, however, very fragmentary and a positive identification of the population group is not possible.

Area 6

TSR 1/1 6.A2.2.1

A fairly complete infant skeleton

Cranium: The cranium, with the exception of the base, is

6a



Plate 52

Schroda Area 6: Burial A2.2.1. Top view of skull.

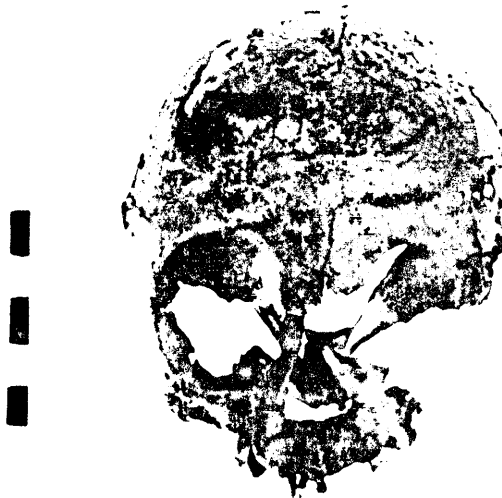


Plate 53

Schroda area 6 : Burial A2.2.1. Frontal view showing distortion to face.

virtually complete but fragmented and distorted.

Mandible: The mandible, likewise, is all but complete - the right condyle is broken in part and the body has been fractured in the region of the canines (bilaterally).

Teeth: Maxillary - the deciduous canines have erupted (the left central incisor is missing but the state of the socket is such as to suggest that this loss had occurred post mortem) The crowns and the greater portion of the roots of the first molar had been formed. The crowns, the second deciduous molar and the first permanent molar are also present

Mandibular - the central incisors are fully erupted but the lateral incisors as well as canines and deciduous first molars are only in part erupted. The second deciduous molars and the first permanent molars are represented by their crowns only.

Post cranial skeleton

Axial: ribs 6 and 6 fragments

Vertebrae: body of one vertebra

Appendicular: left radius and ulna (rt and lt)
humerus (rt and lt)
tibia (rt and lt), fibula (rt and lt)
(lt), ilium (rt)
15 phalanges
pisiform
right malleus

The individual represented is an infant of between 6 to 9 months, as judged by the dentition and epiphyses, the greater sciatic notch is wide, suggestive of a female infant rather than of a male.

The hypsiconcl orbits, the antero-laterally directed frontal process of the right maxilla, the mandibular features and dimensions as well as the large tooth crowns suggest a Negro infant.

B. PONT DRIFT (TPD 1/2)

TPD 1/2 2.2B.5.1

A crushed and distorted skeleton

Cranium: the cranium although crushed and distorted is all but complete

Mandible: is defective anteriorly, that is the incisor-canine region is missing

Teeth: Maxillary - deciduous incisors (one medial, two lateral) and canine as well as molars permanent, crowns of first molar in situ

Post cranial

Axial: arch elements and bodies (+ 5 crushed) of all vertebrae including sacrum

Ribs: complete but crushed and fragmented

Appendicular: scapula (rt and lt)
humerus, radius, ulna (rt and lt)
femur (rt and lt) tibia and fibula (rt)
ilium, ischium and pubis rt and lt
metacarpal/tarsal bones 12
phalanges 19

The individual represented is an infant of between 1½ and 2 years, as judged by the dentition and epiphyses - an apparently wide greater sciatic notch suggest a female. The final skeleton is too fragmentary to permit comment on the population group.

C. GLENNEL

BGL 1/1 A24.1.1

A crushed and fragmented skeleton

Cranium: The cranium is complete except for the left zygomatic arch and the base - the cranium especially the facial skeleton has been severely crushed, fractured and distorted.

Mandible: The mandible is complete except for the condyles, but like the cranium has been distorted and fractured in the region of the symphysis menti, also on left between the second premolar and first molar and the right between the canine and first premolar.

Teeth: Maxillary - all permanent teeth are present (third molars are unerupted (except the left lateral incisor which appears to have been lost post mortem.

Mandibular - all the permanent teeth are present - the third molars and unerupted

Post cranial remains

Axial: Vertebrae (17 fragments) and sacrum; ribs (8 fragments)

Appendicular: humerus, radius, ulna, femur, tibia and fibula are present but fractured and fragmented
fragmentary os coxae
13 metatarsal bones
3 carpal bones and 4 sesamoid bones
animal rib

The individual represented is a juvenile. That is, between the ages of 10 and 12 years and the apparently wide sciatic notch suggests a female. Although the skull has been crushed the recognisable features (e.g. deep palate, large teeth) are essentially Negro in character.

BGL 1/1 A25.1.1

A fairly complete skeleton

Cranium: on the right side fragmentary frontal and parietal bones, the occipital bone is damaged and the entire left side of the cranial vault and base are missing. The facial skeleton likewise is defective on the left side - the roof, lateral wall of the orbit and zygomatic bone are missing.

Mandible: The mandible is complete but for the left condyloid and right coronoid processes. The right condyle is damaged on its medial aspect

Teeth: Maxillary - Incisors are missing, and only the roots of the canines are present - the premolars and molars are, however, complete and in situ. The sockets of the anterior teeth are likewise complete suggesting that these teeth are lost after death.

Mandibular - Teeth are all present.

Both the maxillary and mandibular first molars show wear with dentine exposure. The remaining teeth exhibit enamel wear only.

Postcranial: Hyoid bone

Axial: 23 vertebrae and fragments
sacrum
36 ribs and rib fragments
manubrium and sternum

Appendicular: Humerus (rt and lt)
radius + ulna (rt and lt)
femur + ulna (rt and lt)
tibia, 2 patellae, 2 fibula (rt and lt)
10 carpal bones, 9 metacarpal + 12 phalanges
14 tarsal bones, 9 metacarpal + 11 phalanges
3 rodent and bird bones
2 ostrich egg-shell beads

The individual represented by these remains is fully adult with an estimated maximum living stature of 169.5 cm (based on femur tibia, humerus, radius, ulna).

Cranial and pelvic features are indicative of a male : ischio-pubic index is low (83%). The sciatic notch is narrow, auricular surface of the sacrum is related to 2½ sacral vertebrae, femoral head diameter is 45.7 mm., supra-orbital margin is blunt, mastoid process medium in

size and supra mastoid crest markedly developed.

Age at death: 20 - 25 (based on molar wear).

The robust femur is eurymeric and with only a slight development of the linea aspera. The tibia likewise shows no flattening and is eurycnemic.

The metrical and non-metrical features of the skull of this individual are essentially Negro in character.

BGL 1/1 A25.1.2

Cranium: 10 fragments of cranial vault bones
1 petrous temporal bone

Postcranial

Axial: 35 arches/fragments
18 bodies/fragments
6 ribs/14 fragments

Appendicular: humerus rt and lt
ulna rt
scapula (rt complete lt fragment only)
os coxae (rt and lt ilium)
metacarpal 1
phalanges 2

The individual represented by these remains was in infant probably in the first month as judged by the size of the long bones and ilia.

Sex, possible female, the sciatic notch is wide. It is not possible to assess the population group.

BGL 1/1 A 26.1

A crushed and fragmented skeleton

Cranium: The cranium is crushed, fragmented and distorted - consisting of 48 fragments of the vault bones; 5 fragments of the base; crushed right zygomatic bone and both maxillae - these are damaged and distorted and 2 nasal bones.

Mandible: The mandible consists the greater part of the body fractured in the region of incisors. On the left side the anterior border of the ramus, coronoid and condyloid processes are present but the angle is missing. The right ramus, although fractured in the region of the coronoid and condyloid processes as well as at the angle is complete except for its posterior border.

Teeth: Maxillary:

Right: Incisor, canine, premolar roots are in situ - the crowns have been broken and lost.

Left : Lateral incisor, canine and premolar are present but the crowns are fractured.

Mandibular:

Right: 3 molars and 2nd premolar

Left : 3 molars, 2 premolars and canine
the crowns of the 2nd premolar and canine are damaged and in part missing.
The premolar and first 2 molars show wear with dentine exposure.

Postcranial: the postcranial skeleton is represented by - in part, crushed and fragmented remains - of the vertebrae, the ribs, sacrum and os coxae; the clavicles, scapulae, humeri, radii, ulnae. Patellae, femora, tibiae and fibulae
6 carpal and 9 tarsal bones as well as fragments of metacarpal bones phalanges.

A potsherd and fragment of animal bone are also included.

The bones are chalky and very friable.

The individual represented as fully adult at the time of death, that is between the age of 25 and 35 years. The estimation of age is based on the degree of molar wear.

The os coxae were too damaged for an accurate assessment of sex - the everted left mandibular angle is, however, suggestive of a male.

The cranium was too crushed and distorted for measurement.

The preserved features of the maxillae and mandible are Negroid in character, i.e. the frontal processes are directed anterolaterally and the hard palate appears to have been deep.

The metrical features of the mandible correspond with those of the Negro male.

BGL 1/1 A27.1.4

Cranium: The cranium is fragmented and crushed and represented by fragments of cranial vault bones and petrous temporal bones.

Teeth: central incisor and four molar crowns

Post cranial

Axial: two fragments of vertebrae and a rib fragment, four fragments of long bone.

The individual represented is an infant of between 6 and 9 months of age as judged by the calcification of the tooth crowns. It is not possible to comment on the sex and population group.

BGL 1/1 B26.1.1

Cranium: The cranium has been crushed and fractured and distorted - and is represented by fragments of frontal, parietal and occipital bones; the petrous and squamous parts of the temporal bones; the greater and lesser wings of the sphenoid bone, a fragment of the body of the sphenoid; the left half of the maxilla (the frontal process being absent) as well as a fragment of the anterior part of the right alveolar process.

Mandible: the left half as well as the right coronoid process

Teeth : Maxillary - incisors, canines, right second premolar, first and second molars and left second premolar and first molar are missing. All these teeth with the exception of the incisors appear to have been lost post mortem. Absorption of the central incisor sockets indicates that these teeth were lost before death.

Mandibular - the incisor, canine and first premolars are missing but the state of the corresponding sockets suggest that this loss occurred after death.

The Maxillary and mandibular teeth (except the M3s) show marked unequal wear (5 to 5+) with dentine exposure and the M3s show 2+ wear (Brothwell, 1963).

Post cranial skeleton

Axial

Vertebrae: Atlas, axis and 2 cervical
6 thoracic and fragments of 6
5 lumbar
Sacrum

Manubrium

34 ribs and rib fragments

Appendicular: clavicle (rt, lt)
Scapula (fragments of rt, lt)
Humerus, radius, ulna, femur, tibia
fibula, patella (rt, lt)
os coxae (damaged)
carpels 3
calcaneum, talus, navicular (rt, lt)
cuboid, 2 cuneiform, 3 metatarsals and 7 phalanges

All vertebral bodies show marked osteo-arthritic changes- pronounced lipping.

Also numerous bone flakes and fragments; 2 fragments of animal bone.

The individual represented was a fully adult male with an estimated maximum living stature of 161 cm (based on femur, humerus, tibia, fibula).

The cranial and pelvic features suggest a male - the os coxae were too damaged for measurement but the greater sciatic notch is relatively narrow. The femoral head diameter of 41.6 mm falls in the female range; the cranial muscular markings are well developed, in particular the supra mastoid crest and the skull dimensions correspond closely with the SA Negro male mean values (Table I).

The age at death based on molar wear was between 35 - 45 years. Neither the femur (eurymeric) nor the tibia (Eurycnemic) showed the flattening associated with under nutrition and the femoral linea aspera was well developed.

The characteristics, metrical and non-metrical, of this cranium and mandible correspond closely with those of the South African Negro male.

The left tempromandibular joint and condyle show evidence (like the vertebrae) of osteo-arthritic changes and on the inner aspect of the left mandibular angle there is evidence of myositis ossificans.

BGL 1/1 C25.1.1.1.1

Cranium: Small fragments of vault bones (13); right zygomatic bone fragment of right petrous temporal bone.

Mandible: fragment of the body containing incisors, right canine and 2 molars, and fragments of left ramus and condyle

Teeth: deciduous - mandibular incisors, canine and molar crowns as well as three maxillary molar crowns

permanent - crowns of the right maxillary central incisor and four molars.

Post cranial: fragments of femoral shafts
fragment of a rib
fragment of metacarpal
fragment (6) of animal bone
fragment of shell

The individual represented by these remains is an infant probably between 4 to 6 months of age. The remains are too fragmentary to permit assessment of sex or population group.

BGL 1/1 D35.1.1

Cranium: The cranium is represented by 17 small fragments of bone. The tympanic and mastoid parts of the left temporal bone are preserved and show the mastoid process to be small and the tympanic plate to be moderately well developed.

Postcranial: Hyoid bone - the right greater cornua is missing

Axial: 28 vertebrae, fragments and sacrum - here the right lateral mass is missing.

Appendicular: a clavicle (proximal extremity missing)
fragments of scapulae
fragments and incomplete os coxae

humerus incomplete rt and lt

radius incomplete rt and lt

incomplete rt, 3 carpal, 7 metacarpal bones

femur incomplete rt

tibia fragmented and incomplete rt and lt

fibula fragments of right and left

patella rt and lt

calcaneum + 4 tarsal, 3 metatarsal bones, 16 phalanges many small flakes of bone as well as 3 fragments of animal bone.

The individual as represented by these remains is a fully adult and female as judged by the size of the mastoid process (small), the diameter of the femoral head (42.2 mm), the auricular surface of the sacrum and the greater sciatic notch. The estimated maximum living stature of 160 cm is based on the reconstructed length of the humerus and radius. From these remains it is not possible to estimate the age at death.

The femur is eurymeric and shows only a slightly developed linea aspera (pilasteric index = 100.7%).

The tibia is eurymeric

The fragmentary nature of the skull makes an assessment of population group impossible.

BGL 1/1 D36.1.1

A fragmented and crushed skeleton

Cranium: The vault has been crushed and fragmented. Most of the facial skeleton and base are missing.

Mandible: consists of the greater portion of the outer table of the right ramus, a fragment of the left angle

Teeth: fragments of the premolar and three molars

Postcranial

Axial:

Vertebrae: Thoracic 10 or parts thereof
lumbar 5
sacrum 5 pieces

Ribs: 32 fragments + 3 all but complete ribs
manubrium

Appendicular: Clavicle fragments, rt and lt
scapula fragmentary, rt and lt
humerous, rt and lt shaft and distal extremities
radius, lt and rt fragmented
ulna, lt proximal extremity and shaft, and fragments

Hand Bones: 9 carpals and 2 metacarpals
os coxae rt and lt ilium, ishium + pubis
femur, rt and lt fragmented shafts
tibia, rt and lt fragmented,
fibula, rt and left fragmentary

Foot Bones: rt and lt calcaneum, talus, navicular,
cuboid 5 cuneiform, 1 sesamoid, 2 metatarsals, 9
phalanges

The individual represented by these remains was an immature female, at the time of death probably between 10 to 12 years of age - the epiphyses have yet to fuse and the roots of the second molar teeth are incompletely formed. The non-metrical and metrical features of the pelvis (triangular obturator foramen, wide and shallow greater sciatic notch, an apparently

obtuse sub-pubic angle and an estimated ischio-pubic index of greater than 100) are those of a female rather than a male.

The crushed and fragmentary condition of the skull make an assessment of population group impossible. The femur is platymeric with a well developed linea aspera but the tibia is eurycnemic.

Glennel remains marked Glennel: BGL 1/1

Comprise:

- a) hand and foot bones of an adult : 5 metacarpals, 5 metatarsals, 23 phalanges, 5 carpals and 6 tarsals (including fragment of calcaneus)
 - portion of sternum
 - fragment of acromion
 - 1 coccygeal vertebrae
 - Teeth BGL 1/1
 - 1 lateral incisor relatively unworn
 - 6 incisors showing marked attrition with dentine exposure
 - 1 animal tooth

BGL 2/1

Tibiae (rt and lt) of an adult individual. These bones are lightly constructed and suggest a female. The maximum living stature estimated is 164 cm - for a female and 167 cm for a male. The tibiae are eurycnemic and thus show no flatterning.

- a) immature individuals:
 - 2 vertebral bodies
 - 3 metacarpals and 1 phalanx
 - 1 talus
- b) 1 fragment of pottery (glazed)
- c) fragment of frontal bone

Summary of burials

<u>Age</u>	<u>Sex</u>	<u>Population group</u>
35 - 45 years	male	Negro
25 - 35 years	? male	Negro
25 - 35 years	? male	Negro
20 - 25 years	male	Negro
Adult	female	?
Adult	?	?
Adult	?	?
Immature	?	?
10 - 12 years	female	? Negro
10 - 12 years	? female	Negro
About 5 years	?	? Negro
6 - 9 months	? female	? Negro
6 - 9 months	?	?
4 - 6 months	?	?
1½ - 2½ months	? female	? Negro
1 - 2 months	?	?
About 1 month	? female	?
? Stillbirth	?	?
1½ - 2 years	? female	?

References

- BROTHWELL D.R. (1963) Digging up bones. British Museum (Natural History) London.
- DE VILLIERS H. (1968) The skull of the South African Negro. Witwatersrand University Press.
- (1973) Human skeletal remains from Border Cave, Ingwavuma District, Kwa Zulu, South Africa. Ann. Transvaal Mus. 28: (13): 229-256.
- (1974) Bushman Rock Shelter, Origstad, Eastern Transvaal, South Africa. J. Hum. Evol. 3: 387-396
- (1976) A second adult mandible from Border Cave, Ingwavuma District, Kwa Zulu, South Africa. S. Afr. J. Sci. 72: 212-215.
- DREMAN M.R. (1937) Archaeology of the Oakhurst Shelter, George IV. The children of the cave dwellers. Trans. R. Soc. S. Afr. 25: 281-293.
- GENORES (1959) Diferencias sexuales en el hueso coxal Instituto de Historica, Mexica.
- LISOWSKI F.P. (1968) Osseous characteristics of the femur and tibia indicating malnutrition or racial differences. XVIII International Congress Anthropological and Ethnological Sciences Tokyo and Kyoto. Volume I.
- RIGHTMIRE G.P. (1970) Iron Age skulls from Southern Africa re-assessed by multiple discriminant analysis. Ameri. J. Phys. Anthrop. 33: 147-167
- THIEME (1957) Sex in Negro skeletons. J. For. Med. 4: 72-81.
- TROTTER M., and GLESER G.C. (1958) A re-evaluation of the estimation of stature based on measurements of stature taken during life and long bones after death. Amer. J. Phys. Anthrop. 16: 79-123
- WATSON E. H., and LOWREY G.H. (1969) Growth and development of children. 5th Edition. Year Book. Medical Publishers Inc. Chicago.
- WELLS L.H. (1931) Growth changes in the Bushman mandible. J. Anat. 66: 50-63.

TABLE 1. CRANIAL AND MANDIBULAR MEASUREMENTS AND INDICE (biometrical symbols)

	BGL 1/1 C24.1.1		TSR 1/1 2.2AA 3(1)	BGL 1/1 A25.1.1		SA Negro Male Means	SA Negro Female Means		
DC	25.9		30.8	29.2		23.5	22.7		
IOW	22.1		24.8	24.4		19.7	18.9		
O ₁	38.8		40.6	37.0		39.4	38.0		
O ₂	32.2		34.2	34.4		33.6	33.3		
100 O ₂ /O ₁ M	82.9	Mesoconch	84.2	92.9	Hypsiconch	85.6	87.3		
NH	50.4		50.8	56.6		49.5	47.0		
NB	25.9		26.8	26.4		27.6	26.6		
100 NB/NH P.	51.3	Platyrrhine	52.7	46.6	Mesorrhinic	55.8	57.1		
Max-alv L	51.6?		55.1	57.2		55.4	57.1		
Max-alv-B	66.8		67.3	64.9		64.0	61.2		
100 M.AL/M.AB b	129.4		122.1	113.4		116.1	114.9		
1									
6 ₁	47.0		48.6	47.8		48.9	47.0		
6 ₂	41.5		38.1	37.7		38.1	36.4		
100 6 ₂ /6 ₁	88.2	Mesostaphyline	78.3	4 L	78.8 L	78.2	77.3		
palatal	12.0		10.0	torus	14	6 9m	1 2m	12.9	12.2
Mandible		BGL 1/1 A26.1				TSR 1/1	TSR 1/1		
					6.A2.2.1	1.B1.4.1			
cyl	20.7	21.1	23.3	22.9	8.7	9.4	19.9	18.3	
crh	56	59?	66	66	30	30	59.6	53.3	
rl	56	56?	61.0	61	27	27	57.6	51.9	
rb	31.8		38.4	38.3	23.9	21.2	35.2	33.1	
100 rb/rl	56.7		62.9	55.4	88.5	78.5	61.4	63.9	
cpl	72		84	85	45	45	80.9	76.8	
H at M	26.8	31.1	33.2	33.2M ₁	14.9	14.3	28.8	27.7	
thickness M ₁	13.4	16.6	14.7	14.9	10.5	9.4	14.5	13.1	
Robust I. M ₁	50.0	51.7	44.2	44.8	70.4	65.7	47.2	47.1	

L = Leptostaphyline

TABLE 1 (continued)

	BGL 1/1 C24.1.1	BGL 1/1 A26.1	TSR 1/1 2.2AA.3(i).1	BGL 1/1 A25.1.1	TSR 1/1 6.A2.2.1	TSR 1/1 1.B1.4.1	SA Negro Male Means	SA Negro Female Means
H at M ₂	26.7	27.6	29.1	M2 29.1	15.1	14.1	25.7	24.5
thickness M ₂	17.3	17.3	15.9	16.8	11.4	10.1	15.1	14.9
Robust I M ₂	64.7	62.6	54.6	57.7	75.7	71.6	59.0	61.3
W ₁	31.1?		39.4	39.1	19.1	18.8	34.7	33.1
thickness h ₁	11.6		13.9	13.9	9.4	10.8	13.5	13.5
Robust I h ₁	37.2		35.2	35.5	49.2	57.4	39.4	42.2
W ₁	121.1?		121.0?	121.4?	77.1?	66.4	114.7	109.4
CrCr	100.7?		104.8?	105.3?	67.6?	56.1	92.9	88.5
gogo	94.4?		92.6?	90.6?	52.9?	47.8	91.3	84.2
zz	44.0?		43.9?	44.1?	35.8?	30.5	46.0	44.8
ML	134 ^o		135 ^o	133 ^o	151 ^o	135 ^o	120.6	125.0
ml	120		109	109	62	58	107.5	103.9
L	185		194	184?			186.3	180.8
B	135		126	-			134.2	122.0
100 B/L	72.9 Dolicho cranial		64.9	-			72.1	73.2
H ¹	136		135	-			133.2	128.6
H ¹ /L	73.5 Ortho cranial		69.5	-			71.5	71.5
H ¹ /B	100.7 Acro cranial		107.1	-			99.4	97.3
OH	120		128	-			112.5	109.5
100 OH/L	64.8		58.1	-			60.4	60.3
B ¹	94		100	-			97.7	94.0
100 B ¹ /B	69.9 Eurymetopic		79.3	-			72.8	71.9
U	520		524	-			514.1	502.6
Q	310		292	-			299.7	292.9
S	385		383	-			372.0	338.0
S ₁	137		131	-			129.6	127.1

TABLE I (continued)

	BGL 1/1 C24.1.1	TSR 1/1 2.2AA.3(i).1	BGL 1/1 A25.1.1	SA Negro Male Means	SA Negro Female Means
S ₂	127	130	-	128.0	123.7
S ₃	121	122	-	114.5	114.1
S ₁ ¹	118	112	-	113.3	110.7
S ₂ ¹	116	119	-	115.4	112.3
S ₃ ¹	102	100	-	96.9	95.8
100 S ₁ ¹	86.1	85.4	-	87.6	87.0
100 S ₂ ¹ /S ₂	91.3	91.5	-	90.2	91.0
100 S ₂ ¹ /S ₃	84.2 Moderate curvature	81.9	-	84.7	84.2
fml	33.7	34.5	35.4?	36.7	31.0
fmb	29.0	32.5	30.5?	29.5	28.4
100 fmb/fml	86.0	94.2	86.1	80.2	81.0
1 G H	69.8	70.5	69.1	66.6	63.5
GH	119.4	116.7	115.5	116.3	100.1
J	129	135	-	129.4	121.8
GB	97.9	96.4	101.3	94.4	90.0
100 G H/JM	54.1	52.2	-	51.6	52.5
100 GH/ J L	92.2	86.4	-	89.9	90.7
100 B/J	72.8	74.0	-	75.6	77.9
LB	120	110	99.7	101.3	96.8
GL	100	112	102	102.5	98.2
100 GL/LB	98.0 Mesognathous	101.8	102.3	101.2	101.7
Inner Bi.orb B	96.5	101.3	-	100.4	96.9
Outer Bi.orb B	103	110	-	108.2	103.9