HERITAGE SCREENING REPORT FOR THE RDP HOUSING PROPOSED AT MDINA, MCWILI, MBOMBHELENI, NDUNGU, ZINKUMBINI, MHLANGA, MARUBENI AND MPHANGANA VILLAGES IN LIBODE NEAR MTHATHA, EASTERN CAPE PROVINCE

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EXECUTIVE SUMMARY

Environmental Assurance (ENVASS) was appointed by WSMLeshika Consulting to undertake a Heritage Screening Assessment for the proposed RDP housing development in eight villages (viz: Mdina, Mcwili, Mbombheleni, Dungu, Mhlanga, Zinkumbini, Marubeni and Mphangana) located in Libode near Mthatha, within the Nyandeni Local Municipality, Eastern Cape Province.

The development proposal by the Nyandeni Municipality entails the construction (re-development of existing houses) to 1500 low cost housing units (approx. 40m² in size) that would be shared between the eight villages falling under Ward 31.

The proposed re-development areas are an existing rural settlement and therefore, should be viewed as already disturbed and transformed. The villages are located and spread over the undulating plains in what used to be known as Transkei. They evidence of economic development is still at its earliest stages thus the population is dominated by old, uneducated, unemployed youth and poverty stricken community.

During the heritage screening assessment, the villages were assessed to identify possible heritage aspects of significance in each of the eight of the villages.

Various graves and remnants of old buildings and hand tools were found in some of the villages. These may have heritage significance. The Eastern Cape coastal and inland landscapes are rich in heritage resources and that the possibility exists that previously undetected heritage resources might be impacted on by the proposed development. Based on the observations and findings of the Screening reports, a Heritage Practitioner made the following recommendations

- > A qualified archaeologist must visit the site of the proposed development in order to determine whether heritage resources will be impacted on by the proposed development;
- Recommendations regarding the preservation of graves must be made;
- > The study area must be archaeologically and historically contextualised and the significance determined; and
- ➤ Based on the findings a full Phase 1 Archaeological Impact Assessment is recommended. The Phase 1 Assessment will determine the need for a Phase 2 and 3 Assessment.

1. INTRODUCTION AND BACKGROUND

A RDP housing development in eight villages (viz: Mdina, Mcwili, Mbombheleni, Dungu, Mhlanga, Zinkumbini, Marubeni and Mphangana) located in Libode near Mthatha, within the Nyandeni Local Municipality, Eastern Cape Province is proposed. The development proposal by the Nyandeni Municipality entails the construction (redevelopment of existing houses) to 1500 low cost housing units (approx. 40m² in size) that would be shared between the eight villages falling under Ward 31. The Eastern Cape coastal and inland landscapes are rich in heritage resources and that the possibility exists that previously undetected heritage resources might be impacted on by the proposed development.

The proposed re-development sites are mainly habited by the Xhosas. The Xhosa-speaking people are divided into a number of subgroups with their own distinct but related heritages. The other main subgroups are the amaBhaca, amaBomvana, amaMfengu, amaMpondo, amaMpondomise, amaXesibe, and abaThembu. The villages which were screended are mainly dominated by the amaMpondo speaking group. The provenance of these sites is linked to the AmaMpondo. In terms of the National Heritage Act 25 of 1999 all historical sites are protected so as to preserve the origin and heritage embedded in an area. Therefore, all historical areas should be communicated, documented and if possible structures should be preserved for educating future generations.

2. LEGISLATIVE REQUIREMENTS

The **National Heritage Resources Act 25 of 1999** requires that all heritage resources, that is, all places or objects of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance are protected. The Republic of South Africa (RSA) has a remarkably rich Heritage record that stretches back in time for some 3.5 billion years and must be protected for its scientific value. The heritage of national and international significance is found within all provinces of the RSA. South Africa's unique and non-renewable heritage is protected in terms of the National Heritage Resources Act. According to this act, resources may not be excavated, damaged, destroyed or otherwise impacted by any development without prior assessment and without a permit from the relevant heritage resources authority.

The following legislation in terms of heritage resources apply:

National Heritage Resource Act No.25 of April 1999

Buildings are among the most enduring features of human occupation, and this definition therefore includes all buildings older than 60 years, modern architecture as well as ruins, fortifications and Farming Community settlements. The Act identifies heritage objects as:

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives;
- any other prescribed category.

With regards to activities and work on archaeological and heritage sites this Act states that:

"No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority." (34. [1] 1999:58) and

"No person may, without a permit issued by the responsible heritage resources authority:

- a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites."(35. [4] 1999:58)

and

"No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

- a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority;

c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals." (36. [3] 1999:60)

On the development of any area the gazette states that:

within the past five years; or

- "...any person who intends to undertake a development categorised as:
 - a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
 - b) the construction of a bridge or similar structure exceeding 50m in length;
 - any development or other activity which will change the character of a site exceeding 5000m² in extent; or
 iii. involving three or more existing erven or subdivisions thereof; or
 iiii. involving three or more erven or divisions thereof which have been consolidated
 - iv. the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - d) the re-zoning of a site exceeding 10000m² in extent; or
 - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development." (38. [1] 1999:62-64)

and

"The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

- a) The identification and mapping of all heritage resources in the area affected;
- b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
- c) an assessment of the impact of the development on such heritage resources;
- d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and

g) plans for mitigation of any adverse effects during and after the completion of the proposed development." (38.
 [3] 1999:64)

Human Tissue Act and Ordinance 7 of 1925

The Human Tissues Act (65 of 1983) and Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925) protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities. Graves 60 years or older fall under the jurisdiction of the National Heritage Resources Act as well as the Human Tissues Act, 1983.

3. DESCRIPTION OF AFFECTED ENVIRONMENT

The study area compromised of eight (8) rural settlements scattered on the inland montane escarpment. The assessed villages were the following:

- Mdina under Marubeni A.A;
- Mcwili;
- Mbhombheleni;
- Ndungu;
- Mhlanga;
- Zinkumbini;
- Marubeni and
- Mphangana.

The density of settlement within the assessed villages ranged from low to high. The majority of the residential structures observed are self built and each village is surrounded by communal grazing and arable lands. The community of each of the access villages reside in traditional type and there is a little sign of any significant economic activity within these villages.

4. DESCRIPTION OF THE GEOLOGICAL SETTING

Large areas of the southern African continent are covered by the Karoo Supergroup. The Ecca Group is early to mid-Permian (545-250 Ma) in age. The regional geology of the study area is characterised by sandstones and brownish-red and grey mudstones of the Beaufort Group. From inland towards the coast the profile become dark grey shales with mudstones and sandstones of the Ecca Group. Exposures of Karoo dolerite intrusions are found throughout, but mostly in the higher lying areas.

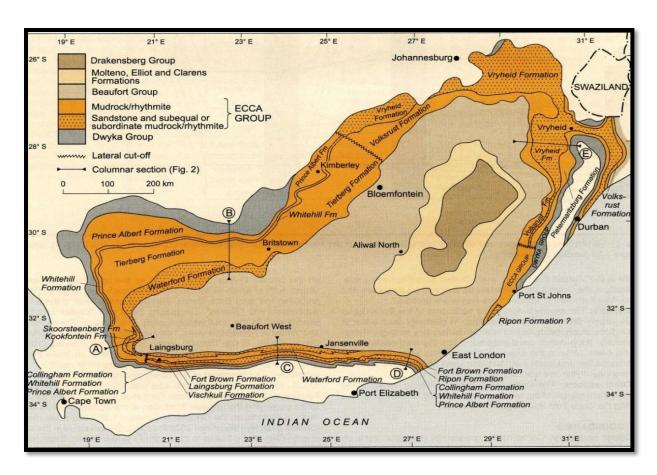


Figure 1: Rock Group Formation Southern Africa.

5. DESCRIPTION OF THE METHODOLOGY

The heritage screening field assessment was undertaken on the 28 August 2014. The walk through of the affected villages was executed and photographs were taken of the sites (with potential heritage / paleontological significance). A MONTANA 600 digital camera was used and the heritage interests were recorded using a Global Positioning System (GPS).

6. RESULTS

During the assessment, it was observed that the majority of the community bury their deceased on a designated section of the household garden. The following observations were made:

7.1. Mdina Village



Figure 2: A garden of one of the Mdina residents



Figure 3: Three graves without headstone for deceased Mthongeni Chulu, Nomngxenge and Mbudu





Figure 4: One of the graves in the garden at Mdina Village

7.2. Mcwili



Figure 5: Two graves with headstones for Gqutyana family



Figure 6: Zozi's family deceased resting place



Figure 7: These two graves were observed next to the road

7.3. Mbhombheleni



Figure 8: Designated the area for burial grounds in gardens

7.4. Marubeni



Figure 9: Vestiges of a rondavel structure

7. RECOMMENDATIONS AND CONCLUSION

Various graves and remnants of old buildings and hand tools were found in some of the villages. These may have heritage significance. The Eastern Cape coastal and inland landscapes are rich in heritage resources and that the possibility exists that previously undetected heritage resources might be impacted on by the proposed development. Based on the observations and findings of the Screening reports, a Heritage Practitioner made the following recommendations

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- Recommendations regarding the preservation of graves must be made;
- > The study area must be archaeologically and historically contextualised and the significance determined; and
- ➤ Based on the findings a full Phase 1 Archaeological Impact Assessment is recommended. The Phase 1 Assessment will determine the need for a Phase 2 and 3 Assessment.

Archaeological impact assessments (AIAs) are often commissioned as part of the heritage component of an EIA and are required under Section 38(1) of the NHRA of 1999, Section 38(8) of the NEMA and the MPRDA. The process of archaeological assessment usually takes the form of:

- A scoping or initial pre-assessment phase where the archaeologist and developer's representative establish
 the scope of the project and terms of reference for the project;
- A Phase 1 AIA;
- o A Phase 2 archaeological mitigation proposal; and
- A Phase 3 heritage site management plan.

Phase 1: Archaeological Impact Assessment

A Phase 1 AIA generally involves the identification and assessment of sites during a field survey of a portion of land that is going to be affected by a potentially destructive or landscape altering activity. The locations of the sites are recorded and the sites are described and characterised. The archaeologist assesses the significance of the sites and the potential impact of the development on the sites and makes recommendations. It is essential that the report supply the heritage authority with sufficient information about the sites to assess, with confidence, whether or not it has any objection to a development, indicate the conditions upon which such development might proceed and assess which sites require permits for destruction, which sites require mitigation and what measures should be put in place to protect sites that should be conserved. Minimum standards for reports, site documentation and descriptions are clearly set out by the SAHRA and supported by the Association of Southern African Professional Archaeologists (ASAPA). The sustainable conservation of archaeological material (*in situ*) is always the best option for any sites that are deemed to

be of importance. The report needs to indicate which sites these are, explain why they are significant and recommend management measures. In certain kinds of developments which involve massive intervention (mining, dam construction, etc.), it is not possible to reach a conservation solution other than to develop a programme of mitigation which is likely to involve the total or partial "rescue" of archaeological material and its indefinite storage in a place of safety.

Phase 2: Archaeological Mitigation Proposal

If the Phase 1 report finds that certain archaeological sites in a development area are of low significance, it is possible to seek permission from the heritage authority for their destruction. The final decision is then taken by the heritage resources authority, which should give a permit or a formal letter of permission, or in the case of an EIA issue a comment allowing destruction. Phase 2 archaeological projects are primarily based on salvage or mitigation excavations preceding development that will destroy or impact on a site. This may involve collecting of artefacts from the surface, excavation of representative samples of the artefact material to allow characterisation of the site and the collection of suitable materials for dating the sites. The purpose is to obtain a general idea of the age, significance and meaning of the site that is to be lost and to store a sample that can be consulted at a later date for research purposes. Phase 2 excavations should be done under a permit issued by SAHRA, or other appropriate heritage agency, to the appointed archaeologist. Permit conditions are prescribed by SAHRA, or other appropriate heritage agencies. Conditions may include as minimum requirements reporting back strategies to SAHRA, or other appropriate heritage agencies and/or deposition of excavated material at an accredited repository. Should further material be discovered during the course of development, this must be reported to the archaeologist or to the heritage resources authority and it may be necessary to give the archaeologist time to rescue and document the findings. In situations where the area is considered archaeologically sensitive the developer will be asked to have an archaeologist monitor earth-moving activities.

Phase 3: Management plan for conservation and planning, site museums and displays

On occasion Phase 2 may require a Phase 3 program involving one of the following:

- > The modification of the site;
- ➤ The incorporation of the site into the development itself as a site museum;
- A special conservation area; or
- A display.

Alternatively, it is often possible to re-locate or plan the development in such a way as to conserve the archaeological site or any other special heritage significance the area may have. For example in a wilderness or open space areas where such sites are of public interest, the development of interpretative material is recommended since it adds value to the development. Permission for the development to proceed can be given only once the heritage resources

authority is satisfied that measures are in place to ensure that the archaeological sites will not be damaged by the impact of the development or that they have been adequately recorded and sampled. Careful planning can minimise the impact of archaeological surveys on development projects by selecting options that cause the least amount of inconvenience and delay. The process as explained above allows the rescue and preservation of information relating to our past heritage for future generations. It balances the requirements of developers and the conservation and protection of our cultural heritage as required of SAHRA and the provincial heritage resources authorities.

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9. ADDENDUM: TERMINOLOGY

Archaeology: The study of the human past through its material remains.

Artefact: Any portable object used, modified, or made by humans; e.g. pottery and metal objects.

Assemblage: A group of artefacts occurring together at a particular time and place, and representing the sum of human activities.

Context: An artefact's context usually consist of its immediate matrix (the material surrounding it e.g. gravel, clay or sand), its provenience (horizontal and vertical position within the matrix), and its association with other artefacts (occurrence together with other archaeological remains, usually in the same matrix).

Cultural Resource Management (CRM): The safeguarding of the archaeological heritage through the protection of sites and through selvage archaeology (rescue archaeology), generally within the framework of legislation designed to safeguard the past.

Excavation: The principal method of data acquisition in archaeology, involving the systematic uncovering of archaeological remains through the removal of the deposits of soil and other material covering and accompanying it.

Feature: An irremovable artefact; e.g. hearths or architectural elements.

Ground Reconnaissance: A collective name for a wide variety of methods for identifying individual archaeological sites, including consultation of documentary sources, place-name evidence, local folklore, and legend, but primarily actual fieldwork.

Matrix: The physical material within which artefacts is embedded or supported, i.e. the material surrounding it e.g. gravel, clay or sand.

Phase 1 Assessment:

Scoping surveys to establish the presence of and to evaluate heritage resources in a given area.

Phase 2 Assessments:

In-depth culture resources management studies which could include major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features. Alternatively, the sampling of sites by collecting material, small test pit excavations or auger sampling is required.

Sensitive:

Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. Sensitive may also refer to an entire landscape / area known for its significant heritage remains.

Site:

A distinct spatial clustering of artefacts, features, structures, and organic and environmental remains, as the residue of human activity.

Surface survey:

Two basic kinds can be identified: (1) unsystematic and (2) systematic. The former involves field walking, i.e. scanning the ground along one's path and recording the location of artefacts and surface features. Systematic survey by comparison is less subjective and involves a grid system, such that the survey area is divided into sectors and these are walked systematically, thus making the recording of finds more accurate.

10. INTRODUCTION TO THE ARCHAEOLOGY OF SOUTH AFRICA

Archaeologically the southern African cultural environment is roughly divided into the Stone Age, the Iron Age and the Colonial Period, including its subsequent Industrial component. This cultural division has a rough temporal association beginning with the Stone Age, followed by the Iron Age and the Colonial Period. The division is based on the identified primary technology used. The hunter-gatherer lifestyle of the Stone Age is identified in the archaeological record through stone being the primary raw material used to produce tools. Iron Age people, known for their skill to work iron and other metal, also practiced agriculture and animal husbandry. Kingships and civilizations associated with the Iron Age are indicative of a complex social hierarchy. The Colonial Period is marked by the advent of writing, in southern Africa primarily associated with the first European travelers (Mitchell 2002).

During the latter part of the Later Stone Age (LSA) hunter-gatherers shared their cultural landscape with both pastoralists and Iron Age people, while the advent of the Colonial Period in South Africa is marked by a complex cultural mosaic of people; including LSA hunter-gatherers, pastoralists, Later Iron Age farming communities and Colonial occupation.

12.1. Early hominin evolution

DNA studies indicate that humans and chimpanzees shared a common ancestor between 6-8 Million years ago (Mya) (Sibley & Ahlquist 1984). By 4Mya, based on fossil evidence from Ethiopia and Kenya, *hominins* (humans and their immediate fossil ancestors and relatives) had already evolved. The earliest fossils are ascribed to *Ardipithecus ramidus* (4.4Mya), succeeded by *Australopithecus anamensis* (4.2-3.9Mya). These fossils are inferred to lie at the base from which all other *hominins* evolved (Leakey et al. 1995; White et al. 1994).

In South Africa the later *hominins* are classed into 3 groups or distinct genera; *Australopithecus* (*gracile australopithecines*), *Paranthropus* (*robust australopithecines*) and *Homo*. South Africa has 3 major *hominin* sites: Taung in the North-West Province, where Raymond Dart identified the first *Australopithecus* fossil in 1924 (Dart 1925); The Cradle of Humankind (Sterkfontein Valley) sites in Gauteng, the most prolific *hominin* locality in the world for the period dating 3.5-1.5Mya which have yielded numerous *Australopithecus*, *Paranthropus* and limited *Homo* fossils (Keyser et al. 2000; Tobias 2000); and Makapansgat in the Limpopo Province, where several more specimens believed to be older than most of the Cradle specimens were discovered (Klein 1999).

A. africanus, represented at all 3 sites are believed to have been present on the South African landscape from about 3Mya. From approximately 2.8Mya they shared, at least in the Cradle area, the landscape with *P. robustus* and from roughly 2.3Mya with early forms of *Homo* (Clarke 1999). Global climatic cooling around 2.5Mya may have stimulated a burst of species turnover amongst hominins (Vrba 1992); the approximate contemporary appearance of the first stone tools suggests that this was a critical stage in human evolution. But exactly which early hominin population is to be accredited as the ancestor of *Homo* remains elusive.

H. ergaster is present in the African palaeo-anthropological record from around 1.8Mya and shortly thereafter the first exodus from Africa is evidenced by *H. erectus* specimens from China, Indonesia and even Europe (Klein 1999).

12.2. The Stone Age

The Earlier Stone Age

In South Africa the only Earlier Stone Age (ESA) Oldowan lithic assemblage comes from Sterkfontein Cave. The predominant quartz assemblage is technologically very simple, highly informal and inferred to comprise exclusively of multi-purpose tools (Kuman et al. 1997). The latter part of the ESA is characterized by the Acheulean Industrial Complex, present in the archaeological record from at least 1.5Mya. Both *H. ergaster* and *P. robustus* may be accredited with the production of these tools.

The association between stone tools and increased access to meat and marrow supporting the greater dietary breath of *Homo* may have been vital to *Homo*'s evolutionary success; and the eventual extinction of the robust *australopithecines* (Klein 1999).

Probably the longest lasting artefact tradition ever created by *hominins*, the Acheulean is found from Cape Town to north-western Europe and India, occurring widely in South Africa. Despite the many sites it is still considered a 'prehistoric dark age' by many archaeologists, encompassing one of the most critical periods in human evolution; the transition from *H. ergaster* to archaic forms of *H. sapiens* (Klein 1999).

The Acheulean industry is characterized by hand-axes and cleavers as fosilles directeurs (signatory artefact types), in association with cores and flakes. Hand-axes and cleavers were multi-purpose tools used to work both meat and plant matter (Binneman & Beaumont 1992). Later Acheulean flaking techniques involved a degree of core preparation that allowed a single large flake of predetermined shape and size to be produced. This Victoria West technique indicates an origin within the Acheulean for the Levallois technique of the Middle Stone Age (Noble & Davidson 1966).

The lithic artefact component was supplemented by wood and other organic material (Deacon 1970).

The Middle Stone Age

The Middle Stone Age (MSA), dating from approximately 500kya to 40-27/23kya is interpreted as an intermediate technology between the Acheulean and the Later Stone Age (LSA) (Goodwin & van Riet Lowe 1929). The MSA is typologically characterized by the absence of hand-axes and cleavers, the use of prepared core techniques and the production of blades, triangular and convergent flakes, with convergent dorsal scars and faceted striking platforms, often produced by means of the Levallois technique (Volman 1984). The widespread occurrence of MSA technology across Africa and its spread into much of Eurasia in Oxygen Isotope Stage (OIS) 7 is viewed as part of a process of population dispersal associated with both the ancestors of the later Neanderthals in Europe and anatomically modern humans in Africa (Foley & Lahr 1997).

After the riches offered by the Cradle sites and Makapansgat, southern Africa's Middle Pleistocene fossil record is comparatively poor.

Early Middle Pleistocene fossil evidence suggests an archaic appearance and fossils are often assigned to *H. heidelbergensis* and *H. Sapiens* rhodesiensis (Rightmire 1976). Modern looking remains, primarily from Border Cave (KwaZulu-Natal) and Klasies River Mouth (Eastern Cape) raised the possibility that anatomically modern humans had, by 120kya, originated south of the Sahara before spreading to other parts of the world (Brauer 1982; Stringer 1985). Subsequent studies of modern DNA indicated that African populations are genetically more diverse and probably older than that elsewhere (Cann et al. 1994). Combined, the fossil and genetic evidence underpins the so-called Out of Africa 2 model (arguing that gene flow and natural selection led regional hominin populations along distinct evolutionary trajectories after **Homo'**s expansion from Africa in the Lower Pleistocene Out of Africa 1 model) of modern human origins and the continuing debate as to whether it should be preferred to its Multiregional alternative (arguing that modern humans evolved more or less simultaneously right across the Old World) (Mellars & Stringer 1989; Aitken et al. 1993; Nitecki & Nitecki 1994).

Persuasive evidence of ritual activity or bodily decoration is evidenced by the widespread presence of red ochre at particularly MSA 2 sites (after Volman's 1984 MSA 1-4 model; Hensilwood & Sealy 1997), while evidence from Lion Cave, Swaziland, indicates that specularite may have been mined as early as 100kya (Beaumont 1973). Evidence for symbolic behavioural activity is largely absent; no evidence for rock art or formal burial practices exists.

The Later Stone Age

Artefacts characteristic of the Later Stone Age (LSA) appear in the archaeological record from 40/27-23kya and incorporates microlithic as well as macrolithic assemblages. Artefacts were produced by modern *H. sapien* or *H. sapien* sapien, who subsisted on a hunter-gatherer way of life (Deacon 1984; Mitchell 2002).

According to Deacon (1984) the LSA can temporally be divided into 4 broad units directly associated with climatic, technological and subsistence changes:

1. Late Pleistocene microlithic assemblages (40-12kya);

- 2. Terminal Pleistocene / early Holocene non-microlithic assemblages (12-8kya);
- 3. Holocene microlithic assemblages (8kya to the Historic Period); and
- 4. Holocene assemblages with pottery (2kya to the Historic Period) closely associated with the influx of pastoralist communities into South Africa (Mitchell 2002).

Elements of material culture characteristic of the LSA reflect modern behaviour. Deacon (1984) summarizes these as:

- Symbolic and representational art (paintings and engravings);
- o Items of personal adornment such as decorated ostrich eggshell, decorated bone tools and beads, pendants and amulets of ostrich eggshell, marine and freshwater shells;
- o Specialized hunting and fishing equipment in the form of bows and arrows, fish hooks and sinkers;
- A greater variety of specialized tools including bone needles and awls and bone skin-working tools;
- Specialized food gathering tools and containers such as bored stone digging stick weights, carrying bags of leather and netting, ostrich eggshell water containers, tortoiseshell bowls and scoops and later pottery and stone bowls;
- Formal burial of the dead in graves (sometimes covered with painted stones or grindstones and accompanied by grave goods);
- o The miniaturization of selected stone tools linked to the practice of hafting for composite tools production; and
- A characteristic range of specialized tools designed for making some of the items listed above.

Rock Art

Rock Art is one of the most visible and informative components of South Africa's archaeological record. Research into LSA ethnography (as KhoiSan history) has revolutionized our understanding of both painted and engraved (petroglyph) images, resulting in a paradigm shift in Stone Age archaeology (Deacon & Dowson 2001). Paintings are concentrated in the Drakensberg / Maluti mountains, the eastern Free State, the Cape Fold Mountains, the Waterberg Plateau and the Soutpansberg mountains. Engravings on the other hand are found throughout the Karoo, the western Free State and North-West Province (Mitchell 2002). Both forms of LSA art drew upon a common stock of motifs, derived from widely shared beliefs and include a restricted range of naturalistically depicted animals, geometric imagery, human body postures and non-realistic combinations of human and animal figures (anthropomorphic figurines). LSA Rock Art is closely associated with spiritual or magical significance (Lewis-Williams & Dowson 1999).

Aside from LSA or KhoiSan Rock Art, thus art produced by both hunter-gatherer and pastoralist and agro-pastoralist groups, Rock Art produced by Iron Age populations are known the be present towards the north of the country.

Shell Middens ('Strandloper' Cultures)

South Africa's nearly 3,000km coastline is dotted by thousands of shell middens, situated between the high water mark and approximately 5km inland, bearing witness to long-term exploitation of shellfish mainly over the past 12,000 years. These LSA shell middens are easily distinguishable from natural accumulations of shells and deposits can include bones of animals eaten such as shellfish, turtles and seabirds, crustaceans like crabs and crayfish and marine mammal remains of seals, dolphins and occasionally whales. Artefacts and hearth and cooking remains are often found in shell midden deposits. Evidence exist that fish were speared, collected by hand, reed baskets and by means of stone fish traps in tidal pools (Mitchell 2002).

Shell midden remains were in the past erroneously assigned to 'Strandloper cultures'. Deacon & Deacon (1999) explain that 'no biological or cultural group had exclusive rights to coastal resources.' Some LSA groups visited the coast periodically while others stayed year round and it is misleading to call them all by the same name. Two primary sources of archaeological enquiry serves to shed more light on the lifestyles of people who accumulated shell middens, one being the analysis of food remains in the middens itself and the other being the analysis of LSA human skeletal remains of people buried either in shell middens or within reasonable proximity to the coast.

Shell middens vary in character ranging from large sites tens of meters in extent and with considerable depositional depth to fairly small ephemeral collections, easily exposed and destroyed by shifting dune action. Shell middens are also found inland, along

rivers where fresh water mussels occur. These middens are often fairly small and less common; in the Eastern Cape often dated to within the past 3,000 years (Deacon & Deacon 1999).

In addition shell middens are not exclusively assigned to LSA cultures; shellfish were exploited during the Last Interglacial, indicating that the practice was most probably continuous for the past 120,000 years (MSA shell middens). Along the coast of KwaZulu-Natal evidence exist for the exploitation of marine food resources by Iron Age communities. These shell middens are easily distinguished from Stone Age middens by particularly rich, often decorated ceramic artefact content. Colonial Period shell middens are quite rare and extremely ephemeral in character; primarily the result of European shipwreck survivors and reported on along the coast of KwaZulu-Natal and the Transkei, Eastern Cape.

12.3. The Iron Age

For close to 2 millennia people combining cereal agriculture with stock keeping have occupied most of southern Africa's summer rainfall zone.

The rapid spread of farming, distinctive ceramics and metallurgy is understood as the expansion of a Bantu-speaking population, in archaeological terms referred to as the Iron Age.

The Early Iron Age

Ceramic typology is central to current discussions of the expansion of iron using farming communities. The most widely used approach is that of Huffman (1980), who employs a multidimensional analysis (vessel profile, decoration layout and motif) to reconstruct different ceramic types. Huffman (1998) argues that ceramics can be used to trace the movements of people, though not necessarily of specific social or political groupings. Huffman's Urewe Tradition coincides largely with Phillipson's (1977) Eastern Stream. A combined Urewe Tradition / Eastern Stream model for the Early Iron Age can be summarized as:

- 1. The Kwale branch (extending along the coast from Kenya to KwaZulu-Natal);
- 2. The Nkope branch (located inland and reaching from southern Tanzania through Malawi and eastern Zambia into Zimbabwe); and
- 3. The Kalundu branch (stretching from Angola through western Zambia, Botswana and Zimbabwe into South Africa).

In southern Africa, recent work distinguishes two phases of the Kwale branch: The earlier Silver Leaves facies (250-430AD) occurring as far south as the Northern Province. The later expression or Mzonjani facies (420-580AD) occurs in the Northern Province a well as along the KwaZulu-Natal coastal belt (Huffman 1998). Since the Silver Leaves facies is only slightly younger than the Kwale type site in Kenya, very rapid movement along the coast, perhaps partly by boat, is inferred (Klapwijk 1974). Subsequently (550-650AD) people making Mzonjani derived ceramics settled more widely in the interior of South Africa.

Assemblages attributable to the Nkope branch appear south of the Zambezi but north of South Africa from the 5th Century. Ziwa represents an early facies, with Gokomere deriving jointly from Ziwa and Bambata. A subsequent phase is represented by the Zhizo facies of the Shashe- Limpopo basin, and by Taukome (Huffman 1994). Related sites occur in the Kruger National Park (Meyer 1988). Zhizo (7th – 10th Century) is ancestral to the Toutswe tradition which persisted in eastern Botswana into the 13th Century.

Kalundu origins need further investigation; its subsequent development is however better understood. A post Bambata phase is represented by the 5th – 7th Century sites of Happy Rest, Klein Africa and Maunatlana in the Northern Province and Mpumalanga (Prinsloo 1974, 1989). Later phases are present at the Lydenburg Heads site (Whitelaw & Moon 1996) and by the succession of Mzuluzi, Ndondonwane and Ntshekane in KwaZulu-Natal (7th – 10th Centuries) (Prins & Grainger 1993). Later Kalundu facies include Klingbeil and Eiland in the northern part of the country (Evers 1980) with Kgopolwe being a Lowveld variant in Mpumalanga (10th – 12th Century). Broadhurst and other sites indicate a still later survival in Botswana (Campbell 1991).

Despite the importance accorded to iron agricultural implements in expanding the spread of farming and frequent finds of production debris, metal objects are rare. Metal techniques were simple, with no particular sign of casting, wire drawing or hot

working. Jewellery (bangles, beads, pendants etc.) constitute by far the largest number of finds but arrows, adzes, chisels, points and spatulae are known (Miller 1996).

Early Iron Age people were limited to the Miombo and Savannah biomes; excluded from much of the continents western half by aridity and confined in the south during the 1st millennium to Bushveld areas of the old Transvaal. Declining summer rainfall restricted occupation to a diminishing belt close to the East Coast and north of S33° (Maggs 1994); sites such as Canasta Place (800AD), Eastern Cape, mark the southern-most limit of Early Iron Age settlement (Nogwaza 1994).

The Central Cattle Pattern

The Central Cattle Pattern (CCP) was the main cognitive pattern since the Early Iron Age (Huffman 1986). The system can be summarized as opposition between male pastoralism and female agriculture; ancestors and descendants; rulers and subjects; and men and women. Cattle served as the primary means of transaction; they represented symbols exchanged for the fertility of wives, legitimacy of children and appearsement of ancestors. Cattle were also used as tribute to rulers confirming sub-ordination and redistribution as loan cattle by the ruler to gain political support. Cattle represented healing and fertilizing qualities (Huffman 1998; Kuper 1980).

This cognitive and conceptual structure underlies all cultural behavior, including the placement of features in a settlement. The oppositions of male and female, pastoralism and agriculture, ancestors and descendants, rulers and subjects, cool and hot are represented in spatial oppositions, either concentric or diametric (Huffman 1986).

A typical CCP village comprise of a central cattle enclosure (byre) where men are buried. The Kgotla (men's meeting place / court) is situated adjacent to the cattle enclosure. Surrounding the enclosure is an arc of houses, occupied according to seniority. Around the outer perimeter of the houses is an arc of granaries where women keep their pots and grinding stones (Huffman 1986). The model varies per ethnic group which helps to distinguish ethnicity throughout the Iron Age, but more studies are required to recognize the patterns.

The Middle Iron Age

The hiatus of South African Middle Iron Age activity was centered in the Shashe-Limpopo Valley and characterized by the 5-tier hierarchical

Mapungubwe State spanning some 30,000km². By the 1st millennium ivory and skins were already exported overseas, with sites like Sofala and Chibuene, Mosambique, interfacing between interior and transoceanic traders. Exotic glass beads, cloth and Middle Eastern ceramics present at southern African sites mark the beginning of the regions incorporation into the expanding economic system that, partly tied together with maritime trading links across the Indian Ocean, increasingly united Africa, Asia and Europe long before Da Gama or Columbus (Eloff & Meyer 1981; Meyer 1998).

Occupation was initially focused at Bambandanyalo and K2. The Bambandanyalo main midden (1030-1220AD) stands out above the surrounding area, reaching more than 6m in places and covering more than 8ha the site may have housed as many as 2,000 people (Meyer 1998). The CCP was not strictly followed; whether this is ideologically significant or merely a reflection of local typography remains unclear. The midden, the size of which may reflect the status of the settlement's ruler, engulfed the byre around 1060-1080AD, necessitating relocation of the cattle previously kept there. The re-organization of space and worldview implied suggests profound social changes even before the sites' abandonment in the early 13th century, when the focus of occupation moved to Mapungubwe Hill, 1 km away (Huffman 1998).

Excavations at Mapungubwe Hill, though only occupied for a few decades (1220-1290AD), yielded a deep succession of gravel floors and house debris (Eloff & Meyer 1981). Huffman (1998) suggests that the suddenness with which Mapungubwe was occupied may imply a deliberate decision to give spatial expression to a new social order in which leaders physically removed themselves from ordinary people by moving onto more inaccessible, higher elevations behind the stone walls demarcating elite residential areas. Social and settlement changes speak of considerable centralization of power and perhaps the elaboration of new ways of linking leaders and subjects.

At Bambandanyalo and Mapungubwe elite burial grave goods include copper, bone, ivory and golden ornaments and beads. Social significance of cattle is reinforced by their importance among the many human and animal ceramic figurines and at least 6 'beast burials' (Meyer 1998).

Today the drought prone Shashe-Limpopo Valley receives less than 350mm of rainfall per annum, making cereal cultivation virtually impossible.

The shift to drier conditions in the late 1200's across the Shashe-Limpopo basin and the eastern Kalahari may have been pivotal in the break-up of the Mapungubwe polity, the collapse of Botswana's Toutswe tradition and the emergence of Great Zimbabwe (1220-1550AD), southern Africa's best known and largest (720ha) archaeological site (Meyer 1998).

South of the Limpopo and north of the Soutpansberg, Mapungubwe derived communities survived into the 14th Century, contemporary with the establishment of Sotho-speaking makers of Maloko pottery.

The Later Iron Age

South African farming communities of the 2nd millennium experienced increased specialization of production and exchange, the development of more nucleated settlement patterns and growing political centralization, albeit not to the same extent as those participating in the Zimbabwe tradition. However, together they form the background to the cataclysmic events of the late 18th / early 19th Century Mfecane (Mitchell 2002). Archaeological evidence of settlement pattern, social organization and ritual practice often differ from those recorded ethnographically. Archaeological evidence of settlement pattern, social organization and ritual practice often differ from those recorded ethnographically. The Moloko ceramic tradition seems to be ancestral to modern Sotho-Tswana speakers (Evers 1980) and from about 1,100AD a second tradition, the Blackburn tradition, appears along South Africa's eastern coastline. Blackburn produced mostly undecorated pottery (Davies 1971), while Mpambanyoni assemblages, reaching as far south as Transkei, includes examples of rim notching, incised lines and burnished ochre slip (Robey 1980). At present, no contemporary farming sites are known further inland in KwaZulu-Natal or the Eastern Cape. Huffman (1989) argues that similarities between Blackburn and early Moloko wares imply a related origin, presumably in the Chifumbaze of Zambia or the Ivuna of Tanzania, which contains a range of ceramic attributes important in the Blackburn as well as beehive grass huts similar to those made by the Nguni. This is one of the few suggestions of contact between Sotho-Tswana and Nguni speakers on the one hand and farming communities who, if Huffman is correct, were already long established south of the Limpopo. Both ethnographic and archaeological data demonstrate that Sotho-Tswana and Nguni are patrilineal and organize their settlements according to the CCP (Kuper 1980).

From 1,300AD there is increasing evidence for the beginning of agro-pastoralist expansion considerably beyond the area of previous occupation. It is also to this time that the genealogies of several contemporary Bantu speaking groups can be traced (Wilson & Thompson 1969).

Associated with this expansion was the regular employment of stone, rather than wood, as building material, an adaptation that has greatly facilitated the discovery and identification of settlements. Maggs (1976) describes 4 basic settlement types all characterized by the use of semi-weathered dolorite to produce hard binding dagga for house floors and a wall building tradition employing larger more regular stones for the inner and outer faces and smaller rubble for the infill. As with the more dispersed homesteads of KwaZulu-Natal and the Eastern Cape, sites tend to be in locally elevated situations, reflecting a deep seated Sotho and Nguni preference for benign higher places rather than supernaturally dangerous riverside localities; another important contrast to both 1st millennium (Maggs 1976) and later Zulu Kingdom settlement patterns (Hall &Maggs 1979).

The lack of evidence for iron production in the interior and eastern part of South Africa emphasize exchange relationships between various groups and associated more centralized polities. By the 19th Century iron production in KwaZulu-Natal was concentrated in particular clans and lineages and associated with a range of social and religious taboos (Maggs 1992). South of Durban comparatively few smelting sites are known (Whitelaw 1991), a trend even more apparent in Transkei (Feely 1987). However, metal remained the most important and archaeologically evident item traded between later farming communities. (Other recorded trade items include glass and ostrich eggshell beads; Indian Ocean seashells; siltstone pipes; dagga, and later on tobacco; pigments including ochre, graphite and specularite; hides and salt.).

Rising polity settlements are particularly evident in the north of the country and dated to the 17th Century, including Molokwane, capital of the Bakwena chiefdom (Pistorius 1994) and Kaditshwene, capital of a major section of the Hurutshe, whose population

of 20,000 in 1820 almost equals contemporary Cape Town in size (Boeyens 2000). The agglomeration of Tswana settlements in the north of the country was fuelled by both population growth and conflict over access to elephant herds for ivory and long distance trade with the East Coast. During this period; ceramic decoration became blander and more standardized than the earlier elaborate decoration that included red ochre and graphite colouring.

The Mfecane refers to the wars and population movements of the early 19th Century which culminated in the establishment of the Zulu Kingdom and came to affect much of the interior, even beyond the Zambezi: The late 18th Century was marked by increasing demands for ivory (and-slaves) on the part of European traders at Delagoa Bay; as many as 50 tones of ivory were exported annually from 1750-1790. As elephant populations declined, competition increased both for them and for the post 1790 supply of food to European and American whalers calling at Delagoa Bay (Smith 1970). Cattle raiding, conflict over land and changes in climatic and subsistence strategies characterized much of the cultural landscape of the time.

Competition for access to overseas trade encouraged some leaders to replace locally organized circumcision schools and agesets with more permanently maintained military regiments. These were now used to gain access through warfare to land, cattle and stored food. By 1810 three groups, the Mthethwa, Ndwandwe and Ngwane dominated northern KwaZulu-Natal (Wright 1995). The Mthethwa paramountcy was undermined by the killing of its leader Dingiswayo in circa 1818, which led to a brief period of Ndwandwe dominance. In consequence one of Dingiswayo former tributaries, Shaka, established often forceful alliances with chiefdoms further south. Shaka's Zulu dominated coalition resisted the Ndwandwe who in return fled to Mozambique. As the Zulu polity expanded it consolidated its control over large areas, incorporating many communities into it. Others sought refuge from political instability by moving south of the Thukela River, precipitating a further domino effect as far as the Cape Colony's eastern border (Wright 1995).

12.4. THE COLONIAL PERIOD

In the 15th Century Admiral Zheng He and his subordinates impressed the power of the Ming Dynasty rulers in a series of voyages as far afield as Java, Sri Lanka, southern Arabia and along the East African coast, collecting exotic animals en route. But nothing more came of his expeditions and China never pursued opportunities for trade or colonization (Mote 1991).

Portuguese maritime expansion began around the time of Zheng He's voyages; motivated by a desire to establish a sea route to the riches of the Far East. By 1485 Diogo Cao had reached Cape Cross, 3 years later Bartolomeu Dias rounded the Cape of Good Hope and less than a decade later Vasco da Gama called at several places along South Africa's coast, trading with Khoekhoen (Khoi) at Mossel Bay before reaching Mozambique and crossing the ocean to India. His voyage initiated subsequent Portuguese bases from China to Iraq. In Africa interest was focused on seizing important coastal trading towns such as Sofala and gaining access to the gold of Zimbabwe. Following the 1510 Portuguese-Khoekhoen battle at Table Bay, in which the viceroy of India was killed, Portuguese ships ceased to call along the South African coast (Elphick 1985).

A number of shipwrecks, primarily along the eastern coast attest to Portuguese activity including the Sao Joao, wrecked in 1552 near Port Edward and the Sao Bento, destroyed in 1554 off the Transkei coast. Survivors' accounts provided the 1st detailed information on Africa's inhabitants (Auret & Maggs 1982).

By the late 1500's Portuguese supremacy of the Indian Ocean was threatened. From 1591 numerous Dutch and English ships called at Table Bay and in 1652 the Dutch East Indian Company (VOC) established a permanent base, with the intent to provide fresh food and water to VOC ships. In an attempt to improve the food supply a few settlers (free burghers) were allowed to establish farms. The establishment of an intensive mixed farming economy failed due to shortages of capital and labor, and free burghers turned to wheat cultivation and livestock farming. While the population grew slowly the area of settlement expanded rapidly with new administrative centers established at Stellenbosch (1676), Swellendam (1743) and Graaf-Reinet (1785). By the 1960's the Colony's frontier was too long to be effectively policed by VOC officials (Elphick 1985).

From the 1700's many settlers expanded inland over the Cape Fold Mountain Belt. The high cost of overland transport constrained the ability to sell their produce while settlement of the interior was increasingly made difficult by resident KhoiSan groups, contributing due to a lack of VOC military support to growing Company opposition in the years before British control of the Cape (1795 / 1806) (Davenport & Saunders 2000).

In 1820 a major British settlement was implanted on the eastern frontier of the Cape Colony, resulting in large numbers of the community moving into the interior, initially to KwaZulu-Natal, and then after Britain annexed Natal (1843), further into the interior to beyond the Vaal River. Disruptions of the Mfecane eased their takeover of African lands and the Boers (farmers) established several Republics. A few years later the 2nd South African War saw both the South African and Orange Free State Republics annexed by Britain, a move largely motivated by British desire to control the goldfields of the Witwatersrand. With adjacent regions of the sub-continent also falling, directly or indirectly, under British rule and German colonization of Namibia, European control of the whole of southern Africa was firmly established before the 1st World War (Davenport & Saunders 2000).

Xhosa Iron Age Cultures meets Colonists in the Eastern Cape

From the late 1600's conflict between migrants from the Cape (predominantly Boers) and Xhosa people in the region of the Fish River were strife, ultimately resulting in a series of 9 Frontier Wars (1702-1878) (Milton 1983). Both cultures were heavily based and reliant on agriculture and cattle farming. As more Cape migrants, and later settlers from Britain (1820) and elsewhere arrived, population pressures and competition over land, cattle and good grazing became intense. Cattle raiding became endemic on all sides, with retaliatory raids launched in response. As missionaries arrived with evangelical messages, confrontations with hostile chiefs who saw them as undermining traditional Xhosa ways of life resulted in conflicts which flared into wars.

As pressures between the European settlers and the Xhosa grew, settlers organized themselves into local militia, counteracted by Xhosa warring skills: But both sides were limited by the demands of seasonal farming and the need for labor during harvest. Wars between the Boers and the Xhosa resulted in shifting borders, from the Fish to the Sundays River, but it was only after the British annexed the Cape in 1806 that authorities turned their attention to the Eastern regions and petitions by the settlers about Xhosa raids. British expeditions, in particular under Colonel John Graham in 1811 and later Harry Smith in 1834, were sent not only to secure the frontier against the Xhosa, but also to impose British authority on the settlers, with the aim to establish a permanent British presence. Military forts were built and permanently manned. Over time the British came to dominate the area both militarily and through occupation with the introduction of British settlers. The imposition of British authority led to confrontations not only with the Xhosa but also with disaffected Boers and other settlers, and other native groups such as the Khoikhoi, the Griqua and the Mpondo. The frontier wars continued over a period of about 150 years; from the 1st arrival of the Cape settlers, and with the intervention of the British military ultimately ending in the subjugation of the Xhosa people. Fighting ended on the Eastern Cape frontier in June 1878 with the annexation of the western areas of the Transkei and administration under the authority of the Cape Colony (Milton 1983).

The Industrial Revolution

The Industrial Revolution refers roughly to the period between the 18th - 19th Centuries, typified by major changes in agriculture, manufacturing, mining, transport, and technology. Changing industry had a profound effect on socio-economic and socio-cultural conditions across the world:

The Industrial Revolution marks a major turning point in human history; almost every aspect of daily life was eventually influenced in some way.

Average income and population size began to exhibit unprecedented growth; in the two centuries following 1800 the world's population increased over 6-fold, associated with increasing urbanization and demand of resources. Starting in the latter part of the 18th century, the transition from manual labor towards machine-based manufacturing changed the face of economic activity; including the mechanization of the textile industries, the development of iron-making techniques and the increased use of refined coal. Trade expansion was enabled by the introduction of canals, improved roads and railways. The introduction of steam power fuelled primarily by coal and powered machinery was underpinned by dramatic increases in production capacity. The development of all-metal machine tools in the first two decades of the 19th century facilitated the manufacture of more production machines in other industries (More 2000).

Effects of the Industrial Revolution were widespread across the world, with its enormous impact of change on society, a process that continuestoday as 'industrialization'.