A REVIEW OF HUNTER-GATHERERS IN LATER STONE AGE RESEARCH IN SOUTHERN AFRICA

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ABSTRACT

Since its inception in academia in 1929 by John Goodwin and Clarence van Riet Lowe, the Later Stone Age (LSA) in southern Africa has seen considerable growth and heated academic debate. Recently, some academics have lamented that LSA research has stagnated, and even reached the brink of marginalisation. According to Mitchell (2005), one reason for reviving LSA research is the field's global importance and potential to empower and represent previously disenfranchised communities. The aim of this paper is to examine how San communities and southern African hunter-gatherers have been historically perceived by reviewing LSA research approaches. Several key themes of LSA research are presented which capture major shifts in methodological and theoretical frameworks and research interests within the field. These examples signal fundamental shifts in research discourse, archaeologists' perspectives, and the dominant views of 'Bushman'. Although providing an historical summary of LSA research, the paper also considers decolonisation within the field, aligning with the current socio-political milieu in southern Africa. It is suggested that while using ethnography and indigenous knowledge systems is helping us decolonise our approach to the archaeological record, this is not without its problems.

Key words: Later Stone Age, hunter-gatherers, Bushman, research historiography, southern Africa.

"... we have been made into nothing" David Kruiper (Khomani San leader) 1998 (Adhikari 2010: 19)

INTRODUCTION

Committed research into southern Africa's Later Stone Age (LSA) has been conducted since 1929, when John Goodwin and Clarence van Riet Lowe published The Stone Age Cultures of South Africa (the term 'Later Stone Age' was first used by Goodwin in 1926). There have been a number of developments since their seminal work in terms of our research approaches, methodologies and aims. Recently, Peter Mitchell (2005) and Lyn Wadley (2014) both expressed their concern about the slow progress of LSA research. A cursory inspection of research papers and field and technical reports published in the South African Archaeological Bulletin shows a slow decline in the number of outputs since an initial boom in the 1970s (Fig. 1). Mitchell (2005) found this dispiriting because within South Africa, LSA research has the ability to empower and represent extant Bushman¹ communities (see Mazel 1992) through improving access to and the relationship with the nation's own heritage. Later Stone Age research, however, has tended to derive from a very colonial perspective. Even in rock art there is a heavy reliance on the records made by Wilhelm Bleek and Lucy Lloyd who, as will be discussed, conducted their study in the manner of their time, influenced by colonial perceptions (Bank 2006). Today, many of the pejorative views held by early colonists have been dispelled, and yet there are still traces of these present in unacknowledged attitudes towards the Bushmen. Nevertheless, LSA research is in the process of decolonising, and has been for some time, but there is still a need to redress some of our perceptions of southern African hunter-gatherers.

Those responsible for producing the artefacts classified as LSA in current terminology are considered to be the ancestors of southern Africa's indigenous hunter-gatherers. Today, they are represented by members of San or Bushman communities (see Mitchell 2002: 230, for a distribution map). However, in the past, other hunting and gathering communities may have inhabited southern Africa whose identity might have differed from that of modern Bushman groups. Therefore, one should not view the LSA as entirely representative of the Bushman or San collective prehistory, but rather representative of a hunter-gatherer prehistory; Pargeter et al. (2016a: 1077) discuss the difficulty of equating archaeological residues with "named ethnographic cultures". Nonetheless, at times it seems that they have been neglected within the research discourse, which in certain circumstances is understandable (e.g. when discussing stone tool technologies), but also misleading. Over the course of LSA research, one sees shifts in the way huntergatherers are viewed depending on national socio-political contexts and the development of the discipline both globally and locally. These perspectives have informed our approaches to studying the past, our research interests, and the success of specific projects. They have also affected the general perception of hunter-gatherers.

This paper seeks to explore the changing perceptions of hunter-gatherers by providing a historiography of LSA research in southern Africa. The aim is to demonstrate how historically we have shifted our views of Bushmen and their ancestors, and how some of these perceptions have continued to the present day. To show this, early colonial and 19th century attitudes towards hunter-gatherers are reviewed, followed by an overview of methodological and theoretical approaches to LSA research over the past 80 years, and how such approaches reflected and influenced the way hunter-gatherers were viewed. The purpose is not, however, to review the findings of LSA research in itself, or to provide changing definitions of the technocomplex. For this, one can refer to the many summaries of LSA archaeology (e.g. Sampson 1974; Deacon 1984; Mitchell 2002; Lombard et al. 2012). The intention behind this paper is to assist in formulating an understanding of past attitudes towards the Bushmen and from that, help to identify possible ways to continue decolonising LSA research.

COLONIAL PERCEPTIONS AND DESCRIPTIVE APPROACHES TO LATER STONE AGE ARCHAEOLOGY

At the time of Goodwin and Van Riet Lowe's (1929) book, little of the LSA was known, despite there having been many interactions, accounts, and even studies of some of the descendants of its producers. All of these accounts, however, were by colonists or European descendants and none by Bushmen themselves. In addition, most were pejorative, racist, discriminatory and heavily biased, yet they formed the initial perception of indigenous communities that in some ways took decades to dispel (Wright & Weintroub 2014). Even to this day in popular media and pseudo-science, one sees the remnants of these perceptions and the reaffirmation of racist ideologies

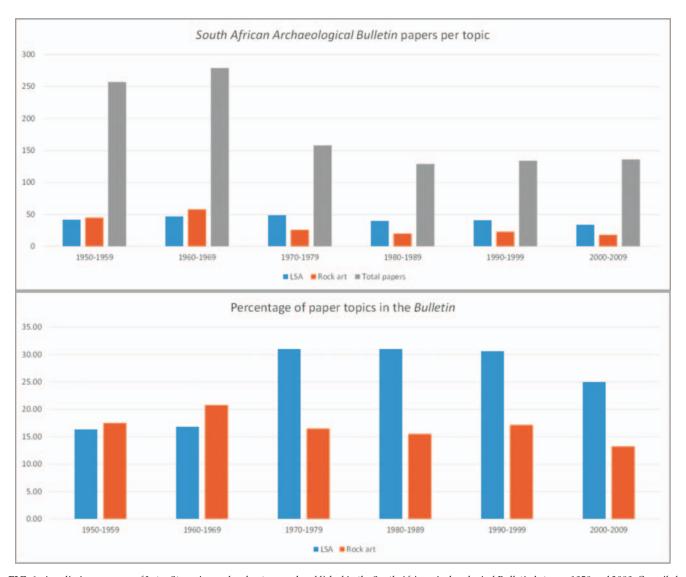


FIG. 1. A preliminary survey of Later Stone Age and rock art research published in the South African Archaeological Bulletin between 1950 and 2009. Compiled from the JStor website (www.jstor.org), from articles on material south of the northern Namibian border and the Zambezi.

and notions of 'primitiveness' in indigenous groups, unable without the assistance of foreign groups to develop complex societies (see examples in Delius & Schoeman 2010). I would not think it a stretch of the imagination to relate some of these perceptions (e.g. by Cyril Hromník, Johan Heine, and Michael Tellinger) (cf. Delius & Schoeman 2010) to the ways in which indigenous groups were viewed by early colonists, and during the following decades.

In the late 19th century, for example, Thomas Elton (1872: 20–21) was attempting to sail down the Shashe River and into the Limpopo River towards the Indian Ocean in order to link the Botswana Tati Mines to the coast. In the Shashe–Limpopo confluence area (middle Limpopo Valley, Fig. 2), he encountered Bushmen, and commented:

After crossing the Limpopo, we surprised a 'knobnuizen' – a wretched specimen of humanity, and a living testimony in favour of the Darwinian theory [...] they bear on their persons all the outward signs of want, abasement, and degradation [...] Starvation continually stares them in the face, and their life is one constant battle for existence.

Another far more menacing account is from Anders Sparrman (1787: 194) who, at the end of the 18th century, observed:

Does a colonist at any time get view of a Boshiesman, he takes fire immediately, and spirits up his horse and dogs in order to hunt him with more keenness and fury than he would a wolf or any other wild beast.

Unfortunately, these comments and observations are by no means uncommon (Fig. 3). The general perception held by many (but not all) Europeans during this early colonial period was that the Bushmen were materially, culturally and socially poor and incapable of elevating themselves from their lot, and engaging with complex thought, symbolism or social structure (see Voss 1987; Gordon 1992; Bregin 2000; Adhikari 2010). The Bushman's reliance on hunting and gathering was seen as 'irrational', "demonstrating 'animal' modes of interaction with the environment" (cf. McGranaghan 2012: 26). Richard Collins (c. 18th century) describes Bushmen as "unfortunate creatures" (cf. Smith et al. 2000: 47), while Robert Ballantyne (1879: 113) goes even further to state "[t]he highest type of monkey suggests – thanks, or rather, blame to Darwin – the lowest type of man in Africa. This is the Bushman, or, as the Dutch have it, the Bosjesman". The notable explorer David Livingstone in 1850 expressed his views of Bushmen by referring to them as "degraded specimens of the human family" (cf. Voss 1987: 26). They were also viewed as oddities, and some individuals and their remains were even removed from their traditional context and sent abroad to be put on display before being repatriated, like Sarah Baartman (Fig. 4) and the body of 'El Negro' (Ouzman 2005). Furthermore, early colonists viewed Bushmen



FIG. 2. Southern Africa with sites and regions mentioned in the text: 1, Brandberg; 2, Apollo 11 Cave; 3, De Hangen; 4, Eland's Bay Cave; 5, Boomplaas; 6, Robberg Peninsula, Plettenberg Bay and Matjes River Rock shelter; 7, Rose Cottage Cave; 8, Thukela Basin; 9, Border Cave; 10, Magaliesberg (Jubilee Shelter and Cave James); 11, Heuningneskrans; and 12, middle Limpopo Valley.

in the same manner as they did fugitives, escaped slaves, and other indigenous groups fleeing colonial society (McGranaghan 2012: 26).

While studying the /Xam language in the mid- to late 19th century and compiling what is known today as the Bleek-Lloyd archive, Wilhelm Bleek himself was in part motivated by



FIG. 3. A depiction appearing in Die Burger (1971) of a trekboer shooting a Bushman. The Afrikaans caption (top right) translates as: Next to the Bible the muzzle-loader was the Trekboer's most precious possession. It was his only protection against the Bushmen and predators.

the prospect of learning a primitive language (Moran 2009: 125). Although a rare example of colonial and indigenous relations (see Chapman 1996: 81), the example of Bleek is nonetheless still rooted in a colonial perspective (Bank 2006; McGranaghan 2012: 14-15). With regard to Bleek's treatment of Bushmen in his writing, Andrew Bank (2006: 9) states that "[t]here are hints here of the stereotype of the harmless Bushmen, one that would emerge in full-blown form in the work of Laurens van der Post". The descriptions Bleek provides are of Bushmen as a 'race' and in the past tense: "They were small and yellowish-brown in colour [...] They dwelt in caves or rude bush huts [...] All seem to have had a vivid imagination [...] They were cleanly in habits, and most particular in manners" (cf. Tongue et al. 1909: 39–40). Dorothea Bleek wrote similarly of Bushmen despite her father's work and her own visits to groups across southern Africa (Bank 2006: 10). This was in keeping with the general perception that Bushmen were extinct (see Ndlovu 2009a) and considered relics of an earlier stage in human evolution (Bank 2006; McGranaghan 2012: 27), or even sub-human (Bregin 2000). Some of these views were made popular by the work of Laurens van der Post (1958), who portrayed the Bushmen of the Kalahari in romantic prose as a simple, peaceful and harmless community.

The richness of their prehistory and heritage did not accord with early perceptions of the Bushman, and it would take many decades for this to change. Frances Colenso (as Atherton Wylde 1880) commented on Bushman paintings, saying that they are: "hideous representations of eland hunts, cattle raids, or fights [...] each one is more ugly than its neighbour" (cf. Lewis-Williams 2008: 469). In 1926, the Cape Argus ran an article titled '"Bushman" paintings: not the work of Bushmen!' in which the conclusion arrived at was that only the recent work was painted by Bushmen, but the earlier, better artwork was by



FIG. 4. An early (c. 1812) 19th century depiction of Sarah Baartman titled Les Curieux en extase, ou les Cordons de souliers. Original print is stored at the Bibliotheque National, Paris (Ouzman 2005).

earlier artists who had inhabited the area. As is typical with such articles, the artwork was likened to European art, implying its suspected origins. Van Riet Lowe was more specific in a *Cape Argus* article in 1937 and claimed that it was probably people who 'wandered from Spain' that painted in southern Africa, a point Alex Willcox (1969) took further by postulating the exact 'wandering' path through Africa that was taken. These notions are also apparent in Henri Breuil's (1948) study of the White Lady of the Brandberg, Namibia. Such misconceptions are not unique to the Bushmen, unfortunately (e.g. Great Zimbabwe; Delius & Schoeman 2010). Nonetheless, how have research interests, perspectives and developments helped dispel some of these myths or engage with the people behind the archaeology?

LATER STONE AGE RESEARCH AS A SCIENCE: INDUSTRIES, COMPLEXES AND CHRONOLOGIES

Although Goodwin and Van Riet Lowe (1929) were the first to propose a Stone Age sequence, it was in 1957 at the Third Pan-African Congress of Prehistory that an arrangement of chronological stages within the Stone Age was outlined. In this, Stage 5, the LSA, contained the Wilton, Smithfield, and Strandloper complexes (Sampson 1974: 8). This was thought to succeed the Second Intermediate stage which included the Howieson's Poort. The Burg-Wartenstein Symposium of 1965 abolished the five stages "in favour of a sequence of complexes based on sealed and stratified field data", and instead adopted a heavily reduced version (Sampson 1974: 8; and see Inskeep 1967). However, by the time of Garth Sampson's (1974) book, The Stone Age Archaeology of Southern Africa, new assemblages from sealed contexts had been uncovered that did not fit the Burg-Wartenstein stages or those proposed by Walter Bishop and J. Desmond Clark (1967). This led Sampson (1974) to propose a new group of complexes, industries and phases. He acknowledged that while his complicated nomenclature might receive criticism from scholars, it was designed to be adjustable as new and opposing data was acquired. He also only relied on assemblages from sealed contexts, unlike stages from before the Burg-Wartenstein Symposium. It may be worth noting that the Burg-Wartenstein Symposium was the last official meeting at which a Stone Age sequence was identified and named, and from this perspective could still be considered the 'official' series (Underhill 2011).

Today, Goodwin and Van Riet Lowe's (1929) terms have largely fallen away, or are being used to describe different complexes and industries. The Smithfield as a stand-alone term describes industries from the Karoo rich in backed bladelets and end-scrapers dating to the last 1000 years (Sampson 1988). It is used in place of Smithfield B and is generally considered to be a part of the Wilton complex. Smithfield A and C are now referred to as Oakhurst, and Interior or Post-Wilton (Fig. 5) (Lombard et al. 2012), respectively. The Oakhurst dates to between about 12 000 and 8000-7500 BP, and is followed by the Wilton which was produced well into the colonial period in some areas. In the mid-1970s, a LSA assemblage predating the Oakhurst was identified. Known today as the Robberg, it is characterised by few retouched or backed tools, a low frequency of scrapers, and a profusion of bladelet blanks. It dates to between 22 000 and 12 000 BP (Deacon & Deacon 1999: 115). Predating the Robberg, and introduced by Peter Beaumont and John Vogel (1972), is the Early LSA. At Border Cave, this complex was dated to around 38 000 BP (Beaumont & Vogel 1972), which is particularly early in its 40 000–20 000 BP range. Initially, six defining characteristics were identified, but as more Early LSA assemblages were uncovered, such as from Rose Cottage Cave (Wadley 1997), Boomplaas (Deacon, H.

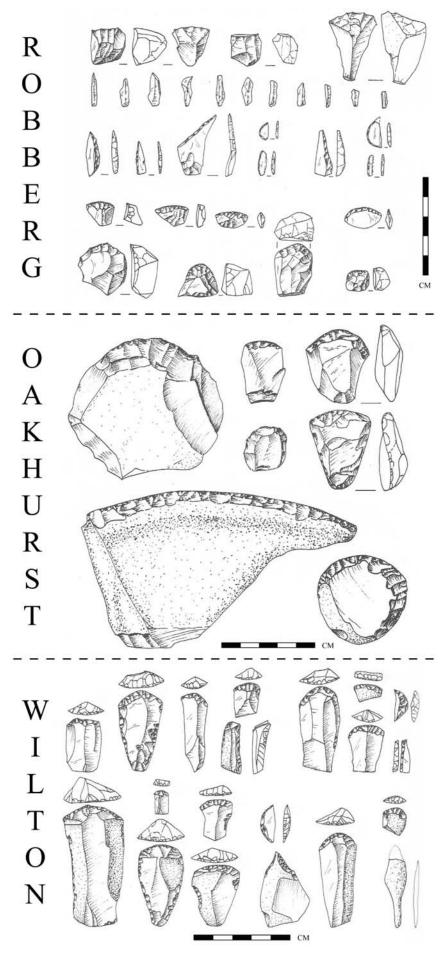


FIG. 5. Examples of Robberg, Oakhurst and Wilton stone tools (from Deacon 1984).

1995) and Heuningneskrans (Beaumont 1981), these became less clear. At Rose Cottage Cave, for example, the Early LSA appears to contain both MSA and LSA traits (Wadley 1997; Bousman & Brink 2017). Today, four general LSA complexes thought to exhibit linear technological progression are used to characterise the LSA (e.g. Lombard *et al.* 2012). The earliest is the Early LSA, followed by the Robberg, Oakhurst, and then the Wilton. However, not everyone agrees that this is the best way of capturing change, progression and cultural expressions within the technocomplex.

Janette Deacon (1984) relies instead on chronological periods rather than complexes with assumed attributes. Her work also integrates "the concept that there will be changes and shifts in tool design and tool frequencies due to materials, activities and stylistic change through time and space, but these changes remain within the bounds of broad similarities in the tool-making tradition" (cf. Lombard et al. 2012: 124, referring to Deacon, J. 1980). Wadley (1993), however, largely retains the terminology of Sampson (1974), but describes micro- and non-microlithic assemblages that overlap chronologically during the late Pleistocene. For example, the Early LSA from Apollo 11 Cave in Namibia falls into the latter, whereas the same assemblage type from Border Cave and Heuningneskrans into the former. Wadley (1993) also lists sites where the Oakhurst industry sub-groups are found (Albany, Lockshoek, Kuruman, and the Oakhurst itself). Mitchell (1997: 368) provides a similar outline, but indicates that the Robberg only disappears around 9500 BP, a late date obtained from Rose Cottage Cave. He also outlines the Wilton (from c. 8000 BP) and Post-classic Wilton (c. 4500–2000 BP) as well as the Kabeljous industry which occurs along the southern Cape coast from c. 4500 BP. In a more recent review of the Stone Age sequence, Marlize Lombard et al. (2012) provide a more up-to-date account of South African and Lesotho complexes and industries, including the LSA (Table 1). They rename several phases and draw more general complex names rather than further sub-dividing the technocomplex. However, one consequence of the reshuffling of LSA terminology is the general confusion that has crept into our understanding of the sequence, and to which assemblage attributes a complex or industry refers (Underhill 2011).

Another consequence of focusing on technocomplexes and attempting to create 'neat' chronological boundaries is the neglect of the people behind the stone tools. The value of typologies is not disputed here; their usefulness in sorting large amounts of data and allowing specific and general comparisons between assemblages is unrivalled. However, the fluidity and interactivity between people of the same, similar, and very different groups was open (Sadr 2008), and 'boxing' material culture and attribute change severs these relations. It also homogenises intra- and inter-regional and site differences. To use just one example, when Mitchell (1997) explains the distribution of LSA complexes and industries, he has to go to great lengths to explain how they vary between regions. He does so

because simply referring to them all as a single category implies cross-regional homogeneity. What these differences may represent, and whether they are significant at all, can only be assessed on an individual basis. Although problematic, complexes and industries guide regional comparisons and provide useful, even if at times debatable, chronological indicators. This has led some to question the archaeological value of creating bounded cultural categories (Green & Perlman 1985; Sampson 1986), whereas others acknowledge the need for some form of shorthand (Parkington 1993). Yet we have no records of Bushman perspectives on stone tools. Had we access to this knowledge, we could gain an emic understanding of what is important about them, whether they demarcate social groupings, or if our 'reading' of stone tools and what are thought of as significant features is appropriate. It may be worth pursuing this and allowing our analysis to be guided by indigenous knowledge, if in fact it is possible at all. Nevertheless, it is still perfectly reasonable in some cases (such as debating complexes or typologies) to not engage directly with the people behind the material culture. This is because, as in the case of complexes and typologies, it creates a measure that we can use to then further examine a population's history and lifeways, in addition to any differences that might exist between social groups or regions. This is obviously all very much dependent on one's research questions.

ECOLOGY AND THE LATER STONE AGE: PEOPLE AND THEIR ENVIRONMENT

Processual archaeology arose after World War II within anthropology departments across the Unites States of America. Archaeologists from this school of thought sought to move away from the social sciences and to introduce a more rigid scientific approach to the discipline (Willey & Phillips 1958; Trigger 1989). Optimal foraging theory, for example, was thought to accurately capture foraging strategies, and attempted to model resource structure and availability as well as collection costs and benefits, to understand forage decisions (Kelly 1983). It is expected that most hunter-gatherers behave in such a way that maximises biological fitness (Winterhalder & Smith 1992; Hawkes 1993). Elizabeth Cashdan (1983) includes foraging theory in a territoriality model when attempting to understand not just subsistence collection strategies, but general mobility among Kalahari Bushmen. Her approach was firmly rooted in models of territoriality based on animal behaviour. Similarly, Lewis Binford's (1980) model on seasonal mobility habits in Nunamuit society, Alaska, was orientated around extreme seasonally available resources that structured landscape use patterns. His work is based on optimal foraging theory as well as behavioural ecology (cf. Holdaway et al. 2013). Other models expand from this, such as those that consider immediate and delayed returns (Stiles 2001). Hunter-gatherers are also examined by evolutionary ecologists under the assumption that their behaviour can inform us about human behavioural evolution (Stiles 2001). Common amongst all these

 TABLE 1. The Later Stone Age sequence in South Africa and Lesotho, according to Lombard et al. (2012: 125).

Complex	Also known as	Regional variants	Chronology
Ceramic final LSA Final LSA	Ceramic post-classic Wilton & Late Holocene with pottery Post-classic Wilton & Holocene microlithic	Doornfontein & Swartkop Smithfield, Kabeljous & Wilton	<2000 BP 4000–100 BP
Wilton	Holocene microlithic	Springbokoog	8000–4000 BP
Oakhurst	Terminal Pleistocene/early Holocene non-microlithic	Albany, Lockshoek & Kuruman	12 000–7000 BP
Robberg	Late Pleistocene microlithic		18 000–12 000 BP
Early LSA	Late Pleistocene microlithic (informal designation)		40 000–18 000 BP

models is the strong link to ecology, animal behaviour, and the environment.

John Parkington's (1977, 1980, 1984, 1992) work along the southwestern Cape has been ongoing for over three decades, and focuses on seasonal mobility and human adaptations to a changing environment (cf. Jerardino 2016a). This he refers to as the seasonal mobility model (Parkington 2001), which models the relationship between settlement decisions and resource availability (see Kelly 1983). By comparing the archaeology of Eland's Bay Cave and De Hangen, Parkington (1980, 1984) noticed that subsistence remains varied between the two campsites. Importantly, this is in terms of seasonally available resources such as juvenile rock hyraxes and molluscs. By comparing these findings with known settlement habits recorded ethnographically, he argues that hunter-gatherers in this area were seasonally alternating time spent at the coast with time spent inland (Parkington 2001). However, in Judith Sealy and Nikolaas van der Merwe's (1986, 1988) analysis of carbon isotope ratios in skeletons from individuals found at the coast and at mountainous inland sites, it was found that these populations tended not to leave their ecological zones. They conclude that coastal-interior seasonal movements were quite unlikely (see Sealy & Van der Merwe 1992; Sealy 2006). Antonieta Jerardino (2013, 2016a,b) also argues that certain features of the archaeological record indicated restricted mobility, such as the limited raw material types used in the stone tool assemblages from the coast and changes in hunter-gatherer subsistence base (but see Parkington 2016). Inferring mobility (or, for example, tool use, social networks, etc.) in the archaeological record is notoriously difficult, especially when it is being tethered to ecological models. And yet, what might these approaches tell us about the people?

Aron Mazel and Parkington (1981) examine the occurrences of tool types and link the presence of adzes at inland sites with the production of digging sticks during a time when there was an emphasis on gathering food, a female role in society. Parkington (1980) also infers gender roles based on the presence of certain female-associated artefacts at Eland's Bay Cave (cf. Mitchell 2002: 151). Sealy (2006), however, believes that relying too heavily on behaviour patterns recorded amongst the Kalahari Bushmen may homogenise an otherwise complex and varying archaeological sequence. Her carbon isotope analysis of skeletons found near the coast around the Robberg Peninsula and Plettenberg Bay areas shows an emphasis on coastal resources, whereas 14 kilometres further at Matjes River Rock shelter, the analysed skeletons revealed a terrestrial resource base. Sealy (2006) concludes that along the Cape coast it appears that settlement mobility was far more limited, unlike among the Kalahari Bushmen. This indicates that people were not organising their settlement patterns around food resources (e.g. Kelly 1983).

Further east, inland from the South African coastline, a slightly different picture has been uncovered. At Wilton (Deacon, J. 1972) and Melkhoutboom (Deacon, H. 1976), dry microenvironments created near ideal contexts for the preservation of non-lithic artefacts and food remains. An array of different artefact types has been excavated here, providing detailed insights into hunter-gatherer lifeways, subsistence habits, and burial practices (see Mitchell 2002: 172). The context also allows for a detailed understanding of sequencing in the archaeological record. From about 5500 BP, people began moving inland and developed distinctive artefact assemblages in restricted areas, with unique tool types, such as Kasouga flakes (e.g. Leslie 1989). From 4700 BP, Wilton and a macrolithic industry are known of in the area, which Binneman (1996)

believes represented different communities. Artefacts, therefore, came to be seen as markers of social networks (Hall 1990), as Mazel (1989) viewed scraper types in KwaZulu-Natal's Thukela Basin (but see Barham's 1992 response). Increased exploitation of local resources in smaller home ranges occurred from 4000 BP (Leslie 1989; Hall 1990). This continued until around 2000 BP and led to poorer nutrition in some cases (Sealy & Pfeiffer 2000). Burials at this time may have come to express social status (Hall 1990) or, where offerings were present, hxaro gift exchange between the living and the deceased (Hall & Binneman 1987). The LSA sequence of the Eastern Cape is extensive and well established, but it is the preservation of the archaeological finds that allows for a more detailed interpretation of local hunter-gatherer communities. Importantly, it demonstrates varied inter-site sequences that are possibly associated with different hunter-gatherer groups. Still, the luxury of highly preserved deposits allows us to get closer to the people behind the archaeology, and gives a more complete understanding of their lifeways.

In the examples from the Cape, the people behind the archaeology are in the foreground; but with some ecological models there are certain underlying assumptions that are worth noting. First, is the link between hunter-gatherer and 'primitive social and subsistence structures': there is an explicit link between this notion and earlier ideas of hunter-gatherers as 'primitive' or 'irrational' (see above). Second, is the belief that hunter-gatherers were tethered to their environment as were animals, or that hunter-gatherer cultures were controlled by biological parameters (Hill & Hurtado 1996). While the use of ecological modelling provides considerable insights into hunter-gatherer lifeways, it invokes ideas of hunter-gatherers as sub-humans who were incapable of escaping their rank in this world. Third, is that these models capture all huntergatherer lifeways. A reading of the literature reveals that the same ecological models were used to generalise huntergatherer behaviour from groups regionally quite disparate. Lastly, there is the apparent lack of agency among huntergatherers: no acknowledgement, at least initially, is made of their culturally and historically situated knowledge systems which are used to inform decision-making processes. Some of these assumptions may have contributed to the discontent that arose with ecological models, but this was largely because they were unable to assist with our understanding of cultural contexts, and decision-making processes (Moore 1983: 175; Mazel 1987), or "social and ideological change in society" (Wadley 1989: 42). To do this, the need for an emic perspective of hunter-gatherer society was identified.

THE PEOPLE BEHIND THE ARTEFACTS: ETHNOGRAPHY AND THE LATER STONE AGE

In many regions of the world, the archaeological past has been understood through ethnographic analogy (e.g. Gould 1971; Trigger 1980; Van Beek 1991; MacEachern 2000; Namono 2012). In southern Africa, the use of ethnography to explain rock art only really gained popularity in the 1970s (Lewis-Williams 1974, 1980, 1981; Vinnicombe 1976). Dorothea Bleek, however, while visiting one of Stow's sites near Ladybrand with Helen Tongue in the early 20th century, commented that "[t]here are no Bushmen left at Ladybrand to give an explanation" (Bank 2006: 3). In stating this, she acknowledged the need to understand the art from a Bushman perspective, and yet still thought much of it was about daily life. In the following year, she visited several more shelters with Tongue and used her knowledge of Bushman culture (beliefs, lifeways, and habits) to explain the art, but once again, did so in a narrative sense by

explaining it as "scenes from Bushman life" (Bank 2006: 6). The use of ethnography by rock art researchers effectively ushered in a new era of analysis that departed from previous sympathetic, magic, 'art for the sake of art', and narrative approaches, and contributed to the field in ways that quantification analysis could not (Lewis-Williams & Loubser 1986: 257–258). This led scholars to apply more widely the ethnographic model in other fields of archaeology, including and especially the LSA (an early example was Clark 1958).

The best known example of this is Wadley's (1986; see also 1989) doctoral study at Jubilee Shelter and Cave James in the Magaliesberg. By drawing on the ethnographic record and specifically settlement patterns and exchange networks, she explains differences in the archaeological assemblages from the two sites as representing different phases of a single occupation cycle. Based on the presence, density, and absence of particular cultural indicators, she suggests that Jubilee was an aggregation camp, and Cave James a dispersal site. Although this appears to be a neat correlation, Lawrence Barham (1992) identifies several issues when comparing his findings at Siphiso Shelter with Wadley's (1986) work, some of which were echoed by other scholars in the years that followed (e.g. Walker 1995; Mitchell 2003). Barham's (1992) concern is primarily with mixed signals; he suggests that Siphiso contained both aggregation and dispersal markers. In addition, Barham (1992) notes that the archaeological resolution required to ensure that one is not dealing with palimpsests or occupation accumulations must be high in order to determine whether a site was used during the aggregation phase. Furthermore, many of the indicators that Wadley (1986) uses to suggest that reciprocal gift giving (hxaro) was occurring at the site, are assumed to have the same meaning and function as those items recorded among modern Bushman groups (Mitchell 2003).

Similar to Wadley's (1986) approach, Mazel (1989) uses /Xam ethnography from the Bleek-Lloyd archive (Deacon, J. 1986) to understand alliance networks in the Thukela Basin. He argues that certain distinctive artefacts, and the elaboration of distinguishing material features, indicate exchange networks. Based on the presence, absence, and dominance of certain backed tool types, Mazel (1989) identifies a single social group in the Thukela Basin before 4000 BP, after which three or four groups emerged (Ndaka, Toleni and Injasuthi). Driving this change was an increase in the local hunter-gatherer population. An increase in foraging communities placed strain on the resource base and hunter-gatherer groups responded by relying more on small game, collectable resources, and fish (Mazel 1989). This may have increased the status of women in society since gathering was part of their labour duties (Mazel 1989). Barham (1992), however, questions whether tool production decisions, such as where to place the backing, are expressive enough to indicate group identity, or if they are a result of blank morphology. Harold Dibble (1987), for example, asks whether the tools as we find them represent the end of production, the end of use, or somewhere in between. Barham (1992: 49) instead suggests handles or jewellery would be more useful, and have "an ethnographic precedent". Nevertheless, like Wadley's (1986) study, Mazel's (1989) research strongly embeds ethnography and Bushman lifeways and experiences in the Thukela Basin's archaeology.

In the examples listed above, the use of ethnography as an interpretive tool has two implications. First, it decouples Western thought from archaeological interpretations and acknowledges the effect of culturally and historically situated knowledge systems and decision-making on the make-up of the archaeological sequence. Second, despite this, the use of

analogy and ethnographies collected by colonists is very much a 'Westernised' approach to interpreting the archaeological past. This is not to devalue these perspectives – analogical reasoning is a formal philosophical concept and methodological approach in archaeological science (e.g. Wylie 1985) – but rather to acknowledge the inherent Western-centrism within our discipline. This should not be unexpected since the study of archaeology as it is used and applied today is a Western construct.

A great deal of emphasis since Wadley's (1986) and Mazel's (1989) initial studies has been placed on the use of ethnography in LSA research (e.g. Mitchell 2003; Van Doornum 2005; Mitchell et al. 2008). Debate has arisen about the analogous strength of modern ethnographies with archaeological pasts (Deacon 1988; Barham 1992; Kent 2002). Scholars have noted that our use of ethnography is heavily centred on Kalahari groups (e.g. Parkington 1984; Mitchell 1997, 2005, 2010; Sadr 1997, 2002). This creates a 'pan-San' impression that has been criticised in LSA research (e.g. Guenther 1996; Sadr 1997; Mitchell 2003), and notably rock art (e.g. Jolly 1986, 1996; Solomon 1997). However, David Pearce (2012) elegantly discusses the strengths of ethnography and its elasticity, arriving at the conclusion that ethnography should not be applied as a whole, but rather on its analogous robustness or connective strands of evidence, with the archaeological record.

How far removed from the earlier views of huntergatherers is our use of ethnography? With scholars claiming that we are using ethnography as a blanket term and creating a 'pan-San' identity, one wonders whether we have placed enough emphasis on the cultural diversity, richness and variety of Bushman culture (see Barnard 1992), and its expression in the archaeological past. It seems, as some suggest, that we are instead using ethnography as a type of Rosetta Stone to Bushman life, with some scholars suggesting this cultural model extended back even beyond LSA times (e.g. Robbins 1999; Villa et al. 2012; D'Errico et al. 2012). Some still see the Bushmen as an ancient and unchanging people (e.g. Kim et al. 2014) instilling LSA archaeology with notions of cultural stasis even though we can see significant change in the material sequence. This primordialist view is strongly opposed by some scholars (Pargeter et al. 2016a). Wadley (1989: 42) at the outset cautioned against "ethnographic snap" and assumptions that "southern African Stone Age people are merely fossilised San". That we are still so heavily reliant on ethnography and its (often) uncritical application to the archaeological past is concerning because this is despite the heated exchanges between scholars in what is known as the Kalahari Debate.

SOCIAL INTERACTION: FORAGERS, HERDERS AND FARMERS

The Kalahari Debate began in the early 1980s, and represents two opposing views of Bushman culture and how it related to their ancestral hunter-gatherer lifeways (Smith et al. 2000). At issue is the extent to which the ethnographies produced in the mid-20th century are analogous with past hunter-gatherers (Mitchell et al. 2008). One view is that Bushman communities represent a more or less isolated social group that is independent, egalitarian and operates fairly harmoniously (Lee & DeVore 1968; Lee 1979; Solway & Lee 1990). However, revisionists claim that the Bushmen are an impoverished, economically marginalised, political underclass (Denbow 1986; Wilmsen 1989; Wilmsen & Denbow 1990). The underlying theoretical argument in this debate is the meaning of farmer-associated items in hunter-gatherer contexts, and vice versa, as well as the appearance of domesticates in

Bushman rock art (Denbow 1984; Campbell 1990; Sadr 1997; Mitchell *et al.* 2008). From this perspective, Karim Sadr (1997) could find little archaeological evidence to support huntergatherer encapsulation or servitude (see also Yellen & Brooks 1989, 1990). He asks: "Do handfuls of potsherds and a few pieces of metal prove Bushman encapsulation in the extensive EIA [Early Iron Age] social and economic network of the time", because if so, "Bushmen certainly didn't get much out of it, perhaps not even a whole pot per family per century" (Sadr 1997: 107). Archaeologically it appears that while having close relations with farmer communities there is little evidence supporting the extreme view held by revisionists.

However, it is not only forager-farmer relations that have been scrutinised but also forager-herder interactions. In the southwestern Cape, this has seen intense debate. Here, arguments focus on whether a distinct, herding, Khoe-speaking population is identifiable in the archaeological sequence (Smith, A.B. 1990, 2005a,b; Smith et al. 1991), or if archaeological variability and the context of historical accounts speak more to hunter-gatherers at different stages along a socio-economic sliding scale (Schrire 1992; Sadr 1998, 2003, 2004). This latter point is taken slightly further by Sadr (2003), as well as John Hobart (2003), and Mitchell et al. (2008), who suggest there may have been a 'Neolithic' phase in southern Africa, with the appearance of food production among some hunter-gatherers (but see Horsburgh et al. 2016). Sadr (1998, 2003) does not accept that because we see sheep/goat remains in LSA contexts, with little else that changes, we see the appearance of Khoespeaking people. This comes later when we are able to pick up archaeological signals of a demic movement (Sadr 2015). Instead, Sadr de-articulates sheep from 'herders', and suggests we may be seeing hunters-with-sheep before the arrival of Khoe-speaking groups.

Sadr's (2003) argument touches on another important issue that has scarcely been grappled with in southern African LSA archaeology: forager-forager relations. We tend to place emphasis on how hunter-gatherers interacted with other groups, as described above, but little primacy on how they interacted with one another. This once again relates to how we view hunter-gatherers with the reappearing impression of hunter-gatherers as a homogeneous group. If this were not the case, surely more emphasis would then have been placed on how we view their own social interactions? The mere fact that we consider the 'contact period' as beginning when herders and farmers appear in southern Africa speaks volumes about how we view contact before their arrival, or, more to the point, how it is not viewed. However, it is perhaps also linked to the difficulty associated with investigating forager-forager interactions. Unlike in Australia where indigenous communities produced distinctive cultural markers such as jewellery to identify themselves (e.g. McDonald & Harper 2016; Wright et al. 2016), in southern Africa, similar cultural signals are difficult to identify possibly because they do not preserve as readily (Barham 1992). Still, it may yet be possible to separate social groups, for example, through the analysis of isotopic data (Sealy 2006), subsistence habits (Parkington 2001), or artefact preferences (Sadr 2015).

Nonetheless, some studies have attempted to investigate forager–forager relations (e.g. Wadley 1986; Mazel 1989 above). For example, Thomas Dowson (1994) uses rock art and a shift in the depiction of shamans – from groups to shamanic consortia, to single and distinct individuals (cf. Smith, B.W. 2010) – as a way for rainmaking specialists to be identified and possibly commissioned by farming groups. This is thought to have led to elevated positions within society, and no doubt affected the

composition of foraging communities. Geoffrey Blundell (2004: 145), however, argues that based on burials with grave goods in the southern Cape, hunter-gatherers had developed "notions of powerful individual shamans long before they interacted" with farmer communities. This acknowledges the important relationships occurring within hunter-gatherer society, and the impact this may have had on social structures. In another study, Deció Muianga (2013) investigates the division between Wilton- and Nachikufan-producing communities living on both sides of the Zambezi River. The assemblages are vastly different, as are the rock art traditions. He notes that interaction and the exchange of goods occurred across the Zambezi, indicating close ties between hunter-gatherer communities on both sides of the river.

Despite these social interactions, the way we view huntergatherers across 'contact', economic and technological divides has remained unchanged. Can we still view hunter-gatherer as 'hunter-gatherers' (e.g. Kent 1992) or should we reconsider this term, from the time they began engaging with multiple economies and altering their foraging way of life within and between cultural landscapes? For example, Benjamin Smith and Sven Ouzman (Smith & Ouzman 2004) consider 'foragers' huntergatherers when their ethnicity is not certain, and 'San' when it is. This is still problematic if one wants to distinguish between San/Bushman ancestors who only hunted and gathered versus those who had begun producing food for themselves (e.g. Sadr 2003): are they both still 'hunter-gatherers'? Revisiting our concept of a 'hunter-gatherer' during the late Holocene and reviewing the nomenclature we use to describe and divide people during this period is a worthwhile pursuit, but will take considerable debate. While it may be difficult and prove treacherous, it will re-centre the people in these discussions. Specifically, it will force archaeologists to engage head-on with variability and diversity in the LSA, and recognise cultural and social groupings across southern Africa.

THE LEGACY OF LATER STONE AGE RESEARCH

Hunter-gatherers, beyond only Bushman prehistory, who they are and where they came from, is not only a major topic in academia but also in political discussions (Wright & Weintroub 2014). This, I believe, is the legacy of LSA research despite the problems associated with linking LSA remains to extant communities (e.g. Pargeter et al. 2016a,b; D'Errico et al. 2016). Whether or not our findings speak to 'Bushman prehistory', whatever part of the LSA sequence that may be, it deals directly with the cultural ancestry of southern Africa's only known indigenous community; hunter-gatherers. Our views of, and specifically the historically known and extant Bushmen, has changed since the colonial period, thankfully. I wish to highlight six legacies and developments that have been discussed in this paper that each in their own way has contributed to improving our understanding of indigenous southern African hunter-gatherers:

- Bushmen are no longer seen as socially, culturally and materially poor:
- Since the mid-1920s, dedicated research has uncovered a diverse and rich material culture belonging to the Bushmen's Stone Age ancestors;
- Research has sought to understand their material culture from technological, morphological and quantitative perspectives, and from this understand hunter-gatherer craft and tool production;
- Studies have highlighted the important role the environment played in hunter-gatherer society; and yet
- Studies have also shown that social, cultural and historically

- situated knowledge systems played a major role in huntergatherer decision-making and material production; and
- Ethnography has helped decolonise LSA research and engage more directly with the people behind the archaeology.

There have been shifts in the way the Bushmen have been viewed, from the early colonial perceptions and how they were portrayed in Western media, to modern archaeologies and investigations into social groupings and identities. However, early attitudes and views remain hidden in the study of Bushman communities to this day. In some cases, these are explicit whereas in other instances, they manifest in less acknowledged ways. For example, elsewhere in the world, hunter-gatherer complexity has been studied (see Arnold 1996), and yet it is not a topic commonly examined among southern African hunter-gatherers. Instead, we reserve such study only for farmer groups who underwent massive socio-political development (e.g. Huffman 2015). This may well stem from earlier notions that the Bushmen were incapable of developing social complexity. If so, these views are certainly not maintained in any pejorative manner among modern archaeologists who are acutely aware of the earlier racial indignities towards these people. The notion of stasis among the Bushmen has also resulted in debate, particularly in rock art, where some have questioned the interpretive value of ethnography. In another sense, our blanket use of the term 'huntergatherer' has the underlying implication that these people are the same regardless of their socio-political, technological, and subsistence contexts or developments, or that their 'culture' persisted well into the past (see the debate between Pargeter et al. 2016a,b; and D'Errico et al. 2016). It is surely time that we review our terminology, and how and to whom it applies.

It is important to acknowledge the current socio-political environment within southern Africa and indeed, around the world. Whether it pleases or dismays archaeologists, the discipline is a politicised subject. For this very reason, however, we are able to decolonise our study of the past. In LSA archaeology this has been happening for some time now, with our use of ethnography in explaining past behavioural patterns, settlement structures, and rock art sequences, but this is not without its problems. One largely unresolvable issue is with the production and socio-political contexts of the ethnographies we use; for example, some were produced in early colonial contexts and all by groups of European descent. Knowledge itself is still primarily generated by white scholars and non-southern African citizens, with very little input from members of black African communities (Ndlovu 2009a). Ndukuyakhe Ndlovu (2009a,b) discusses this issue along with the need for transformation and diversity within the field. In LSA research, this is of paramount importance because of the people that our investigations are aimed towards. Descent groups still exist today and have, as was discussed at the beginning of this paper, been historically marginalised, disempowered, and abused. Through archaeology and LSA studies, we are able to recognise their cultural history, scrutinise inflammatory and denigratory perceptions, and improve the relationship and access that extant communities have with their rich heritage.

The intention of this paper was to demonstrate the shifting perspectives held of Bushmen and their ancestors. That earlier views have been and continue to be challenged within the field, is a healthy sign of growth and development. Through reflexive and retrospective inspection of our approaches and perspectives we will be able to continue improving on how we represent hunter-gatherers and conduct LSA research. The

most important consequence of this is the empowering of indigenous Bushmen, whether they be extant communities, or through the development of their heritage.

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NOTES

¹The terms 'Bushman' and 'San' have been used pejoratively in the past. Today, however, many groups prefer the use of these names (Low 2013: 356), which is why they are used here, and not to invoke earlier discriminatory connotations.

REFERENCES

Adhikari, M. 2010. A total extinction confidently hoped for: the destruction of Cape San society under Dutch colonial rule, 1700–1795. *Journal of Genocide Research* 12: 19–44.

Arnold, J.E. 1996. The archaeology of complex hunter-gatherers. *Journal of Archaeological Method and Theory* 3: 77–126.

Ballantyne, R.M. 1879. Six Months at the Cape. London: James Nisbet & Company.

Bank, A. 2006. Bushmen in a Victorian World: the Remarkable Story of the Bleek-Lloyd Collection of Bushmen Folklore. Cape Town: Juta & Company.

Barham, L.S. 1992. Let's walk before we run: an appraisal of historical materialist approaches to the Later Stone Age. *South African Archaeological Bulletin* 47: 44–51.

Barnard, A. 1992. Hunter and Herders of Southern Africa: A Comparative Ethnography of the Khoisan Peoples. Cambridge: Cambridge University Press.

Beaumont, P.B. 1981. The Heuningsneskrans Shelter. In: Voigt, E. (ed.) *Guide to Archaeological Sites in the Northern and Eastern Transvaal*: 132–145. Pretoria: Southern African Association of Archaeologists.

Beaumont, P.B. & Vogel, J.C. 1972. On a new radiocarbon chronology for Africa south of the equator, Part 2. *African Studies* 31: 155–181.

Bishop, W.W. & Clark, J.D. (eds) 1967. Background to Evolution in Africa. Chicago: University of Chicago Press.

Bregin, E. 2000. Representing the Bushmen: through the colonial lens. *English in Africa* 27: 37–54.

Breuil, H. 1948. The White Lady of the Brandberg, South West Africa, her companions and her guards. *South African Archaeological Bulletin* 3: 2–11.

Binford, L.R. 1980. Willow smoke and dog's tails: hunter-gatherer settlement systems and archaeological site formation. *American Antiquity* 45: 4–20.

Binneman, J. 1996. Symbolic construction of communities during the Holocene Later Stone Age in the south-eastern Cape. Unpublished PhD thesis. Johannesburg: University of the Witwatersrand.

Blundell, G. 2004. *Ngabayo's Nomansland: San Rock Art and the Somatic Past*. Uppsala: Uppsala Universiteit.

Bousman, C.B. & Brink, J.S. 2017. The emergence, spread, and termination of the Early Later Stone Age event in South Africa and southern Namibia. *Quaternary International*.

https://doi.org/10.1016/j.quaint.2017.11.033

Campbell, C. 1990. Comment on 'Foragers, genuine or spurious?' by J.S. Solway and R.B. Lee. *Current Anthropology* 31: 123–124.

Cashdan, E. 1983. Territoriality among human foragers: ecological models and an application to four Bushmen groups. Current Anthropology 24: 47–66.

Chapman, M. 1996. Southern African Literatures. London: Longman.

Clark, J.D. 1958. Some Stone Age woodworking tools in southern Africa. South African Archaeological Bulletin 13: 144–152.

Deacon, H.J. 1976. Where Hunters Gathered: a Study of Holocene Stone Age People in the Eastern Cape. Claremont: South African Archaeological Society.

Deacon, H.J. 1995. Two late Pleistocene-Holocene archaeological

- depositories from the southern Cape, South Africa. South African Archaeological Bulletin. 50: 121–131.
- Deacon, H.J. & Deacon, J. 1999. Human Beginnings in South Africa: Uncovering the Secrets of the Stone Age. Cape Town: David Phillip.
- Deacon, J. 1972. Wilton: an assessment after 50 years. South African Archaeological Bulletin 27: 10–45.
- Deacon, J. 1980. Comments on 'Time and place: some observations on spatial and temporal patterning in the Later Stone Age sequence in South Africa' by J. Parkington. *South African Archaeological Bulletin* 35: 89–93.
- Deacon, J. 1984. Later Stone Age people and their descendants in southern Africa. In: Klein, R. (ed.) *Southern African Prehistory and Paleoenvironment:* 221–328. Rotterdam: Balkema.
- Deacon, J. 1986. 'My place is the Bitterpits': the home territory of Bleek and Lloyd's /Xam San informants. *African Studies* 45: 135–155.
- Deacon, J. 1988. The power of place in understanding Southern San rock engravings. *World Archaeology* 20: 129–140.
- Delius, P. & Schoeman, M. 2010. Reading the rocks and reviewing red herrings. African Studies 69: 235–254.
- Denbow, J.R. 1984. Cows and kings: a spatial and economic analysis of a hierarchal Early Iron Age settlement system in eastern Botswana. In: Hall, M., Avery, G., Avery, D.M., Wilson, M.L. & Humphreys, A.J.B. (eds) *Frontiers: Southern African Archaeology Today:* 24–39. Oxford: British Archaeological Reports.
- Denbow, J.R. 1986. A new look at the later prehistory of the Kalahari. *Journal of African history* 27: 3–28.
- D'Errico, F., Backwell, L., Villa, P., Degano, I., Lucejko, J.J., Bamford, M.K., Higham, T.F.G., Colombini, M.P. & Beaumont, P.B. 2012. Early evidence of San material culture represented by organic artifacts from Border Cave, South Africa. *Proceedings of the National Academy of Sciences of the USA* 109: 13214–13219
- D'Errico, É, Villa, P., Degano, I., Lucejko, J.J., Colombini, M.P. & Beaumont, P. 2016. The 'to be or not to be' of archaeological enquiry. *Antiquity* 90: 1079–1082.
- Dibble, H. 1987. The interpretation of Middle Palaeolithic scraper morphology. *American Antiquity* 52: 109–117.
- Dowson, T.A. 1994. Reading art, writing history: rock art and social change in southern Africa. *World Archaeology* 25: 332–342.
- Elton, F. 1872. Journal of exploration on the Limpopo River. *Journal of the Royal Geographical Society of London* 42: 1–49.
- Goodwin, A.J.H. 1926. *A Handbook to the Collections of Stone Implements*. Cape Town: South African Museum.
- Goodwin, A.J.H. & Van Riet Lowe, C. 1929. *The Stone Age Cultures of South Africa*. Pretoria: Annals of the South African Museum 27.
- Gordon, R.J. 1992. The Bushman Myth and the Making of a Namibian Underclass. Boulder: Westview.
- Gould, R.A. 1971. The archaeologist as ethnographer: a case from the Western Desert of Australia. *World Archaeology* 3: 143–177.
- Green, S.W. & Perlman, S.M. 1985. Frontiers, boundaries and open social systems. In: Green, S.W. & Perlman, S.M. (eds) *The Archaeology* of Frontiers and Boundaries: 3–13. New York: Academic Press.
- Guenther, M. 1996. Diversity and flexibility: the case of the Bushmen in southern Africa. In: Kent, S. (ed.) *Cultural Diversity Among Twentieth-century Foragers: an African Perspective*: 65–86. Cambridge: Cambridge University Press.
- Hall, S.L. 1990. Hunter-gatherer-fishers of the Fish River Basin: a contribution to the Holocene prehistory of the Eastern Cape. Unpublished PhD thesis. Stellenbosch: University of Stellenbosch.
- Hall, S.L. & Binneman, J.N.F. 1987. Later Stone Age burial variability in the Cape: a social interpretation. South African Archaeological Bulletin 42: 140–152.
- Hawkes, K. 1993. Why hunter-gatherers work. *Current Anthropology* 34: 341–361.
- Hill, K.R. & Hurtado, A.M. 1996. *Ache Life History: the Ecology and Demography of a Foraging People*. New York: Aldine de Gruyter.
- Hobart, J. 2003. Forager-farmer relations in south-eastern southern Africa: a critical assessment. Unpublished PhD thesis. Oxford: University of Oxford.
- Holdaway, S.J., Douglass, M.J. & Fanning, P.C. 2013. A new ecological framework for understanding human environment interactions in arid Australia. In: Frankel, D., Lawrence, S. & Webb, J. (eds) *Archaeology in Environment and Technology: Intersections and Transformations*: 51–68. London: Routledge.
- Horsburgh, K.A., Moreno-Mayar, J.V. & Gosling, A.L. 2016. Revisiting the Kalahari Debate in the highlands: ancient DNA provides new

- faunal identifications at Sehonghong, Lesotho. *Azania: Archaeological Research in Africa* 51: 295–306.
- Huffman, T.N. 2015. Social complexity in southern Africa. *African Archaeological Review* 32: 71–91.
- Inskeep, R.R. 1967. The Later Stone Age. In: Bishop, W.W. & Clark, J.D. (eds) Background to Evolution in Africa: 557–582. Chicago: University of Chicago Press.
- Jerardino, A. 2013. Two complementary West Coast Holocene lithic assemblages from Elands Bay and Lamberts Bay: implications for local changes in tool kit and group mobility. *South African Archaeological Bulletin* 68: 188–199.
- Jerardino, A. 2016a. Beating the same drum for a lifetime and smoke screens: a reply to Parkington *et al.* (2015). *South African Archaeological Bulletin* 71: 87–93.
- Jerardino, A. 2016b. Megamiddens and mega-refusals over the years: a final reply to Parkington. South African Archaeological Bulletin 71: 95–97.
- Jolly, P. 1986. A first generation descendant of the Transkei San. South African Archaeological Bulletin 41: 6–9.
- Jolly, P. 1996. Symbiotic interaction between Black farmers and southeastern San. Current Anthropology 37: 277–305.
- Kelly, R.L. 1983. Hunter-gatherer mobility strategies. *Journal of Anthro*pological Research 39: 277–306.
- Kent, S. 1992. The current forager controversy: real versus ideal views of hunter-gatherers. *Man* 27: 45–70.
- Kent, S. 2002. Interaction encounters of the first kind: an introduction. In: Kent, S. (ed.) Ethnicity, Hunter-gatherers and the "Other": Association or Assimilation in Africa: 1–27. Washington: Smithsonian Institution Press.
- Kim, H.L., Ratan, A., Perry, G.H., Montenegro, A., Miller, W. & Schuster, S.C. 2014. Khoisan hunter-gatherers have been the largest population throughout most of modern-human demographic history. *Nature Communications* 5: article 5692.
- Lee, R.B. & DeVore, I. (eds) 1976. *Kalahari Hunter-gatherers: Studies of the !Kung San and their Neighbors*. Cambridge: Harvard University Press.
- Lee, R.B. 1979. The !Kung San: Men, Women and Work in a Foraging Society. Cambridge: Cambridge University Press.
- Leslie, M. 1989. The Holocene sequence from Uniondale in the Eastern Cape. *South African Archaeological Bulletin* 6: 17–32.
- Lewis-Williams, J.D. 1974. Rethinking the southern African rock paintings. *Origini* 8: 229–257.
- Lewis-Williams, J.D. 1980. Ethnography and iconography: aspects of southern San thought and art. *Man* 15: 467–482.
- Lewis-Williams, J.D. 1981. Believing and Seeing: Symbolic Meanings in Southern San Rock Paintings. Cambridge: Cambridge University Press.
- Lewis-Williams, J.D. 2008. A nexus of lives: how a heretical bishop contributed to our knowledge of South Africa's past. *Southern African Humanities* 20: 463–475.
- Lewis-Williams, J.D. & Loubser, J.H. 1986. Deceptive appearances: a critique of southern African rock art studies. *Advances in World Archaeology* 5: 253–289.
- Lombard, M., Wadley, L., Deacon, J., Wurz, S., Parsons, I., Mohapi, M., Swart, J. & Mitchell, P.J. 2012. South African and Lesotho Stone Age sequence update (I). South African Archaeological Bulletin 67: 123–144.
- MacEachern, S. 2000. Genes, tribes, and African history. *Current Anthropology* 41(3): 357–384.
- Mazel, A.D. 1987. The archaeological past from the changing present: towards a critical assessment of South African Later Stone Age studies from the early 1960s to the early 1980s. In: Parkington, J. & Hall, M. (eds) *Papers in the Prehistory of the Western Cape, South Africa*: 504–529. Oxford: British Archaeological Reports.
- Mazel, A.D. 1989. Changing social relations in the Thukela Basin, Natal 7000–2000 BP. South African Archaeological Society Goodwin Series 6: 33–41.
- Mazel, A.D. 1992. Changing fortunes: 150 years of San hunter-gatherer history in the Natal Drakensberg, South Africa. *Antiquity* 66: 758–767.
- Mazel, A. & Parkington, J. 1981. Stone tools and resources: a case study from southern Africa. *World Archaeology* 13: 16–30.
- McDonald, J. & Harper, S. 2016. Identity signalling in shields: how coastal hunter-gatherers use rock art and material culture in arid and temperate Australia. *Australian Archaeology*. https://doi.org/10.1080/03122417.2016.1186345
- McGranaghan, M. 2012. Foragers on the frontiers: the /Xam Bushmen of the Northern Cape, South Africa, in the nineteenth century. Unpublished PhD thesis. Oxford: University of Oxford.

- Mitchell, P.J. 1997. Holocene Later Stone Age hunter-gatherers south of the Limpopo River, ca. 10,000–2,000 B.P. *Journal of World Prehistory* 11: 359–424.
- Mitchell, P.J. 2002. *The Archaeology of Southern Africa*. Cambridge: University of Cambridge Press.
- Mitchell, P.J. 2003. Anyone for Hxaro? Thoughts on the theory and practice of exchange in southern African Later Stone Age archaeology. In: Mitchell, P.J., Haour, A. & Hobart, J. (eds) *Researching Africa's Past: New Contributions from British Archaeologists*: 35–43. Oxford: Oxford University School of Archaeology.
- Mitchell, P.J. 2005. Why hunter-gatherer archaeology matters: a personal perspective on renaissance and renewal in southern African Later Stone Age research. *South African Archaeological Bulletin* 60: 64–71.
- Mitchell, P.J. 2010. Making history at Sehonghong: Soai and the last Bushman occupants of his shelter. *Southern African Humanities* 22: 149–170.
- Mitchell, P.J., Plug, I., Bailey, G. & Woodborne, S. 2008. Bringing the Kalahari debate to the mountains: late first millennium AD huntergatherer/farmer interaction in highland Lesotho. *Before Farming* 2: 1–22.
- Moore, J.A. 1983. The trouble with know-it-alls: information as a social and ecological resource. In: Moore, J.A. & Keene, A.S. (eds) *Archaeological Hammers and Theories*: 173–192. New York: Academic Press.
- Moran, S. 2009. Representing Bushmen: South Africa and the Origin of Language. Rochester: University of Rochester Press.
- Muianga, D. 2013. Rock art and ancient material culture of Cahora Bassa Dam, Tete Province, Mozambique. Unpublished MSc dissertation. Johannesburg: University of the Witwatersrand.
- Namono, C. 2012. Dumbbells and circles: symbolism of Pygmy rock art of Uganda. *Journal of Social Archaeology* 12: 404–425.
- Ndlovu, N., 2009a. Decolonizing the mind-set: South African archaeology in a postcolonial, post-Apartheid era. In: Schmidt, P. (ed.) *Postcolonial Archaeologies in Africa*: 177–192. Santa Fe: School for Advanced Research Press.
- Ndlovu, N. 2009b. Transformation challenges in South African archaeology. *South African Archaeological Bulletin* 64: 91–93.
- Ouzman, S. 2005. Silencing and sharing southern African indigenous and embedded knowledge. In: Smith, C. & Wobst, H.M. (eds) *Indigenous Archaeologies: Decolonizing Theory and Practice*: 208–225. London: Routledge.
- Pargeter, J., MacKay, A., Mitchell, P., Shea, J. & Stewart, B.A. 2016a. Primordialism and the 'Pleistocene San' of southern Africa. *Antiquity* 90: 1072–1079.
- Pargeter, J., MacKay, A., Mitchell, P., Shea, J. & Stewart, B.A. 2016b. Primordialism and the 'Pleistocene San' of southern Africa: final reply. *Antiquity* 90: 1087–1089.
- Parkington, J.E. 1977. Follow the San. Unpublished PhD thesis. Cambridge: University of Cambridge.
- Parkington, J.E. 1980. Time and place: some observations on spatial and temporal patterning in the Later Stone Age sequence in southern Africa. *South African Archaeological Bulletin* 35: 75–83.
- Parkington, J.E. 1984. Soaqua and Bushmen: hunters and robbers. In: Schrire, C. (ed.) *Past and Present in Hunter-Gatherer Studies*: 151–174. Orlando: Academic Press.
- Parkington, J.E. 1992. Making sense of sequence at the Elands Bay Cave, Western Cape, South Africa. In: Smith, A.B. & Mütti, B. (eds) *Guide to Archaeological Sites in the Southwestern Cape*: 6–12. Cape Town: Southern African Association of Archaeologists.
- Parkington, J.E. 1993. The neglected alternative: historical narrative rather than cultural labelling. *South African Archaeological Bulletin* 48: 94–97.
- Parkington, J.E. 2001. Presidential address: mobility, seasonality and southern African hunter-gatherers. *South African Archaeological Bulletin* 56: 1–7.
- Parkington, J.E. 2016. Megamiddens: a reply to A. Jerardino. South African Archaeological Bulletin 71: 93–95.
- Pearce, D.G. 2012. Ethnography and history: the significance of social change in interpreting rock art. In: Smith, B.W., Helskog, K. & Morris, D. (eds) *Working with Rock Art: Recording, Presenting and Understanding Rock Art using Indigenous Knowledge*: 135–145. Johannesburg: University of the Witwatersrand Press.
- Robbins, L. 1999. Direct dating of worked ostrich eggshell in the Kalahari. *Nyame Akuma* 52: 11–16.
- Sadr, K. 1997. Kalahari archaeology and the Bushman Debate. *Current Anthropology* 38: 104–112.

- Sadr, K. 1998. The first herders at the Cape of Good Hope. *African Archaeological Review* 15: 101–132.
- Sadr, K. 2002. Book review: Ethnography in Action by David, N. & Kramer, C. 2001. South African Archaeological Bulletin 57: 42–43.
- Sadr, K. 2003. The Neolithic of southern Africa. *Journal of African History* 44: 195–209.
- Sadr, K. 2008. An ageless view of first millennium AD southern African ceramics. *Journal of African Archaeology* 6: 103–129.
- Sadr, K. 2015. Livestock first reached southern Africa in two separate events. *PLOS ONE* 10: e0134215.
- DOI:10.1371/journal.pone.0134215.
- Sampson, C.G. 1974. The Stone Age of Southern Africa. New York: Academic Press.
- Sampson, C.G. 1986. On the classification of Stone Age prehistory in southern Africa. In: Singer, R. & Lundy, L.K. (eds) *Variation, Culture and Evolution in African Populations: Papers in Honour of Dr Hertha de Villiers.* Johannesburg: University of the Witwatersrand Press.
- Sampson, C.G. 1988. *Stylistic Boundaries among Mobile Hunter-Foragers*. Washington, DC: Smithsonian Institute.
- Schrire, C. 1992. The archaeological identity of hunters and herders at the Cape over the last 2000 years: a critique. *South African Archaeological Bulletin* 47: 62–64.
- Sealy, J. 2006. Diet, mobility, and settlement pattern among Holocene hunter-gatherers in southernmost Africa. Current Anthropology 47: 569–595.
- Sealy, J. & Pfeiffer, S. 2000. Diet, body size and landscape use among Holocene people in the southern Cape, South Africa. Current Anthropology 71: 642–655.
- Sealy, J.C. & Van der Merwe, N.J. 1986. Isotope assessment and seasonal mobility hypothesis in the southwestern Cape of South Africa. *Current Anthropology* 27: 135–150.
- Sealy, J.C. & Van der Merwe, N.J. 1988. Social, spatial and chronological patterning in marine food use as determined by δ 13C measurements of Holocene human skeletal remains from the south-western Cape, South Africa. *World Archaeology* 20: 87–102.
- Sealy, J.C. & Van der Merwe, N.J. 1992. On 'Approaches to dietary reconstruction in the Western Cape: are you what you have eaten?' a reply to Parkington. *Journal of Archaeological Science* 19: 459–466.
- Smith, A.B. 1990. On becoming herders: Khoikhoi and San ethnicity in southern Africa. *African Studies* 49: 50–73.
- Smith, A.B. 2005a. *African Herders: Emergence of Pastoral Traditions*. Walnut Creek: AltaMira Press.
- Smith, A.B. 2005b. The concepts of 'Neolithic' and 'Neolithisation' for Africa? *Before Farming* 4: 29–34.
- Smith, A.B., Malherbe, C., Guenther, M. & Borens, P. 2000. *The Bushmen of Southern Africa: a Foraging Society in Transition*. Cape Town: David Philip Publishers.
- Smith, A.B., Sadr, K., Gribble, J. & Yates, R. 1991. Excavations in the southwestern Cape, South Africa, and the archaeological identity of prehistoric hunter-gatherers within the last 2000 years. *South African Archaeological Bulletin* 46: 71–90.
- Smith, B.W. 2010. Envisioning San history: problems in the reading of history in the rock art of the Maloti-Drakensberg Mountains of South Africa. *African Studies* 69: 345–359.
- Smith, B.W. & Ouzman, S. 2004. Taking stock: identifying Khoekhoen herder rock art in southern Africa. Current Anthropology 45: 499–526.
- Solomon, A.C. 1997. The myth of ritual origins? Ethnography, mythology and interpretation of San rock art. *South African Archaeological Bulletin* 52: 3–13.
- Solway, J.S. & Lee, R.B. 1990. Foragers, genuine or spurious? *Current Anthropology* 31: 109–146.
- Sparrman, A. 1787. A Voyage to the Cape of Good Hope. London: G.C.J. & J. Robinson.
- Stiles, D. 2001. Hunter-gatherer studies: the importance of context. *African Study Monographs* 26: 41–65.
- Tongue, M.H., Balfour, H., Bleek, E. & Bleek, D. 1909. *Bushman Paintings and Engravings in the Northern Cape copied by M. Helen Tongue*. Oxford: Clarendon Press.
- Trigger, B.G. 1989. A History of Archaeological Thought. Cambridge: Cambridge University Press.
- Trigger, B.G. 1980. Archaeology and the image of the American Indian. *American Antiquity* 45: 662–676.
- Underhill, D. 2011. A history of Stone Age archaeological study in South Africa. South African Archaeological Bulletin 66: 3–14.

- Van Beek, W.E.A. 1991. Dogon restudied: a field evaluation of the work of Marcel Griaule. *Current Anthropology* 32: 139–167.
- Van der Post, L. 1958. *The Lost World of the Kalahari*. London: Hogarth Press.
- Van Doornum, B.L. 2005. Changing places, spaces and identity in the Shashe-Limpopo region of Limpopo Province, South Africa. Unpublished PhD thesis. Johannesburg: University of the Witwatersrand.
- Villa, P., Soriano, S., Tsanova, T., Degano, I., Higham, T.F., D'Errico, F., Backwell, L., Lucejko, J.J., Columbini, M.P. & Beaumont, P.B. 2012. Border Cave and the beginning of the Later Stone Age in South Africa. Proceedings of the National Academy of Science of the USA 109: 13208–13213.
- Vinnicombe, P. 1976. *People of the Eland*. Pietermaritzburg: University of Natal Press.
- Voss, A.E. 1987. The image of the Bushman in South African English writing of the nineteenth and twentieth centuries. *English in Africa* 14: 21–40.
- Wadley, L. 1986. A social and ecological interpretation of the Later Stone Age in the southern Transvaal. Unpublished PhD thesis. Johannesburg: University of the Witwatersrand.
- Wadley, L. 1989. Legacies from the Later Stone Age. South African Archaeological Society Goodwin Series 6: 42–53.
- Wadley, L. 1993. The Pleistocene Later Stone Age south of the Limpopo River. *Journal of World Prehistory* 7: 243–296.
- Wadley, L. 1997. Rose Cottage Cave: archaeological work 1987 to 1997. South African Journal of Science 93: 439–444.
- Wadley, L. 2014. South Áfrican Middle and Later Stone Age research: a retrospective. South African Archaeological Bulletin 69: 208–212.
- Walker, N.J. 1995. Late Pleistocene and Holocene Hunter-gatherers of the

- Matopos: an Archaeological Study of Change and Continuity in Zimbabwe. Uppsala: Societas Archaeologica Upsaliensis.
- Willcox, A.R. 1969. Stone Age art from Cantabria to the Cape. *Optima* 19: 94–99.
- Willey, G.R. & Phillips, P. 1958. *Method and Theory in American Archaeology*. Tuscaloosa: University of Alabama Press.
- Wilmsen, E.N. 1989. *Land Filled with Flies*. University of Chicago Press: Chicago.
- Wilmsen, E.N. & Denbow, J.R. 1990. Paradigmatic history of Sanspeaking peoples and current attempts at revision. Current Anthropology 31: 489–524.
- Winterhalder, B. & Smith, E.A. (eds) 1992. Evolutionary Ecology and Human Behavior. Hawthorne: Aldine de Gruyer.
- Wright, D., Langley, M.C., May, S.K., Johnston, I.G. & Allen, L. 2016.Painted shark vertebrae beads from the Djawumbu–Madjawarrnja complex, western Arnhem Land. Australian Archaeology 82: 43–54.
- Wright, J. & Weintroub, J. 2014. The problem with 'Bushman studies'. Critical Arts 28: 735–736.
- Wylde, A. (Colenso, F.E.) 1880. My Chief and I, or Six Months in Natal after the Langalibalele Outbreak. Reprint edited by Daymond, M.J. 1994. Pietermaritzburg: University of Natal Press.
- Wylie, A. 1985. The reaction against analogy. *Advances in Archaeological Method and Theory* 8: 63–111.
- Yellen, J.E. & Brooks, A.S. 1989. The Late Stone Age archaeology of the !Kangwa-/Xai/Xai valleys, Ngamiland. *Botswana Notes and Records* 20: 5–27
- Yellen, J.E. & Brooks, A.S. 1990. The Late Stone Age archaeology in the /Xai /Xai Region: a response to Wilmsen. *Botswana Notes and Records* 22: 17–19.

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