

Western Cape Landscapes

JOHN PARKINGTON

ARCHAEOLOGY IS THE INTEGRATION of the geological, the ecological, the social, and the symbolic. Archaeology is also, in Kent Flannery's famous words— 'the most fun you can have with your trousers on'. For me these definitions are connected in that it is the freedom to use archaeology as an integration of many disciplines that makes it so much fun— with or without trousers. Grahame Clark once described archaeology as 'incessant if absorbing toil', and it is my impression that what absorbed him was the scope the subject offered for intellectual inquiry. When I arrived in South Africa in 1966 there were very few professional archaeologists. This meant that I was under no pressure to look for a specialized niche, but had the good fortune to be able to investigate all aspects of the landscape of the western Cape. Here I try to build some connections between the physical landscape, the ecological framework and former human settlement systems.

Geological contexts

The Atlantic coast of the western Cape is characterized as a series of half-heart shaped or long spiral bays of various lengths (Figure 1). The sizes and depths of these bays are determined by the interval between rocky spurs at sea level and the extent to which these reach west into the Atlantic. The sandy bays are massive suppliers of very shelly sand that is transported onshore by strong, southerly, summer winds to form very large dune plumes easily visible on satellite and air photographs. These plumes are characteristically not used for wheat production as are the more nutrient-rich shale soils further inland and are repetitively and cyclically vegetated and deflated. Sand supply is episodic and probably related to regressions of sea level which expose and make available the offshore sand blanket. Soil development alternates with depositional episodes.

Earlier dunefields are cemented and often transformed by soil development to form a fossil landscape ideal for bone preservation because of the high calcium carbonate content. These calcretes have been known as the Langebaan Limestone and were thought to

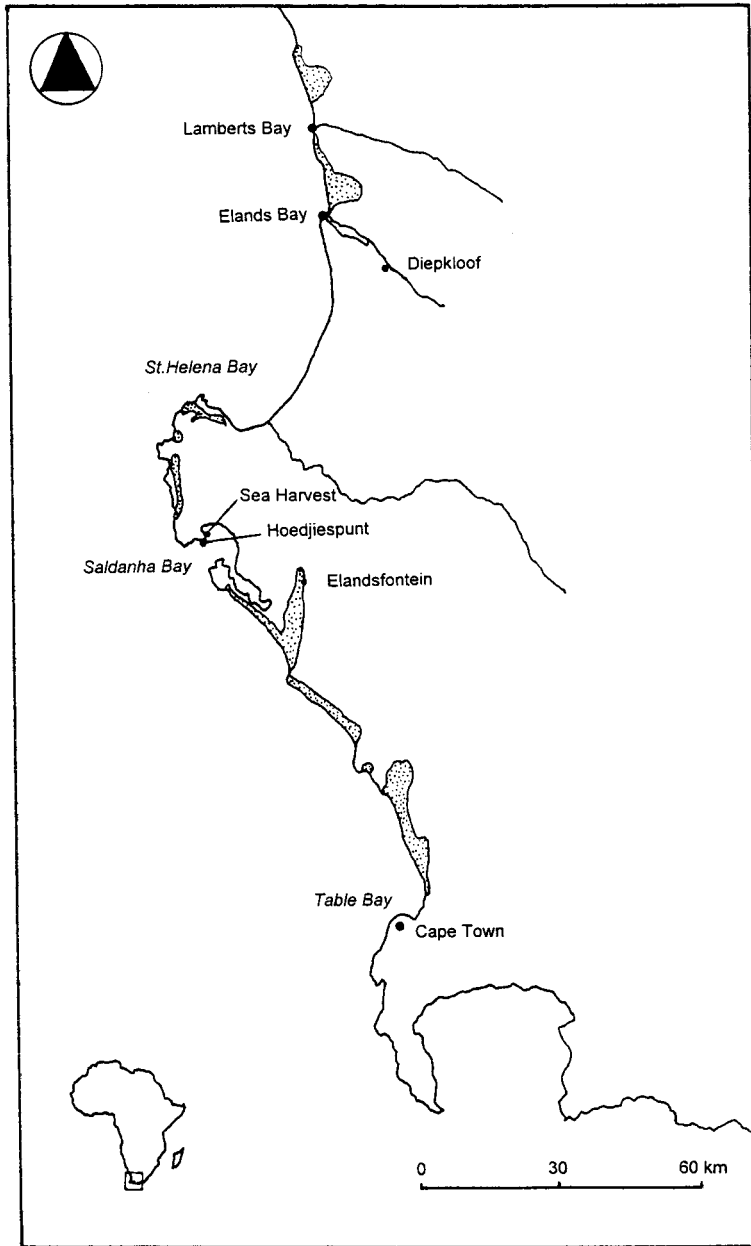


Figure 1. Map of the western Cape with dune plumes and sites mentioned in the text.

date from the Last Interglacial period. It is becoming increasingly clear, however, that the calcified dunes are often much older and that Early and Middle Pleistocene ages are likely for some of them. Perhaps the best known series of localities are those on the farm Elandsfontein from which the cranial roof known as Hopefield of Saldanha 'Man' was found in the early 1950s. These sites are in part palaeontological, but include Early, Middle, and Later Stone Age artefacts and probably span much of the last 0.5 million years. Dating is a major problem because deflation is common and there are no extensive marker horizons such as characterize the volcanic deposits in East African lake basins. Uranium series, electron spin resonance, and luminescence methods, along with rather embryonic biostratigraphic indicators from terrestrial and marine organisms are used for dating, but so far resolution is poor.

There are hyena, owl, and human derived faunal accumulations in these calcretes, almost all of them forming small pockets tucked away in cavities under calcrete shelves or eroding out in deflation hollows. The hyenas, probably mostly the brown hyena, are useful accumulators, vacuuming bones off the contemporary landscape and returning them helpfully to lairs in the lime-rich sands. Less helpfully they then systematically chew the rather spongy human bones and devour many of them. The durable hominid fragments that remain at Sea Harvest, for example, are invaluable because they can be excavated, dated, and properly contextualized. At the Hoedjiespunt site at Saldanha Bay we have four teeth, four or five small fragments of cranium, and two postcranial bones of one or two individuals from a hyena lair. The terrestrial character of the faunal remains and some preliminary uranium series dates on ostrich eggshell fragments may imply an age of 130,000 to 180,000 years for the hominids. It is sobering to think that—Klasies River Mouth aside—almost all the key human fossil specimens of Pleistocene southern Africa are without proper context. Kabwe was blasted out of a hillside by miners, Elandsfontein was found on a deflated surface and Florisbad was unearched during the enlargement of a spring eye.

The human occupation sites in this calcrete landscape are even more remarkable in that they include many, probably hundreds of Middle Stone Age (MSA) shell middens with bone, ostrich eggshell, ochre, stone tools, and abundant marine shells, birds, and seals. Beyond the range of ^{14}C dating, these sites must date from a time of high sea level, most likely a part of oxygen isotope stage 5. Stratified above the hyena lair at Hoedjiespunt, for example, we have a series of MSA shell midden horizons with a quartz stone tool assemblage and abundant, sometimes bevelled and striated, ochre.

Although the ostrich eggshell fragments found so far at these coastal sites do not appear to come from water flasks, there are decorated fragments of ostrich eggshell not far away at the cave Diepkloof in the northern Sandveld (Figure 2). These are engraved fragments clearly associated with MSA stone tools, a reasonable faunal assemblage, and well-preserved charcoal. One fragment of decorated ostrich eggshell has been dated by AMS radiocarbon to more than 40,000 years and the sediment that contains the eggshell has a new luminescence date of about 63,000 years. This is as early as almost any claimed decorated object anywhere in the world. The contrast between the bone tools, abundant ochre, and

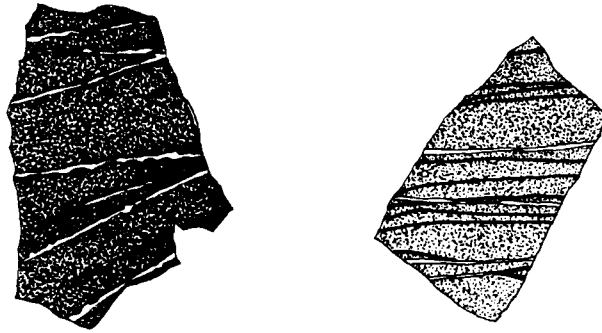


Figure 2. Two of 13 pieces of decorated ostrich eggshell from the late Middle Stone Age (Howiesons Poort) levels of Diepkloof.

decorated objects of the southern African MSA and their relative absence in the technologically similar Middle Palaeolithic assemblages of Europe and the Near East is an issue of growing interest.

But for me the excitement lies in the large number of undoubted shell middens along this coast, allowing us to contrast Holocene and Last Interglacial utilization of more or less the same set of resources. The idea of 'modern human behaviour' seems poorly defined but we have in the Cape a chance to look at large exposures of both MSA and LSA (Late Stone Age) domestic campsites and to assess changes over about 100,000 years. Already it is clear that MSA people left far more ochre, far more ostrich eggshell, ate a more restricted range of marine resources and ate, on average, larger limpets than their LSA descendants. Richard Klein's suggestion that there were fewer people in the MSA and that they used the landscape in a different way from later LSA people may well be correct and is certainly testable. It may also be that MSA integration of shellfish gathering into subsistence arrangements was less sophisticated than in later times.

Why, I'm wondering, do we have so many of these relatively early shellfish-gathering sites when they are so rare elsewhere on earth? It may be that we are simply lucky enough to have access to well-preserved repositories, which elsewhere are inundated by sea-level transgression or deeply buried under coastal sands. Alternatively, it may be that the origins of systematic shellfish gathering lie in this currently seasonal, mediterranean-type landscape at the southern tip of Africa. If this is so, we might begin to speculate about the antiquity of settlement systems that integrate spatially discrete and temporally complementary resources. Is the juxtaposition of an extremely rich near shore marine ecosystem with a seasonal and arguably unrewarding terrestrial ecosystem the significant factor? What do we know of other juxtapositions at this time elsewhere—in the Mediterranean, in Australia, in south-east Asia—or elsewhere in Africa?

Ecological contexts

The vegetation communities of the western Cape belong to the Fynbos Biome or the Cape Floral Kingdom, the smallest of the world's six plant kingdoms, arguably the most diverse and apparently the most threatened. Although characterized by botanists as heathlands and shrublands featuring many proteaceae, ericaceae, and restioniaceae, for hunter gatherers the key character is the abundance of geophytes, especially the many edible corms of the iridaceae family. There are no oil-based nuts or fruit-bearing trees such as are found in African savannas and the carbohydrate-rich corms are the best returns for gathering effort, requiring only a digging stick and carrying bag technology. The fynbos landscape is not very productive, has a low animal-carrying capacity and apparently was not conducive to the encouragement of formal domestication. The rainfall regime is strongly seasonal and results in a rhythmic pattern of corm development and edibility that may well have influenced hunter-gatherer movements and settlement.

Although there are many species of bulbous, tuberous, and corm-bearing plants, early traveller descriptions of the exploitation of plant foods by indigenous people refer regularly to 'uintjiesyd' or 'onion time', the period of the year when corms are fully developed but before the plant itself begins to make use of the stored carbohydrate. Indigenous gatherer hunters and gatherer herders knew the patterns of growth, edibility, and palatability of the local iridaceae and reckoned time by the availability cycle. Because most, but not all, of the western Cape geophytes flower in the spring and early summer, the growing months of the winter rainy season are lean periods for gatherers of corms. It is tempting to speculate that here is a seasonally restricted resource that needs to be integrated into a spatially coherent settlement strategy—arguably including coastal resources where available. Inter-tidal shellfish are as predictable and more spatially constrained than plant foods, and may have filled the gap left by the dearth of corms in winter.

As a sixties Cambridge graduate, these possibilities did not pass me by. Recently my reconstructions of seasonal mobility have been challenged by the isotope archaeometrists who have seen coastal populations as living permanently along the shores of the western Cape. Over the years it has become clear that there is no easy or direct relationship between a stable carbon isotope reading and the length of coastal residence. Pre-colonial organisms, including people, occupied an isotopically more enriched biosphere, collagen readings reflect only protein intake, not total diet, and coastal signatures, being derived from high protein shellfish diets, are exaggerated by rapid turnover in human skeletons. I know that some earlier reconstructions of seasonal rounds need modification, but I have no doubt that during parts of the Holocene, coastal visits were brief and seasonally scheduled. We need now to begin to study the seasonality of MSA coastal visits.

What is interesting in the context of subsistence patterns based on the exploitation of shellfish and underground corms is the complete absence of these staples or people gathering them from the painted repertoire of the hunter gatherers of the western Cape landscape. Not only that, but the landscape itself—topography, rivers, vegetation—

is not reflected in the paintings. Clearly the paintings are *in* but not *about* the physical landscape.

Social and symbolic contexts

The western Cape is a painted landscape with an estimated 10,000 painted rock shelters and caves scattered through the sandstone and quartzite hills and mountains. Although the age of the paintings is not yet well known it is likely that the paintings we can still see were made in the last 5000 years, although the tradition certainly extends back at least 10,000 years and is rooted in regular use of ochre in the MSA. Some broad stratigraphic patterns can be seen. Most clear is the superimposition of many handprints and some other finger-drawn images on fine line depictions of humans and animals, and the complete absence of the reverse. We take this to imply two periods during which dramatically different assemblages of images were made. I'd like to report our current views on the meaning of the fine line images.

These paintings are dominated by human images which outnumber animals by about 2 to 1. Humans are frequently depicted in lines, usually of either males or females, which are arguably representations of dances (Figure 3). Males are identified by prominent depictions of the penis, and women by breasts but more characteristically by well-defined, perhaps exaggerated, rounded buttocks (Figure 4). Many humans are too residual to be assigned as males or females, and there is some disagreement as to whether these were originally unambiguously one or the other. We think so. Although cloaked figures are technically impossible to classify by physiology, the regular association of bows, arrows, quivers, and hunting bags with cloaks has persuaded us they are male. The important points are that people are frequently painted naked, that men far outnumber women, that men almost always have bows, but that they very rarely are painted using them against animals, though not infrequently against one another. In the western Cape women are rarely depicted with the digging stick.

The fine line animals are very clearly not intended as a checklist of local fauna nor as a reflection of what was eaten. In fact the selection of animals to paint, and indeed the selection of images generally, point unambiguously toward the symbolic marking of the landscape with highly *socially* charged paintings. There are many paintings of small antelope, few of which are easily identified to species, and smaller but still substantial numbers of eland and elephant, some rhino, hartebeest, and sheep. Carnivores and small mammals such as dassies, porcupines, mongoose, hares, mole rats, and non-mammals such as tortoise and shellfish are either extremely rare or never painted. The frameworks for viewing this extra-ordinary selection are the archaeological, ethnographic, and historic documents which help us classify the local fauna in terms of economic, social, and symbolic values. Archaeologically, for example, shellfish, tortoises, dassies, small antelope, and plant foods provide the bulk of dietary intake, whereas eland bones are quite rare. Of



Figure 3. Lines of male figures from the farm Sevilla in the western Cape, probably an initiation event.



Figure 4. A line of female figures with one opposed male figure with bow from the farm Bushmansklouf in the western Cape.

the regular diet items only small antelope are painted. Ethnographically, by contrast, eland, along with gemsbok and kudu, the last two not found in the local fynbos, are very prominent in myth and folklore and form a group of animals hunted only by men with the bow and poisoned arrow.

One way to approach the selectivity of images and to try to suggest meanings for the paintings is to build a matrix which orders plants and animals of the landscape along economic, social, and symbolic dimensions and to compare the cell counts with the painted frequencies. Thus, carnivores are not hunted, large game are eagerly sought but rarely caught, small mammals are routinely killed, and corms and shellfish consumed almost daily. The larger the animal the greater the potential to share and develop social networks and the greater the amount of excitement caused by its capture. Women collect shellfish, may kill or collect small mammals and tortoises, but leave the killing of eland and other large game to men, who use bows and poisoned arrows. Risk, social value, and package size are somewhat related to one another and to gender roles.

In the Bleek and Lloyd archive (see for example Lloyd 1911), an extensive nineteenth-

century collection of hunter-gatherer lore, mantis, porcupine, dassie, blue crane, mongoose, and tortoise exist as 'people of the early race', a time when the distinction between people and animals was not yet drawn. These animals are rarely or never depicted. Eland, however, were created at, and in fact create, the transformation to the present order when the distinctions *are* recognized and when the relationship between hunter and prey was established. The critical episode is the killing, by his children or grandchildren, of the mantis' favourite animal, an eland he had made and was keeping secretly near an isolated pool, rubbing it down with honey and referring to it as a person. When he discovers the killing, mantis complains that his permission was not sought and declares that from now on eland are meat and men are hunters. It is a moment of role definition and an event relived in all initiation ceremonies for hunters thereafter.

In Kalahari ethnographies a girl's first menstruation is marked by isolation and a ceremony attended by the adult women, but from which young adult men are excluded. This Eland Bull Dance, as it sometimes is called, is characterized by suggestive dancing by the women who frisk their waistbands like tails at an older man who represents the eland bull. The women are playing the role of eland cows and are welcoming the new maiden into the herd. The girl is now available as prey and as a mate for the young initiated men.

Eland thus occupy a very distinct economic, social, and symbolic position among southern African hunter-gatherer societies. As a large game species the eland offers an abundance of meat to be shared. It is exclusively the prey of men with the poisoned arrow, it is the kill that turns a boy into a man, it is the metaphor used to describe the transformation of a girl into a woman, and it is the animal of which the mantis/kaggen, a kind of trickster/creator/master of the game, was most fond. It was never a person 'of the early race', but appears in the Drakensberg, in the Karoo, and in Namibia at different times as an animal of particular, almost sexual, significance to the hunter (Figure 5).

Image choice in the paintings looks very interesting viewed along these dimensions. The absence of the collected component of diet and the rarity of the characters and themes of 'primal time' surely means that the paintings do not emphasize the economic role of women and do not illustrate the myths and legends of hunter-gatherer cosmology. Rather, a theme of the paintings is the social landscape, the approved relations between men and women. This line of argument might imply distinct meanings for the three kinds of animals regularly painted: small antelope, large herbivores, and very large beasts such as rhino and elephant. Here I tackle only the large herbivores represented in the western Cape by frequent depictions of eland.

The concept of n!ao in the Kalahari is a belief system that links the larger game—eland, kudu, gemsbok—with men's hunting abilities, women's childbearing and the weather. Significantly it is not as plant gatherers that women are opposed to men, but as sexual partners and childbearers. Significantly, also, the emphasis in paintings of women is not on the food quest but the erotic buttocks. Associated with n!ao is an extended verbal metaphor in which relations between adult men and women are spoken of in hunting terms—men pursue and eat women, as they hunt and eat large game. Women like meat,

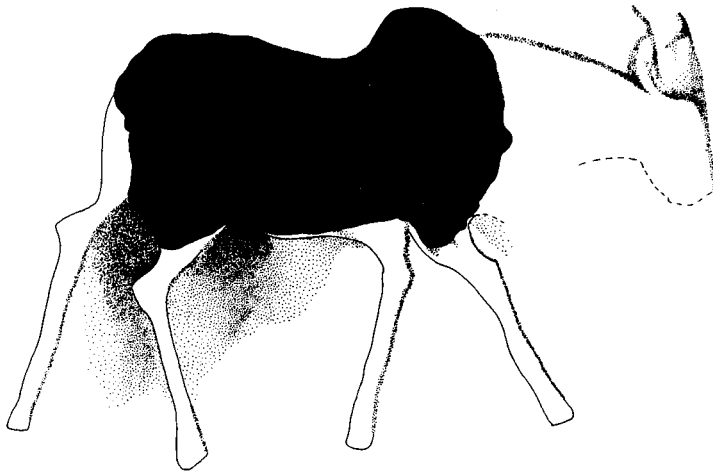


Figure 5. A bichrome eland from the farm Keurbos in the western Cape.

but women are also like meat as Megan Biesele (1993) has noted. Men become husbands and hunters at the same initiation ceremony. The assumption of the hunter–prey relationship refers back to the original eland death when a person became meat, when roles were established, when order was promulgated. Another Bleek and Lloyd story, about *The Anteater's Laws*, explains the transformation from primal to modern times as a kind of second creation, in the same way that an initiation event recreates the young man or woman under a new set of rules.

These metaphors seem to explain the prevalence of eland as painted subjects and their regular association with men and women painted to emphasize their sexual potential, and especially the processional dances that signal the achievement of sexual potential. My view is that many of the paintings in the western Cape and elsewhere in southern Africa, capture the tensions of the changing relationships between boys and girls, men and women, older men, and older women. Elephant, rhino, and small antelope fall into different cells of our multi-dimensional matrix and require other explanations.

In conclusion

Whatever else it is, the western Cape landscape is a wonderful palimpsest of traces from the past—a vessel that houses not only archaeological but also palaeontological, geological, botanical, zoological, architectural, and historical traces of what has been. We are currently developing a concept of the Landscape as combined museum framework and school curriculum in which we hope to return traces back to the landscape from which

they came and to display them in context. The call in South African schools education is to dismantle disciplinary boundaries, to localize the content of the syllabus, to re-connect people to a pre-colonial past from which they have been severed and to focus on outcomes—numeracy, literacy, a conservation ethic. Archaeology is ideally placed to play an increasingly important role by integrating the museum case with the classroom and the present with the past. This may require incessant toil, but will be a truly absorbing task.

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Our conclusion is that the boundaries of *Homo* should be reset so that it includes early African *Homo erectus*, or *Homo ergaster*, and excludes *H. habilis sensu stricto* and *H. rudolfensis*. This would mean that the manufacture of stone tools would no longer be restricted to members of the genus *Homo*. However, we would contend that this has been an untenable association ever since the realization that synchronic taxa have existed in East Africa for much of the early phases of hominin evolution for which there is also evidence of stone artefact manufacture.

JOHN PARKINGTON

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The Atlantic coast of the western Cape is host to a vast quantity of archaeological sites of the past 100,000 years. Ecological studies of Middle and Late Stone Age sites provide opportunities to explore the development of behavioural patterns. The multitude of painted shelters and caves in the western Cape allow us to glimpse the systems of belief that structured early societies.

RHYS JONES

Dating the Human Colonization of Australia: Radiocarbon and Luminescence Revolutions

Dating the early colonization of Australia has for long been at the forefront of prehistoric archaeological enquiries. This paper reviews the historical progression from conjecture to fact, amplified by increasingly sophisticated methods of dating, and identifies those sites now acknowledged to be of paramount importance to a greater understanding of human colonization of the continent.

BRIAN FAGAN

Grahame Clark and American Archaeology

Grahame Clark exercised a seminal influence on American archaeology at a critical stage in its development. His ecological and subsistence researches in the Cambridgeshire Fenland and interest in settlement archaeology were known to but a few American scholars of the 1940s and 1950s. However, the publication of *Prehistoric Europe: The Economic Basis* (1952) and *Star Carr* (1954) came at a time when Americanists were turning from culture history to processual archaeology. Clark's analyses of environment and subsistence played a vital role in the formulation of some of the basic tenets of the so-called 'new archaeology' of the 1960s. His field researches provided a practical component to the influ-