

Introduction

1.1. Introduction

The farm Blauwbosch 364 (Bloubos), partly covered by the southern Kalahari sand sea, and partly by exposed bedrock, has drawn people to roam over both its rocky stretches and dunes to find refuge in its bounty for many millennia. The farm has not been previously subjected to archaeological investigation although it is rich in material remains of prehistoric occupants. It is particularly regarding the Later Stone Age (LSA) that Bloubos was found to be a source of worthwhile research possibilities. An unusually extensive surface scatter alongside a pan was selected for special attention.

1.2. Research motivation and objective

In order to evaluate the landscape utilisation and subsistence strategies of the LSA, the detailed understanding of not only cave sites but also open-air surface sites is essential. The archaeological value of surface assemblages has been underestimated for a long time by workers in the field, despite the accepted role played by these remains in locating stratified or subsurface sites. However, the potential and expanding role of surface assemblages has been discussed extensively by Lewarch and O'Brien (1981). The main argument against the use of these assemblages is the effect of post-depositional natural and cultural disturbances (Lewarch & O'Brien 1981:311-312). While not denying the processes that disturb or change the character of surface assemblages, it should be recognized that subsurface assemblages are also not without disturbance. Other arguments listed by them against the substantial use of surface assemblages are as follows:

- a perceived difficulty of chronological control;
- the destructive influence of agricultural activities;
- surface material is less likely to reflect the complexity of archaeological phenomena;

- possible bias due to previous amateur or professional collection of material at the site;
- the perceived lack of positive results when analysing surface collections.

Lewarch and O'Brien consider these arguments in detail and propose several solutions to each of them. They also mention several studies that have been undertaken in the United States in recent years that aim to illustrate the expanding role of surface collections in archaeology. Several studies focussing on intensive artefact collection at a single site in semi-arid environments undertaken especially in the southwest of the USA and in Mesoamerica are relevant to this project. Results of these studies include:

- the successful identification of specialised activity areas;
- the influence of site gradient on artefact disturbance;
- the description of community settlement patterns (Lewarch & O'Brien 1981:328-330).

The essence of the review by Lewarch and O'Brien is that the archaeological value of surface assemblages has been demonstrated to an increasing extent. In terms of the present research project, contributions made by the investigation of surface sites may include:

- an improved perception of the nature of living sites;
- an indication of where stratified cultural deposits are located;
- an improved perception of the utilisation of an area or region;
- previously uninvestigated regions characterised only by surface assemblages, may now be seen as having archaeological potential;
- comparisons between surface and stratified sites may lead to an improved insight into site utilisation;

- the investigation of surface assemblages may lead to a more complete reconstruction of subsistence strategies;
- instead of only concentrating on excavation, a wider range of field techniques may be employed, such as the investigation of settlement layouts (Lewarch & O'Brien 1981:312);
- practical implications regarding field research include that larger numbers of people may easily be involved and that this may prove to be educational to both students and amateurs. Simultaneously, it has been shown that smaller, dedicated research teams may be effective, even in large areas, due to the nature of the field work (Lewarch & O'Brien 1981:320);
- documentation of surface assemblages is an important part of cultural resource management (Lewarch & O'Brien 1981:320-321).

The main objectives of the present research project are:

- to determine to what extent the surface assemblage on Bloubos farm can add any new, relevant information to the existing chronological and spatial database of the LSA in the Northern Cape;
- to place the chosen surface assemblage on Bloubos into the broader LSA temporal and spatial framework of the Northern Cape in addition to the archaeological description of the site.

The importance of achieving these objectives lies in countering the notion that surface assemblages may be mentioned as additional information, but that they are seldom taken as reliable archaeological evidence.

**1.3. Historical review***1.3.1. The Orange River area*

The fertile banks of the Orange River are a true oasis on the edge of the southern Kalahari desert. In both prehistoric and historical times the river was a valuable source of food and water which drew man and animal alike. In this way, both hunter and herder societies were sustained. Today the waters of the Orange River support large-scale agricultural activities on the flood plains of the river and so it remains a settlement determinant of considerable importance to the present inhabitants of the Northern Cape as well as an integral part of the economy of the area (Smith & Metelerkamp 1995:1).

During early historical times the value of the Orange River or Gariep was well-known and the river resources were frequently exploited by various societies of Khoi and San descent. The Orange River was inhabited by these nomadic hunter and herder peoples from the river mouth in the west up to its confluence with the Seekoei River in the east. It was unlikely that herders would have ventured much further east than the Seekoei River with their livestock due to the Sotho-Tswana agro-pastoralist presence there. The Middle Orange River - that part of the river between the Vaal confluence and the Augrabies Falls - is characterised by numerous islands which were favoured by the herding (Khoi) societies for the natural protection barrier that they provided against wild animals and stock thieves, and this stretch of the river was therefore densely inhabited in precolonial times (Smith & Metelerkamp 1995:1; Penn 1995:22).

The resources of the river were, of course, shared by hunter-gatherer societies (San). Preceding the advent of colonial disruption in the Northern Cape, these two groups were apparently able to co-exist in relative harmony along the river. This was probably due to the fact that the Khoi mainly inhabited the islands in the river, and that the San realised the advantages of peacefully exploiting the riverine



resources without being in constant contest with the herders for their livestock (Penn 1995:22).

Penn (1995) reviewed this historical scenario extensively, drawing on the observations of eighteenth century travellers like Wikar and Gordon. These observations shed some light on the complex cultural composition along the Orange River at the dawn of colonial influence in this part of the country. Numerous hunting and herding groups were mentioned in these reports. During the eighteenth century, the Khoi or herding inhabitants of the Middle Orange River were the Einiqua. The Einiqua, Namaqua and Korana all belonged to the same language group, namely Orange River Khoi which can be divided into two dialects. -Nama was spoken by the Namaqua to the west and !Kora by the Korana to the east, with the Einiqua thus falling in between. The Einiqua were divided into several subdivisions on the grounds of their location and thus had affinities with either the Namaqua or Korana (Penn 1995:38).

These subdivisions seem to have been frequently at war although the Einiqua apparently had better relations with the various San groups who also inhabited the area from Augrabies Falls to Kheis. It is in the vicinity of the latter where the first Korana group, namely the Kouringeis, was to be found. These people displayed some Tswana influences with regard to their appearance, according to Gordon (Penn 1995:39-41).

Penn states that as the Northern Cape frontier steadily moved northwards during the eighteenth century, "Bastaards" and "Bastaard-Hottentots" gradually moved away towards Namaqualand and eventually also focussed on the Orange River as a sanctuary from colonial rule (Penn 1995:48). This influx disrupted the relatively stable situation along the Orange River. In 1751 the first loan farm next to the River was officially registered although other European trekboers unofficially utilised grazing lands in the area before the 1780's. The relative stable circumstances along the Orange River were increasingly complicated not only by the presence of the trekboers and "Bastaard", "Bastaard-Hottentot" or Khoi refugees in the second half of the eighteenth century, but also by the extreme

violence introduced by individuals searching for cattle and by big game hunters who frequented the area. A veritable Pandora's box was opened by the metamorphosis of the Orange River into the colonial frontier and by the inherent resistance of Khoi slaves, "Bastaard" and "Bastaard-Hottentot" groups and the Oorlams against European colonialism. The nineteenth century brought relief in the shape of European religion with the first Christian missionaries arriving at the Orange River in 1801 (Penn 1995:51-58, 91).

1.3.2. *The farm Bloubos*

Just beyond the fertile soils of the Orange River flood plain the first red dunes of the Kalahari start, and with them, the possibility of agriculture largely ends. The practice of pastoralism is however suited for this environment, especially so with present-day water exploitation strategies. As the crow flies, the farm Bloubos lies some 50 kilometres north-north-west from the town Upington, situated on the banks of the Orange River. Sheep farming is currently the main activity practised by inland farmers of the Northern Cape and on the farm Bloubos, sheep and springbok numbers are substantial.

The history of the immediate study area, i.e. Bloubos and its neighbouring farm Hakdooren Vlei is as follows:

Blauwbosch 364, registration number Gor Q4-3, was first deeded on the 19th of August 1896 under a system called *Quickrent*, whereby the farm was made available and registered by the British Government in the Cape of Good Hope. The original size of Bloubos was 12000 morgen. In 1899 however 3000 morgen was removed and in 1953 the bottom left corner, consisting of 18 morgen, was cut off from the original farm.

Hakdooren Vlei 428, registration number Gor Q5-35 was first deeded on the 13th of December 1897 to the trustees of the former Bechuanaland. In 1925 the farm was deeded in the name of the family Liebenberg and the western and eastern ends were removed. In 1951 and again in 1953 the farm was cut back by two smaller pieces of land. Both farms were first deeded by

the British Deeds Office for this part of the country (British Bechuanaland), located in Vryburg. Hakdooren Vlei is presently owned by the Liebenberg Family Trust while Bloubos is owned by Mr. F. Liebenberg.

1.4. Archaeological background

In an effort to move away from European terminology, the archaeological term Later Stone Age was coined in 1929 by Goodwin and Van Riet Lowe in their pioneering monograph, *The Stone Age Cultures of Southern Africa*, to describe the younger prehistoric finds in southern Africa. Within the Later Stone Age they defined the **Wilton** and **Smithfield** cultures (Goodwin & Van Riet Lowe 1929; Deacon 1990:44). The type description of the Wilton culture was based on data from the excavations at a rock shelter and cave on the farm Wilton near Alicedale in the eastern Cape, excavated by Hewitt in 1921 (Deacon 1972:10). Both the rock shelter and cave assemblages are dominated by scrapers while some segments and backed pieces were also present (Deacon 1972:12, 47). Since that time, the connotations and implications of the term Wilton have changed considerably, but it remains an important part of present-day South African LSA nomenclature.

In his *The Prehistory of Southern Africa*, Desmond Clark still identified "two great culture complexes" south of the Limpopo River, namely the macrolithic Smithfield and the microlithic Wilton Complexes (1959:190). He also distinguished four regional forms of the Wilton tradition in South Africa of which the fourth was named the **SWA** or **Kalahari Wilton**, found mainly along the Orange River and in the Upington area. Assemblages within this Wilton variant were said to contain single and double crescents, borers, backed bladelets, thumbnail scrapers as well as thin sidescrapers, high backed side- and endscrapers and shell beads, slate pendants and bone artefacts (Clark 1959:204).

It soon became apparent that the neat identification of two regional cultural complexes were not enough to explain the LSA sequence in South Africa. Between 1965 and 1968 Garth Sampson undertook extensive archaeological research in the Orange River Scheme area along the border



of the Free State. In examining the LSA of the Orange River, he identified six phases (typological units) which he subsequently classified into three LSA industrial complexes (Sampson 1972). He felt that the stone tools belonging to Phase 1 were representative of Van Riet Lowe's **Smithfield A**, that Phases 2 to 5 represented an **Early Wilton**, a **Middle Wilton**, a **Late Wilton** and a **Late-ceramic Wilton**. Phase 6 corresponded with the previously defined **Smithfield B** and **C** (Sampson 1972:188, 205, 287). According to Sampson, Phase 1 belonged to the **Oakhurst Complex**, Phases 2 to 5 to the **Wilton Complex**, and Phase 6 to the **Smithfield Complex** (Sampson 1972:285-287).

The emergence of the Wilton Industry during Phase 2, characterised by the appearance of microlithic stone tools including small convex scrapers, *outils écaillés*, backed blades and crescents (currently known as segments), was attributed by Sampson to a change in raw material preference, as was the development of long endscrapers during Phase 4 (Sampson 1972:199, 242). Specific mention was made of observed surface scatters in Namibia, Botswana and in the vicinity of Upington in the Northern Cape containing high proportions of backed blades, endscrapers and segments with associated pottery (Sampson 1972:262). The observed types seem to echo that of Clark (1959) with regard to his SWA or Kalahari Wilton variant.

In his publication titled *The Stone Age Archaeology of South Africa*, Sampson (1974) clearly distinguishes between a **Coastal** and **Interior Wilton** within the Wilton Complex. He also subdivides each into an **Early**, **Classic**, **Developed** and **Ceramic** phase, which broadly correspond to Phases 2 to 5 of his 1972 review (Sampson 1974:9). The importance attached by him to the role played by raw material preference and/or availability in the size and shape of stone tools is again evident in his 1974 publication. However, this tendency was already prominent in the 1920's when Goodwin and Van Riet Lowe attributed the occurrence of micro- and macrolithic assemblages to the choice of raw materials, and continued from then on to appear regularly in LSA studies in South Africa (Clark 1959:185; Deacon 1990:44).

Sampson again mentions a surface site close to Upington which he attributes to the Interior Wilton (1974:330). This site was one of two described by I. Rudner (1953), who mentioned a site located some 48 kilometres north of Upington within a dune depression. The stone implements found at both of the sites mentioned were originally ascribed to the Smithfield B but later considered to belong to the Wilton Industry, based on the discovery of several segments (Rudner 1953:82; Rudner & Rudner 1959:142-144). In 1959 I. and J. Rudner referred to thin walled Khoisan pottery at the Upington sites, which were similar to pottery found in coastal middens. They attributed thicker pottery with flat or rounded bases found on these sites to contact with Iron Age people (Rudner & Rudner 1959:142, 145). It seems as if the coastal pottery referred to represents their later defined type C, which is found both along the coast and inland, and which has pointed bases and internally reinforced lugs (Rudner 1979:11, 13; Sampson 1974:302-305).

In the period between 1966 and 1967 Janette Deacon examined material excavated at the Large Rock Shelter on the farm Wilton (Deacon 1972:10). Deacon's research not only revealed that the Wilton deposits were not representative of a single cultural entity as originally believed, but also shed some light on the relation of Wilton to other LSA sites in southern Africa. Until then, the term Wilton had been used to describe assemblages containing small scrapers and microlithic backed tools and especially segments (Deacon 1972:38). This trend is confirmed in the descriptions of the Wilton by the abovementioned researchers. Deacon identified a **Pre-Wilton** phase containing large and smaller scrapers, that reminds of the now defined Oakhurst typology. This unit was followed by a microlithic phase named the **Wilton**. The **Post-climax** and **Pottery Wilton** followed at about 2000 years ago (Deacon 1972:36, 38). Broadly similar trends were identified at other sites in the eastern Cape including Oakhurst shelter, but could not be identified without doubt in the interior, with the possible exception of sites excavated by Sampson along the Orange River (Deacon 1972:38-39).

In a subsequent review, *Later Stone Age People and their Descendants in Southern Africa* (1984a), Deacon divided the LSA into four culture-

stratigraphic units. These are **Late Pleistocene microlithic assemblages, Terminal Pleistocene/early Holocene non-microlithic assemblages, Holocene microlithic assemblages** and **Late Holocene assemblages associated with pottery**. The Holocene microlithic assemblages date from approximately 8000 years BP to a few hundred years ago. It encompasses fully microlithic traditions characterised by backed tools, small convex scrapers, and bone, shell and wooden tools. Terms falling within this unit include, among others, Goodwin and Van Riet Lowe's (1929) Wilton and Smithfield C, the southern and eastern Cape Wilton defined by Deacon (1972) and Sampson's (1974) Wilton Complex (Deacon 1984a:228).

According to Deacon, Late Holocene assemblages associated with pottery date to the last 2500 years with most sites younger than 2000 years BP. The pottery is, in some areas, associated with microlithic assemblages but Deacon specifically mentions that Northern Cape and former Transvaal and Natal pottery is associated with long endscraper dominated assemblages, with limited backed tools (Deacon 1984a:229).

Within the last culture-stratigraphic unit, terms referring to microlithic assemblages include Deacon's (1972) Post-Climax Wilton and Sampson's (1974) Ceramic Wilton. The terms Smithfield B of Goodwin and Van Riet Lowe (1929) and Sampson's (1974) Smithfield Complex are indicative of assemblages with long endscrapers associated with pottery (Deacon 1984a:229). These assemblages supposedly occur in the Northern Cape and Free State and are thus of interest to this study.

A.J.B. Humphreys and A.I. Thackeray (1983) also recognize the Wilton Complex as having been present in the Northern Cape by at least 8000 years BP. The definition for the Northern Cape used by them is however very broad, being that portion of the Cape Province lying north of the Orange River and bordering on Namibia, Botswana and the former Transvaal and Orange Free State (Humphreys & Thackeray 1983:283). According to Humphreys and Thackeray, the Wilton Complex overlies the regional variation of the Oakhurst Complex, which they named the **Kuruman Industry** (Humphreys & Thackeray 1983:278).

Assemblages characteristic of the Wilton Complex were excavated from several sites situated along the Ghaap escarpment and in the Kuruman hills. While the Northern Cape Wilton differs in some aspects from the southern and eastern Cape Wilton, it also mirrors some. Endsrapers are, for example, said to be longer in the Northern Cape, as also observed by Sampson (1974:328) in the Orange River Scheme area. However, according to these researchers backed tools, especially segments, are present as they are in Wilton assemblages of other South African regions. They also recognize that assemblages are not static in terms of lithic composition and stone tool dimensions, but that they changed throughout the middle and late Holocene (Humphreys & Thackeray 1983:283-284).

Based on his extensive survey of sites in the Northern Cape, P.B. Beaumont identifies two contemporaneous but distinct industries within the Ceramic LSA: the Swartkop and Doornfontein Industries. Predating these, Beaumont finds Oakhurst type aggregates in the region, followed by a local Wilton Complex industry he has named the **Springbokoog**, which dates between c.4300-4200 BP and 2600-2300 BP. The Springbokoog aggregates are characterised by a high incidence of backed blades (50-80%) within the formal tool sample, as opposed to the contemporaneous scraper dominated assemblages found in the southern and eastern parts of the country (Beaumont, Smith & Vogel 1995:242, 254).

The **Swartkop Industry** is characterised by a very large blade flake index as well as by an extremely high frequency (more than 60%) of backed blades within the formal tool component. The similarities between the Springbokoog and Swartkop industries, lead Beaumont to believe that the latter originated from the former. He also indicates that hunters or the historical /Xam (a San group) may be clearly associated with the Swartkop Industry in Bushmanland. The pottery associated with the Swartkop Industry, is usually coarse, undecorated, grass-tempered ware (Beaumont, Smith & Vogel 1995:254-255).

The **Doornfontein Industry**, recognized on sites close to the Orange River, on sites close to other water sources, and in regions bordering Bushmanland, is defined by Beaumont, mainly as containing large samples



of pottery (Beaumont, Smith & Vogel 1995:246). The pottery is usually amphora shaped, thin walled, with thickened bases, lugs, bosses, spouts and decorated necks or rims. The associated stone tools are predominantly amorphous, dominated by irregular flakes and with only a small formal component. Beaumont sees the Doornfontein Industry as being directly linked to herding groups, or the historical Khoi (Beaumont, Smith & Vogel 1995:246-247, 255).

It is clear that differing definitions of the Northern Cape and its borders have led to some conflicting and confusing conclusions. For example, Deacon clearly states that Northern Cape assemblages are dominated by long endscrapers and characterised by reduced backed blade figures (1984a:229). This might be so in the Orange River Scheme area in the East, but does not seem to be applicable throughout the whole area investigated by Beaumont (Beaumont, Smith & Vogel 1995). The Swartkop assemblages are obviously not characterised by endscrapers while they have high backed blade frequencies. Beaumont's research is an attempt to further refine the known database with regard to Ceramic LSA industries in the Northern Cape, and in so doing, he is claiming definite associations with either LSA hunting or herding societies. These most recently published research results are relevant to the present study.

An absence of studies based on samples from open-air surface site led to the formulation of the following research approach.

1.5. Research approach

1.5.1. Methodology

While keeping the existing state of knowledge regarding the LSA in South Africa and specifically the Northern Cape region (see paragraph 1.4), as well as the aforementioned research objectives (see paragraph 1.2), in mind, the following methodology was followed to determine the possible significance of a LSA open-air surface site on Bloubos.

1.5.1.1. *Field work*

The arguments against the substantial use of surface collections in archaeology strongly relates to the initial choice of appropriate sites as well as to the methodology used to retrieve archaeological material from open-air sites. In order to evaluate the nature and scope of the archaeological remains of the LSA surface sites on Bloubos, an extensive collection of surface material from one suitable site was undertaken. The choice of such a suitable site is largely dependant on the size and condition of the surface scatter. The collection had to be of sufficient size to enable meaningful comparison with other sites and to ensure positive results after analysis. The site preferably had to be undisturbed by recent human activity, such as farming. Such a surface scatter was located, lying on the edge of a dune adjacent to a pan on Bloubos. Initial inspection indicated that the scatter consists of a large number of stone artefacts.

The collection of an extensive sample of surface material was, as far as possible, conducted in an unbiased way so as to ensure that an accurate reflection of the archaeological phenomena on the site would be attained. All the artefacts on the site were obviously not collected since this would have prevented future inspection. A test sample of artefacts collected with the aid of a grid was taken from the site to achieve this goal. All archaeological material found within randomly chosen grid blocks was collected.

1.5.1.2. *Artefact analysis*

The question of chronological depth on a surface site can only be answered by means of typological classification and metric analysis. The analytical method used in this study consisted of a systematic process of typological classification of artefacts, followed by the measurement of the size and shape of each artefact.

- The material from each grid block was analysed separately, after which the results were compared and combined. These units (grid

blocks) were judged sufficient to indicate any significant variations in terms of typological composition and artefact size and/or shape, that might have pointed to chronological depth on the site.

- Additionally, a deposit of cultural material was located in the general vicinity of the surface site. A test excavation was conducted which enabled a typological and chronological assessment of the open-air site by cross-referencing the sets of data from the two sites.

1.5.1.3. *Site comparisons*

The results obtained from the artefact analysis were subsequently compared to other published archaeological sets in the Northern Cape region. Especially the work of Thackeray, Humphreys and Beaumont was considered since theirs is, geographically, the most relevant to this study. Adjustments were necessarily made where different methods of classification and/or size analysis were applied. These are discussed in Chapter 5.

1.5.1.4. *Synthesis*

Finally, a synthesis was made of all the relevant material. The results from both the artefact analysis and the site comparisons were considered in order to interpret the open-air surface site and to assess the degree to which the research objectives were achieved.

1.5.2. *Presentation*

The need for comprehensive studies on open-air surface sites in the Northern Cape as discussed in Chapter 1 is addressed as follows:

- Chapter 2, **Study area**, discusses the geographical extent of the study area as well as its environmental characteristics. The



suitability of the area for human occupation during the LSA is indicated by this discussion;

- Chapter 3, **Field work**, describes the sites and the archaeological field research conducted on them. The discussion of the dates of the sites indicate an LSA context while the artefacts on the sites confirm the latter;
- Chapter 4, **Artefact analysis**, gives a detailed description of the artefacts retrieved from the surface scatter on Bloubos. The results of the metric and typological analysis conducted on the sample are discussed and compared to those from a second site - a stone circle with a deposit containing LSA remains. This comparison indicates that they belong to the same LSA industry;
- Chapter 5, **Site comparisons**, describes the comparison made between the sample from the Bloubos open-air site and other contemporaneous samples within the study area. The results indicate to which LSA industry the Bloubos sample belong, and shed light on the economy of the site's occupants;
- Chapter 6, **Conclusions**, takes all the above into account to interpret the contribution of this open-air site to our understanding of the LSA in the Northern Cape.

1.6. Conclusions

The ideal outcome of this study was that the Bloubos site and its properties would fit into the existing chronological and typological LSA pattern of the Northern Cape and that it would not, by a process of elimination, simply represent a well documented but otherwise irrelevant surface site, dependant on further research for incorporation into this framework. Ideally, this project will begin to evaluate and demonstrate the contribution that a surface site can make to understanding the utilisation of the landscape by LSA communities.