

The archaeology of indigenous herders in the Western Cape of South Africa

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ABSTRACT

Archaeologists commonly cite the high mobility of pastoralists and destruction by modern development and agriculture to explain the low number of herder sites known to date. This paper presents an alternative explanation. Here it is argued that the type of research itself is at least partly responsible for the limited results. The focus on deeply stratified archaeological deposits in caves and coastal middens at the expense of open landscape surveys, the persistence of typological classification and the lack of research into the eighteenth- and nineteenth-century Khoekhoen are presented as causal factors. A dominant theoretical model links all three. The cultural identity or 'dichotomy model' requires deep deposits and large numbers of artefacts in order to classify assemblages as either produced by hunters or by herders. The dominant model also encourages a focus on the pre-colonial period, as hunter and herder identities are thought to have become less distinct after colonial settlement. In contrast, results of recent work suggest that the best methods for recognising herders in the archaeological record may involve open landscape survey and the study of low-density sites, the study of spatial and technological organisation and the use of a wider range of historical sources, including those from the eighteenth and nineteenth centuries.

KEY WORDS: Khoekhoen herders, hunters, open site survey, low-density sites, post-contact archaeology.

Historical records from the Western Cape abound with reference to Khoekhoen 'kraals', describing large open-air encampments of sheep and cattle herders (e.g. Moodie 1838; Raven-Hart 1967; Thom 1952, 1954, 1958). AMS dates on sheep bones have convincingly shown sheep herding was introduced to the Cape between 1600 b.p. and 1900 b.p. (Henshilwood 1996; Sealy & Yates 1994; Webley 2001). Yet, until recently, only some of the sites at Kasteelberg on the Vredenberg Peninsula contained significant concentrations of sheep bones (Smith 1986: 38). To explain the apparent absence of herder sites archaeologists give prominence to depositional factors (H.J. Deacon *et al.* 1978: 57; Robertshaw 1978: 29; Smith 2005: 44–50). Herders are said to have moved quickly across the landscape in their search for new pastures and to have left little behind that can be studied by archaeologists. Some commentators have suggested that the resultant invisibility of herder sites could be compounded by post-depositional factors, such as the destructive effects of modern development and agriculture which, it is said, favour the same fertile and well-watered parts of the landscape as the Khoekhoen occupied in the past (H.J. Deacon *et al.* 1978: 57; Mitchell 2002).

The first half of this paper presents an alternative explanation: that it is the nature of the research itself that has limited results to date. Three related arguments are put forward. First, Stone Age research, of which 'herder archaeology' is a sub-field, has focused on caves, rock shelters and coastal middens. This is problematic for the task of studying indigenous herders since historical sources describe Khoekhoen kraals as large open air encampments most commonly located along inland river valleys (Arthur 2008). The reluctance of archaeologists to address this bias within herder archaeology is linked to the theoretical model that has become the accepted method for recognising herders in the archaeological record. This 'dichotomy model' employs comparative frequency

analysis of certain types of artefacts in order to label an assemblage as either 'hunter' or 'herder'. A second line of argument is that the theoretical premise of hunters and herders as two distinct groups is inadequately examined. This premise fails to address why hunter and herder assemblages may differ in crucial behavioural aspects. There has been no attempt to investigate the procurement, manufacture, use and discard of either lithics or ceramics that have been labelled as herder types. As a result, our techniques of identifying the variation in herder lifeways, and the ability to recognise herders, is dramatically reduced. The third line of argument is that pastoralist archaeology has favoured pre-colonial indigenous sites. These were thought by proponents of the dichotomy model to reflect a time before hunter and herder identities were 'disrupted' by colonial influence (Smith 1993). The effect of this has been an almost complete lack of archaeological research on the eighteenth- and nineteenth-century Khoekhoen.

The second half of this paper reviews developments in herder archaeology over the last decade, during which time there has been a gradual move away from studying only sites with deep deposits and large numbers of artefacts. The aim of this paper is to highlight the relationship between the questions archaeologists ask and the methods they employ. Moving beyond comparative frequency analysis towards spatial and technological analysis enables a shift from questions concerning cultural identity towards the interpretation of social organisation. In order to expand our definitions and develop historically informed questions, research needs to include previously ignored landscapes including inland river valleys and agricultural land, tackle new types of site and develop methods for dealing with a wider range of historical sources.

ARCHAEOLOGY AND THE BUSHMAN / HOTTENTOT DICHOTOMY

When Goodwin and Riet Van Lowe published *The Stone Age cultures of South Africa* (1929) they avoided the labels 'Bushman' and 'Hottentot' in their description of Later Stone Age (LSA) 'cultures' because of possible racial overtones (Bollong *et al.* 1997: 287). Most writers, however, were not so cautious in their associations. Many attempts were made in the first half of the twentieth century to match the Bushman and Hottentot dichotomy presented in historical sources with archaeological 'types', such as the stone tool industries of the 'Smithfield' and 'Wilton', coarse and fine pottery, as well as rock paintings and engravings (Rudner 1968, 1979; Rudner & Rudner 1970; Sampson 1974), but there was never a consensus (J. Deacon 1984: 274; Humphreys 1979: 7). Sites such as Skipskop, near Bredarsdorp on the south coastal plain (Grobelaar & Goodwin 1952), were tentatively assigned to a Khoe-speaking group, but this often depended on the rather dubious typology of human remains, which were fitted into a tall, robust Khoekhoen herder type or a small Bushman type (see also Beaumont & Boshier 1974).

Throughout the first half of the early twentieth century, the Khoekhoen were thought to have migrated from distant parts of North and East Africa, but it was unclear when this occurred. Stow (1905) was in favour of the Great Lakes region of East Africa, while Meinhoff (1912) proposed that the Khoe languages were linked to the Hamitic languages of Northeast Africa. The migrationist theory demanded that there had to be a racial and cultural distinction that could be recognised both in skeletal type and through material culture (J. Kinahan 2001: 9). The physical distinction between the two indigenous groups was, however, never convincingly demonstrated and the linguistic connection with Northeast Africa was shown to be false (Maingard 1934). The racial

paradigm persisted into the 1960s (De Villiers 1968; Ollemans 1960), but research into southern African blood groups demonstrated that Bushmen and Hottentot, as well as Bantu-speaking peoples shared many genetic characteristics (Singer & Weiner 1963). Further linguistic evidence also indicated that the Khoe and Central Bush languages shared a common linguistic root (Westphal 1963). The general consensus by the mid-1960s was that the Khoekhoen were not racially distinct from Bushmen.

Although the idea of Khoe-speakers as immigrants from outside southern Africa seemed no longer tenable, the presence of pottery and sheep in LSA deposits in the Cape continued to be explained by the southwards movement of Khoekhoen (e.g. H.J. Deacon *et al.* 1978). The question of 'cultural' or 'ethnic' distinctiveness of the two groups, and whether this could be identified archaeologically became the more pertinent issue. Attempts to associate the LSA with specific groups known from historical sources continued into the 1970s. Even though discussions of ethnicity became increasingly unfashionable in archaeology elsewhere in the world around this time (Jones 1997), the ethnographic link with pottery types, stone tools and rock art, together with the availability of historical records, encouraged archaeologists in southern Africa to continue to match material culture to ethnic group (Rudner 1979; Sampson 1974; see Inskeep 1969: 21 for a contemporary critique).

HUNTERS OR HERDERS?

Radiocarbon dates on charcoal thought to be associated with sheep bones from Die Kelders in the early 1970s (Schweitzer & Scott 1973) pushed the perceived migration of pastoralists back to 2000 b.p. (cf. Sealy & Yates 1994) and spurred a resurgence of interest in finding the Khoekhoen archaeological signature. An intensive phase of discovery and publication followed in which sheep bones were recorded in a number of LSA cave excavations across the Western Cape, including Boomplaas (H.J. Deacon *et al.* 1978), Nelson Bay Cave (Inskeep 1987) and Byneskranskop (Schweitzer & Wilson 1982) among others (see Bousman 1998; Klein 1986). At the time, even the excavators noted that the focus on caves and rock shelters was less than satisfactory for the task of identifying herder encampments in the archaeological record. The research bias remained, however, as there was an even greater sense of pessimism towards open site survey at this time (H.J. Deacon *et al.* 1978: 57). This negative opinion can be traced back as far as the early 1960s (White & White 1964), when the need for dated sequences was repeatedly emphasised in the literature (Inskeep 1967; Parkington & Poggenpoel 1971: 3). Surface sites were considered less satisfactory as they were deemed to be in secondary context (Sampson 1985: 106). With data from deep cave excavations, models of ecological adaptation and change over time dominated LSA research from the 1960s until the mid-1980s. This was particularly the case in the southwestern and southern Cape where caves and rock shelters were abundant in the Cape Fold Mountains.

There was one attempt to find pastoralist sites in the open landscape during this formative period. Peter Robertshaw (1979) analysed aerial photographs to identify circular crop marks which he thought might correspond to hut circles; a technique that had proved successful in identifying prehistoric features in Britain. Ultimately, a lack of surface artefacts in the areas where crop marks had been identified led Robertshaw to abandon this technique. Instead, he concentrated on building an ethnographically

derived model to explain the perceived low archaeological visibility. Robertshaw recorded an abandoned Nama pastoralist campsite at Sendelingsdrif in the Richtersveld area of Namaqualand and found little that could be studied by archaeologists. This observation was combined with selective historical evidence describing the movement of Khoekhoen groups to construct a theory of herder invisibility. Robertshaw (1979: 245) surmised that “there is little likelihood that pastoralist sites will be found in the Cape”. This early false start did little to encourage further survey and Robertshaw’s (1979: 190) conclusion echoed the pessimism of earlier authors: “the best method for studying the prehistory of the Khoi in the Cape is through the effects they had on the archaeology of the local hunter-gatherer populations”. Thus the archaeology of pastoralism remained focussed on cave sites and the ‘invisible herder’ assumption prevailed. The irony in this wisdom was that it was precisely the focus on caves that prevented researchers from studying other site types that might have led to the identification of herder settlements.

In addition to caves and rock shelters, coastal areas have long received a disproportionate amount of attention from archaeologists in southern Africa. The sheer density of sites, visibility of shell middens, organic preservation and abundant dating material all contribute to the attractiveness of coastal areas for research. More specifically, archaeological work has concentrated on the immediate shoreline, and surveys often fail to sample areas further inland. This bias is particularly significant for herder archaeology as recent survey results and historical observations in Namibia and the Western Cape suggest that Khoekhoen kraals tended not to be located along the immediate shoreline, but rather several kilometres inland (Fauvelle-Aymar *et al.* 2006: 255; J.H.A. Kinahan 2000: 96). Documentary research into Khoekhoen settlement on the south coastal plain of the Western Cape clearly demonstrates that Khoekhoen settlement was concentrated in a narrow strip to the south of the Cape Fold Mountains (Bredenkamp 1981; Elphick 1985), where there are a higher number of perennial rivers, more fertile soils, and higher rainfall than at the coast (Arthur 2008).

Robertshaw (1979) claimed the only material culture that would survive on most open air pastoralist encampments would be pottery and flaked stone. Hunters and herders at this time were perceived to be very similar, at least in terms of stone technology (Avery 1974; J. Deacon 1984: 275; Inskeep 1967; Robertshaw 1978: 29–30). Herders were thought to have left so paltry a material trace on open sites that researchers focused their attention on caves and coastal middens instead. The thinking was that at least sheep bones could be recovered and dated from sealed contexts (H.J. Deacon *et al.* 1978). Yet, in such locations herders were likely to be doing exactly what hunters do, that is, preparing for, or eating the spoils of a hunt; or collecting and consuming shellfish. Pastoralist groups would, of course, also have used caves, either as shelter from time to time or occasionally to corral their sheep. But how could archaeologists distinguish the activities of these groups from those of hunters who were also known to herd sheep on a part-time basis and for whom stock theft was a subsistence strategy, at least in the colonial period? These problems were persistent in LSA studies for decades as archaeologists stuck rigidly to the idea that sheep and pottery must have been brought to the Cape by an immigrant group of Khoekhoen stock herders.

THE REVISIONIST ARGUMENT

Rather than accept the difficulties of distinguishing hunters from herders, some authors began to develop theories to explain the evidence as it was. Janette Deacon (1984) was the first to rock the migrationist boat. She highlighted the insignificant change in lithic assemblages from 'hunter' levels to 'herder' levels. To explain this continuity, Deacon (1984: 269–75) suggested that perhaps it was hunting populations who took on herding but kept their traditional stone technologies. In this line of thinking, the boundaries between hunters and herders are not fixed and acculturation is viewed as the most important process in the initial spread of pastoralism (Sadr 1998, 2003).

Janette Deacon's acculturation theory was similar to a school of thought emerging amongst historians in the 1970s, who also advocated a blurring of the distinction between hunters and herders (Elphick 1985; Marks 1972). Khoekhoen herders and San hunters were thought to be part of the same economic and cultural system and the distinction between stock owners and those with no stock, as seen in the colonial records, was said to be purely the result of economic fortune. Carmel Schrire (1980) took this debate into the archaeological arena, questioning associations between assemblages found in the southwestern Cape caves and the historically observed hunter way of life typified by those termed 'Soaqua' (Parkington 1977, 1984). Schrire suggested that there is no reason these caves could not have been occupied by the Khoekhoen, who were just as likely to hunt and occupy caves as other groups identified in the historical period (Schrire 1980: 17).

THE HERDER PACKAGE

When the eventual identification of herder encampments at Kasteelberg came about in the mid-1980s, the evidence, not surprisingly, was from an open site context. The story that emerged proved once and for all that herder sites were visible and, furthermore, researchers believed they had identified a particular material culture signature which could be distinguished from that associated with hunters (Beaumont & Vogel 1984; Beaumont *et al.* 1995; Sampson 1984, 1986; Smith 1986). Two sites with faunal assemblages dominated by sheep bones (KBA and KBB) were identified at Kasteelberg on the Vredenberg Peninsula (Smith 1986: 38). Based on these new discoveries, Smith (1983, 1986) presented a detailed definition of pre-colonial pastoralism in the Western Cape. Drawing on the ethnographic literature of cattle herding in Africa, pastoralism was described as a particular way of life adapted to marginal grasslands (Smith 1983: 83–4). Developing Monica Wilson's (1969: 72) and John Parkington's (1984) ideas, relations between hunters and herders were seen as competitive and the two groups were modelled not only as different subsistence strategies, but as separate cultural entities (Smith 1986: 38–40). Smith reaffirmed that hunters would find the transformation to herding very difficult as two key ideological aspects, accruing surplus for future consumption and the owning of property, were in conflict with their egalitarian principles (Smith 1986: 39). Clientship, trade, conflict and robbery were described as common modes of interaction but herding was defined as the dominant subsistence strategy (Smith 1983, 1986).

Smith's response to the revisionists was twofold. First, he (Smith 1990) elaborated on his earlier model of separate cultural groups with anthropological arguments and further developed the thesis of ideological barriers that would have prevented hunters from becoming herders. Second, the initial identification of a pastoralist

signature was backed up with a wider range of material culture associations to demonstrate further that they were distinct from contemporary hunter sites (Smith *et al.* 1991). A number of sites were investigated on the Vredenberg Peninsula and the mountains overlooking the Swartland, and two significant groups of material associations were delineated. One group was said to represent herders, and the other, hunters. According to Smith *et al.* (1991), a herder site should consist of large amounts of domestic livestock remains, a high density of pottery (> 700 sherds/m³), large ostrich eggshell beads, many grindstones and few formally retouched stone artefacts. Hunter sites should, in contrast, be characterised by a dominance of wild fauna, less pottery (< 10 sherds/m³), formally retouched lithics (often in silcrete), *Donax* shell scrapers, small ostrich eggshell beads and few grindstones (Smith *et al.* 1991: 86–7). Yates and Smith (1993) later refined the model. They proposed that herder sites would have a higher proportion of ceramic sherds relative to flaked stone artefacts than would be found at hunter sites.

Similar observations were made in the Bushmanland region of the Northern Cape, where ‘Cape Coastal Pottery’ was found to occur most frequently with an informal flaked-stone assemblage (Beaumont & Vogel 1984). Based on the assumption that Cape Coastal Ware had been used by some Khoekhoen herders in the historic period and that some sheep bones had been found at two sites named Doornfontein and Blinklipkop, Beaumont and Vogel (1984: 81–2) had no doubts that this type of site was related to ‘Khoisan tenders of sheep and cattle.’ A second type of site was found with a different, grass tempered pottery and a Wilton lithic assemblage, similar to that found in pre-pottery sites. This continuity in stone technology, the differences with the herder sites, and the historical observations of pottery use encouraged the authors to associate this second type of site specifically with /Xam hunter-gatherers (Beaumont & Vogel 1984).

Beaumont and colleagues named their herder and hunter packages the Doornfontein and Swartkop industries respectively (Beaumont *et al.* 1995). The Doornfontein industry was seen as geographically separate from the Swartkop industry and defined by “a quite different Ceramic LSA industry in which the lithics are more amorphous, while all the pottery is thin-walled, grit-tempered, well-fired, and of amphora shape, that can be associated with the Khoi by way of historic record” (Beaumont *et al.* 1995: 255). Links were also made to the theoretical model of herder dominance that was proposed for the Western Cape. The Doornfontein or Khoi people were said to have occupied the areas close to the river and the Swartkop people, believed to be the direct ancestors of the historically observed /Xam hunter-gatherers, were marginalised and forced to occupy the open plains (Beaumont *et al.* 1995).

The most conclusive evidence for pastoralism came from the Seacow Valley on the eastern flanks of the Karoo where 299 stone-built stock enclosures were recorded (Hart 1989; Sampson 1984, 1986). Here, the herder and hunter packages were defined on the basis of artefacts associated with the stone structures. The dichotomy was based on the observation that Cape Coastal Ware and a non-Smithfield lithic type (although the lithic differences were never described) dominated sites close to clusters of stone-built kraals, and ‘Bushman’ pottery was found together with Smithfield stone artefacts and dominated on non-kraal sites (Sampson 1984). Artefact analysis of the dichotomy focused on the pottery, and nearly 1000 surface sites were classified (Bollong *et al.* 1997: 295). The

initial classification was based on the early twentieth-century dichotomy, also used by the Bushmanland research group (Beaumont *et al.* 1995), which defined herders on the ethnographically observed distinction that Bushman pottery was grass tempered and Khoi was not. Subsequent analysis confirmed the distinction on technological grounds. There were definite differences in types of clays, manufacture, temper, form and finish (Bollong *et al.* 1997: 294). Sampson was a little more cautious than Beaumont and colleagues when assigning pottery to a Khoekhoen group, but nevertheless decided to keep the cultural label, renaming it 'Khoi' pottery, although warning that this might not equate directly with the linguistic group (Sampson 1984: 102).

Early papers published on this project were without the benefit of ceramic seriation and focused on the general spatial divide between the pottery types and the stone-built features (Sampson 1984, 1985). A frontier was hypothesised between the herder zone in the south of the study area and the much larger hunter zone to the north. The subsequent seriation of ceramics, combined with spatial plotting of densities in relation to stone structures, enabled Sampson and colleagues to reconstruct the shifting distributions of pottery in relation to stone-built kraals over time and to test the robustness of the hypothesised frontier (Bollong *et al.* 1997; Sampson 1996). Clusters of kraals were grouped together by the authors to make seven units centred around waterholes. In the earliest phase (pre-AD 1200), there was found to be a correlation between the dominance of Khoi type pottery at kraal clusters and 'Bushman pottery' on non-kraal sites (Bollong *et al.* 1997: 295–6). But the results show significant variation from this pattern, and the authors admit that rock shelter excavations in the upper valley do not support this distinction. Indeed, by the second phase of kraal building, which occurred between AD 1200 and 1500, Bushman pottery dominated at one of the kraal groups and also at isolated kraal sites between the main clusters. 'Khoi ware' dominated at many non-kraal sites (Sampson 1985: 103–5).

One of the key features of the distribution that required explanation was that there were many lithic and pottery scatters without kraals between the groups. Did these sites represent hunters living amongst the groups of herders, or were they merely non-kraal herder locations? In the early phase, Bushman pottery dominated at these sites, but later the situation was more complex. This aspect was never really resolved and chemical analysis showed that pots likely to be from the same production batches were circulating between kraal sites and non-kraal sites. In the first summary of the ceramic data, Sampson (1996: 323) suggests that this could represent either herders extending their settlement out beyond the normal grazing areas, or trade with hunters. Clientship is also offered as a potential explanation for lithic scatters dominated by Khoi pottery (Sampson 1985: 105). One aspect which Sampson (1985: 105) admits may help resolve these questions of identity is lithic analysis, but even in the latest summary (Bollong *et al.* 1997: 295–6), the lithic data are not included; the sites are described in terms of pottery types and whether they are with or without stone enclosures. In general, the spatial data was found to "support the idea of an ethnic division expressed in the ceramics" (Bollong *et al.* 1997: 295). Whilst the authors admitted that the "so-called Bushman pottery is not in itself an ethnic marker for hunter-gatherers of the South African interior" (Bollong *et al.* 1997: 296), the general interpretation reflected the dominant, historically derived interpretation of a sustained ethnic divide seen also in Western Cape and Bushmanland examples.

TWENTY YEARS ON

Pastoralist archaeology has developed considerably from the pessimism of the 1970s. Scholars have now developed models to distinguish between hunters and herders based on the association of certain types and numbers of artefacts. Furthermore, three particularly abundant find spots, at Kasteelberg, Bushmanland and the Seacow Valley, demonstrate that herding communities were fixing themselves to specific points in the landscape (Beaumont & Vogel 1984; Sampson 1984; Smith 1983, 1986). These locales were either occupied long enough, or visited frequently enough, for groups to invest time in the construction of stone structures, or to accumulate dense middens. This was in sharp contrast to the original historical model derived from Van Riebeeck's journal, which suggested that herders would not be found archaeologically because they had been constantly on the move in their search for new pastures and rarely occupied the same location twice (Robertshaw 1978). So, if herders are not 'invisible', and we have a good method for distinguishing them from hunters, why have so few herder sites been located since the 1980s?

I argue that at least part of the problem is the rigid definition of herder assemblages in the literature and the reliance on quantities of a certain type of pottery or domestic stock bones to provide a positive identification. Crucially, certain types of landscapes, known to have been occupied by indigenous herders, are unlikely to produce the types of archaeological data required for the application of the dichotomy model (Arthur 2008). These include the inland river valleys of areas such as the south coastal plain of the Western Cape, which were settled by some of the largest Khoekhoen groups (Bredenkamp 1981; Elphick 1985). But there is more to it than this. Even when interesting cases of variation have been noted, some researchers have failed to consider broadening the criteria of what might constitute a herder or hunter site. In the Seacow Valley project, for example, Khoi pottery dominated at some clusters of non-kraal sites and in the Bushmanland surveys Khoi pottery dominated at Wilton (and therefore hunter-gatherer) sites. These anomalies were explained away as evidence of cultural contact in the form of hunter-herder clientship (Beaumont *et al.* 1995; Sampson 1984: 105). This is a classic normative culture-historical approach whereby differences between two groups are thought to reflect distance between two populations and similarities represent closeness (Jones 1997). There is little consideration of diversification or variation within the cultural groups of 'hunters' and 'herders' themselves (but see Bollong *et al.* (1997) who accept hunter-herder integration in the Seacow Valley after AD 1500). Similarly, at one hunter site, Voëlvlei in the southwestern Cape, bead sizes appeared to increase through time. This is explained as closer cultural contact with the dominant herders in the later periods (Smith *et al.* 1991: 89).

How then might we expand our approach beyond the simple classification of artefacts into herder or hunter types? For the remainder of the paper I suggest four ways in which this might be achieved. First, through the more detailed study of lithic technology on a landscape scale; second, through the identification of large sites that can provide intra-site spatial data; third, through an examination of low-density sites and plough-zone surveys. Finally, I argue that herder archaeology urgently needs to tackle the post-contact period where a much wider range of archaeological material can potentially be associated with the Khoekhoen.

FUTURE DIRECTIONS 1: BEYOND THE FORMAL/INFORMAL DICHOTOMY

Both Schrire (1992) and Sadr *et al.* (2003) have found the formal/informal lithics distinction to be better explained as a functional rather than a cultural difference (see also Wilson 1996: 82). Here, I note two additional but related limitations with this aspect of the model. First, there is no attempt to explain *why* the assemblages may vary in the way that they do. Why would herders employ a more expedient technology and hunters leave behind smaller retouched artefacts, and why would there be differential use of raw materials between hunters and herders in the same environment? Such a line of enquiry does not necessarily refute the dichotomy of hunters and herders. If there were indeed two separate groups one would expect mobility, forward planning, risk management, group organisation and activities to vary considerably between the two different subsistence regimes.

The second major limitation is that the so-called informal assemblages are never analysed in detail. Instead, they are simply classified as non-formal, and using the traditional typological terminology, labelled as 'debitage'. If archaeologists are attempting to group artefacts together as a 'cultural' entity or even as an economic group, a more detailed consideration of the flaked stone is necessary. The typological analysis of retouched forms is only a small part of the sub-field of modern lithic analysis. Technological analysis, either using metrical techniques, more qualitative reduction sequence studies, or preferably a combination of both, together with refitting, microwear and residue studies would allow archaeologists to tackle the kind of behavioural questions just mentioned. Until very recently there has, in fact, been no technological analysis of any lithic assemblages assigned to a pastoral economic group.

Isabelle Parsons' (2003) re-evaluation of the Swartkop/Doornfontein dichotomy attempted to employ a technological approach. However, rather than using the opportunity to pose questions of technological organisation and subsistence strategies, Parsons focused on simply trying to see if two adjacent surface sites had two different sizes of artefacts. She also analysed two sites already assigned to the Doornfontein and Swartkop groups. Not surprisingly the four sites divided into two groups. It would, however, be useful to hypothesise why the two different size ranges in stone tools might be the residues of hunting or herding subsistence practices. For example, why would two groups occupying the same space (only 150 m apart) be using different raw materials, producing flakes of different sizes, one retouching a certain type of flake and the other not retouching any? Raw material size and availability is an obvious concern that needs to be taken into account when explaining the size and shape of debitage (cf. Sampson 1974).

In order to demonstrate purposeful procurement of one set of raw materials over another, the same raw material availability would have to be demonstrated for the two groups. A recent analysis of a small sample of the KBB (herder) and Witklip (hunter) assemblages by Rivat (2006) attempted to address this issue. The results suggest that the occupants of the latter site showed a preference for finer grained raw materials than the former, even though fine-grained material was readily available to both. But such an observation does not automatically allow us to jump to conclusions of 'cultural practice' (cf. Binford & Stone 1985; Gould 1985). Different raw materials fracture differently and have different potential for utilisation, and functionality is likely to have varied accordingly. Furthermore, functional difference, in terms of raw material use

and the finished stone artefact product, is but one behavioural consideration that needs to be taken into account. To think outside the culture versus function debate for a moment allows archaeologists to consider other questions relating to social organisation. For example, studies of raw material procurement, manufacture and use, if tackled on a landscape scale, could dramatically improve our understanding of herder settlement patterns and mobility.

FUTURE DIRECTIONS 2: TOWARDS SPATIAL ORGANISATION

Some researchers have suggested that the intra-site spatial analysis of LSA sites might be a better way to recognise pastoralists in the archaeological record (Avery 1974; J. Kinahan 2001). John Kinahan's work in the Brandberg Mountains, Namibia, interpreted very visible clusters of stone walls as representing distinct pastoral household units. Further south, a number of pastoralist sites have been exposed along the banks of the Orange River in the Richtersveld area, due to the effects of upstream damming (Smith *et al.* 2001). Webley (1997: 3) investigated two large open sites that had been exposed in this way, Jakkalsberg A and B. The sites consisted of both dense scatters of lithics containing large amounts of pottery and fauna, and discrete ashy hearths. Only 30 km downstream, Smith *et al.* (2001) investigated another recently exposed open air site at Bloeddrift 23. Detailed intra-site spatial mapping revealed a surface scatter of 13 ashy hearths, consisting of flaked and ground stone, manuports, pottery, bone, ostrich eggshell fragments and beads. Although the investigations at Bloeddrift 23 and Jakkalsberg added a much needed spatial dimension to the 'herder package', the comparisons of relative frequencies of stone, pottery and fauna remained the principal tools for identifying herders.

More recent investigations at low-density sites in the Western Cape demonstrate that this conventional dichotomy approach is not always necessary to identify possible herding encampments. KFS5 on the Vredenberg Peninsula is a large open-air site, discovered in the 1992 Vredenberg Peninsula Survey (Sadr *et al.* 1992), but recently recorded as part of the *Archives Khoisan* project (Fauvelle-Aymar *et al.* 2006). Concentrations of burnt calcrete cobbles, thought to mark hearths, were plotted by GPS (Fauvelle-Aymar *et al.* 2006: 259). Perhaps the most important discovery at KFS5 was vitrified dung, which represents a new diagnostic tool for recognising LSA kraals in the archaeological record of southern Africa (Fauvelle-Aymar *et al.* 2006: 265–7). Significantly for the future prospect of open-site survey, vitrified dung does not require good organic preservation. A survey of agricultural land at the Breede River and Buffeljachts River confluence, an area known for large aggregations of Khoekhoen groups in the 1670s and 1680s (Elphick 1985: 139), has also identified large artefact scatters comparable to KFS5 (Arthur 2008). Spatial plotting with GPS recorded concentrations of burnt stone, surrounded by pottery and flaked stone, numbered BR1–3, that have subsequently been interpreted as hearth locations (Arthur 2008).

Recent mapping and test excavations at Simon se Klip (SSK) by Jerardino and Maggs (2007) have built on this spatial research movement in herder archaeology. Through extensive recording of stone walls on the slopes and summit of a large rock outcrop, Jerardino and Maggs have provided a direct opportunity to observe the spatial layout of a pastoralist campsite. The centrality of the main domestic stock enclosure within the settlement and the juxtaposition of domestic space and animal pens indicate an intensity of herd management not seen in other sites in the Western Cape. This new discovery

has also helped reaffirm the role of archaeology in questioning the conventional models of Khoekhoen history (Jerardino & Maggs 2007). There is, after all, no mention of the Western Cape Khoekhoen building stone kraals in the written record.

A project similar to Arthur's (2008) survey of the Breede River is the survey of the Berg River undertaken in 2006 as part of the *Archives Khoisan* project (François Bon pers. comm.). This French team also surveyed a section of an inland river valley in the Western Cape where documentary sources confirm Khoekhoen occupation, and where Hart (1984) had previously identified surface sites with lithics and pottery. Significantly, these sites are located in ploughed fields similar to KFS5 and also consist of a low-density spread of artefacts likely to be related to herder occupations (François Bon pers. comm.; personal observation of one of the sites).

FUTURE DIRECTIONS 3: THE IMPORTANCE OF LOW DENSITY AND PLOUGH-ZONE ARCHAEOLOGY

At KFS5, the density of the flaked stone artefacts was as low as one every 6 m² (Fauvelle-Aymar *et al.* 2006: 261) and only 33 flaked stone artefacts were recorded from the excavations at SSK. If the models of pastoralist settlement which have come to dominate discussions in the Cape (H.J. Deacon 1983; Robertshaw 1979; Smith 1983) are accepted, then such large and low-density sites should be the key identifying feature. Yet surprisingly, such dispersed distributions of artefacts are a new research topic for pastoralist studies in southern Africa. Elsewhere in the world, the importance of low-density sites for the study of pastoralism has long been appreciated (Rosen 1992: 80). All open context sites should be recorded, regardless of the density and types of artefacts present, if we are eventually to understand the true extent of subsistence and identity variation indicated by recent fieldwork. The size of the samples from low-density open air sites can certainly be problematic (Mitchell 2002: 131), yet this drawback is more than balanced by the potential that low-density sites offer for the recognition of shorter occupation periods.

As we have already seen, archaeologists have long been aware of the correlation between the best agricultural land and the areas most favoured by the Khoekhoen. Until recently, this relationship has been mentioned only in reference to the much vaunted 'invisibility' of mobile herders (e.g. Mitchell 2002). The plough-zone sites, KFS5 on the Vredenberg Peninsula and BR1–3 on the Breede River, have, however, convincingly demonstrated that agricultural practices do not destroy all evidence of indigenous settlement (Arthur 2008; Fauvelle-Aymar *et al.* 2006). The fact that colonial settlement and intensive agriculture of the twentieth century favoured the same locations as pre-colonial herders should not be a discouragement from working in ploughed fields. Indeed, elsewhere in the world, plough-zone archaeology is given prominence for the very reason that it is under threat (e.g. Dickson *et al.* 2005). Ploughed fields are generally thought of as a mixed blessing for archaeologists, artefacts are displaced both vertically and horizontally, but the silver lining is that visibility can be increased and buried materials can be brought to the surface. While no experimental studies such as the ones undertaken in North America (Ammerman 1985), England (Reynolds 1982) and Australia (Gaynor 2001), have been undertaken in southern Africa, there is a general consensus that spatial patterning does survive in the plough-zone (Lewarch & O'Brien 1981; Odell & Cowen 1987; Roper 1976).

FUTURE DIRECTIONS 4: THE POST-CONTACT ARCHAEOLOGY OF THE KHOEKHOEN

Another problematic legacy of the cultural dichotomy model is the tendency amongst its proponents to avoid studying the period after initial European contact. Those who support the model have suggested that disruption of indigenous communities in the seventeenth and eighteenth centuries meant that the cultural boundaries between hunters and herders became less distinct (Smith 1993: 439). Although not explicitly stated, it can be presumed that researchers working within this framework have focused on pre-colonial indigenous sites for this very reason, that is, so that the theory of two separate cultural groups could be tested. As Gavin Lucas (2006: 69) recently put it, it is as if the Khoekhoen “no longer existed after 1652”. Some writers have recognised the crucial need to develop an ‘archaeology of impact’ or an ‘archaeology of contact’ for the colonial period (Hall 1993: 184–6; Sadr 2003: 205), but surprisingly there have only been two attempts to target a known point of Colonist–Khoekhoen interaction in the Western Cape (Clift 2001; Schrire 1988).

In general, historical archaeology at the Cape is well developed compared to elsewhere in Africa (Reid & Lane 2004) and has been specifically aimed at uncovering the histories and lifeways of those not represented in the written texts, including slaves, servants, lower-class town dwellers and soldiers (Hall 1993). Most of this research has, however, been carried out in an urban context. There have been some attempts to study vernacular architecture from an archaeological perspective (Gribble 1989), but there have been few surveys of rural buildings and structures that are not associated with homesteads or, indeed, the landscapes that exist on the margins of these estates where Khoekhoen farm workers are known to have lived.

An example of post-contact Khoekhoen archaeology is provided by John Kinahan’s survey of stone walling at //Khauxa!nas, in the south of Namibia, a historically known eighteenth-century encampment (Kinahan 1996). Here, the recognition of similar aspects of social organisation in the layout of //Khauxa!nas to that observed in the Hungorob allowed Kinahan to develop a critique of the conventional historical wisdom that the Oorlam groups who occupied the site were a product of colonial forces (Kinahan 1996). Another example is from the southern Cape of South Africa. In addition to the seventeenth-century historical evidence used to locate BR1–3 on the Breede River, Arthur (2008) also investigated oral histories originating in the eighteenth century. The histories were recorded in the early twentieth century from descendents of mid-eighteenth-century colonists (Arthur 2008; Tomlinson 1943). A critical evaluation of the sources was undertaken, not only to aid survey but to develop specific questions concerning the social and political interactions between Khoekhoen, the Dutch authorities and the settlers. The survey focused on two locations, *Lang Elsieskraal* and *Ou Tuin*, today situated in Bontebok National Park, which according to oral accounts were Khoekhoen kraals (Tomlinson 1943). A large, dense scatter of indigenous pottery and flaked stone was identified at *Ou Tuin* and a shepherds hut, irregular stone enclosure and two thorn/aloe enclosures at *Lang Elsieskraal*. Positive identification of Khoekhoen occupation is difficult to demonstrate from these two locations alone but this is primarily a symptom of the lack of research into open landscapes of the Swellendam region. Further survey is planned to increase the data set on adjacent farms where oral history indicates a number of other kraals and associated burial sites were situated (Arthur 2008; Tomlinson 1943).

CONCLUSION

This review has shown that the methodological emphasis in the archaeological study of LSA herders is now shifting towards the analysis of spatial organisation and lithic technology, through which it is possible to study variety in aspects such as group size, mobility, settlement patterns and social structure. Investigation into the seventeenth- and eighteenth-century Khoekhoen have also tested the disciplinary boundaries of Khoekhoen archaeology, by focusing on historically known sites and asking questions of specific historical narratives (Reid & Lane 2004: 12). The range of sites is also expanding to include not only dense accumulations or those with diagnostic artefacts, but also dispersed sites in plough-zones, ephemeral stone walling on hilltops, and even shepherd huts and vegetation features. The body of knowledge is growing and through the spatial maps recorded at sites such as Bloeddriestad 23, the Jakkalsberg sites, KFS5, SSK, and those from the Breede River, together with detailed artefactual analysis like that employed on the *Archives Khoisan* project, we may soon get a little closer to understanding the variety of herder lifeways.

Perhaps now the biggest challenge is to adjust our definition of pastoralist archaeology in the Western Cape. It is significant in this regard that three of the most recent identifications of possible pastoralist encampments were not new discoveries. KFS5, SSK and the Berg River sites have all been known to archaeologists for over 10 years and it is simply by changing the way we look at these sites that the new perspective is being formed. As more researchers free themselves from the confines of cultural models and the disciplinary boundaries of Stone Age or Historical archaeology it is quite likely that a greater variety of ‘herder’ sites will emerge in the next few years. It may yet turn out to be that pastoralists were not invisible after all; it was just that we did not know how to see them.

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