

KLIPFONTEINRAND 2:
A SIGN OF THE TIMES

by

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HONOURS PROJECT submitted in partial
fulfilment of the requirements for the
B.A. (Hons.) degree in Archaeology at
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ARCHAEOLOGY

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'EMANCIPATE YOURSELF FROM
MENTAL SLAVERY,
NONE BUT OURSELVES
CAN FREE OUR MINDS...'

BOB MARLEY FROM THE
ALBUM 'UPRISING', 1982. ISLAND RECORDS, INC.



BUT
571
NACK

(CAPE ARCHIVES)



THE SHELTER OF KLIPFONTEINRAND 2

DIGITISED

13 JUL 2016

ABSTRACT

Archaeological research into the late Holocene in the western Cape has been directed towards the question of pastoralism and its effect on the local gatherer-hunters. Consequently a model has arisen out of this research and observations have been built around it to create a supportive picture of the past. Evidence from Klipfonteinrand 2 (KFR2), in the absence of radiocarbon dates, appear to contradict an important aspect of this model, ie. that adzes are predominantly found in the last 2000 years. This questioning could lead to the reviewing of this "pastoralist-package" and its validity. Furthermore, the KFR2 sequence is hoped to add to that of Klipfonteinrand 1, in order to complete the culture history of the area, in the light of the fact that the upper stratigraphic horizons of Klipfonteinrand 1 was disturbed.

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CHAPTER 1

INTRODUCTION:

Klipfonteinrand is a rocky outcrop situated in the Cedarberg in the Clanwilliam district, about 240km north of Cape Town (Fig. 1). The outcrop is located close to a geological and vegetation interface (Taylor, 1978), which is visible nearby. The Bokkeveld/Table Mountain Supergroup interface matches well with the Karoo/ Fynbos ecotone in the area. The sandstone ridge of Klipfonteinrand, harbors two prominent cave sites, Klipfonteinrand 1 (KFR1) and Klipfonteinrand 2 (KFR2), which lie within 50m of one another, (Plate 1), on the coordinates 32° 04' south 19° 08' east (3219AA PAKHUIS map). This general region of the Olifants River catchment- basin has been subjected to extensive archaeological research, especially in the field of rock art; the farm of Boontjieskloof, by now well-known archaeologically (Yates; Golsen and Hall 1983, Johnson; Rabinowitz and Sieff 1959, Maggs 1967), lies within a few kilometers of Klipfonteinrand (Fig. 2).

Both KFR 1 and KFR 2 have been excavated by the University of Cape Town's Department of Archaeology and have been shown to contain substantial deposits, of which KFR 1 is the deeper. In fact, the latter has a cultural sequence that can be traced back to the "Middle Stone Age" (Thackeray, 1977). The "Later Stone Age" lithic material from this site has been analyzed by Anne I. Thackeray as an Honors project (Thackeray, 1977). The smaller cave, KFR 2, with which this project is concerned, was excavated as part of the Spatial Archaeology Research Unit's bedding and ash programme, geared towards understanding late Holocene settlement and subsistence strategies in the western Cape.

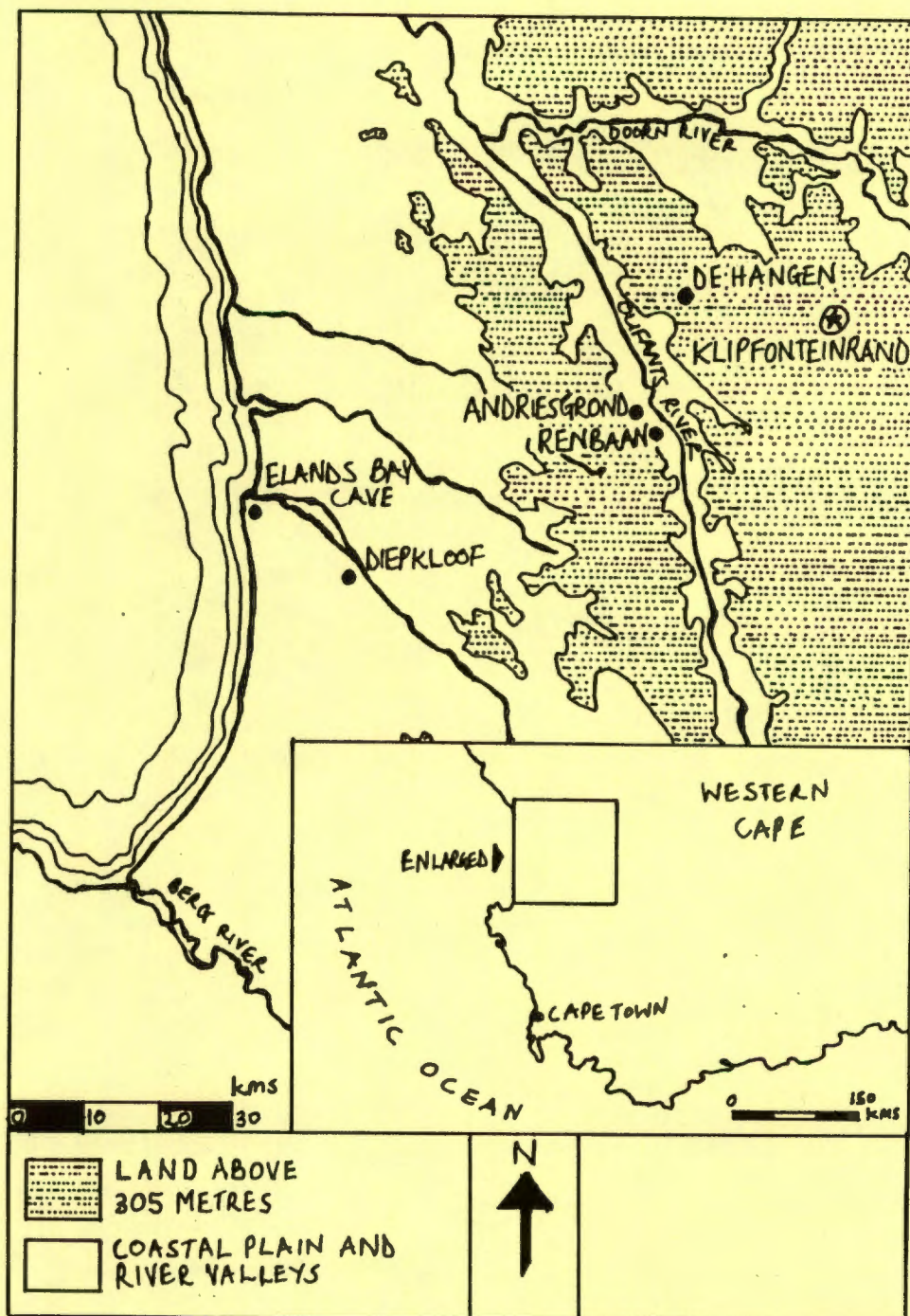


FIG. 1. KLIPFONTEINRAND IN RELATION TO SOME PROMINENT CAVE SITES IN THE WESTERN CAPE

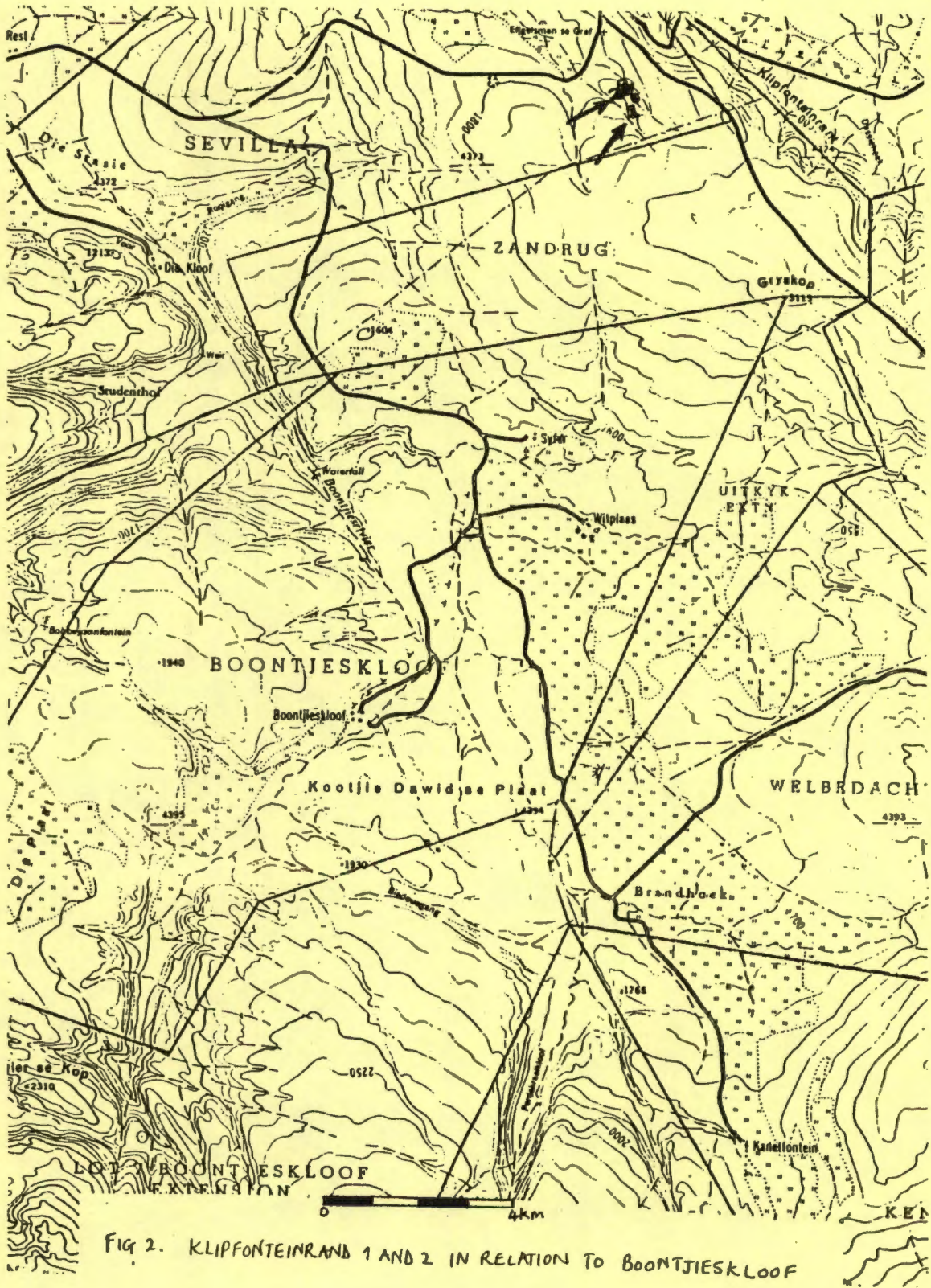


FIG 2. KLIPFONTEINRAND 1 AND 2 IN RELATION TO BOONTJIESKLOOF

The excavation of KFR 2 was conducted in two seasons. The first, in which I participated, was carried out in June/ July 1987 under the direction of John Parkington and Cedric Poggenpoel with student volunteers from the University of Cape Town. A second excavation was undertaken in February 1989 by myself, with the assistance of Royden Yates, Tony Manhire and Michael Taylor, in order to complete the excavation of two one metre squares and to collect suitable charcoal samples for radiocarbon dating.

Structurally the two cave sites of Klipfonteinrand appear similar: both sites have a N to NE orientation, both are fronted by large talus slopes on which numerous stone artefacts and pottery are scattered and both contain panels of rock art. On closer inspection^{however} though, it appears that the surface deposits in KFR 1 have been disturbed. This is noted by Thackeray (1977), who stated that the farmer had removed the top horizons of the deposit in KFR 1 to accommodate his sheep and goats in a "kraal". A radiocarbon date of 5500 BP was recorded for the top of the KFR 1 deposits (Parkington, 1980), while a burial in the deposit, dated to 3500 BP was located somewhat below the levels with this date (Thackeray, 1977). The burial is assumed to have been dug in the more superficial deposits which have subsequently been removed. The Late Stone Age material analysed by Thackeray (1977) therefore includes the earlier half or a portion of the early to mid- Holocene period. The cultural sequence of KFR 1 is thus incomplete.

The analysis of the material from KFR 2 allows us the opportunity of "matching" the two cultural sequences and establishing a longer Holocene-sequence. Due to the fact that KFR 2 shows no sign of any major disturbance, as observed in KFR 1, and its close proximity to the bigger



PLATE 1. KLIPFONTEINRAND: 1 - KFR1

2 - KFR2

NOTE THE TALUS SLOPES IN FRONT OF THE SITES

cave, it is speculated that both sites contained partially contemporaneous deposits prior to the disturbance of KFR 1 and that they can subsequently be accepted to represent one "place" (Parkington, 1980), although separate entities in their own right. The primary objective of this project is thus to attempt the construction of a Klipfonteinrand- sequence, aimed at the Later Stone Age material or later Holocene time- period.

A secondary, and no less important aim considers KFR 2's status as a "bedding and ash" site. Sites so described usually have a spatial arrangement within the shelter of bedding arranged along the back wall around a central ash body, the latter being commonly termed the main ash concentration (Parkington and Poggenpoel 1971, Manhire 1984, Kaplan 1987, Parkington et al 1986, Parkington 1987).

This pattern of site use, along with the dominant appearance of adzes and pottery fragments in most cave sites post- dating 2000 BP, is considered to document a settlement response by gatherer- hunters to the appearance of pastoralism in the western Cape (Parkington 1980; 1984, 1987, Parkington et al 1986). Further observations that excavated samples display a distinct correlation between adzes, woodworking debris (in the form of woodshavings) and highly visible plant material, has led to the argument by Parkington (1984) that adzes became more common in the last 2000 years in the western Cape, because woodworking increased, especially in the mountainous regions of the Cape Fold Belt. This dominance of adzes in this specific time- period is perceived as related to the entry, and settlement, of herders on the coastal plains, thereby forcing gatherer- hunters to "retract" into the relatively less accessible mountain areas.

1986
would
have
been
a better
reference

Tied into this model of a move into a more marginal environment is the increase in stress on the gatherer- hunters, which in turn led to the increased practice of ritual, and consequently increased rock- painting in small cave sites located in relatively isolated places (Parkington et al, 1988). This scenario of adzes, plant food residue, woodworking, pottery, bedding and ash deposits and juxtaposed rock paintings are all believed to be a reaction to the appearance of pastoralism 2000 years ago in the western Cape (Parkington, 1980).

The excavated deposits from KFR 2 span the "pre- and post- pottery" period. Radiocarbon dates show it to have deposits associated with the mid- to late Holocene, thereby contributing vital knowledge of this period, which is as yet missing from the Cape Fold Belt. This deposit contains adzes which possibly predate the entry of herders, seriously questioning the validity of the post- 2000BP model, as the latter is based on a lot of short "sequences" and information from open sites. The scenario of the last 2000 years appears extremely vulnerable when compared to the data from KFR 2. The analysis of the material from KFR 2 could force the re- evaluation of this model, opening new avenues of discussion and research.

CHAPTER 2

BACKGROUND

This chapter is brief and is concerned primarily with a summary of Anne Thackeray' analysis of the excavated material from KFR1 (Thackeray,1977) to allow a comparison with KFR 2 later. The rest of the chapter will concentrate on reviewing the research pertaining to the last 4000 years in the western Cape, especially the entry of pastoralists in the last 2000 years.

KFR 1 was excavated in 1969 by John Parkington from UCT, with the help of students. The cave measures 12m across the mouth and about 9,5m from the rear wall to the dripline (Thackeray, 1977). Seven 1m x 1m squares, of the 17m² area examined, were dug to bedrock. A general lack of visible natural stratigraphy within the area excavated led to the allocation of arbitrary spits to the excavation. The spits which contained most of the LSA material, as assessed by Thackeray, are located in the uppermost portion of the site, specifically Spits 3 to Horizons Above Spit 1 (see Fig. 3) (Thackeray, 1977). Thackeray also points out that the farmer had disturbed the talus slope and the surface of the cave deposit for dung. The farmer had apparently kept his goats and sheep in the cave, which acted as a makeshift "kraal", from which he collected dung. During the practice of the latter, the farmer appeared to have removed the top or near- surface horizons of the deposit.

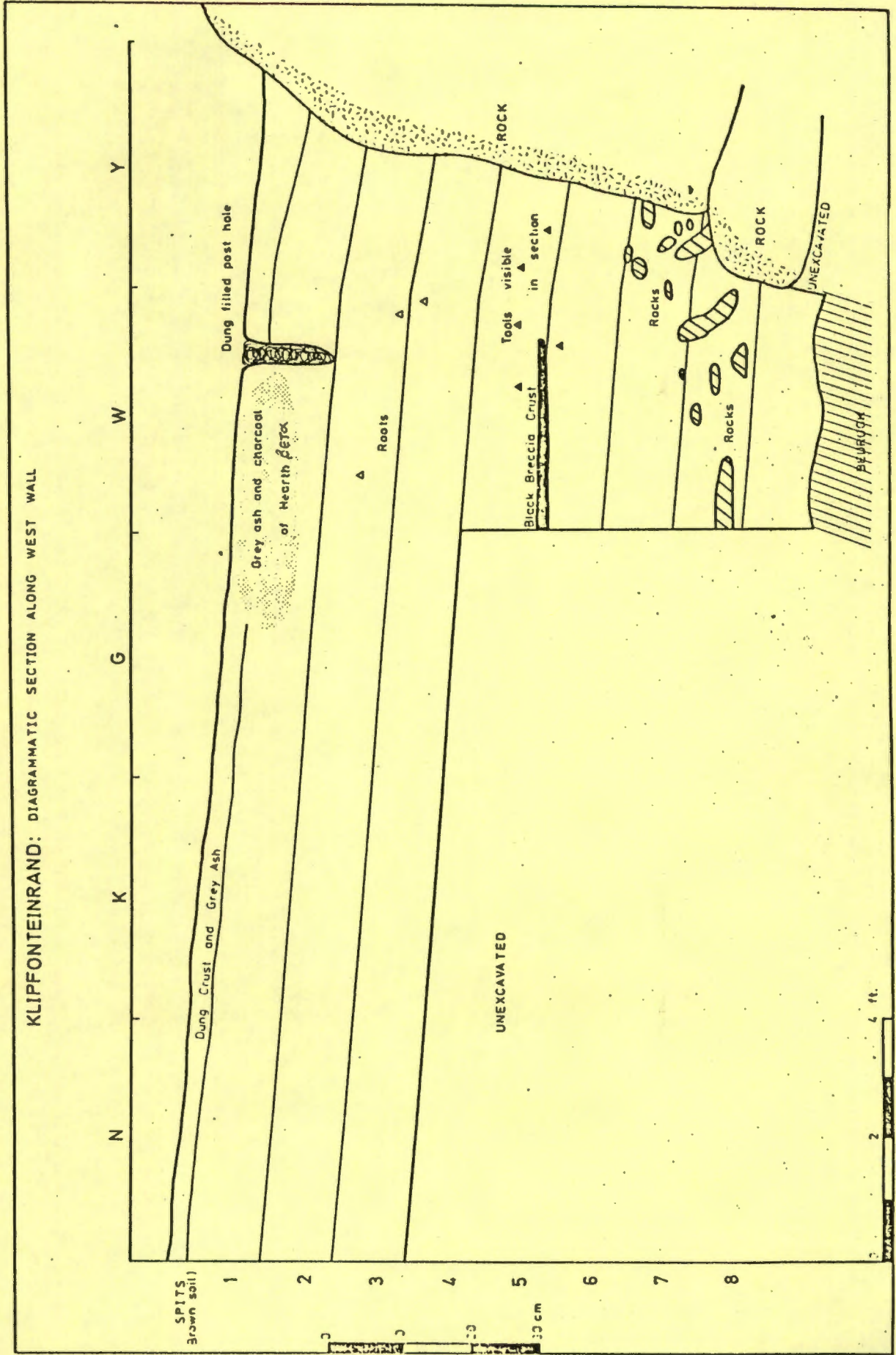


FIG. 3. THE STRATIGRAPHIC SEQUENCE OF KLIPFONTEINRAND 1
(after Thackeray, 1977)

A burial was excavated from the site in 1969 (Parkington and Poggenpoel, 1971) and this was later dated to $3540 \pm 60\text{BP}$ (Pta 1642) (Thackeray, 1977). The burial was discovered in Spit 1 and deemed to be contemporary with the uppermost or missing deposits. The radiocarbon dates, one of $5570 \pm 70\text{BP}$ (Pta 2475) for HAS 1 and another of $8680 \pm 110\text{BP}$ (Pta 4531) for Spit 3, show that only the earlier half of the Holocene is represented in the site. Thackeray (ibid) notes that the farmer's disturbance is quite visible and fairly extensive at places. not available
to AIT

It is possible that the burial in Spit 1 may have occurred within the site without further deposition of any major sediment after 5500BP, but Thackeray's observations and the radiocarbon dates appear to confirm the idea of a disturbance.

In the absence of radiocarbon dates, Thackeray had proposed that the analysed sequence covered a time span of 7000 years, from 2/ 3000BP to 9/ 10 000BP. The radiocarbon dates on the other hand demonstrate a 3000 year span for the LSA- deposits. Thackeray also anticipated a cultural continuum from Spit 3 to HAS 1. The changes in this continuum are perceived as minor and constantly changing and therefore *not* sufficient enough to be construed as a change in function or activity.

The most obvious changes in the stone artefact assemblage are the decreasing use of quartzite and hornfels and conversely the increased use of silcrete, CCS and quartz. Thackeray attempted to fit the KFR 1 sequence into the Cultural Systems Ontogeny model, proposed by Janette Deacon to describe the sequence of Wilton Large Rockshelter- a type site of the Wilton in the eastern Cape (Deacon, 1972).

From Thackeray's work, one can derive the following information about the lithic assemblage:

- 1) scrapers dominate HAS 1, as well as the total assemblage, the former contains 92 scrapers to 7 adzes,
- 2) pieces esquillees are ranked 2nd highest at 39 (25,7%), 3) overall the assemblage is dominated by scrapers, followed by bipolar cores and then adzes, the latter does not appear to feature prominently in the last 8000 to 5000 years at KFR1.
- 4) backed pieces of any kind, and segments in particular, are relatively uncommon throughout.

Thackeray's attempt to model the KFR 1 sequence according to the Ontogeny- scheme seems to be a product of the research at the time. Mazel (1987) identifies it as forming part of the New Archaeology approach, which; in a sense; portrayed the humans of the archaeological record as "passive actors" responding to external changes usually brought on by environmental changes. Most research done in the 1970s and early 80s was conducted under this functionalist framework. Present research is moving away from the positivist/ empiricist nature of these type of studies, as more scholars become aware of its limitations in interpretation.

Just as studies under the banner of the New Archaeology suffered from the problems of contextual influences, so it must be accepted that the present social, political, economic and personal context in which research occurs, affects the manner in which the research is done today. In order for us to understand the nature of present studies, it is therefore necessary to examine the history behind that research. Consequently, the

information in this project was derived from a continuously changing research programme being conducted in the western Cape.

When it was first initiated, the major issues were concerned with seasonality and mobility (Parkington, 1976). These issues led to the idea that gatherer-hunters spent the winter months in the mountains and moved to the coast in the summer. A pattern of a yearly cycle of seasonal transhumance therefore dominated research interpretations for the subsequent years (see Mazel, 1978 for a good example)

Research expanded to cover more spatial issues under the auspices of the Spatial Archaeology Research Unit (SARU) and the concerns became increasingly centered around stone tool variability (Kaplan, 1987). The latter is presumed to reflect changing activities through time (Parkington, 1980). The emphasis was on time and place, the latter being defined as "space given meaning", implying the occupation of space or sites by humans. Although changes in the archaeological record was still being interpreted in terms of environmental conditions and resource availability (Manhire et al 1984), a more behavioural approach to the LSA was being adopted.

Judy Sealy's (1984) research on isotopic data from skeletons found in archaeological deposits has seriously drawn into question the idea of seasonal mobility. Although seasonality is still deemed as "acceptable", the reliance in such data to explain changes in the archaeological record today is highly speculative.

Through the years of research a model has slowly been constructed concerning the appearance of herders on the coastal plains of the western Cape in the last 2000 years and the response of the gatherer-hunters to

this invasion. Observations from the sites of De Hangen (Parkington and Poggenpoel, 1971), Andriesgrond Cave, Renbaan Cave (Kaplan, 1987), Tortoise Cave (Robey, 1984), Diepkloof (Parkington, 1976: Parkington and Poggenpoel, 1987), shell middens along the coast and further inland (Buchanan 1984) and the deflation hollows and Sandveld kopje assemblages (Manhire 1984), all contributed to the model of gatherer- hunters being "forced" into the Cape Fold Belt, where they had to adapt their settlement patterns to small isolated caves, increasing their emphasis on small food parcels and adopting a settlement strategy of retreat and isolation in a marginalised terrain (Parkington, 1987: Parkington *et al* 1986).

CHAPTER 3

EXCAVATION AND ANALYSIS OF CULTURAL MATERIAL

This chapter deals with the details of the excavation, the stratigraphy, dating and analysis of the material remains from Klipfonteinrand 2 (KFR 2).

EXCAVATION:

KFR 2 was excavated in two seasons. The first occurred in July 1987 under the direction of John Parkington, and the second in February 1989, under the direction of Royden Yates and Anthony Manhire.

KFR 2 is eroded out of sandstone and is a relatively long and shallow rock shelter. The portion of the shelter containing deposit (Fig. 4 and Plate 2) measures 11 metres across the mouth and roughly 6 metres deep at its deepest point. The shelter faces in a N to NE direction on the coordinates 32° 04' south 19° 08' east. The roof of the site itself is very low, approximately 1,5m high at the mouth (Plate 2) and slopes down and back to a point where the excavator has to lie down in order to excavate. The part of the site which does have enough space to allow comfortable movement does not appear to contain any significant archaeological deposit,

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FIG. 4. KLIPFONTEINRAND 2: PLAN OF CAVE AND EXCAVATION

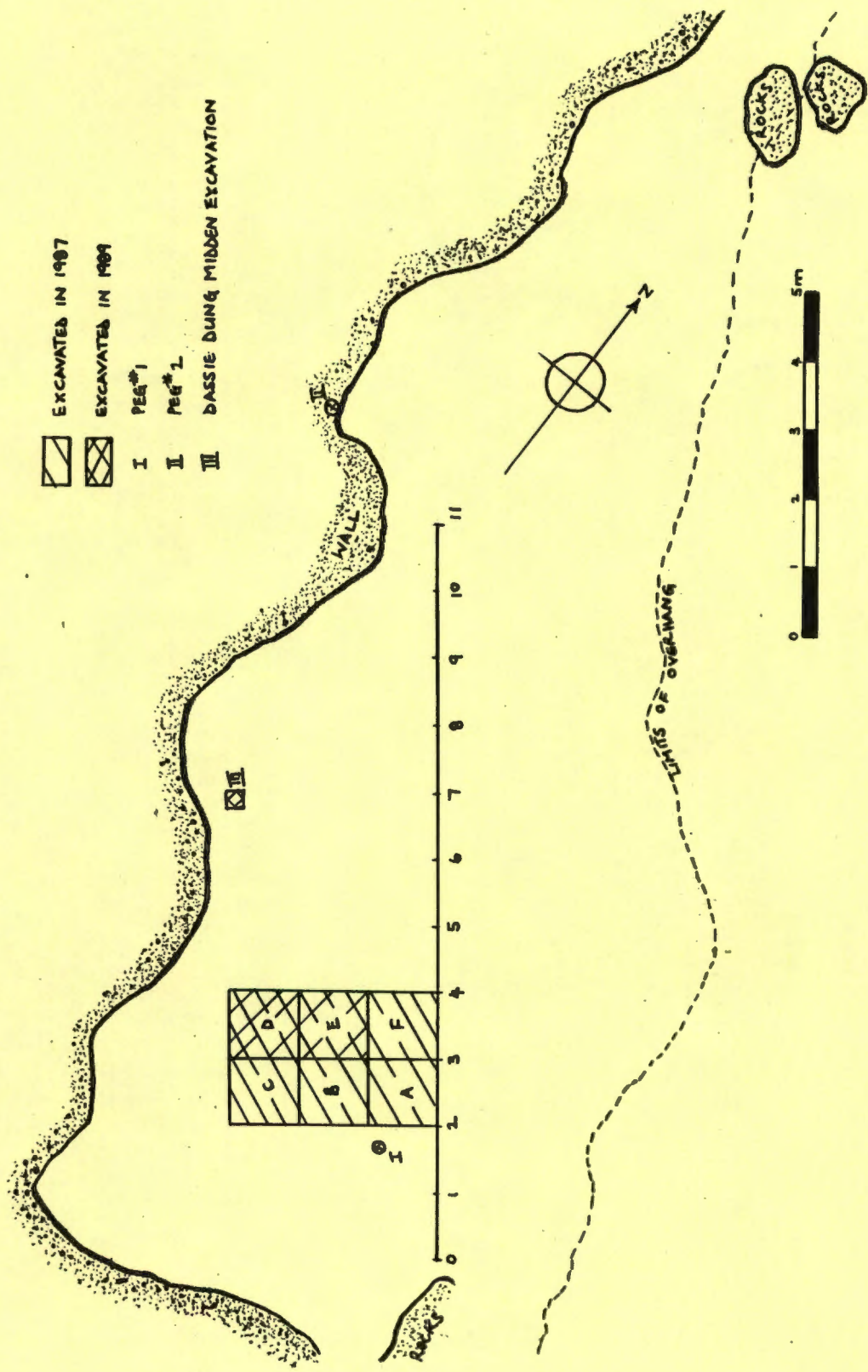




PLATE 2. A VIEW OF THE INTERIOR OF KFR 2

1 - AREA OF EXCAVATION

2 - BASSIE DUNG MIDDEN

3 - ROCK ART IMAGES

NOTE THE LOW ROOF

if one compares it to the area of excavation. The former is located in the general area of III in Fig. 4, where the deposit was found to consist of a dassie dung matrix. This "midden" was excavated in a 30cm square to a depth of 72cm, with sediment samples taken for possible palynological research. No evidence of any archaeological remains (ash, stone tools, bone, etc.) was found in this excavation.

The shelter is fronted by a large talus slope (Plate 1), which makes the site easily accessible. The talus slope is relatively artefact- rich, especially in phyllite reamers, adzes and pottery (Parkington, 1980). The part of the site which does not contain any deposit (trailing off to the right in Fig.4) has several rock art images, which include handprints (Plate 3). Ashy deposits seem to trickle out at the mouth of the cave and are very noticeable as one approaches the site. The site is continuously in shade during summer, except for very early in the morning, and hardly any rain enters the site, in the area excavated.

Of the two excavations undertaken at the site, the first was spatially more extensive than the second, although the latter was deeper (Plate 2). Archaeological exploration occurred in a 6m² area in 1987 (Fig. 4). These 6 squares, marked alphabetically A to F, were further subdivided into 16 smaller squares each.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

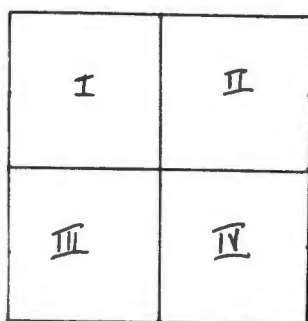


PLATE 3. SOME OF THE HANDPRINT IMAGES AT KFR2

Most of the deposit was removed in 25cm² units. The deposit was mostly sorted at the site, after being sieved through 3mm and 1,5mm sieves. Some of the excavated material, however, was bagged in bulk- form and brought back to the laboratory at

UCT. All the excavated material was sorted into various categories of stone, bone, etc. to facilitate further analysis. No section drawings were made at the time and only limited recording of the different stratigraphic layers occurred.

In 1989 the excavation was continued by myself and 3 others in order to complete the details and to dig at least one square to bedrock. The excavation was concentrated on squares D and E (Fig. 4) as these were the squares deepest dug in 1987 (Plate 4). The squares were subdivided into 4 smaller squares each, 50cm x 50cm each:



in order to link up with the pattern of the 1987 excavation. Square E was dug to bedrock, roughly 1.1m below the surface, (Fig. 5), and square D dug to about 0.5m below surface. The excavation had to be concluded at this depths due to the presence of a large rock perched between squares D and E, which threatened to collapse on the excavator standing in square E (Plate



PLATE 4. THE 1989- EXCAVATION OF KFR 2.

SQUARE E LIES AT THE FRONT, WHILE SQUARE D
LIES AT THE BACK OF THE PICTURE.

NOTE THE ROCKS BETWEEN THE SQUARES.

4). All the excavated material was sieved through a 1,5mm sieve and bulked. No sorting was done at the site, and barring several rocks/ spalls, all the sieved material from the site was brought back to the laboratory for sorting and further analysis. Two wooden pegs, presumably used for hanging up leather bags in pre-colonial times, were also removed from cracks in the roof of the site, which are to be radiometrically dated for future research.

STRATIGRAPHY:

Extensive burrowing by termites, rodents, etc. has led to the situation whereby that a portion of the deposit in KFR 2 has been churned to the point that it appears homogeneous. A termite burrow was in actually exposed when the backfill plastic was uncovered from the 1987 excavation. Because of the complication of burrowing, noted at other sites (see especially Robey 1984), the natural stratigraphy of the site was "changed". This lead to different units being mixed with one another, forming bigger units. The depth of these natural stratigraphic units was therefore such that they were dug in spits. The arbitrary spits were thus integrated with the natural stratigraphy of the site and formed subdivisions of them. The stratigraphy described below is far more complicated than the description presented , but to ease the understanding thereof, it has been generalised into the grosser excavated units of the natural stratigraphy. What follows is thus a description of squares D and E, which formed the focus of both seasons of excavation.

The 1987 Season:

This season's excavation led to the removal of the relatively "undisturbed" stratigraphy in the excavated area. Although the excavation was undertaken over 6m², it appears to have been focussed on squares D and E, concentrating apparently on the removal of an extensive bedding patch, which dips sharply downward in the deposit from the back of the cave towards the front (Fig. 5 and 6).

After cleaning off a thin surface layer, a dung crust (DC) was removed over several of the 6 squares. This unit was rich in dassie dung pellets and seemed quite thin in places, especially toward the front of the cave. A hearth (HbDC) was discovered immediately below the dung crust and was removed separately. Although this hearth is centred in square E, it does not extend over the entire square and is limited to square B and a part of E.

A bedding patch found in squares C and D was found to dip below this Hearth (HbDC) into square E, in a basin-like manner. Another hearth with burnt dung (OHBD) was removed in square E. The stratigraphic relationship between OHBD and the bedding patch (BP#1) is uncertain. The base of OHBD is marked by a brown sand unit (BSbOHBD) which has a thin layer of charred bedding at the bottom of it. It was felt that HbDC and OHBD actually led to this scorching of the bedding. This fine line of burnt bedding rests on a layer of light brown soil (LBS) which overlies BP#1. An orange hearth (10H), the first of the spit levels, was removed slightly above LBS.

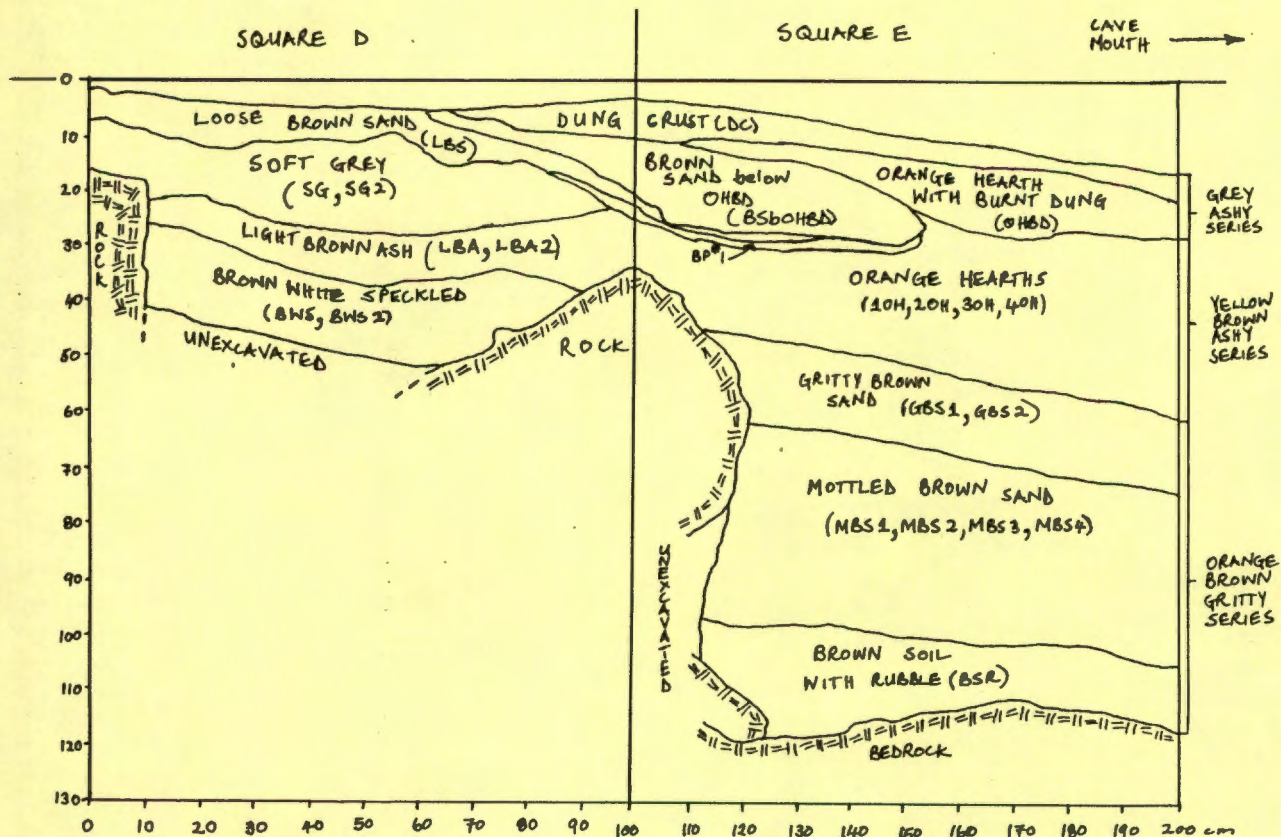


FIG. 5. GENERALISED SECTION-DRAWING ALONG NORTH-WEST-ORIENTATION

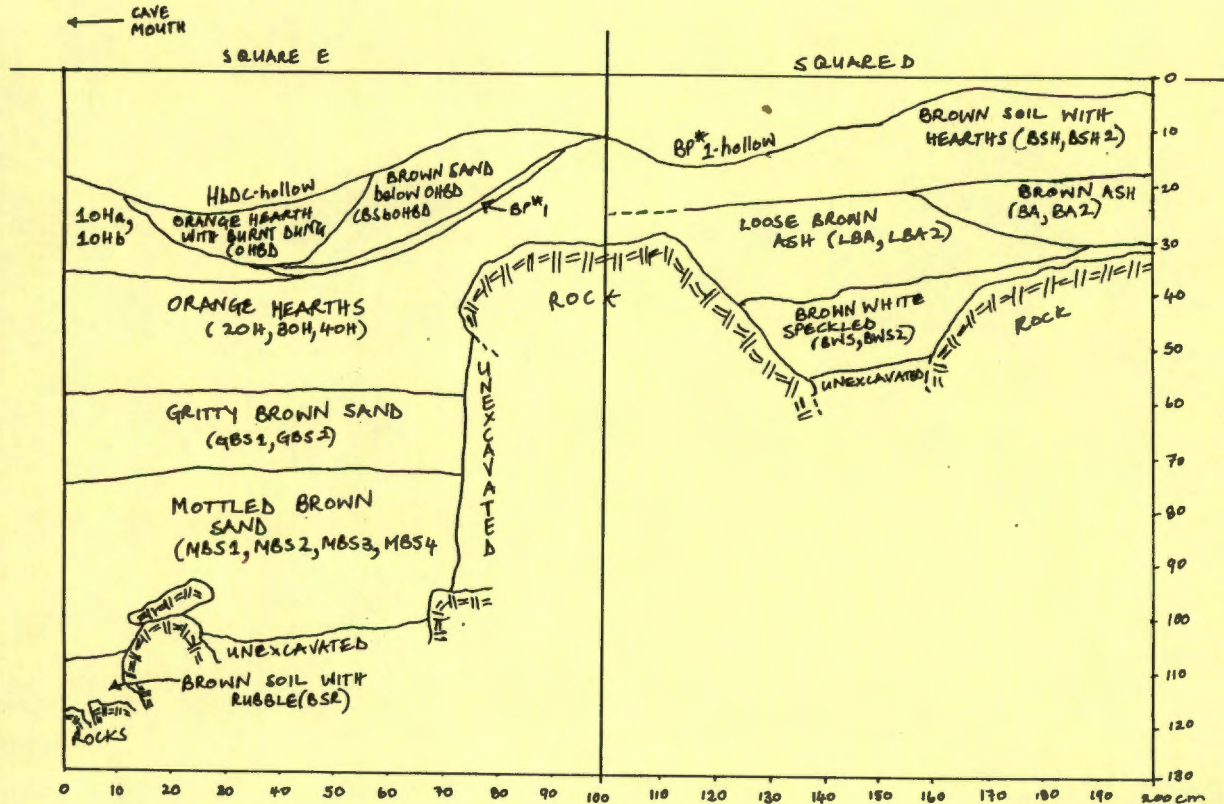


FIG. 6. GENERALISED SECTION-DRAWING ALONG SOUTH-EAST ORIENTATION

It appeared that the spit-dug hearth of 20H, below 10H, could be associated with BP#1, as the hearths of HbDC, OHBD and 10H overlie BP#1 without any marked effect, such as the charring mentioned earlier. Further spits dug as 30H and 40H seem to confirm the idea that Sq. E was an "established" hearth area. The orange hearths appear to have been oxidised and have been subject to substantial post-depositional disturbance through burrowing.

Further excavation exposed a grittier layer, though somewhat similar in colour to the orange hearths, termed Gritty Brown Sand (GBS1). After the removal of this layer the excavation was stopped for the season. Once the orange hearths were encountered, the excavation in Sq. E had taken on a bench-like form with only the subsquares 1, 2, 5, 6 and 11, 12, 15, 16 being removed, leaving the other half intact.

The 1987 season established the upper half of the KFR2 sequence as a bedding-and-ash deposit, similar to many other small sites found in the mountainous regions (see references cited in Chapter 1). Kaplan (1987) also refers to bedding patches at Renbaan Cave merging with Orange speckled hearths. A radiocarbon date from these hearths at Renbaan Cave was dated to $1910 \pm 60\text{BP}$ (Pta 3783). Mention is also made of a similar situation at Andriesgrond Cave (Kaplan, ~~ibid~~). Although the picture of KFR2 is unique to the site itself, it appears that it conforms to the general trend of bedding-and-ash sites stratigraphically.

The 1989 season:

Square E:

The retention of moisture by the backfill-plastic, laid down in 1987, and the misreading of the 1987 fieldnotes, led to the levelling and removal of the units 10Ha and 10Hb in EI and EIII. It was later realised that the 1987 fieldnotes indicated the removal of the entire 10H from square E. The material from these "mistaken" units has however been analysed as 10H, after it was decided that the units of 10Ha and b was indistinguishable stratigraphically from the unit of 10H dug in 1987.

I still don't follow this

The bench-like feature left in 1987 was therefore excavated in a similar fashion to the earlier season. The units 20H and 30H showed a marked difference in the quantity of cultural remains retrieved, in comparison with 10H. Except for the general lack of plant remains, 20H and 30H had substantially more material remains than 10H.

As the excavation continued through the orange hearths spits (dug in 8cm units), the deposit gradually became grittier and browner, as one reached the GBS1 spit. By the time a new series of spits were reached, Mottled Brown Sands (MBS), the cultural finds had notably diminished, accompanied by the increase of roof-spalls and the encountering of rootlets for the first time in MBS1. The subsequent layers of MBS 2-4 were dug in 10cm spits in view of this apparent decrease in human occupation. The MBS-deposit is marked by an increase in the number and size of roof-spalls, as well as the more frequent finding of roots and rootlets. The last unit, Brown Soil with Rubble (BSR) seemed devoid of human occupation and was dug as a 20cm spit to bedrock. Spalls in this layer often exceeded 15cm in size. Due to the lack of substantial amounts of charcoal and other

cultural remains, this unit appeared "redder/browner" than those above. Bedrock was uncovered in square E at a depth of 1.1m below the surface of the site.

Square D:

The excavation in square D was achieved by standing in square E, as the close proximity of the roof to the deposit hampered "easy" excavation of the back square. Square D was excavated from the units of LBS/BP# 1 onwards, and two spits called Soft Grey (SG and SG2) were dug. White flecking of what appears to be gypsum, occurs in SG. This decreased in the second spit (SG 2), as some patches of humified geophyte corm castings, possibly *Iridaceae* species, were encountered in the excavation.

Problems arose when the units of Brown Soil with Hearths (BSH and BSH2) were dug in D1 and III. They appeared to grade into the SG units, and were later found to have cut horizontally across a sharp decline in the deposit in DI. This sudden dip in the deposit remains inexplicable as the units of Brown Ash (BA and BA2) were dug to correct the error of the sudden truncation. Below the units of SG, BSH and roughly continuous with BA, the layers of Loose Brown Ash (LBA, LBA2 and LBA 2 ext.) were dug. These units represent what could possibly be termed the units of most intense human occupation in the excavated part of the site. These layers are fairly charcoal rich and contain a particularly high number of adzes, several of which have mastic traces. These grey ash bodies seem roughly continuous with the orange hearths identified in square E, LBA even shared a stratigraphic marker-label with 20H. There appeared to be no visible

stratigraphic break between these layers so that no conclusion can be drawn about their relationship.

possibly they are contemporary?

Below the LBA layers there was a very noticeable decrease in the number of adzes found. This layer, Brown White Speckled (BWS), is named after what appeared to be gypsum, and seemed to differ in content from the LBA units only in the absence of adzes and the white speckling. A preliminary test by Ute Seeman confirmed the speckling as being gypsum (CaSO_4^{2-}). The gypsum speckling continued into BWS2, as well did the lack of adzes and other formal tools. These units do however contain a relatively more substantial number of botanical materials than previous layers. At this point it was decided to terminate the excavation due to the danger posed by rocks separating the squares of D and E.

Due to time and financial constraints it had been decided not to remove single isolated hearths as separate units, although the more prominent ones have been noted in the fieldnotes. Such hearths occurred in the units of 20H and LBA2.

DATING and CORRELATION:

At present there are 5 radiocarbon dates available from KFR 2 and they are as follows:

<u>Lab.no.:</u>	<u>Date BP:</u>	<u>Material:</u>	<u>Levels:</u>
Pta 5063	1430 \pm 50	Charcoal	OHBD
Pta 5065	1800 \pm 45	Charcoal	10H
Pta 5076	3480 \pm 50	Charcoal	30H
Pta 5072	4030 \pm 60	Charcoal	BWS
Pta 5074	4280 \pm 70	Charcoal	MBS3

From the evidence of the radiocarbon dates above, it seems that the KFR2 sequence spans a time-range of roughly 4500 years, representing a series of discontinuous human occupations. The pattern is therefore one of periods of intense human occupation separated by periods of less or no occupation in the site. This idea of "pulses" of human occupation (Parkington in press) is evident from the radiocarbon dates. Two prominent pulses are visible, while the 2000- 3000 BP period is lacking in any radiocarbon dates from the site and is presumed to be missing, indicating a possible hiatus.

The first pulse of occupation occurs around 3300 to 4400 BP, with three dates falling into this time range. Although it was not possible to collect any substantial charcoal samples for dating purposes from the basal unit of BSR, it has been accepted that these three dates, mentioned above, are synchronous with the greatest amount of sediment in the excavation. Between the two dates of 3480 \pm 50BP (30H) and 4280 \pm 70BP (MBS3) in square E, 45¹/₈ buckets of deposit were removed, which could be accepted as

evidence for a more- or- less continuous rate of sediment deposition in the site and a pulse of human occupation lasting about a 1000 years.

The second apparent pulse seems to occur in the post- ceramic levels with the dates of $1800 \pm 45\text{BP}$ (10H) and $1430 \pm 50\text{BP}$ (OHBD). These dates correspond with the most accentuated part of the deposit, in terms of stratigraphic clarity. This pulse represents the bedding- and ash period of gatherer- hunter occupation in the western Cape.

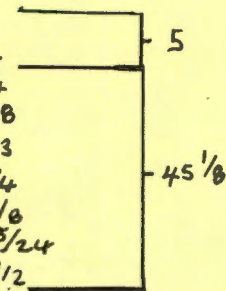
A preliminary analysis of the volume of deposit (Table 1) between this pulse and the previous one shows that during a period of roughly 1600 years, between 3480BP and 1800BP, 5 buckets of deposit were laid down, compared with the $45\frac{1}{8}$ buckets laid down in about 800 years slightly lower down in the deposit. The possibility of a hiatus occurring between 10H and 30H should therefore be considered extremely likely. If this hiatus does exist, it is speculated to occur in or between 10H/ 20H or between 20H/ 30H.

The understanding of this hiatus would be crucial if one is to consider that the LBA- units are roughly contemporary with the 20H/ 30H/ 40H levels in a stratigraphic sense. As mentioned earlier, the units of LBA appear to represent the most intense period of human occupation within the excavated area of the site. The fact that it is adze- rich contributes to its importance, especially in terms of its relationship with the post- ceramic levels and the notion of the association of adzes with pastoralist activities in the western Cape (as mentioned earlier).

The lack of direct dating for LBA or LBA2 clearly represents a problem in square D, as the relationship of the LBA- units to the BWS-

Table 1. BUCKET NUMBERS FROM KFR2

SQUARE D		SQUARE E	
UNIT:	f	UNIT:	f
Surface	1	Surface	1 $\frac{3}{4}$
DC	1	DC	3 $\frac{3}{4}$
UCP	$\frac{1}{2}$	HbDC	2 $\frac{1}{2}$
LBS	$\frac{1}{2}$	OHBD	4
BP*1	9 $\frac{3}{4}$	BSbOHBD	3 $\frac{3}{4}$
SG	1	BP*1	6 $\frac{1}{8}$
SG2	1 $\frac{7}{8}$	1OH	$\frac{1}{2}$
BSH	2 $\frac{1}{4}$	2OH	4 $\frac{1}{2}$
BSH2	1	3OH	9 $\frac{1}{4}$
LBA	5 $\frac{1}{4}$	4OH	8 $\frac{3}{8}$
LBA2	4 $\frac{1}{4}$	GBS1	5 $\frac{2}{3}$
LBA2 ext.	1 $\frac{1}{4}$	GBS2	3 $\frac{3}{4}$
BA	1	MBS1	4 $\frac{7}{8}$
BA2	1	MBS2	6 $\frac{5}{24}$
BWS	5	MBS3	7 $\frac{1}{2}$
BWS2	2 $\frac{1}{2}$	MBS4	3 $\frac{3}{4}$
		BSR	6 $\frac{3}{4}$
		*LBS	3 $\frac{1}{4}$



* LBS TO BE INCLUDED BEFORE BP#1

units and the OH- levels cannot be resolved on a stratigraphic basis. Radiocarbon dating from this layer is consequently quite crucial for our understanding of the late Holocene cultural sequence in the western Cape, and a sample has been submitted for the dating of this unit. Results are, at this point however, still pending.

The most immediate correlation with other radiocarbon dates from other sites is with KFR 1. Three dates from KFR 1 represent what is known of the LSA- component of the site (Table 2). The two earliest dates from KFR 1 fall prior to any in KFR 2, but the latest date of 3540 ± 60 BP from a skeleton matches closely with the KFR 2 sequence. The problem is, however, that the deposits possibly associated with this burial are missing from KFR 1. It is assumed that such deposits existed prior to the farmer's disturbance. If one accepts this, it follows that KFR 1 and KFR 2 did at one point contain partially contemporary deposits. However, the present situation is that the only existing material in KFR 1 predates that in KFR 2.

Other corresponding dates come from the sites of Renbaan cave, De Hangen and Andriesgrond Cave (Table 2). Similar "hearth- type" areas from these sites date to 1910 ± 60 BP, 1850 ± 50 BP and 1640 ± 50 BP respectively. This seems to correlate well with the Orange hearth area of KFR 2, of which the uppermost unit, 10H, dates to 1800 ± 45 . Although the abovementioned dates do not all correspond in terms of what one would call the "Main Ash Concentration" or "MAC", the dates represent areas which appear to be used as fire- places and may be similar to that of KFR 2.

TABLE 2. RADIOCARBON DATES FROM THE WESTERN CAPE FOLD BEL

RENBAAN CAVE

Lab.No:	Date BP:	Material:	Levels:
PTA-3768	1150 ± 50	Grass Bedding	Bedding Patch
PTA-3783	1910 ± 60	Charcoal	Orange Speckled
PTA-3766	5430 ± 70	Charcoal	Brown Sand with Charcoal

DE HANGEN

Lab.No:	Date BP:	Material:	Levels:
PTA-127	1850 ± 50	Charcoal	Hearth Above Bedrock
PTA-125	380 ± 45	Charcoal	Main Ash Concentration
PTA-167	90 ± 50	Charcoal	Grass Layer
PTA-188	458 ± 45	Charcoal	Main Ash Concentration
PTA-126	350	Charcoal	Main Ash Concentration
PTA-346	390 ± 45	Grass Bedding	Grass Layer

485?

another?

ANDRIESGROND CAVE

Lab.No:	Date BP:	Material:	Levels:
PTA-2480	1640 ± 50	Charcoal	Charcoal Flecked
PTA-2482	430 ± 50	Charcoal	Main Ash Concentration

KLIPFONTEINRAND1

Lab.No:	Date BP:	Material:	Levels:
PTA-2475	5570 ± 70	Human Bone	Spit 1
PTA-1642	3540 ± 60	Charcoal	Brown Sandy Soil

± 8600

?

MATERIAL REMAINS FROM KFR2

This section encompasses the description of the excavated material from KFR 2. In an attempt to draw a correlation between the stratigraphies of squares D and E, and to help sort out the problems presented of the relationship of the LBA- units, all the described material was separated in these squares and analysed. as such.

Non cultural material;

Flora:

Preservation of the botanical remains was such that very little identifiable material was collected from the excavation. The only plant materials retrieved in any significant amounts were the grass bedding of BP#1. This contains large numbers of corm-casings from underground plants. It was decided not to remove any of these from the bedding, as it would be analysed later in separate research.

The grass bedding, all removed as BP#1, is of a very "thick" nature, occurring in large wads. The bedding appears to become more fragmented as it dips into the deposit. At its lowest point in square E, it was in fact described as fragmented bedding. This fragmentation may be a function of preservation. From the description of the bedding at De Hangen (Parkington and Poggenpoel, 1971), it seems that the KFR 2- bedding is very similar, except that it contains large amounts of corm- casings, sticks, etc. No inflorescences were found on any of the bedding. Bedding from Renbaan Cave

and De Hangen were dated to $1150 \pm 50\text{BP}$ and $390 \pm 45\text{BP}$ respectively. Kaplan (1987) also presumes that bedding becomes more fragmented with time. BP#1 at KFR 2 seems to be overlain slightly by 10H, which has a date of $1800 \pm 45\text{BP}$. The bottom of the bedding could therefore predate 1800 BP, and possibly pastoralist presence in the western Cape. This is however highly speculative, for there is at present no concrete evidence for grass bedding predating 2000BP in the Cape Fold Belt of western Cape.

Although patches of humified corm casings have been noted in areas such as SG2 and BWS, these are of such a fragmented character that it does not seem to be identifiable at a species level. It is however presumed that they may be *Iridaceae* corms and represent food debris. It has been decided to forego this part of the analysis due the problems involved in the identification of the samples. An analysis of the plant material contained in the grass bedding could, however, provide better prospects.

Faunal remains:

The faunal remains from KFR 2 are extremely fragmented, the biggest piece measuring about 10cm. All the macrofauna appear to be broken into very small pieces, of which the majority is unidentifiable. Due to this severe fragmentation, it was decided that an adequate yardstick was needed to measure the amount of bone. Weight was deemed sufficient enough a measure and all the excavated bone was weighed (in grams) and kept separate in terms of the square of origin.

It was assumed that, because of the high degree of fragmentation and the general lack of evidence for carnivore- activity, as well as other

agents), that all the macrofaunal bone, including tortoise, was the result of human occupation. Although other agents cannot be discounted, it was felt that this assumption would facilitate easier analysis. This broad generalisation obviously does not dismiss the fact that in reality the process of bone accumulation in the site is of a far more complex nature, involving both human and non-human agents of deposition.

All the excavated faunal material from the site was sorted into the categories of i) diagnostic, ii) tortoise, iii) microfauna and iv) adiagnostic components, and each weighed separately. Two basic assumptions were made in the analysis of this data:

- 1) all the diagnostic, adiagnostic and tortoise bone probably result from human activity,
- 2) the microfaunal remains may have been deposited by non-human agents, possibly owls.

The faunal remains were then analysed as two groupings, macrofauna (human activity) and microfauna (non-human activity). Neither of these components has yet been analysed in terms of species identification, but this is to be undertaken soon.

Although the three categories of bone have been lumped together, each was weighed separately prior to this lumping. The bone in square D exhibits a bi-modal peak (Fig 7), with the greatest weights occurring in LBA2 and LBA2 ext. (added together as a single unit) and BWS. LBA2 and LBA2 ext. display the greatest weight of the two, being 104,2g (Table 3). Other than these two prominent peaks, the only other units showing a marked increase from the rest, is BP#1 (21.3g). LBA and LBA2 together (including LBA2 ext.), contain about 40% of all the macrofaunal bone in square D. BWS (68g)

Why is BP#1 above 10H? at top of page 23?

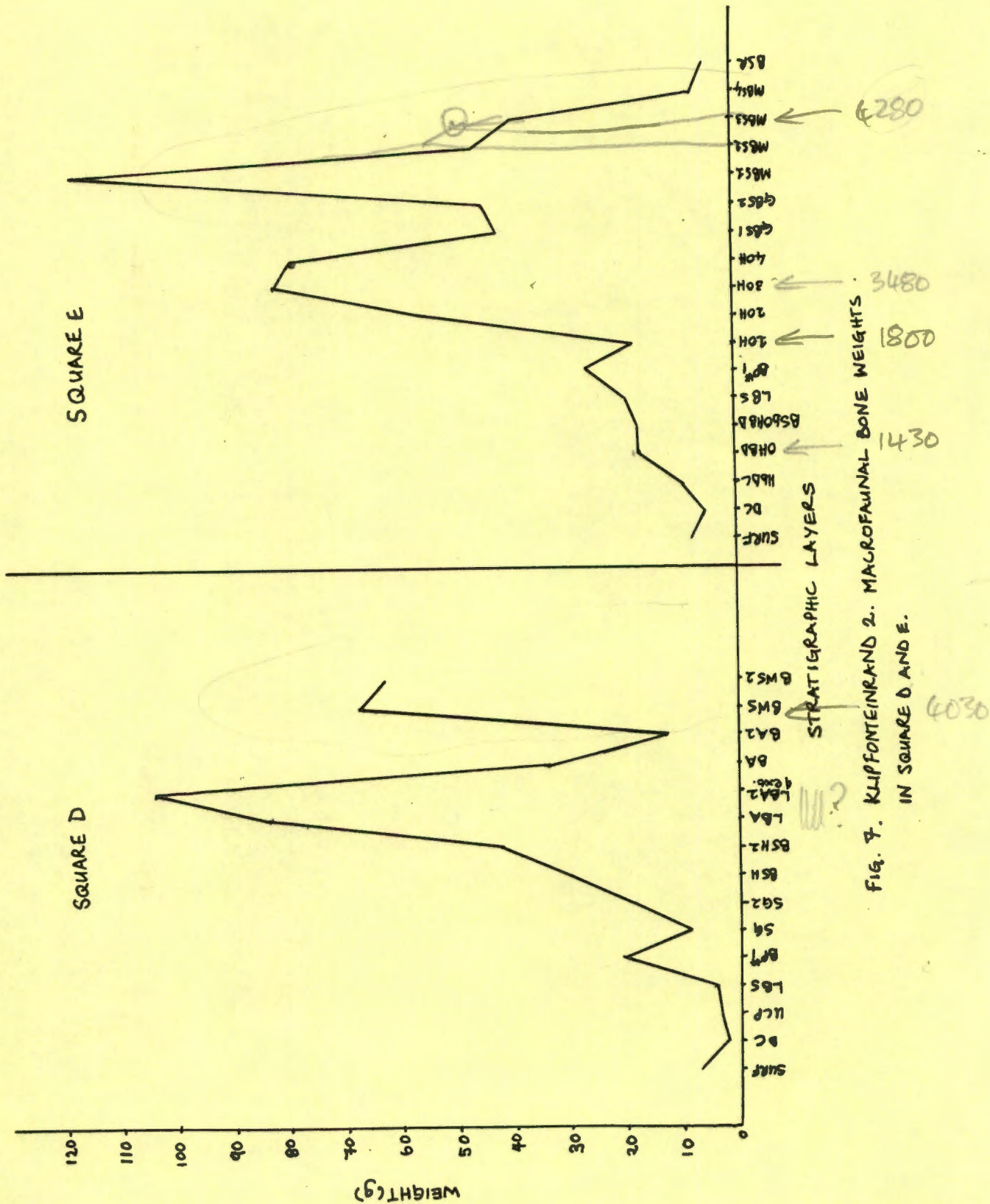


Fig. 7. KLIPFONTEINRAND 2. MACROFAUNAL BONE WEIGHTS IN SQUARE D AND E.

There seems to be a very coherent pattern on this + the next page!

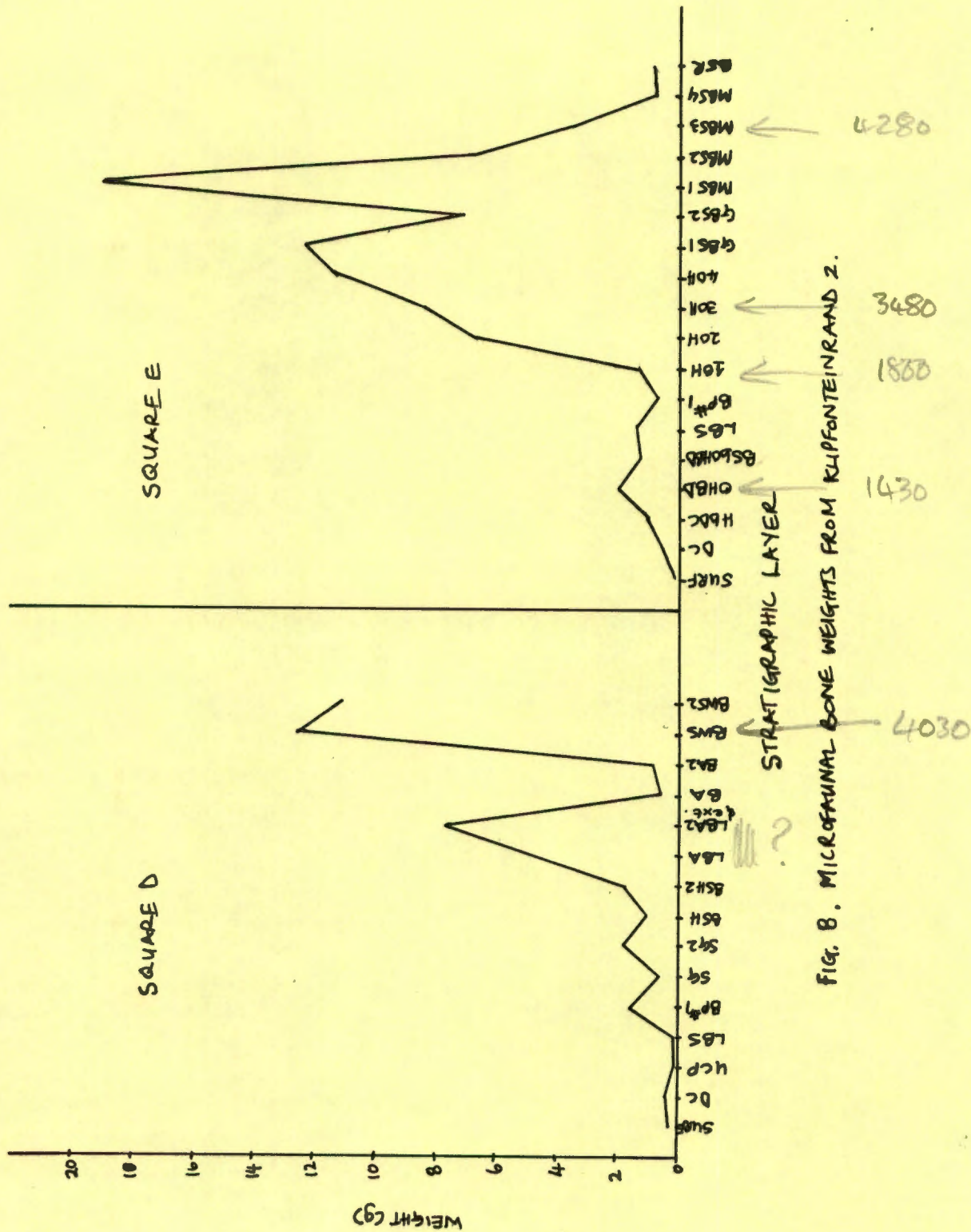


FIG. 8. MICROFAUNAL BONE WEIGHTS FROM KLIPFONTEIN RANDE 2.

is the only other layer which compares in any way with the high bone weights of the LBA- layers.

In square E, a similar pattern emerges. Two peaks, 30H and MBS1, dominate the other units, while BP# 1 also seems to display a small peak (Fig. 7). The OH layers show a marked increase from 18.2g in 10H to 82.7g in 30H (Table 3), declining slightly in 40H and sharply in GBS1. MBS1 (118g) contains the most bone in both squares and forms a more isolated peak than that of 30H. Both squares show a slight decline in the units dated to 4050 ± 50 BP and 4280 ± 50 BP. The microfaunal bone has been analysed in the same fashion as the macrofaunal bone. Again one notices a twin peakedness in the graphs of the two squares (Fig. 8). In square D the peaks represent the units of LBA2 and LBA2 ext, combined, (7.5g) and BWS (12.6g). BWS is higher in bone weight from LBA2 by 5.1g, roughly 35-40% more. This peakedness differs from the macrofauna (Fig. 7) in that the peaks are reversed.

In square E the peaks show a closer relationship with the macrofaunal bone (Fig. 8). The microfauna peak in MBS1 (19g) is similar to the macrofauna, while the GBS1 unit exhibits a peakedness different from the peakedness in the 30H macrofauna. The peak in the GBS1 in square E microfauna seems to have shifted one unit, as the macrofauna in sq. E (Fig.7) peaks in 30H. As in the macrofaunal bone weights, the MBS1 microfauna exhibits the greatest peak in both squares. On a general scale there is an overall correspondence between the macrofaunal and microfaunal bone, the only difference occurring in the area of 30H and GBS1 in square E and other very minor fluctuations in units such as BP#1, etc.

Table 3. MACROFAUNAL AND MICROFAUNAL WEIGHTS FROM KFR2

SQUARE	MACROFAUNA			MICROFAUNA	
	UNITS	n(g)	%	n(g)	%
D	SURF	7.2	1.4	0.3	0.7
	DC	2.2	0.4	0.4	0.9
	UCP	3.7	0.7	0.1	0.2
	LBS	4.0	0.8	0.1	0.2
	BP ^{#1}	21.3	4.2	1.6	3.5
	SG	9.1	1.8	0.6	1.3
	SG2	19.1	3.8	1.7	3.8
	BSH	30.7	6.1	1.0	2.2
	BSH2	43.8	8.6	1.8	4.0
	LBA	84.8	16.7	4.9	10.8
	LBA2	94.0	18.5	5.9	13.0
	LBA2 ext.	10.2	2.0	1.6	3.5
	BK	33.4	6.6	0.6	1.3
	BA2	12.2	2.4	0.8	1.8
	BWS	68.0	13.4	12.6	27.8
	BWS2	63.8	12.6	11.3	24.9
	TOTAL	507.5	100	45.3	100
E	SURF	8.4	1.3	0.1	0.1
	DC	5.5	0.8	0.5	0.6
	HbDC	9.9	1.5	1.0	1.2
	OHbD	17.3	2.6	2.0	2.4
	BS60HbD	17.3	2.6	1.3	1.5
	LBS	19.8	3.0	1.4	1.7
	BP ^{#1}	26.4	4.0	0.7	0.8
	10H	18.2	2.7	1.3	1.5
	20H	56.7	8.5	6.6	7.8
	30H	82.7	12.4	8.4	10.0
	40H	79.9	12.0	11.3	13.3
	GBS1	42.7	6.4	12.3	14.5
	GBS2	45.2	6.8	7.1	8.4
	MBS1	118.0	17.7	19.0	22.4
	MBS2	57.4	8.6	6.8	8.0
	MBS3	50.0	7.5	3.5	4.0
	MBS4	7.9	1.2	0.8	0.9
	BSR	5.4	0.8	0.9	1.1
	TOTAL	667.7	100	85	100

Non- lithic cultural material:

Shell:

Under this heading I will talk about both marine shell and ostrich eggshell (OES).

Very little marine shell was retrieved from the excavation and most of it was very fragmented. All the unworked marine shell was weighed (Table 4) in order to compare it with the bone. The weights from the two squares were once again kept separate. Most of the marine shell weighed appeared to be fragments of black mussel, *Choromytilus meridionalis*, except for one fragment of limpet shell, found in LBA. The layer containing the greatest amount of marine shell from both squares is LBA2 (23g), more than 50% of the shell in square D. The second highest amount in D also comes from the LBA units -- LBA has 23% of the shell. In Square E the highest frequency comes from the surface(20%), followed by GBS2 (13%). The units of 20H, 30H and GBS1 also feature relatively well. Square D, however contains 4 times more shell than E, with unit LBA2 standing out clearly from all other layers.

The worked marine shell fragments all come from the post- 2000BP layers (Table 6) and are all on black mussel. These fragments have ground edges, some of which are heavily scratched. One circular *Haliotis* species (perlemoen) pendant was found in LBA, containing two broken perforations near the top of the shell.

The OES was analysed in a similar fashion as the marine shell (Table 5). The LBA levels again exhibit a high frequency, with almost 50% of the

↓
This is post-2000?

Table 4. MARINE SHELL WEIGHTS FROM KFR 2

SQUARE D			SQUARE E		
UNIT:	f(g)	%	UNIT:	f(g)	%
Surface	0.7	1.7	Surface	2.0	20.2
DC	0	0	DC	0.7	7.1
UCP	0.1	0.2	HbDC	0.4	4.0
LBS	0.1	0.2	OHBD	0	0
BP*1	0.4	1.0	BSbOHBD	0.6	6.1
SG	1.7	4.1	BP*1	0.1	1
SG2	0.3	0.7	1OH	0.4	4
BSh	0.9	2.2	2OH	0.8	8.1
BSh2	0.7	1.7	3OH	0.9	9.1
LBA	9.5	23.1	4OH	0.4	4
LBA2	23.0	56.0	GBS1	0.8	8.1
LBA2 ext.	0.1	0.2	GBS2	1.3	13
BA	1.5	3.7	MBS1	0.5	5.1
BA2	0.3	0.7	MBS2	0.4	4.0
BWS	1.2	2.9	MBS3		
BWS2	0.6	1.5	MBS4		
TOTAL	41.1g	100	BSR		
				9.9g	99.9
			* LBS	0.3	3
			* DBBBH	0.3	3

* LBS AND DBBBH TO BE INCLUDED BEFORE BP*1

shell from square D occurring in these units. BP#1 and the BWS units also contain relatively high frequencies of OES weights. In square E the weights are much more concentrated in the units of 30H (30%) and GBS2 (22%). These two units contain the bulk of the OES weights in E.

The worked OES from the site are found in the form of OES beads, engraved OES fragments and an OES pendant. The latter comes from the unit 40H, while 3 decorated OES fragments were also found, of which 2 were from LBA. The three OES water container spout fragments found, also come from LBA.

The OES beads were separated into finished and unfinished beads (Table 6). A preliminary spatial plot of these beads showed that most of the finished and unfinished beads occurred in the front half of square E. Overall E has more unfinished beads than D, in fact, almost 6 times more.

Worked bone:

Eight of the nine pieces of worked bone from the site occur in the pre- 2000BP units (Table 7). Some of these bone fragments contain quite severe utilisation marks, with a groove occurring on one. A broken bone pendant was sorted from 30H and had a single perforation broken at the top. The majority of the worked tortoise carapace bowl fragments were found in the post- 2000BP layers (Table 7).

Worked wood:

All the worked wood fragments come from the post- 2000BP units and contain a possible fire- stick and a possible discarded digging stick,

Table 5. OES WEIGHTS FROM KFR2

SQUARE D			SQUARE E		
UNIT:	f(g)	%	UNIT:	f(g)	%
Surface	0	0	Surface	1.3	5.5
DC	0	0	DC	0	0
UCP	0	0	HbDC	0.2	0.9
LBS	0.4	1.2	OHBD	0	0
BP*1	5.8	16.8	ESbOHBD	1.2	5.1
SG	0	0	BP*1	0	0
SG2	0.3	0.9	1OH	1.3	5.5
BSH	0.3	0.9	2OH	1.8	7.7
BSH2	0.5	1.5	3OH	7.2	30.6
LBA	6.1	17.8	4OH	1.3	5.5
LBA2	5.7	16.5	GBS1	1.4	6.0
LBA2 ext.	5.2	15.1	GBS2	5.2	22
BA	0.8	2.3	MBS1	0.1	0.4
BA2	0	0	MBS2	0	0
BWS	4.2	12.2	MBS3	0.1	0.4
BWS2	5.2	15.1	MBS4	0	0
TOTAL	34.5	100	BSR	0	0
				23.5	100
			* LBS	1.2	5.1
			* DBBBH	1.2	5.1

again
points to a
LBA = 30H
cardium!

* LBS AND DBBBH TO BE INCLUDED BEFORE BP*1

Table 6. OES BEADS FROM KFR2

SQUARE D				SQUARE E			
UNITS	FINISHED	UNFINISHED	TOTAL	UNITS	FINISHED	UNFINISHED	TOTAL
SURF	3		3	SURF	2		2
DC	1		1	DC	1		1
UCP	4		4	H6DC	1	1	2
LBS	1		1	OH6D	0	0	0
BP* ₁	13	1	14	BS6OH6D	2		2
SG	1		1	DBBBH		2	2
SG2	1		1	LBS	2		2
BSH	1		1	BP* ₁	7		7
BSH2	2		2	10H	0	0	0
LBA	9		9	20H	5	4	9
LBA2	7	2	9	30H	13	20	33
LBA2ext	0	0	0	40H	4	5	9
BA	0	0	0	G6S1	3	2	5
BA2	0	0	0	G6S2	0	0	0
BWS	3	1	4	M6S1	0	0	0
BWS2	1	2	3	M6S2	0	0	0
				M6S3	0	0	0
				M6S4	0	0	0
				BSR	0	0	0
TOTAL	47	6	53	TOTAL	40	34	74

measuring roughly 40cm long. Both these pieces had been found in BP#1. The other pieces of worked wood are primarily shaved fragments. Five fragments of cut and split reeds were retrieved from BP#1.

Only one woodshaving was found in the pre- 2000BP levels and it comes from LBA. On the other hand 57 woodshavings were sorted out of the post-2000BP units. Most of these were contained in the BP#1 layer. This seems to point to the poor preservation one finds in the pre- 2000BP units.

Pottery:

Five potsherds were recovered from the excavation compared with the large numbers found out on the talus slope. The lowest unit in which the pottery is found, is the fragmented bedding of BP#1. The pottery fragments appear to conform to the Cape Coastal pottery, as defined by Rudner (1968).

Ochre:

Almost 700 fragments of ochre were recovered, which appear to be scattered on a rather uniform basis throughout the excavated sequence. Of these, 490 pieces occur in the pre- 2000BP levels and 206 in the post-2000BP units.

Lithic cultural material:

1984
The stone tools from KFR 2 were organised in accordance with Janette Deacon's Classificatory scheme (Deacon, 1982) 13256 Stone tools were

Table 7. NON-LITHIC CULTURAL REMAINS FROM KFR2.

FINDS	PRE 2000 BP	POST 2000 BP	TOTAL
WORKED OES FRAGMENTS	5	1	6
OES BEADS	86	41	127
PENDANTS	3	0	3
WORKED MARINE SHELL FRAGS	0	11	11
WORKED WOOD FRAGS.	0	7	7
WORKED REED FRAGS.	0	5	5
WOODSHAVINGS	1	57	58
WORKED BONE FRAGS.	8	1	9
TORTOISE CARAPACE BOWL FRAGS.	1	5	6
POTTERY	0	5	5
RUBBED OCHRE FRAGS	2	0	2
OCHRE	490	206	696

counted from the excavated units (Table 8). The stone tools were divided into two categories, pre- and post- 2000BP, as well as separated by square to see if some sense could be made of the stratigraphic relationships between the two squares. The stone was then further grouped into formal, utilised and waste pieces.

In the overall raw material analysis, quartz (60,5) dominates all the other categories quite significantly (Fig.9). Following quartz as the second highest ranked raw material is the "Other" category. The Other category consists entirely of phyllite fragments. Except for a stone ring fragment, found in 30H, most of the stone pieces made on phyllite fall into the waste classes of chips and chunks (99,7%). Many appear to be of a very soft nature, primarily chips(80,1%). It is questionable that all the phyllite fragments resulted from stone tool manufacture or usage, as phyllite is used as a raw material for the reamers found on the talus slope outside KFR 2. The alternative explanation for these softer phyllite fragments is its possible function as decorative material (Tony Manhire pers. comm.). One could therefore assume that most of the "Other"- category was used for decorative purposes. Unfortunately this fact was only discovered when most of the analysis was already completed.

The third highest category of raw material to feature is hornfels (10,9%). In the formal classes hornfels features especially prominently amongst the adzes, with more than 60% of the adzes being manufactured on hornfels. The other stone tool categories contain significantly fewer stone, than the above three categories. Of the former, cryptocrystalline silicates (CCS) is the raw material most found in the assemblage (5,9%).

TABLE 8

KLIPFONTEINRAND 2

TOTAL LITHIC INVENTORY

FORMAL TOOLS	QUARTZ		SILCRETE		OCS		HORNFELS		QUARTZITE		OTHER		TOTAL		% OF TOTAL ASSEMBLAGE
	%	f	%	f	%	f	%	f	%	f	%	f	%	f	
SCRAPERS	72.2	26	66.7	2	33.9	19	8	4					34.9	51	59 — 60 edge in table → 9-12
ADZES			33.9	19	74	37			100	1			39	57	
MRPS	27.8	10	33.3	1	14.3	8	18	9					19.2	28	
DRILLS			14.3	8									5.5	8	
BACKED PIECES			1.8	1									0.7	1	
OTHER			1.8	1									0.7	1	
TOTAL	100	36	100	3	100	56	50	1	100	1			100	146	148 1.1
<u>UTILIZED PIECES</u>															
UTILIZED FLAKES	100	8	100	5	100	14	100	10					84.1	37	
H/STONE									33.3	2			4.6	2	
G/STONE FRAGS									66.7	4			9.1	4	
OTHER													2.3	1	
TOTAL	100	8	100	5	100	14	100	10	100	6			100	44	0.3
<u>WASTE</u>															
FLAKES	4.6	363	29.5	65	17.6	126	20.7	284	21.1	104	0.3	7	7.3	949	
BROKEN FLAKES	3.6	288	6.8	15	14.6	105	15.9	218	10.5	52			5.2	678	
BLADELETS	0.9	73	1.4	3	3.1	22	0.7	9					0.8	107	
CHIPS	82.9	6610	52.3	115	57.9	416	52.2	717	35	173	80.1	1830	75.5	9861	
CHUNKS	7.3	579	9.1	20	6.1	44	9.5	31	32	158	19.6	448	10.6	1380	
BIPOLAR CORES	0.6	44			0.1	1	0.2	3	0.2	1			0.4	49	
CORES	0.3	20	0.5	1	0.6	4	0.8	11	1.2	6			0.3	42	
TOTAL	100	7977	100	220	100	718	100	1373	100	494	100	2285	100	13066	98.6
GRAND TOTAL	60.5	8021	1.7	228	5.9	788	10.9	1433	3.7	504	17.3	2286	100	13256	99.9

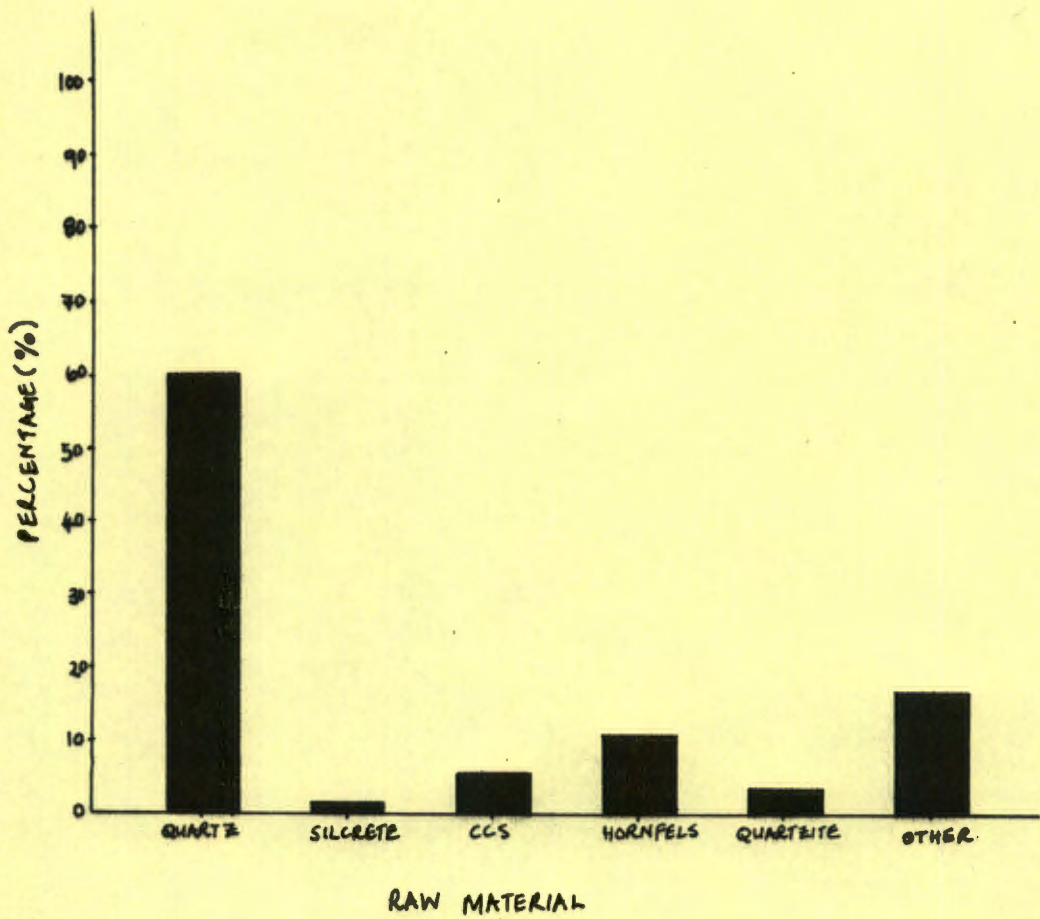


FIG. 9. KLIPFONTEINRAND 2. PERCENTAGES OF RAW MATERIAL IN LITHIC ASSEMBLAGE

CCS appears to have been a popular choice as a raw material in general, featuring prominently in the categories of scrapers (19), adzes (19), MRPs (8), all the drills and the only backed piece found in the site. All the drills come from the front square of E and are mostly found in 20H (50%). Amongst the utilised flakes CCS dominates with the frequency being 14. The majority of the scrapers (26) are made on quartz, as is bipolar cores (44). The waste category is dominated by quartz as well and the waste forms 98,6% of the overall stone tool assemblage.

The stone tools were subsequently divided into a pre- and a post-2000BP assemblage for the different squares. As Fig 10 demonstrates, the post- and pre- 2000BP assemblages of square D correlate very strongly, with quartz dominating; followed by "other" (phyllite), and hornfels.

Square E shows a difference in the raw materials used in the pre- and post- 2000BP layers. Before 2000BP CCS was a major source of raw material for stone tools, more so than hornfels, but after 2000BP, hornfels dominates CCS, as the pattern seems reversed. It appears that the hornfels in the post- 2000BP layers of square E (Table 10) is mainly found in the waste classes, while there are more formal and utilised pieces on CCS than hornfels. In the post-2000BP units the picture seems clearer in both squares (Table 10), with hornfels dominating all the categories when compared to CCS. The situation is therefore that the post- 2000BP layers are dominated by quartz, followed by hornfels and then CCS. The "other" assemblage is discounted due to the reasons mentioned above.

The post- 2000BP assemblages of square D and E differ primarily in quantity, as the three categories of formal, utilised and waste are identical in their contribution to the total assemblage. The quantity is

TABLE 9 KLIPPONTEINRAND 2. SQUARE D: POST 2000 BP - TOTAL LITHIC INVENTORY

	QUARTZ		SILCRETE		OCS		HORNFELS		QUARTZITE		OTHER		TOTAL		% OF TOTAL ASSEMBLAGE
	%	f	%	f	%	f	%	f	%	f	%	f	%	f	
<u>FORMAL TOOLS</u>															
SCRAPERS	100	3			33.3	1							66.7	4	
ADZES					33.3	1							16.7	1	
MRPS					33.3	1							16.7	1	
DRILLS															
BACKED PIECES															
OTHER															
TOTAL	100	3			99.9	3							100	6	1.2
<u>UTILIZED PIECES</u>															
UTILIZED FLAKES							100	2					100	2	
H/STONE															
G/STONE FRAGS															
OTHER															
TOTAL							100	2					100	2	0.4
<u>WASTE</u>															
FLAKES	3.6	11			18.2	2	23.6	13	10.4	3			6.1	29	
BROKEN FLAKES	1.3	4					12.8	7	3.5	1			2.5	12	
BLADELETS	0.3	1	50	1									0.4	2	
CHIPS	84.2	261	50	1	45.5	5	47.3	26	41.4	12	66.7	46	73.7	351	
CHUNKS	8.7	27			26.4	4	14.6	8	44.8	13	33.3	23	15.6	75	
BIPOLAR CORES	1.9	6											1.3	6	
CORES							1.8	1					0.2	1	
TOTAL	100	310	100	2	100	11	100	55	100	29	100	69	100	476	98.4
GRAND TOTAL	64.7	313	64	2	2.9	14	11.3	57	6.0	29	14.3	69	100	484	100

TABLE 10 KLIPFONTEINRAND 2. SQUARE E : POST 2000 BP - TOTAL LITHIC INVENTORY

	QUARTZ		SILCRETE		CCS		HORNFELS		QUARTZITE		OTHER		TOTAL		% OF TOTAL ASSEMBLAGE
	%	f	%	f	%	f	%	f	%	f	%	f	%	f	
<u>FORMAL TOOLS</u>															
SCRAPERS	83.3	5			20	1	33.3	1					50	7	
ADZES					80	4	66.7	2					42.9	6	
MRPS	16.8	1											7.1	1	
DRILLS															
BACKED PIECES															
OTHER															
TOTAL	100	6	100	5	100	3						100	14		1.2
<u>UTILIZED PIECES</u>															
UTILIZED FLAKES			100	2	100	1							60	3	
H/STONE									100	2			40	2	
G/STONE FRAGS													100	5	0.4
OTHER															
TOTAL			100	2	100	1			100	2			100	5	
<u>WASTE</u>															
FLAKES	8.5	60	41.7	5	30.6	11	22.5	44	27.5	11			11.2	131	
BROKEN FLAKES	1.8	13			8.3	3	15.3	30	7.5	3			4.2	49	
BLADELETS	0.4	3			2.9	1	0.5	1					0.4	5	
CHIPS	71.7	506	50	6	30.6	11	43.9	86	30	12	52.5	95	61.1	716	
CHUNKS	16.6	117	8.3	1	27.8	10	17.9	35	35	14	47.5	86	22.5	263	
BIPOLAR CORES	0.4	3											0.3	3	
CORES	0.6	4											0.3	4	
TOTAL	100	706	100	12	100	36	100	196	100	40	100	181	100	1171	98.4
GRAND TOTAL	59.8	712	1.0	12	3.6	43	16.8	200	3.5	42	15.2	181	100	1190	100

TABLE 11 KLIPFONTEINRAND 2. SQUARE D: PRE 2000 BP. - TOTAL LITHIC INVENTORY

	QUARTZ		SILCRETE		OCS		HORNFELS		QUARTZITE		OTHER		TOTAL		% OF TOTAL ASSEMBLAGE
	%	f	%	f	%	f	%	f	%	f	%	f	%	f	
<u>FORMAL TOOLS</u>															
SCRAPERS	81.3	13			18.2	2	2.3	1						22.9	16
ADZES					45.5	5	79.1	34						95.7	39
MRPS	18.8	3			24.3	3	18.6	8						20	14
DRILLS															
BACKED PIECES					9.1	1								1.4	1
OTHER															
TOTAL	100	16			100	11	100	43						100	70
<u>UTILIZED PIECES</u>															
UTILIZED FLAKES	100	5	100	1	100	2	100	4						92.3	12
H/STONE															
G/STONE FRAGS														7.7	1
OTHER									100	1					
TOTAL	100	5	100	1	100	2	100	4	100	1				100	13
<u>WASTE</u>															
FLAKES	2.7	102	304	21	20.9	55	20.4	154	11	42				5.6	374
BROKEN FLAKES	3.6	135	11.6	8	17.1	45	19.2	145	9.5	36				5.5	369
BLADELETS	1.1	42	1.5	1	4.6	12	0.9	7						0.9	62
CHIPS	66.7	3300	90.7	35	92.5	138	93	401	54.9	209	81.2	1243	79.5	5326	
CHUNKS	5.2	196	5.8	4	4.2	11	4.9	37	23.4	89	12.8	133	7.8	520	
BIPOLAR CORES	0.5	18			0.4	1	0.4	1	0.3	1			0.3	23	
CORES	0.3	12			0.4	1	1.2	9	1.1	4			0.4	26	
TOTAL	100	3605	100	69	100	263	100	756	100	381	100	1426	100	6700	98.7
GRAND TOTAL	56.4	3826	1.0	70	4.1	276	11.8	803	5.6	382	21.0	1426	100	6783	100

TABLE 12 KLIPFONTEINRAND 2. SAMPLING: PRE 2000BP-TOTAL LITHIC INVENTORY

	QUARTZ		SILCRETE		OCS		HORNFELS		QUARZITE		OTHER		TOTAL		% OF TOTAL ASSEMBLAGE
	%	f	%	f	%	f	%	f	%	f	%	f	%	f	
<u>FORMAL TOOLS</u>															
SCRAPERS	45.5	5	66.7	2	41.8	15	28.6	2					41.4	24	
ADZES					25	9	42.9	3	100	1			22.4	13	
MRPS	54.5	6	33.3	1	11.1	4	14.3	1					20.7	12	
DRILLS					22.2	8							13.8	8	
BACKED PIECES							14.3	1					1.7	1	
OTHER													100	58	1.2
TOTAL	100	11	100	11	100	36	100	7	100	1			100	58	
<u>UTILIZED PIECES</u>															
UTILIZED FLAKES	100	3	100	4	100	10	100	3					83.3	20	
H/STONE									66.7	2			8.3	2	
G/STONE FRAGS									38.3	1			4.2	1	
OTHER											100	1	4.2	1	0.5
TOTAL	100	3	100	4	100	10	100	3	100	3			100	24	
<u>WASTE</u>															
FLAKES	6.1	190	22.8	39	14.2	58	20	73	29.3	48			8.6	415	
BROKEN FLAKES	2.4	76	4.1	7	14.0	57	9.0	36	7.3	12			3.9	188	
BLADELETS	0.8	26	0.6	1	2.2	9	0.3	1					0.8	37	
CHIPS	81.7	2543	63.2	108	64.2	262	55.7	204	36.6	60			75.0	3623	
CHUNKS	7.7	239	8.8	15	4.7	19	13.9	51	25.6	42			10.8	522	
BIPOLAR CORES	1.1	35			0.7	3	0.3	1	1.2	2			0.2	11	
CORES	0.1	4	0.6	1									100	4831	98.3
TOTAL	100	3113	100	171	100	408	100	366	100	164			100	609	
GRAND TOTAL	63.6	3127	3.6	178	9.3	455	7.7	376	8.4	168			100	4913	100.0

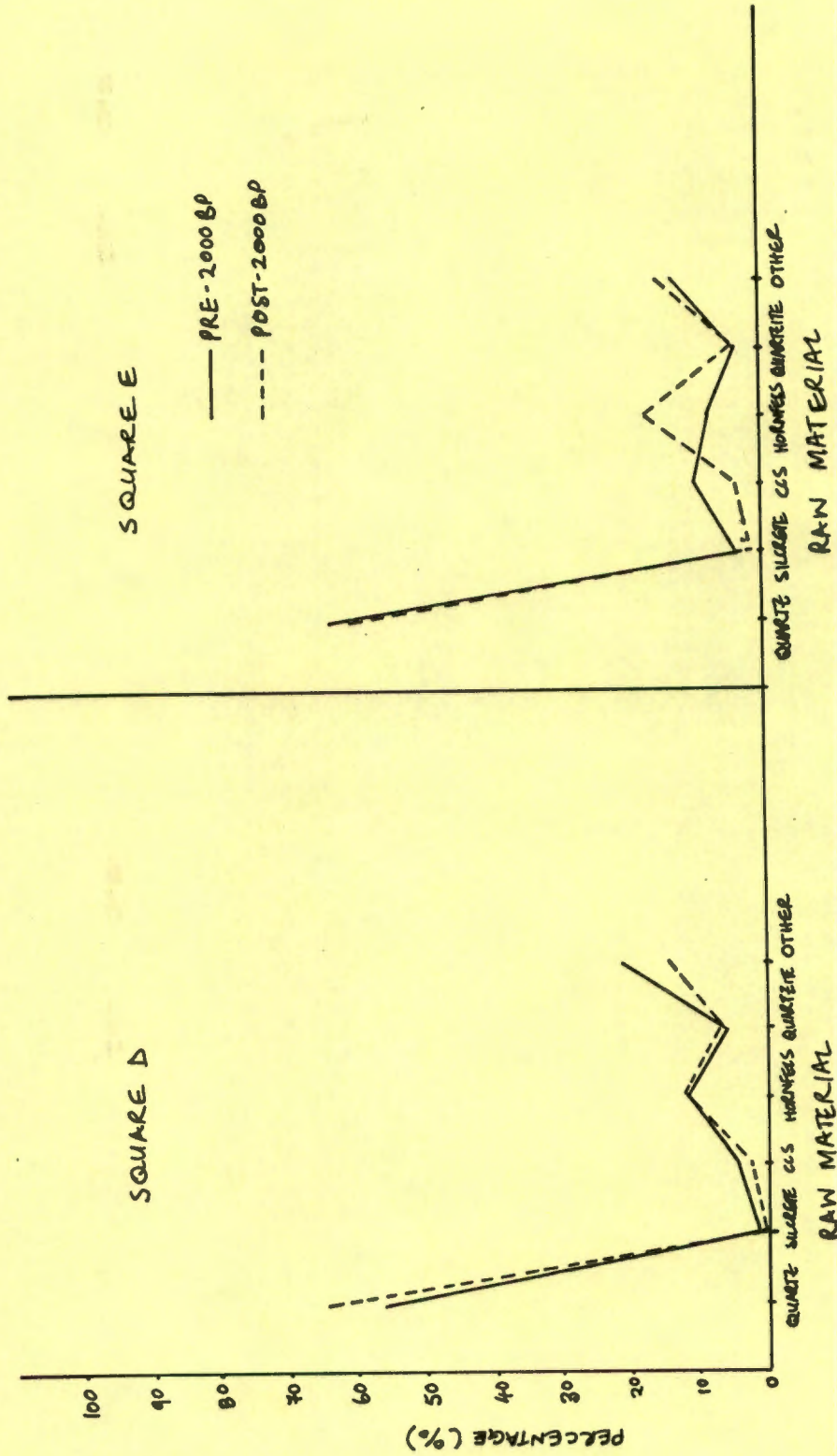


FIG. 10. COMPARISON OF RAW MATERIALS: PRE- AND POST-2000 BP IN SQUARE D AND E, KLIPFONTEIN RAN 2.

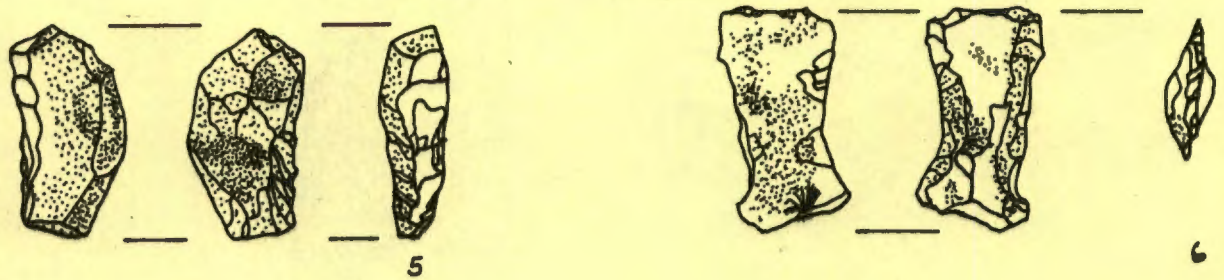
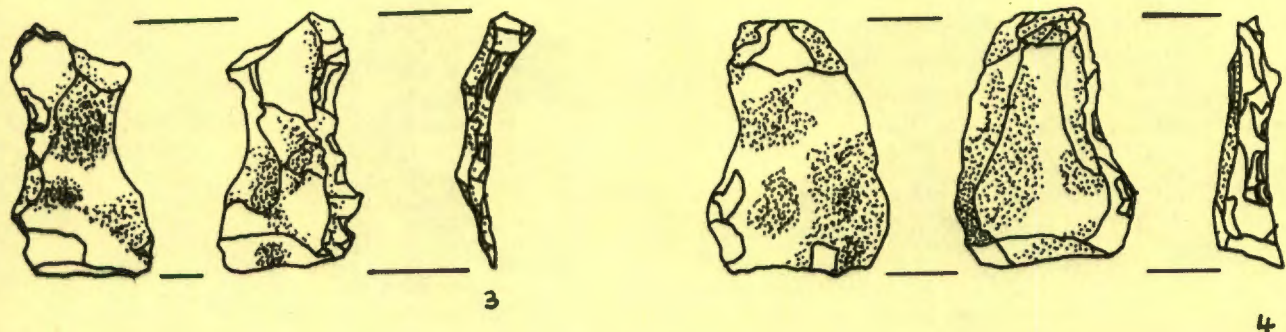
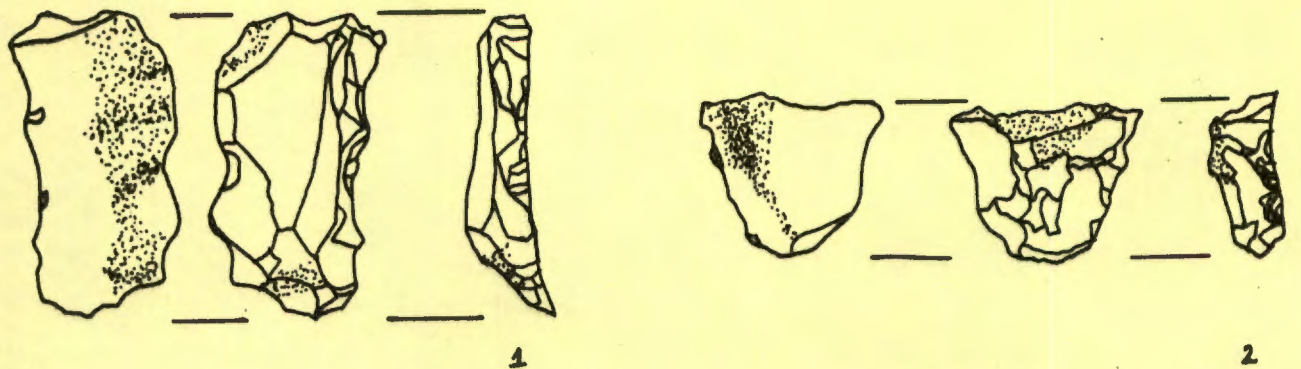
most probably an artefact of the depth of deposit dug in the two squares, E being much deeper than D. However, this statement is immediately contradicted when one looks at the pre-2000BP layers in Square D (Table 11) and E (Table 12). Square D contains almost 2000 more pieces of stone than E. The matter becomes more complicated when one looks at the formal tools from the two squares. The two squares display almost totally opposite pictures if one compares the number of adzes to scrapers:

	D	E
scrapers	16	24
adzes	39	13

Almost a total reversal of the figures occur, when they are theoretically supposed to be similar. Of square D, 52,2% of the stone comes from the LBA-complex, which contain 53% of the adzes in square D. The LBA- units therefore represent the major input of stone in square D. A comparison of the number of adzes in BWS shows the difference noted in the excavation, because there is only 1 adze in this layer, compared with the 21 of the LBA- series. This concentration of adzes appears to be limited in a temporal as well as a spatial frame, as this adze- richness does not seem to spill over into square E. The OH- units contain only 5 adzes compared to 13 scrapers. The situation in the LBA- units seem reversed, with only 11 scrapers being found. The assemblages of the OH and the LBA levels therefore do not appear to be similar in that they contain equivalent numbers of formal tools.

The only area where square E outnumbered D in stone tool numbers is in the utilised category. In square D more than 25% of the adzes have mastic traces. These are predominantly reddish in colour, possibly containing some

ochre pigment. One of these adzes is made on an older MSA- flake (Fig 11) . The only other older patinated flake which was retouched at a much later stage is a utilised piece of hornfels from MBS1. Other rare features amongst the stone tools found in the site include a CCS- drill from MBS4 (Fig 12) and a naturally backed knife made on hornfels, found in GBS1. A discoidal MSA- core and several possible MSA- flakes were sorted from BSR, the basal layer, as well as a very large quartzite core of about 15cm in diameter from the same layer. An ochred stone was retrieved from BWS and a sizable fragment of a lower grindstone uncovered in DC.



KEY:



MASTIC TRACES

FIG. 11.: ADZES FROM KLIPFONTEINRAND 2, SQUARED: 1: ON OLDER FLAKE; 1-7: FROM THE UNIT LBA; 8: FROM THE UNIT LBA 2; ALL THE ILLUSTRATED ADZES ABOVE ARE MADE ON HORNFELS.

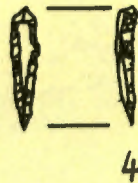
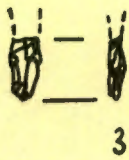
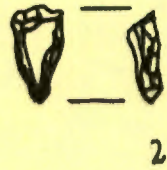
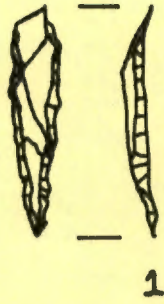
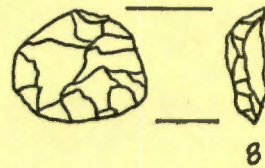
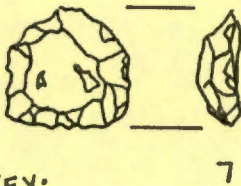
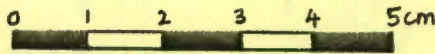
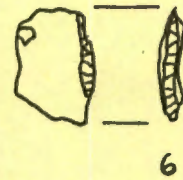
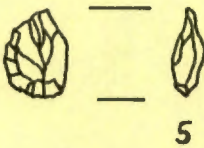
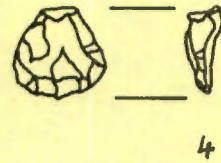
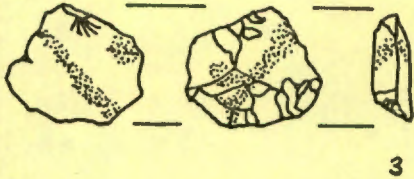
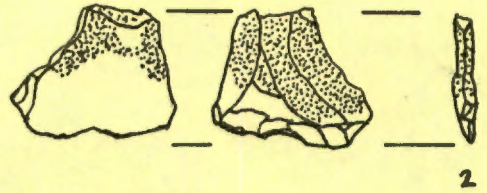
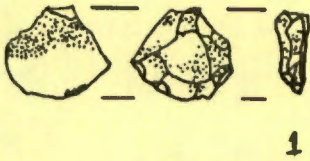


FIG. 12. A SELECTION OF CCS DRILLS FROM KLIPFONTEINRAND 2, SQUARE E:
1: FROM UNIT 20H; 2: FROM UNIT 20H; 3: FROM UNIT 30H; 4: FROM
UNIT MBS4.



KEY:

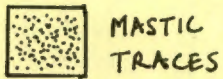


FIG. 13. A SELECTION OF SCRAPERS FROM KLIPFONTEINRAND 2, SQUARES D AND E:
 1: FROM UNIT 40H; 2, 5 AND 8: FROM UNIT LBA; 3: FROM UNIT MBS 1; 2: ON
 HORNFELS; 1 AND 3: ON CCS; 4-8: ON QUARTZ.

CHAPTER 4

DISCUSSION:

This chapter concentrates on the KFR 2 sequence, its comparison with KFR 1, other sites in the Cape Fold Belt and KFR 2 in terms of a regional picture.

The KFR 2 sequence:

The overall picture gained from the lithic assemblage in terms of raw material (Fig 9), is that quartz dominates all assemblages in the sequence, followed by "other", hornfels and then CCS. Silcrete numbers are very low. As explained earlier, a large portion of the "other" category (phyllite) may have had a decorative function somewhat distinct from that of other rock types. The dominance of hornfels over CCS is more complicated and somewhat unexpected. In the pre- 2000BP units CCS dominates hornfels in sq. E, but in post- 2000BP levels hornfels numbers exceed CCS in both squares.

This difference between sq. D and E is further accentuated when one looks at the formal tools from the two assemblages. Square D , which contains the greatest amount of stone, has an adze to scraper ratio of 2,4: 1, while sq. E has a ratio of 1: 1,5. The two squares "contradict" one another if one assumes a spatially continuous sequence in both squares.

The predominance of the adzes within a specific group of units (the LBA complex) is also puzzling. This layer grades into the OH units in sq. E, most likely 20H and 30H, but possibly 40H as well. A date of 3480BP from these units (in 30H) seems to place this adze-rich layer before 2000BP. The layer immediately below it (BWS) is dated to roughly 4000 years ago, suggesting that the LBA-series may date to the mid- to late Holocene. The complete absence of an emphasis on adze manufacture in BWS and the OH units leads one to the conclusion that the LBA units may be spatially and temporally isolated, even from the layers above it. That LBA represents *the* major unit of occupation is undeniable, for no other unit in the excavated part of the site compares with it in terms of sheer numbers of cultural material.

The other evidence for the isolation of LBA comes from the marine shell weights (Table 4). These are predominantly found in the LBA units (79% of sq. D). Comparatively, BWS and the OH- units contain negligible amounts. If adzes are most numerous in levels from the last 2000 years (associated with the fugitive-like settlement by gatherer-hunters in the mountainous regions) one could propose that links with the coast would have been cut or damaged, assuming that the pastoralists would favour the coastal plains for settlement (Manhire, 1984). With this idea in mind, the high frequencies of adzes in the mountains would presumably be accompanied by the low numbers of marine shell. However, in the LBA layers there is a very high incidence of both marine shell and adzes. The evidence seem^s to favour the fact that the LBA- events predate the 2000 year mark, or that some more complex relationship between adze manufacture and access to the coast is reflected here.

Gypsum- speckling in SG and BWS is arguably an indicator of minimal human occupation. This is based on the assumption that high gypsum-low artefact density is associated with scarce or less human occupation than an area of low gypsum-high artefact content, where increased human occupation (as seen in the LBA series) would have decreased the possibility of gypsum sediment forming in any significant amounts in the deposit. Gypsum is associated with a period of low human occupation at Elands Bay Cave, although the reason for this is understood to differ from the situation at KFR 2 (Parkington *et al* 1988) The rock in the section between sq. D and E (Plate 4) obviously creates a natural catchment area for the gypsum, which may have leached out of the sandstone at the back of the cave. The possibility exists that there is a break in the active occupation of sq. D in SG, which separates BP#1 (presumed to date to within the last 2000 years) from the adze rich units of LBA. This further supports the idea of adzes predating pastoralist activity in the western Cape.

Evidence for adzes occurring in very high numbers in comparison with other stone tool- types comes from two other sites in the Cape Province. The one site, Melkhoutboom, is located in the eastern Cape (Deacon, 1976). Deacon's (1976) research shows that the majority of adzes in the site are found between the unit CAF, dated to $2870 \pm 90\text{BP}$ (Pta 706) and the unit MB, dated to $5900 \pm 90\text{BP}$ (Pta 680). However, there exists a strong possibility of an hiatus between these dates, so that the adzes may be better associated with the later, rather than the earlier date.

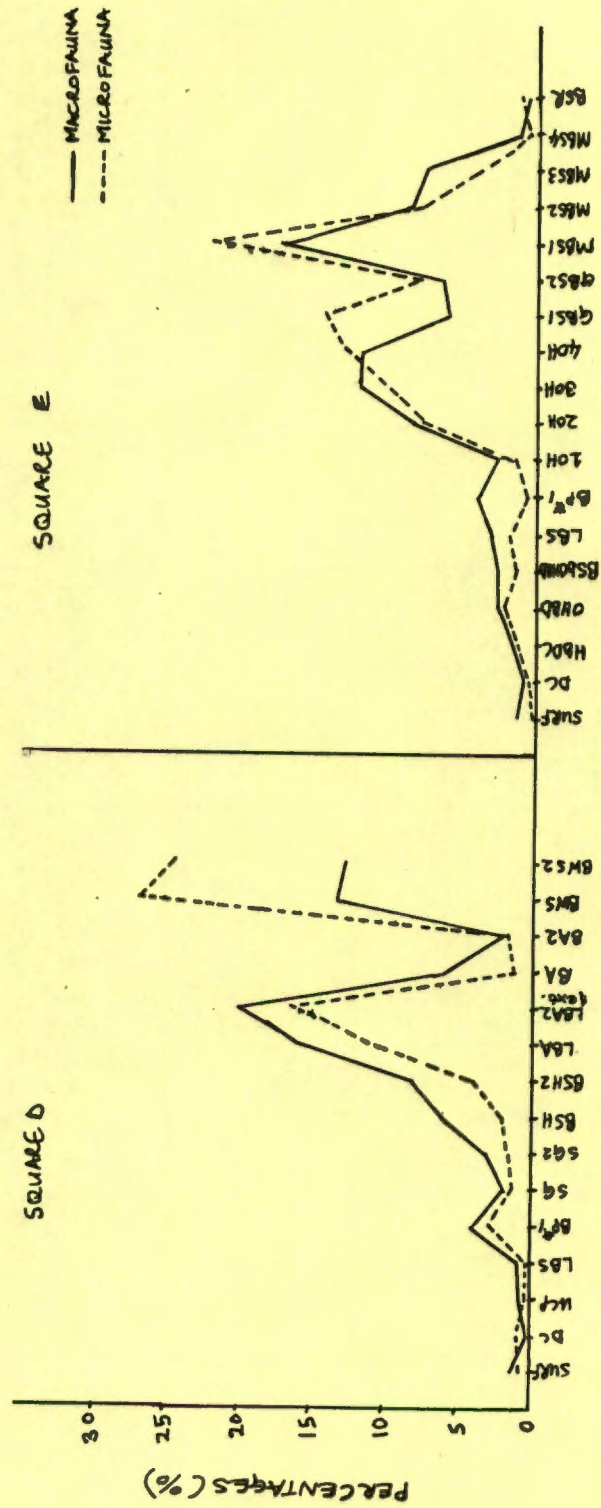
The other site which provides better evidence for the early date of adzes, is Byneskranskop (Schweitzer and Wilson, 1982). From layer 5 , with a date of $3900 \pm 60\text{BP}$ (Pta 1571) to layer 4, there is a very sudden increase in the number of adzes in the site, with scrapers decreasing

It may
be
post-
agricultural

correspondingly. Layers 2, dated to $3400 \pm 55\text{BP}$ (Pta 1569), and 5 contain between the two of them almost 60% of all the adzes in the site (Schweitzer and Wilson, 1982). This demonstrates more conclusively that there are instances of adzes becoming very prominent before the last 2000 years. The problem is that the two sites mentioned above are geographically very distant from KFR 2. Whether they form part of the same regional pattern is arguable.

An interesting pattern also emerges out of the analysis of the bone from KFR 2. The macrofaunal and microfaunal bone weights (Fig. 14), when compared with one another, generally show a high degree of correlation. Except for the difference in sq. E, where there is a shift in the microfaunal bone from the pattern of the macrofauna, seen in the units of 40H and GBS1, the general view is one of correspondence between the two. This correlation calls into question the assumption made earlier that the microfaunal element in the site was collected by non-human agents. Avery (1982) argues strongly for owls being the primary agents for the accumulation of microfauna in cave sites. These owls, being nocturnal predators, usually roost in the rock shelters. No evidence for any such suitable perch was noticed in KFR 2, the roof being so low.

Mazel (1989) argues for humans being the most likely candidates for the accumulation of substantial quantities of microfauna in rock shelters. Mazel mentions ethnographic instances where gatherer-hunters were recorded to have eaten microfauna. The observations from KFR 2 lend support to Mazel's view as the macrofaunal bone, with which the microfauna corresponds, is assumed to have resulted from human activity. There is certainly no suggestion at KFR 2 that owls and people occupied the rock shelter at different times or at different intensities through the



STRATIGRAPHIC LAYERS

FIG. 14. KLIPPONTEINLAND 2. MACROFAUNA VS. MICROFAUNA FROM SQUARE D AND E.

stratigraphic sequence, as appears to have been the case at Boomplaas cave (Deacon, 1979). The peaks in the bone weights occur in layers which appear to predate the entry of pastoralists. On the basis of this one, could argue that there was a very significant drop in the in the densities of bone accumulated, possibly due to the brevity of the visits to the site by a highly transient population of gatherer- hunters.

Comparison with KFR 1:

The KFR 1 sequence, as dated, predates that of KFR 2. Thackeray (1977) identified an increase in the numbers of silcrete, CCS and quartz, matching the decrease in the amount of quartzite and hornfels up the sequence to HAS 1, which has a date of 5500BP. In comparison, the sequence of KFR 2 shows a very low incidence of silcrete, with the frequencies of CCS and hornfels varying in the pre- 2000BP layers in sq. E. The post-2000BP layers, however, display a very clear uniformity in both squares with quartz dominating the assemblage and hornfels slowly increasing. Very high numbers of phyllite fragments from the excavated units could compare well with the high numbers of reamers found on the talus slope. This could, however, only occur once the pattern of the "soft and hard" phyllite has been solved.

In KFR 1 there is an increase in the number of scrapers from Spit to Spit 1, after which there appears to be a drop in the numbers in the layer immediately above it. The adzes seem to remain the same in all the excavated horizons in the site, ranging around about 7 per layer. In the KFR 2 sequence there is a gradual decrease in the adzes and scrapers in both sq D and sq. E after 2000BP, although the problem of the differences

in the adze to scraper ratios in the pre- 2000BP units have not been resolved.

KFR 1 therefore could represent the initiation of a period where scrapers start decreasing in favour of adzes until roughly about 2000 years ago, from where onwards both tool- types decrease, as witnessed in KFR 2.

Comparison with other sites in the Cape Fold Belt:

The pattern exhibited by small isolated cave sites in the western Cape -- one of shallow deposits, formal tool assemblage rich in adzes in the upper levels; associated with woodshavings, pottery, a subsistence base dominated by underground plant foods, an arc of bedding lining the back of the cave and an ash deposit towards the centre and rock art on the walls (Kaplan, 1987) -- is widespread and consistent. This represents a widespread subsistence pattern across space, occurring in the Cape Fold Belt, as well as the Sandveld kopjes. Chronological linkage would place these abovementioned sites within the last 2000 years, and they are said (Parkington *et al*, 1986) to represent the appearance of pastoralism.

The evidence from KFR 2 contradicts this pattern. Although bedding- and ash deposits do occur in the upper levels of KFR 2, and seems to correspond with those from other sites, the adze rich layers are interpreted (in the absence of a radiocarbon date) as predating the local of herders. This seriously calls into question the validity of the entire "pastoralist- package", as the high frequencies of adzes occurring very late is an integral part of this model.

Arguably, this contradiction cannot be fully substantiated without a date from LBA, but the evidence hints at an early date for adzes at KFR 2. A general lack of deposits dating after 4500BP in the Cape Fold Belt does not help to clarify this picture. Comparatively, the pre- 2000 BP deposits at KFR 2 are much more complicated than initially thought, and could represent a pattern with both spatially and temporally variable components, as witnessed in the differences between squares D and E.

The relation of KFR 2 to the broader regional settlement:

If one compares KFR 2 with the broader picture of the western Cape, it appears that the KFR 2 sequence, with its two "pulses" of 3400 to 4400BP and 1000 to 1800BP, matches general pattern of gatherer- hunter settlement in the mid- to late- Holocene. Observations from Tortoise Cave (Robey, 1984) for example, seem to suggest that between 4400 and 1700 years ago, the deflation hollows of the Sandveld were the main focus of settlement (Parkington, 1987). This suggestion arises from the similarity in stone tool assemblage composition between Tortoise Cave and the deflation hollows. Prior to 4000 years ago, a major hiatus is noted in the cave sites of Elands Bay Cave and Tortoise Cave, indicating that after 8000BP the coastal sites ceased to experience regular visits. Parkington (1987) notes that between 8000 and 4000 years ago the only dates from the western Cape comes from the Cape Fold Belt, from the sites of Renbaan Cave (Kaplan, 1987), KFR 1 (Thackeray, 1977), and Aspoot (Smith and Rip, 1978). The mid-Holocene is very poorly represented in the coastal plains, as opposed to the southern Cape.

Between 4000BP and 2000BP there seems to be lack of deposits in the Cape Fold Belt, except for the single date of 3500BP from KFR 1 (

Thackeray, 1977). The latter is however from a skeleton and the corresponding deposits are missing. Regular coastal settlement after 4300BP resumes as caves and shelters become attractive for settlement (Parkington et al 1988). The routine use of these coastal plains continues into colonial times. After the advent of pastoralism, there is a resurgence of interest in rockshelters, especially the smaller ones of the mountainous interior. Low deposit volumes during this time suggests high residential mobility, small group size and overall very low population numbers (Parkington, 1987). This possibly links up with the bedding and ash pattern resulting from an increasingly fugitive, stressed settlement pattern developed in response to the appearance of herders and later, colonialism.

this is now being challenged.

Radiocarbon dates from KFR 2 fill the gap in the Cape Fold Belt in the mid- Holocene, with three dates falling within the 4400 to 3400BP period. Although this time range is well represented at the coast, information from the mountains of the interior is at present extremely sparse. The upper portion of the KFR 2 sequence appears to be separated from the lower portion by hiatus or at least a very substantial decrease in the rate of sediment accumulation. The second pulse of occupation, dating from 1800BP upwards, conforms to the settlement pattern of bedding and ash sites in the last two millennia in the western Cape.

From the brief and very generalised picture sketched here from KFR 2, it is evident that we need more samples from the mountains of the western Cape before we can gain a better understanding of the pre- 2000BP sequence. The coastal element is, at this stage relatively well analysed, but this can not be studied in isolation. In the absence of other cave sites in the Cape Fold Belt with deposits dating to this period and the low prospects of

discovering suitable sites, it may be considered wise to expand on the excavation at KFR 2. Current research being conducted at the coast on spatial organisation and layout of sites could only prove beneficial to cave-excavations in the future. This does not imply that research into cave sites should play a lesser role in terms of research priorities, but points to the fact that small concentrated excavations, such as the one at KFR 2, are very limited in that they only supply clues to past events and does not provide the researcher with sufficient samples to be able to make more conclusive statements. Ideally, barring time, financial and other constraints, excavations should be undertaken on a spatial basis, and not be so preoccupied with depth probes as they are at present.

rather poorly proof-read.

this is a good draft but could have been immeasurably improved by being re-written. There has been a lot of work, analysis and tabulation, but the expression of the results and the reflection on issues is preliminary and somewhat simplistic.

REFERENCES

- Avery, D.M. 1982. Micromammals as palaeoenvironmental indicators and an interpretation of the late Quaternary in the southern Cape Province, South Africa. Ann. S. Afr. Mus. 85: 183-374
- Euchanan, W.F., Parkington, J.E., Robey, T.S. and Vogel, J.C. 1984 Shellfish, subsistence and settlement: some Western Cape Holocene observations. In Frontiers: Southern African Archaeology Today (eds M. Hall, G. Avery, D.M. Avery, M.L. Wilson and A.J.B. Humphreys): pp. 121-30. (BAR Int. Series 207).
- Deacon, H.J. 1976. Where Hunters Gathered. South African Archaeological Society Monograph Series 1.
- _____. 1979. Excavations at Boomplaas Cave—a sequence through the Upper Pleistocene and Holocene in South Africa. World Archaeology 10: 241-257.
- Deacon, J. 1972. Wilton: an assessment after 50 years. S. Afr. archaeol. Bull. 27: 10-45.
- ? _____ 1982. The Later Stone Age in the southern Cape, South Africa. Oxford: British Archaeological Reports.
- Johnson, T., Rabinowitz, H. & Sieff, P. 1959. Rock paintings of the South western Cape. Cape Town: Nationale Boekhandel Beperk.
- Kaplan, J. 1984. Renbaan Cave: stone tools, settlement and subsistence. Unpublished Honors thesis, University of Cape Town.
- Maggs, T.M.O'C. 1967. A quantitative analysis of the rock art from a sample area in the south western Cape. S. Afr. J. Sci. 63: 100-104.
- Manhire, A.H. 1984. Stone tools and Sandveld settlement. Unpubl. M.Sc.

thesis, University of Cape Town.

_____, Parkington, J.E. & Robey, T.S. 1984. Stone tools and Sandveld settlement. In Frontiers: Southern African Archaeology today. (eds M. Hall, G. Avery, D.M. Avery, M.L. Wilson & A.J.P. Humphreys): pp. 111-20. Oxford: British Archaeological Reports.

Mazel, A.D. 1978. Stories in stone: aspects of artefact distribution in the Clanwilliam district, south western Cape. Unpubl. Honors thesis, University of Cape Town.

_____. 1987. The archaeological past from the changing present: Towards a critical assessment of South African Later Stone Age studies from the early 1960s to early 1980s. In Papers in the Prehistory of the Western Cape. (eds J.E. Parkington & M. Hall). Oxford: British Archaeological Reports.

_____. 1989. People making history: the last ten thousand years of hunter-gatherer communities in the Thukela Basin. Nat. Mus. J. Hum. 1: 1-168.

Parkington, J.E. 1976. Follow the San: An analysis of Seasonality in the prehistory of the southwestern Cape. Unpubl. PhD thesis, Queens College, Cambridge University.

_____. 1980. Time and Place: some observations on spatial and temporal patterning in the Later Stone Age sequence in southern Africa. S. Afr. archaeol. Bull. 35: 73-83.

_____. 1987. Changing views of the prehistoric settlement in the Western Cape. In Papers in the Prehistory of the Western Cape. (eds J.E. Parkington and M. Hall). British Archaeological Reports.

_____. in press. A view from the south: Southern Africa before, during and after the LGM.

- Parkington, J.E. & Poggenpoel, C. 1971. Excavations at De Hangen, 1968. S. Afr. archaeol. Bull. 26: 3-36.
- _____. 1987. Diepkloof Rockshelter. In Papers in the Prehistory of the Western Cape. (eds J.E. Parkington & M. Hall). Oxford: British Archaeological Reports.
- _____., Buchanan, W.F., Robey, T., Manhire, A. H., Sealy, J. 1988. Holocene coastal settlement in the western Cape. In The Archaeology of Prehistoric coastlines. (eds G. Bailey & J.E. Parkington) Cambridge: Cambridge University Press.
- Robey, T.S. 1984. Burrows and bedding: site taphonomy and spatial archaeology at Tortoise Cave. M.A. thesis, University of Cape Town.
- Rudner, J. 1968. Strandloper pottery from South and South West Africa Ann. S. Afr. Mus. 49:441-663.
- Sealy, J. 1984. Stable carbon isotopic assessment of prehistoric diet in the southwestern Cape, South Africa. Unpubl. M.Sc. thesis, University of Cape Town.
- Schweitzer, F.R. & Wilson, M.L. 1982. Byneskranskop 1, Bredasdorp District, Southern Cape. Ann. S. Afr. Mus. 86: 375- 566.
- Smith, A.B. & Ripp, R.M. 1978. An archaeological reconnaissance of the Doorn/ Tanqua Karoo. S.Afr. archaeol.Bull. 33: 118-133.
- Taylor, H.C. 1978. Capensis. In Biogeography and Ecology of southern Africa. (ed M.J.A. Werger). pp. 171-229. The Hague: Junk.
- Thackeray, A.I. 1977. Stone tool analysis from Klipfonteinrand. Unpubl. Honors thesis, University of Cape Town.
- Yates, R. J., Golson, J. & Hall, M. 1985. Trance performance: the rock art of Boontjieskloof and Sevilla. S. Afr. archaeol. Bull. 40: 70-80.