The first Homo sapiens colonisation of southern Africa

180317-180728

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Southern Africa relief

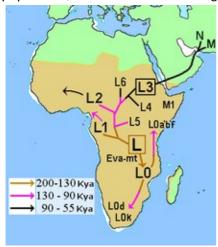
Life on earth is thought to have got under way around ©260,000,000. The australopithecines who roamed the highland savannah plains of southern Africa date from much later, about ©4,497,000,000. Humans became a reasonably distinct species about ©4,498,000,000. From around ©4,498,500,000, Homo erectus appears to have roamed the open savannah lands of eastern and southern Africa, collecting fruits and berries, and perhaps roots, and either scavenging or hunting.

A present consensus has defined the 'recent African origin of modern humans', with Homo sapiens forming about ⊙4,499,700,000-800,000, in the areas from the Horn of Africa to the Great Rift Valley if we give most weight to physical findings. Genetic 'Mitochondrial Eve' is the defining ancestor for

sapiens at about ⊙820,000. There is debate and controversy about many of the items and definitions of our prehistory.

Modern non-African-resident populations are largely children of populations of Homo sapiens which left Africa after ⊙820,000. The most recent and persistent exodus from Africa seems to have been around ⊙932,000.

Within Africa, the first lineage perceived to branch off the sapiens root (⊙742,000-872,000) was the bearers of genetics 'haplogroup' L0, found in high proportions in the present Bushmen/San of southern Africa and the Sandawo and Mbute in eastern Africa. The first migration of this branch into southern Africa may be order of ⊙870,000. This first branch into southern Africa has been fairly isolated genetically most of the time since then. To walk from Kilimanjaro to the Cape, 3,500km at 6-16km per day if one were deliberately heading outwards might take two years if a group was very directed. From the original lineage of sapiens in east Africa, ancestors of the rest of the world's population, further branches diverged, the second, L1, reaching the Bight of Biafra.

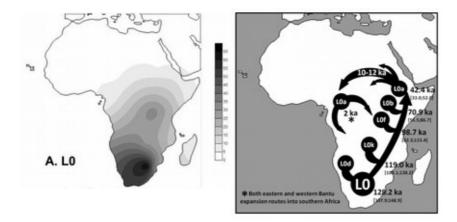


Early sapiens migrations <wikipedia>

The non-L3 African sapiens population is stated to be the most genetically diverse (the L0 first southern African sapients having the greatest diversity) as compared to the L3 who later migrated out of Africa.

Some of the earliest fossils associated with Homo sapiens, dated from about ●880,000-935,000, have been found in South Africa at the Klasies River Caves in Eastern Cape, South Africa, while at Border Cave on the South Africa—Swaziland border a date of about ●910,000 has been claimed for similar remains. These people had southern Africa to themselves (apart from residual earlier humans, of whom a few percent of genetic traces are found in the L0) for 120,000 years, developing an enduring culture until the second sapiens colonisation, starting from around ●999,500 and running to today, closed this chapter.

The first southern African sapients may have given rise to a series of reverse migrations mostly to the north east and later from there to the Bight of Biafra which are prior to the relatively recent Bantu Expansion. The study suggests that the linguistic relatives current or recent in east Africa (Sandawo, Mbute) derived from a fairly recent migration, explaining why the click-consonant language and their culture have resemblances to the recent Bushman/San.



L0 distribution <Rito et al>

Reverse migrations •880,000-925,000 and since ⊙980,000 <Rito et al>

With the emergence of Homo sapiens, experimentation and regional diversification displaced the undifferentiated Early Stone Age tool kit, and a far more efficient 'small blade' or 'microlithic' technology evolved. Still Bay stone working (⊙928,000 and perhaps back to ⊙838,000) is a southern African marker for this, using heat to prepare stone for flaking. Kyle Brown, a Still Bay researcher stated 'These people were extremely smart ... I don't think you could have passed down these skills from generation to generation without language'.

The intriguing Blombos cave. Western Cape south coast, had a first intermittent occupation series •902.000-932.000, with another occupation series of the Late Stone Age from 1-1700. The engraved ochre found there has stylistic and symbolic tradition continuity across the earlier period.







●929,000 <wikipedia>

Engraved ochre, Blombos cave Bifacial stone point, Blombos Shell beads with wear marks, cave <wikipedia>

Blombos cave <wikipedia>

This cave is 300km east of Cape Town, 34m above present sea level, facing the sea to its south. During the Middle Stone Age, it appears (with some controversy) that there was a 6000-year period using Still Bay technology, from about @924,500. The residents of the cave at this era made Still Bay type bifacial stone points, bone tools, fished and engaged in other advanced behaviour like making and stringing ostrich egg shell and sea shell beads and personal decorations from these, and indicated by substantial traces of ochre that they likely used body painting and did make symbolic decoration of ochre pads as pictured. At Pinnacle Point, not far away, 25mm stone chips thought to be arrowheads have defined the earliest likely record so far of bow and arrow at about ⊙929,000. New techniques included hafting technology, the use of compound paints and adhesives, ingenious stone technology that included pressure flaking and the heat treatment of rock, engraving of eggshell with geometric designs and the production of a wide range of bone implements.

Organized hunting in addition to the earlier gathering and scavenging brought substantial new resources to human society. Southern Africa offers environments from marine, desert and arid land, savannah and high mountains to near rainforest. Additional distinctive industries that emerged reflect increasing specialization as opportunity arose to exploit different environments. With bows and arrows and a variety of snares and traps for hunting, as well as grindstones and digging sticks for gathering plant food; with hooks, barbed spears, and wicker baskets they also were able to catch fish and thus exploit rivers, lake shores, and sea coasts more effectively.

Late Stone Age people were more numerous, probably because their technology allowed more intensive hunting and gathering. Southern Africa appears to have been widely depopulated between ●940,000 and ●975,000: widespread hyper-aridity. After ●970,000, low sites were likely occupied during ice ages, when global sea level was at its nadir and the coastline was displaced far seawards. It was only after ●988,000 that the sea level recovered towards its current level.

Some researchers consider that the rate of tool accumulation increases with population size, and a tool's probability of loss is inversely dependent on the population size, because additional tool users decrease the likelihood of failed transmission. Cultural evolutionary dynamics could have driven the transition to behavioural modernity. An archaeological pattern that has been noted is the sporadic, possibly transient appearance of 'advanced' behaviours, previously considered characteristic of the Late Stone Age, well within the Middle Stone Age such as at Blombos cave. If these were transient phenomena, it has been thought that the populations in which they occurred were too small and disconnected from one another to stably maintain complex culture.

Southern African sites seem concentrated in the interior of the subcontinent before ●870,000. Thus, the florescence of Middle Stone Age innovations described here appears to have coincided with the dispersal after that time of populations from the interior to mountainous areas, but, more particularly, to the coastal stretches of the southern and western Cape. By ●942,000 occupations tended once more to shift away from the southern coast and back into the interior, or to the south-east coast.

Population density for this hunter-gatherer population of southern Africa might have been order of 12 people/100 km². Botswana with ~600,000 km² could have had 75,000 people. Southern Africa with ~2,700,000 km² could have had 300,000-350,000 people. The Rito et al study using genetics seems to indicate a notably lower southern Africa population of about 80,000 at ⊙999,000, up from 8,000 around ⊙900,000. "The many Bushman groups seem to have had a low population density and certain parts of southern Africa were barely inhabited", Sven Ouzman has stated.

Rock art as chronology of the Bushman/San: the works are found in Namibia, Botswana, Zimbabwe, South Africa and Lesotho. In some areas, painting reflected the entry of people of the second sapiens colonisation, so the art included very recent work to 1850. Notable sites are found at Waterberg ●992,000 and Wonderwerk cave ●990,000 (occupied by humans for 2 million years). At Tsodilo Hills in Botswana, some of the paintings are thought to date from around ●978,000. Traces of occupation have been found there from the Middle and Late Stone Age (●722,000-964,000), ●972,000 at the Depression Rock shelter. While exact dating of cave paintings is problematic, paintings at the Apollo 11 Cave in southern Namibia appear to be some 26,000 to 28,000 years old. Apart from painting, rock sculptures and excised images were made, which may reflect variations of language and culture.

The people of the first sapiens colonisation of southern Africa

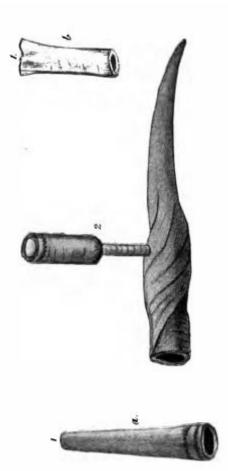
(Most records following are from recent periods, noted by outside observers)

They were physically small (under 1.5m) with small hands and feet. They were of a sallow-brown skin colour. In Damaraland, women were stated to be very small, just over 4' tall. Hair was peppercorn, and some groups twisted this out into tassels. They were known for endurance, longevity, hospitality and love of freedom. Personal qualities were stated to be cautious, strategic-thinking, coolness and presence of mind. They were said to have remarkably good long-distance vision. Waving a jackal tail on a stick constituted a sign of truce.

Women would look after children and have reduced work until the child was mobile, since the woman had to carry the non-walking child. Children might be abandoned if the group could not sustain them.

Most languages used click-consonants. These hunter-gatherer groups spread out across the subcontinent became so diverse that numbers of their languages were mutually unintelligible (Traill 1995). Culturally, there also seems to have been great diversity. There were three words for numbers, after which one added words to give a large number. At Border Cave, a 40,000 year-old 29-groove calendar-stick has also been found, similar to recent usage. There were chieftains of larger groups and sub-chiefs would have a kraal, their totem animal would be featured in the main cave, and they would guard the recipes for arrow poisons and antidotes. We know that by the later second colonisation, hunter-gatherers were organized in loosely knit bands, of which the family was the basic unit, although wider alliances with neighbouring bands were essential for survival. Each group had its own territory, in which special importance was attached to their ancestral natural resources, and in many instances bands moved seasonally from small to large camping sites, following water, game, and vegetation. In dry areas every water hole had a name. Labour was allocated by gender, with men responsible for hunting game, women for snaring small animals, collecting plant foods, and undertaking domestic chores. By tradition, they were not aggressors, but they would defend their rights. Ownership of resources was protected, such as beehives belonging to the discoverer.

The hunter-gatherer way of life was far from poor. People could be highly skilled and had a good deal of leisure and a rich spiritual life, as their cave paintings and rock engravings show. The art varied from stylized and schematic to more naturalistic, showing scenes of hunting and fishing, of ritual and celebration; it vividly portrays their cosmology and way of life. The motives of the artists remain obscure, but many paintings appear linked to the trance experiences of medicine men, in which the eland antelope was a key symbol. They demonstrated surpassing artistic talents and made complex music. They invented a great variety of musical instruments, and there was a notable compass and variation in the refrains which accompanied their dances. Paintings of the dances could be understood and remembered as the dance and the music and the words. Smoking was part of the culture, and a variety of plants and products were used, the most common Stow reports being 'dacha' and another being the camphor bush. There were tube pipes and water (hookah) pipes.





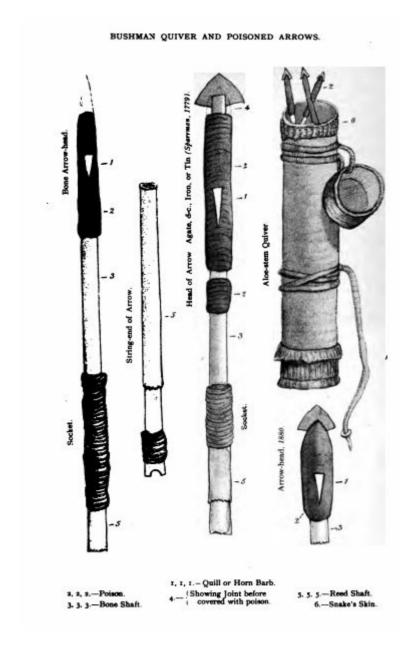




<stow> <stow>

During the long millennia of this first colonisation, there were animals and plants providing food. The people, once their tool-making had developed, engaged in frequent hunting and occasional war. Both had the men employ disguises to hide their presence from prey and enemies. The disguises used body painting and use of hides, buck and ostrich heads and clusters of grass. All sizes of animals were hunted, snares were used and pitfalls were also excavated for elephants and hippo. A hartebeest disguise and imitation of movements and sounds was used when hunting hippo or elephant, ostrich when hunting zebra. Poison was used on the arrows (and an antidote was usually carried), and was applied by type and quantity to match the likely game. Slings were also used. Men were expert trackers, able to follow their dying prey over long distances and able to find, follow and make mock tracks of most animals. Roots, tubers, melons and fruits in season all contributed to the diet. Mortars of suitable nearby rock were ground out to have a depth suitable for rock pestles for preparing roast locusts, grass seeds and other foods, which were stored in skin bags. Termite pupae were 'Bushman rice', and were sieved and roasted. Termite mounds were used for baking. Potterv was made creating shaped, varnished and baked pots. Small tortoise shells were used as cups, larger as dishes. Ostrich eggs were used as water containers. Before the second colonisation, the norm was that the people had ample food and their dogs were in good condition. The honey guide bird would lead the person to a hive. To reach it, he might need to make a ladder of climbing pegs, up trees or up cliffs, sometimes precipitous. A family would have a particular recipe for their mead made with honey.

Stone tools were the norm, and if one needed a knife, it could be rapidly made (except on the great sand face). Arrowheads, flakes, hammers and rubbers were common. Special shaped stones were used to assemble arrowheads on shafts. Stones for particular purposes were carried long distances. At Smithfield SA, 300km distant stones were fetched. Digging sticks were made with considerable labour to ease digging-out of roots and excavating of pitfalls. They might also be used as clubs. The people's stone tools and workings were found all over southern Africa. Wood or bone might be used for scrapers. Wood was used for bows (longer north of the Vaal, shorter south) and arrow shafts. Making fire was said to be quick and easy using two fire sticks, one flat and one pointed. Three varieties of wood were commonly used for the sticks. The second most widespread artefact would seem to be the ostrich shell beads made by the people, using special stones shaped for this work.



<stow>

Shelters were small 4' spherical structures (5' for a chief) made of withes and small rush mats, open to the east. Sleeping posture was curled up on one side. The shelters would be rolled up and carried to the next camp site. A fireplace was made of three round stones. A camp was supposedly protected against lions by a scent put on the fire by the Bushmen. Caves were popular as long-term dry shelters with space for community activities and painted records.

Some of the clans found a niche among the rocks and sands of the sea coasts. Their principal food appeared to be shellfish and caught or cast-up fish. Their dress was composed of the skins of seals and jackals, the flesh of which they ate. It has been stated that Middle Stone Age people made substantially less use of the shellfish populations along the Cape west coast than their Late Stone Age descendants, presumably because people were fewer in number and/or visited the shore less often and/or for shorter periods.

The people appeared to have had an almost passionate fondness for dressing themselves up in masquerading fashion, in the guise of some animal or other, so that it was not only in hunting and war that they simulated the wild animals by which they were surrounded, but even in their amusements, their games, and dances.

One game had two men, each with a certain number of arrows, taking up a standing, sitting, or lying

position opposite to one another, and then at a given signal let fly at one another, one after the other, with as great rapidity as possible, each with equal rapidity trying to avoid the shafts of his opponent. Another class of games also showed skill, but in these it was accompanied with a certain amount of sleight of hand. One of these became so universally popular that it has been adopted and perpetuated among tribes of the second colonisation, by whom it was known as 'Bushman cards'. There was also a form of shuttlecock, where the game involved keeping a shuttlecock in the air.

The people not only had a multitude of dances, but each dance had its own special time adapted to it, which, although confined to five or six notes, were capable of much modification. Much music from Africa uses polyrhythms, usually within the framework of 4/4, 12/8, 9/8, or 6/8 time signatures (if they are to be interpreted in euro-african terms). Bushman music uses these meters, but perhaps uniquely in Africa, also regularly employs such non-standard time signatures as 7/8, 7/4, 11/8, 13/8, 17/4, and 21/4

In their dances the men danced and sang, or chanted, while the women accompanied them with the clapping of hands, and perchance, with a long, droning, humming undercurrent of a refrain. To this, after a time was added, to increase the effect, the beating of sticks and shaking of rattles in measured time. The hunter striking his bowstring with the shaft of his arrow, or a small wand, could reproduce the pleasant sound at will, this led to its use as an instrument of music. Paintings show bows with two and four strings as extensions of the idea. By pressing the bow upon something hollow, the sound of the instrument was improved and increased: the man used a tortoise shell for his earliest soundingboard.

Stow reports that Le Vaillant, during his visit to southern Africa in 1781-2 met with an instrument among some of these people, which he called a 'Rabouquin', made of a triangular piece of wood with three strings fastened with pegs, so that they could be tightened at pleasure and which when played were twanged with the fingers.

Le Vaillant also saw a ^joum-joum: The woman playing placed the bow before her perpendicularly like a harp, holding the bottom firm with her foot, without touching the cord, she grasped the bow with her left hand about the middle, and whilst blowing upon the string, where a quill feather was attached, she struck the string with a wand about five to six inches long.

Another painting shows a scene where dancers' bows have been collected and fixed in the ground before the player so that the strings are all on a level and inclined towards him, upon which he is playing by striking with a bow-stick; thus the idea of a dulcimer, composed of a combination of bows.

Thompson states that he observed a Bushman playing on a Ra-tna'kie, which he describes as being about forty inches long by five broad, and having half a calabash affixed to one end, with four strings somewhat resembling those of a violin. Here then we find a further advance of a quadruple-stringed bow, joined with a calabash sounding-board.

A 'Kan'gan was made of a kind of compound bow, formed of three pieces, the centre being a strong piece of bamboo, about twelve inches in length. Two pieces of tough wood were then inserted, one into each end, about eighteen inches long and tapered off towards the tips like the extremities of a bow, giving it the appearance of some of the old euro-african classical bows. This was then tightly strung with a fine line made of an antelope's sinew.

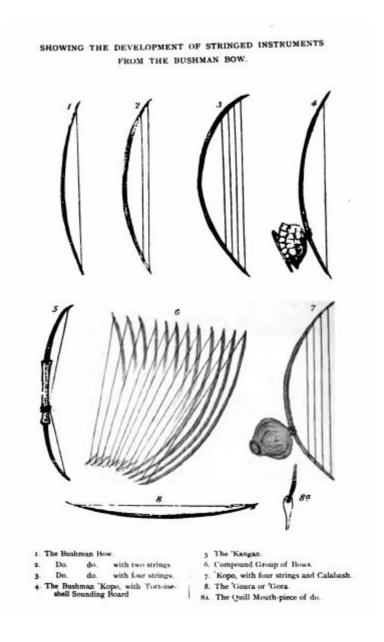
The ^Goura is simply a bow in which one end of the string, instead of being fastened to the bow itself, is attached to a broad, thin, flexible tongue-shaped piece of quill, which is firmly fixed and spliced to the end of the bow. It is this piece of quill which acts as a kind of mouth-piece. The instrument was played by taking the quill in the mouth, and causing it to vibrate by strong in and out breaths, and therefore might be termed a wind-stringed instrument.

Another wind instrument was a kind of reed flute, or pipe, and was especially used in an old favourite dance called 'Ko-'ku-curra. The reeds were cut at a particular season, and the flutes made of different sizes and lengths, so as to obtain a variety of notes. They were made by one or two of the men who were skilled in their manufacture, but their use was reserved exclusively for the women.

There were also drums, some being formed of a portion of the shell of the great bush-tortoise, the bottom being cut away, and its place supplied with a skin stretched over it.

Lastly, there were "Bushman bells" and similar. The larger kind were formed of a piece of dry hide, from which the hair had been scraped. They were in the shape of a large hollow sphere, and were fastened to either the upper arm or shoulder. The smaller ones were generally made of prepared springbok skin, and were either round like the others, or cup-shaped. This latter kind was fastened round the ankles and wrists: they were from two to three inches in diameter. Sometimes a belt of small ones, the size of a pullet's egg, encircled the waist, or was worn across the shoulders. They all

contained small pebbles, and made a noise in the movements of the dance.



<stow>

The fondness of the people for disguising themselves in masquerading dress, representing various animals, birds, and imaginary monsters, either with the aid of paint or the skins, heads, and horns of the objects to be represented was notable. Beyond this, however, their powers of mimicry were said to be striking, and thus they were able not only to assume the appearance, but the action, manner, and cries of the animal they wished to personify, with extraordinary accuracy. It was this talent which enabled them to give such variety to their dances, of which they were passionately fond, and in which they indulged upon every fitting occasion. Stow notes that the universality of this custom was shown from the fact that, in the early days, in the centre of every village or kraal, or near every rock shelter, and in every great cave, there was a large circular ring where either the ground or grass was beaten flat and bare, from the frequent and constant repetition of their dances. It was when food was abundant, after having eaten, that they gave rein to this favourite amusement. Feasting and festivity were accompanied by continuous dancing and rejoicing from the evening to the dawn of the returning day.

There were some regular triggers for dances, such as new and full moon and the first thunderstorm of the summer. There were ball dances (throwing balls from one line of dancers to the other, separate for men and women) and the flute dance exclusively for women, a kind of competition dance, as the women of one cave or kraal would send a challenge to those of another, informing them that on a

certain day they intended to come and 'flute' with them. Food would be gathered for a feast, and a procession made its way to the venue. It was the day of the women asserting the prerogative of unlimited freedom, and might continue for 3-4 days. Other erotic dances were held, along with acrobatic dances, the all-night trance dances and many other variants.

The most famous dance was stated by Stow to be the Mo*koma. They believed that their ancestors derived their instructions with regard to this dance direct from ^Kaang himself, and that in times of famine, war, scarcity, or sickness, this dance was to be continued throughout the whole night, in his honour.

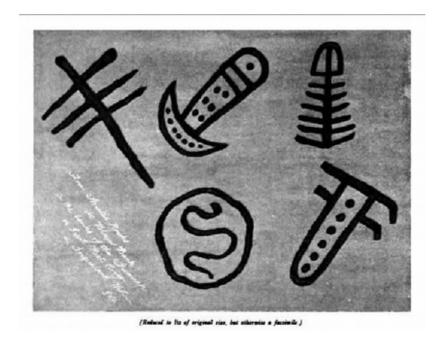
The custom of cutting off the first joint of the little finger was stated to be almost universal amongst the Bushman tribes. The operation was performed with a sharp stone, and the western Bushmen were stated to believe that by this act of self-mutilation they secured to themselves a long career of feasting after death.

There was a rich treasure of beliefs, myths, legends and stories in the culture. A certain amount of religious belief was connected with some of their dances; and Stow notes that, in a painting of the Mo*koma, we are furnished with a positive representation of their fancied deities; and moreover it clearly demonstrates, as was before suggested, that the 'Nadro and hunting disguises of their remote ancestors had become so identified with some great, past hero of their race, upon whom they looked in process of time as not only the first man, but the originator of all things, and who they at length believed was not only superhuman, but that the very disguises which he wore were transformed into a living portion of himself, until their lively imaginations depicted him as a being endowed with enormous power, as denoted by the strength of his limbs and possessing not such a head as belonged to common humanity, but one similar to some great horned beast.

Among the western Bushmen the most prominent object in their mythological tales was stated to be 'Kaggen' whose representative is the Mantis, and that this Mantis ('Cagn - 'Kaggen'), according to the myths of Bushmen informants, was very far from being represented as a beneficent being, but on the contrary is a trickster, getting into scrapes, and even doing purely mischievous things, so that in fact it was no wonder that his name has sometimes been translated by that of the devil.

There were social routines for marriage, for dealing with guarrels and for burials.

This then was the first Homo sapiens colonisation and occupation of southern Africa, in place for a hundred and twenty millennia.



Mystical symbols taken from rock paintings <stow>

The note on years forwards

A footnote on year recalibration:

Take 1AD as ●4,500,000,001. Take earlier dates anywhere to the left ie ●10,004,500,000,001 (yes, science will change its mind on the subject), and take the series from 1AD to 9999 as plain years without ● unless it helps. Now is ●4,500,002,018 (10 digits with thousand separators) or ●002,018 (six digits with thousand separator) or 2018. Six digits are good for most of the essay above.

This ⊙ is 'fongman' a Thai character used for purposes like a dot in front of each item in a list. But it could be seen as a circle around a sun. Consider http://dyait.net/day/years.html

The note on data absence

A footnote on precision:

Researchers are using palaeoanthropology, genetics, archaeology and palaeoclimatology to try to work out our prehistory. A look at the 1969 Oxford History of South Africa reveals major increases in knowledge of our context since that time.

We lack physical data on the past; The % of potential data found so far is tiny.

Absence of archaeological or palaeontological data should be interpreted cautiously. Homo sapiens is not seen by all as equivalent to Anatomically Modern Humans (AMH).

References and Bibliography

Wikipedia.org: Recent African Origin of Modern Humans, Haplogroup L0 (mtDNA), Khoisan, San people, Sandawe people, Tsodilo Hills, Blombos Cave, Klasies River Caves, Bantu Expansion

https://www.britannica.com/place/Southern-Africa#ref479593

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3827445/ The First Modern Human Dispersals across Africa: Rito T, Richards MB, Fernandes V, Alshamali F, Cerny V, Pereira L and Soares P. 2013

https://www.researchgate.net/publication/234147678_Origins_and_Spread_of_Pastoralism_in_Africa https://archive.org/stream/cu31924029888587/cu31924029888587_djvu.txt

Greater than the sum of its parts? Modelling population contact and interaction of cultural repertoires https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5454306/

Those marvellous millennia: the Middle Stone Age of Southern Africa https://www.tandfonline.com/doi/abs/10.1080/0067270X.2015.1039236

The Ysterfontein 1 Middle Stone Age site, South Africa, and early human exploitation of coastal

resources http://www.pnas.org/content/101/16/5708

The Native Races of South Africa; George W. Stow, F.G.S., F.R.G.S.; Edited by George McCall Theal, Litt.D., LL.D., Swan Sonnenschein & Co. Limited, London and the Macmillan Co., New York 1905

http://www.bushmanmusicinitiative.org/

http://www.nationsencyclopedia.com/economies/Africa/Botswana.html

https://pdfs.semanticscholar.org/1435/90d6d1fb1f86d95fd7b0b603f6b25ffc00c7.pdf

https://www.smithsonianmag.com/science-nature/early-bow-and-arrows-offer-insight-into-origins-of-human-intellect-112922281/ 2012

http://www.bradshawfoundation.com/namibia/twyfelfontein_site_report.php Sven Ouzman

Middens and moderns: shellfishing and the Middle Stone Age of the Western Cape, South Africa; John Parkington

https://open.uct.ac.za/bitstream/item/18235/Parkington Article 2003.pdf?sequence=1

Notes

Southern Africa areas:
Botswana 600,000 km²
Lesotho 30,000 km²
Namibia 826,000 km²
Swaziland 17,000 km²
South Africa 1,221,000 km²

2,694,000 km²

UN schema, red for southern Africa <wikipedia>

Metric inch: 25mm, symbol " Metric foot: 300mm, symbol ' 'Recent' for the time covered in the essay above is the last three thousand years.

'People' in the essay are the Homo sapiens of the first colonisation of southern Africa, whom we meet in most detail as the recent Bushmen/San.

'Dacha' is also known as cannabis and marijuana.

David Alexander Young, 11ag18