




Bored Stones–Star Stones– Ancestral Stones: A Sub-Saharan Perspective of the Ritualised Relationship Between Humans and Perforated Stones

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ABSTRACT

Bored stones are prolific in South Africa and found across much of sub-Saharan Africa. Most are surface finds, but some have been excavated from Pleistocene Stone Age deposits dating to between about 11,000 to 45,000 years ago. Others are found in association with late Holocene Iron Age farmer occupations, and in some places, they have been used during historical times. The relationships between humans and these objects, therefore, transcend socio-economical boundaries. The stones are mostly thought of as weights for digging sticks—but some groups in sub-Saharan Africa also had/have ritualised, symbolic relationships with them. Here, I explore bored stones in their ritual and spiritual contexts, drawing largely on historical accounts. I also provide a summary of archaeological finds to demonstrate the possible time depth of such relationships.

Résumé: Nombreuses en Afrique du Sud, les pierres perforées sont découvertes à travers une grande partie de l'Afrique subsaharienne. La plupart se trouvent en surface, mais certaines résultent de fouilles de gisements de l'Âge de pierre du Pléistocène datant d'il y a environ 11 000 à 45 000 ans. D'autres sont trouvées en lien avec les activités agricoles de l'Âge de pierre de l'Holocène tardif, et sur certains sites elles ont été utilisées durant des périodes historiques. Par conséquent, les liens entre les êtres humains et ces objets transcendent les limites socio-économiques. Les pierres sont essentiellement envisagées comme des poids pour des bâtons fousseurs, mais certains groupes dans l'Afrique subsaharienne avaient/ont aussi des liens ritualisés, symboliques avec elles. J'étudie ici les pierres perforées dans leurs contextes rituels et spirituels, en puisant largement

dans les récits historiques. Je propose également un sommaire des découvertes archéologiques pour démontrer la possible profondeur temporelle de ces liens.

Resumen: Las piedras perforadas son prolíficas en Sudáfrica y se encuentran en gran parte del África subsahariana. La mayoría son hallazgos de superficie, pero algunos han sido excavados en depósitos de la Edad de Piedra del Pleistoceno que datan de hace entre 11 mil y 45 mil años. Otros se encuentran asociados con ocupaciones de agricultores de la Edad del Hierro del Holoceno tardío y, en algunos lugares, se han utilizado durante épocas históricas. Las relaciones entre los seres humanos y estos objetos, por tanto, trascienden las fronteras socioeconómicas. Las piedras se consideran principalmente pesas para palos de cavar, pero algunos grupos en el África subsahariana también tenían o han tenido relaciones simbólicas ritualizadas con ellas. Aquí exploro piedras perforadas en sus contextos rituales y espirituales, basándome en gran medida en relatos históricos. También proporciono un resumen de los hallazgos arqueológicos para demostrar la posible profundidad temporal de tales relaciones.

KEY WORDS

Perforated stones, Spirit realm, Grave goods, Rainstones

Introduction

In southern Africa, stones with human-made holes or perforations through their centre are referred to as *!kwe* stones in the /Xam San language (a hunter-gatherer group from the Nama Karoo, South Africa) or bored stones in general (Figure 1). Archaeologists often associate these artefacts with weighted digging sticks (e.g. Goodwin 1947; Mazel and Parkington 1981). Amongst the San, who represent different groups of southern African hunter-gatherers/foragers or their descendants, bored stones are also known as ‘star stones’ (Bleek 1875). In San folklore, the stars of the southern skies represent mythical personalities or creatures (Bleek 1875; Bleek and Lloyd 1911). Amongst both the /Xam and !Kung San (the latter is a hunter-gatherer group now living mostly on the western edge of the Kalahari Desert in northern Namibia, southern Angola, and northwestern Botswana), falling stars are associated with a person’s death, wherein according to /Xam lore the ‘heart’ goes to the creator in the sky, but the ‘ghost’ goes

to ‘the great hole’ (underground), and certain stars are ‘people of the early race’ or the ancient ancestors and creators of all beings (Bleek 1935; Marshall 1962; Solomon 1997). Modern San perceive themselves as connected to their ancestors in many different ways, and all the participants in a recent study indicated that stars and stories about the stars are important elements in such ancestral connection (Binneman and Davis 2020). Shamans or sorcerers, who lead healing or trance dances of the San, are thought of as ‘dying’ when they reach deep states of altered consciousness. Dia!kwain of the /Xam San said that:

“When a sorcerer [sic] dies, his heart comes out in the sky and becomes a star. His heart feels that he is no longer alive; therefore his body there, in which he was alive, becomes a star there, because it feels that he used to be a sorcerer. Therefore his magic makes a star, in order to let his body in which he lived walk about. For a sorcerer sees things which we, who are not sorcerers, do not see. [...] Then a star shoots (falls), for a sorcerer who has gone about among things which are bodies has really died. His sorcery is shooting, because his spirits have got bodies. Therefore they work magic” (Bleek 1935:24–26).



Figure 1. The three stones to the left are *!kwe* stones from South Africa demonstrating their size range. The two on the right were collected from Tanzania. All these stones are currently curated at the University of Cape Town, South Africa. Photos Marlize Lombard©

For my contribution to this special volume about ‘Ancestral Stones’ and the reimagining of human relationships with stones, I explore the connection between people of sub-Saharan Africa, bored stones (star stones), and the ancestral spirit realms that may be either in the heavens above or in the ground below. This paper is not about disputing the possible mundane functions of some bored stones, such as being used as weights for digging sticks, but to highlight the range of spiritual and ritual relationships that different African groups have/had with these objects through time and across space. I start with historical accounts about where some groups think the stones come from. Then, I focus on a few detailed records about how the stones were used in their different ‘ancestral’ contexts. Lastly, I provide a list of dated bored stones from archaeological excavations, demonstrating the deep-time origins of the stones, which I speculate may indicate continuity of the symbolic and/or spiritual relationships between people and bored stones in sub-Saharan Africa.

Where Do Bored Stones Come From?

In June 2002, whilst recording a rock engraving site (van der Ryst et al. 2004), we visited the Tswana-speaking village of Makwate in south-eastern Botswana. Here, we met Mr Willem Bafidile, the village headman, who spoke about the area and its people. Bored stones are regularly observed in the village and the landscape around Makwate, and we asked Willem whether he knew someone who made these stones. Without hesitation, he answered that they were not manufactured by humans but by *Modimo* (god), a long time ago when the rocks were still soft. According to Tswana oral tradition, Matsieng, a one-legged giant who was the servant of the creator *Lowe*, emerged from a waterhole in the earth when it was still soft and wet, followed by his animals and all the different human tribes (Kirby 1940; Breutz 1952, 1953; Walker 1997). When we asked Mr. Bafidile what the bored stones were used for, he turned to the graveyard of the village and told us that both men and women used the stones to look over the graves of the ancestors to see into the spirit world (Lombard et al. 2003:5). He then suggested that we visit the local healer or *Ngaka*, Mr. Dinyalo Lathang to learn more.

At his homestead, Dinyalo told us that bored stones were known by the locals as ‘*Lentswe la Badimo*’ translating into ‘stone of the ancestors’. He confirmed Willem’s narration that *Modimo* had made the stones, but according to him, they were used by the ancestors who looked through the hole to see what the people down in the village were doing. Sometimes an ancestor would accidentally drop a stone from heaven, which is why they can be found in the veld (Lombard et al. 2003). Similar accounts are

Table 1 Records of ceremonial or symbolic functions of bored stones that were perceived as not made by their users but found on the ancestral landscapes or inherited from their ancestors

Ritual/symbolic function	Origin	Place	People	Source
Grave goods	Found on the ancestral landscape	Western Cape, South Africa	Hunter-gatherer or pastoralist	Bell (1876)#
Charm associated with fertility or rain rites	Found on the ancestral landscape	Malawi	Agriculturalist	Van Riet
<i>Luhud</i> : a special perforated stone used to weigh sticks for the ceremonial digging of graves	Self-made or found on the ancestral landscape	Ethiopia, Somalia	Not indicated, agriculturalist	Lowe (1941)# Clark (1944)*
Used by the chief in various ceremonies for rain, purification, and initiation	Found on the ancestral landscape	Dodomo, Tanzania	Gogo, semi-pastoral	Dart (1948)#
Ancestral spirit sanctification of corn before eating by passing it through the hole	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
Proffering libations to the ancestral spirit at the harvest festival through the orifice of the stone	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
The spirit residing in the stone protected the household to which it belonged	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
Ingesting some of the stone may ward off spirits causing illness	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
It represented an ancestor of a <i>lapa</i> (household) who held an exemplary position	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#

Table 1 continued

Ritual/symbolic function	Origin	Place	People	Source
Consulting the gods by pouring new beer through the hole before drinking	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
Protecting the children of the household	Found on the ancestral landscape	Limpopo, South Africa	Sotho, agriculturalist	Dart (1948)#
Spirits of various ascriptions reside in the holes	Collected from the landscape, made by people of long ago	Lake Rukwa and Lake Tanganyika, Tanzania	Not indicated, agricultural	Kleindienst (1961)#
Diviners sacrifice a hen or cock, dripping its blood into the hole of a bored stone to determine from which direction bad influences are coming	Collected from the landscape, made by people of long ago	Lake Rukwa and Lake Tanganyika, Tanzania	Not indicated, agricultural	Kleindienst (1961)#
Used in rain and fertility rites	Found on the ancestral landscape	Malawi	Agriculturalists of the last few hundred years	Rangely (1963)#
Used by the ritual experts to foretell raids and future events	Found on the ancestral landscape	Mount Elgon, Uganda	Sebei-speaking groups, pastoralists?	Weatherby (1965)#
Rainstones of the ritual leader used to make prosperity medicines	Inherited from ancestors	Tanzania	Gogo, semi-pastoral	Rigby (1966)*
Used in rainmaking ceremonies	Inherited from ancestors	Tanzania	Gogo, semi-pastoral	Rigby (1967)*
Used to look over the graves of the ancestors to see into the spirit world	Made long ago by god	Tuli Block, Botswana	Tswana, agriculturalist	Lombard and Parsons (2003)#
Made for the ancestors to look at the people down in the village	Made long ago by god	Tuli Block, Botswana	Tswana, agriculturalist	Lombard and Parsons (2003)#

The entries are arranged in sequence from the oldest to the most recent published reports (* = self-observation by author, # = verbal account from informant to author)

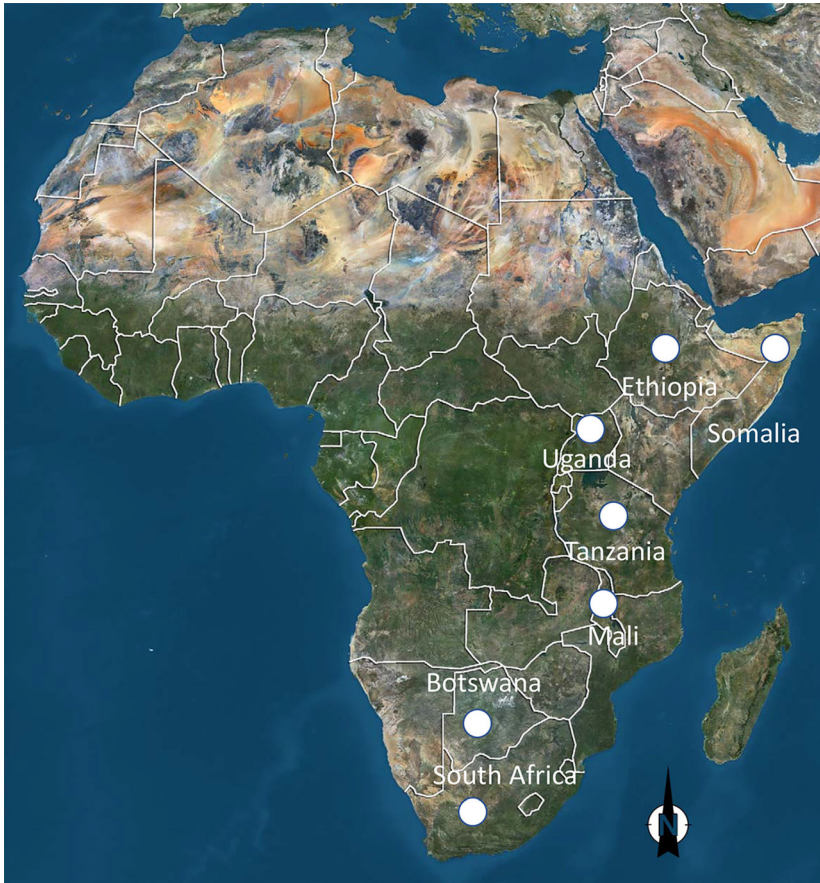


Figure 2. Regions in sub-Saharan Africa where there are records of bored stones perceived as ancestral and used in symbolic or ritual contexts

known from further north; for example, Sharpe (1901) writes about bored stones from Tanzania near the south end of Lake Tanganyika where people found the stones in the ground. They do not know where they come from or who made them, but refer to them as *miala ya rmlunga*, i.e. ‘stones of god’ or supernatural stones. In Table 1, I summarise more historical accounts wherein bored stones, either found on the landscape or inherited from a predecessor, have been linked to ritual or symbolic use. In these contexts, they are often considered to have been made long ago by god or the ancestors.

The summary shows that at least since the 1800s people from what is today Botswana, Ethiopia, Malawi, Somalia, South Africa, Tanzania, and Uganda perceived bored stones to be ancestral in one way or another and

used them in ritualised behaviours associated with the spiritual realm (Table 1; Figure 2). In my own experience, listening to Willem and Dinyalo (Lombard et al. 2003), the bored stones facilitated a two-way channelling between the people of the village and the spiritual world. A porthole through which living people could ‘see into the spirit world’ and through which the ancestors could ‘look upon the people’. The Sotho-Tswana-speaking people of southern Africa are agri-pastoralists whose ancestors arrived in the area less than 2000 years ago from Western Africa (e.g. Choudhury et al. 2021; Fortes-Lima et al. in press). The question, therefore, is whether they brought their views about bored stones with them or obtained their ideas from the local hunter-gather populations whom they encountered, and who have a genetic ancestry of more than 300,000 years in sub-Saharan Africa (Schlebusch et al. 2017, 2020).

‘Star stones’ of the San and Communicating with the Spiritual/Ancestral Realm

Bantu-speaking agriculturalists arrived from western Africa in South Africa about 1800 years ago (slightly later than in the northerly parts of southern Africa), preceded a few centuries by Khoe pastoralists who migrated from eastern Africa (Breton et al. 2014; Vicente et al. 2019). Before that, the region was inhabited by numerous hunter-gatherer groups, some practising a forager lifeway until a century or two ago, with small groups still living in the Kalahari basin of Angola, Botswana, Namibia, and South Africa. Today, we have a rich historical record for San hunter-gatherer behaviours and mythology from the Nama Karoo (Northern Cape, South Africa) as a result of/Xam San individuals such as //Kabbo, /A!kunta, /Han ≠ kass’o, Dia!kwain, ≠ Kasin and !Kweiten ta //ken who shared their thoughts and memories with Wilhelm Bleek and Lucy Lloyd between 1870 and 1879 (Hollmann 2004). Some of these individuals referred to bored stones as star stones, linking them to the spirit or ancestral worlds in the sky and in holes below the ground. To maintain the integrity of the original narrations, I quote three cameos directly from Hollmann’s (2004) reprinted transcriptions of the Bleek and Lloyd notes first published in the 1930s by Dorothea Bleek, the originals of which can be found in the Digital Bleek and Lloyd collection of the University of Cape Town (<http://lloydbleekcollection.cs.uct.ac.za/books.html>, consulted 1st of February 2023).

First Cameo Told by Dia!kwain on the 24th and 25th of June 1875

Quoted from Hollmann (2004:256–258; original notebook reference L.V. II: 4801 rev.-4809 rev.).

Mother used to tell me that the spirit people were those who had been game sorcerers. When they died their thoughts, with which they had been sorcerers and worked magic, continued, though they died and we did not see them; still their magic doings went about here. Their magic doings are like a person who always lives, they do not die; thus he still lives in his sorcery. Therefore mother used to tell me that she would beg from her sorcerers who had owned game; when she beat the ground [with a round or bored stone], then she spoke to them. Mother did not see them, yet she talked with them for mother felt sure that they would hear her. [...] For they had been sorcerers, they had known things by their sorcery, this it was which they worked. Therefore mother used to do this, she beat the ground, she begged the sorcerers for game; as she struck down the stone she said. 'O my spirit people, do you no longer think of me? It seems as though you had turned your backs on me, that you do not seem to think as you used to do, at the time when you still had bodies; you used to talk as if you really loved me, but it seems as if you had in dying taken your thoughts away from me. For you do not always give my husband some old thing that he can kill for me, that I may eat of it [...] It seems as if you have died taking away your thoughts which used to be favourable to me'.

Second Cameo Told by Dia!kwain on the 23rd and 28th of June 1875

Quoted from Hollmann (2004:263–265; original notebook reference L.V. II: 4807- 8428).

This is what mother did when father went out and returned without having seen anything that he could bring us; father used to tell mother how he had seen the things behave, when he was stalking them, they had seemed to know where he was; they kept looking round, they seemed to feel that he was stalking him. Mother spoke, saying, 'The people who work magic there, must have bewitched the things again, that they act like this. For the things act as if sorcerers had bewitched them, they behave like that. For you tell me, you saw the things, and they did not act nicely.' Mother told us that she would beat the ground (with a stone), to see what could be the matter [...] (When we beat the ground we beg of the people who own game; that is why we beat the ground, for it is a prayer). Mother said to the children. 'Bring us the digging-stick-stone [*/kwe:*], so that I can find out what is the matter, that father does not do as usual [...] then I can find out why father's going, his standing and walking is not successful, but is unlucky'. Then one of us, a little child, gave mother the digging-stick stone, and mother took it and went out, and sat down by a bush and said, she would see what was the matter, that made father's going like this. And then mother struck the digging-stick stone on the ground, she said, 'The backs of your heads are here, you who are spirit people have turned your backs on me here'. Mother spoke, saying, 'What can be the matter? It does not seem if my husband could hunt here

[...] Therefore I truly see that the spirit people have turned their backs on us. So I will just beat the ground to see what is affecting my husband's going [...]. Mother beat the ground, and we went back, we lay down to sleep.

Third Cameo Told by ≠ Kasin on the 29th of December 1873 and the 19th of January 1874

Quoted from Hollmann (2004:286–292; original notebook reference L.IV.3: 3701–3737).

The Old Woman stuck her digging-stick [with stone, *!kwe*: in original transcription] (into the earth), she begged from the Chameleon [one of rain's things], and the Chameleon looked towards her. She told the Chameleon that her children were thirsty, they could not find water, the Chameleon should give her people water, that they might live, for her children could not find food. And the Chameleon looked at the ground, and when it looked at the ground, it looked up to the sky, it knew that the rain would fall, and it looked at the children (to see if the Old Woman spoke truly about them), then it looked towards the Old Woman. And the little children laughed, because they rejoiced. And the old woman took out her digging stick (from the ground).

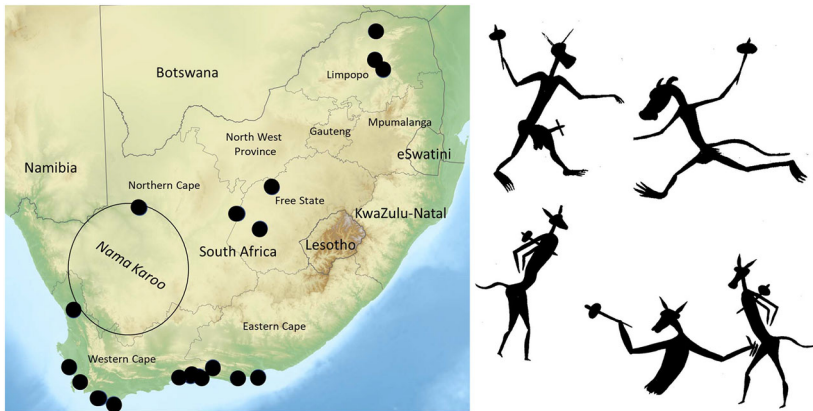


Figure 3. Left: General area known as the Nama Karoo, and places in South Africa where bored stones have been found as grave goods. Right: Five therianthrope figures (i.e. individuals with mythological ability or affliction to metamorphose into animals or hybrids by means of shapeshifting) copied by George Stow (1905) in the Maloti-Drakensberg. Image adapted by ML and reproduced with the permission of IZIKO Museums©

In all three these cameos, women perform the rituals to communicate with sorcerer spirits or ‘the rain’s things’ through beating the ground with round or bored stones or digging sticks with such stones. Bleek and Lloyd (1911:429) also write that they were told that a man does not beat a stone upon the ground—a woman beats a stone upon the ground. Hollman (2004) sees these accounts as unequivocal indication of the /Xam belief that ancestral sorcerers can be approached by the living for help—and one way of communicating with the ancestral spirits is by beating the ground with bored stones. Such beating “was done at a specific place where one could meet spirits, such as at crossroads or at an open patch, for example a pan (a natural depression) where no bushes grew” (Hoff 2007:14).

When Hoff (2017) began her research, she realised that 17 of her Khoe-San (groups that may include either pastoralists [Khoe] or hunter-gatherers [San]) informants were of /Xam San descent still living in the Nama Karoo, South Africa (Figure 3 left). They believed in an underworld wherein graves and the act of digging graves (with weighted or unweighted digging sticks), or the digging for certain food and medicinal roots or bulbs, were connected to the underworld (Hoff 2011). Some of her data suggest that bored stones in particular had a link with the underworld (Hoff 2017), and that the connection with the underworld may have extended to the act of digging for water (Alexander 1838:125). Similar to those who shared their information with Bleek and Lloyd, Hoff’s informants indicated that spirits could be called by hitting the ground with a round stone, bored or unbored, and that bored stones may have been placed in a grave to end the connection with death (Hoff 1990, 2017). Currently, I am aware of bored stones having been used as grave goods at Chipongwe in Zambia (Clark and Toerien 1955), and at Mumba Cave in Tanzania (Mehlman 1979), as well as 26 instances throughout South Africa (Figure 3 left; Table 2). The data demonstrate that using these artefacts as grave goods represent a multi-millennial tradition that transcends the lifeways of Bantu-speaking Iron Age agriculturalists, Khoe herding communities, and Later Stone Age hunter-gatherers (Table 2).

Possibly the oldest known bored stones used as grave goods come from the Lower Bed III at Mumba Shelter, Tanzania, that may date to ~ 27,000 years ago based on radiocarbon from eggshell (Mehlman 1989; Mabulla 2007), or to ~ 37,000 years ago based on OSL from quartz (Gliganic et al. 2012). Mehlman (1989) describes two ‘stone balls’ with hourglass perforations lying immediately beneath the head of what may have been a woman of about 40 years old at death (Bräuer 1980). It is, however, the only burial from this context that was not flexed or contracted, so that it may be intrusive (Mabulla 2007), and therefore much younger (Gliganic et al. 2012). At Oakhurst Cave in the Western Cape of South Africa, Goodwin (1937) reported two Later Stone Age graves with bored stones as part of

Table 2 List of known burials in South Africa where perforates stones were found as part of the grave goods

Location found/excavated	Other grave goods/notes	Source
<i>Bantu-speaking, iron age agriculturalists (based on skeletal morphology and archaeological context)</i>		
Magoebaskloof Rest Camp, Limpopo	Late Iron Age pot burial with bored stone	Morris (1992)
Happy Rest, Limpopo	Grave goods with male skeleton	Steyn and Nienaber (2000)
K2, Limpopo	Grave goods with child's skeleton	Steyn and Nienaber (2000)
<i>Probably Khoe herders (based on grave goods including pottery)</i>		
Koffiefontein, Free State, South Africa	Shallow round grave with stones in the shaft, body buried with a bored stone, cowrie shells, and a lugged pot	Broom (1941), Humphreys (1970), and Morris (1992)
Bokbaai, Western Cape, South Africa	Skeletal material found close to a perfect spherical bored stone, a flat bored stone of irregular shape and a grooved bead-polisher of coarse sandstone	Rudner and Rudner (1955)
Bokbaai, Western Cape, South Africa	A jawbone found with a bored stone-disc	Rudner and Rudner (1955)
Koffiefontein, Free State, South Africa	Shallow round grave with stones in the shaft, body buried with ostrich eggshell beads, a bored stone, and a small pot	Humphreys (1970) and Morris (1992)
Grootdrink, Northern Cape, South Africa	Old graves at a depth of between 3.5 and 5.5 m, with them were found several ostrich eggshell flasks (one filled with powdered specularite iron), eggshell beads, bored stones (one of them heart-shaped), pots and other objects	Rudner (1971)
Essexvale, Gqeberha (previously Port Elizabeth), Eastern Cape, South Africa	Human remains found with partly bored stone and pottery sherd	Morris (1992)
Cape Agulhas, Bredasdorp district, Western Cape	Isolated human remains on beach, possibly associated with pottery and /kwe stones	Wells (1951) and Morris (1992)

Table 2 continued

Location found/excavated	Other grave goods/notes	Source
Strydpoort, Jacobsdal	Burial in stone circles with bored stone, cowrie shell, and ostrich eggshell beads	Morris (1992)
<i>Later stone age hunter-gatherers (based on age, and/or grave goods, and/or archaeological context)</i>		
Tsitsikamma Mountains, Western Cape, South Africa	Bored stone found with female skeleton	FitzSimons (1923) and Wadley (1997)
Commonage, Knysna, Western Cape	One of 12 burials with stone slabs over the bodies, this person was buried with stone tools and 'ring stones' (spherical, slightly flattened on the sides, or quoit-like, and others with cutting edges, in every stage of manufacture)	FitzSimons (1928) and Morris (1992)
Commonage, Knysna, Western Cape	One of 12 burials with stone slabs over the bodies, this person was buried with stone tools and stone rings as described above	FitzSimons (1928) and Morris (1992)
Cape Flats, Western Cape	Skeletal fragments with broken half-bored stone, grooved stones and other stone implements	Goodwin (1929)
Heads Road, Western Cape, South Africa	Bored stone found with skeletons	Goodwin (1947)
Oakhurst Shelter, Western Cape, South Africa	Grave VIa, found with gravestones, red ochre, Wilton artefacts, bored stone, jewellery of ostrich eggshell and conus shells	Goodwin (1937)
Oakhurst Shelter, Western Cape, South Africa	Grave X covered with several gravestones, behind the skull or resting on it were an ostrich eggshell and a spherical bored stone, another eggshell or parts of it rested on the face	Goodwin (1937)
Rietrivier, Free State, South Africa	Stone ring, found with skeleton	Esterhuysen (1964)
Waterbakke, Lutzville, Western Cape	Isolated grave just above high-water mark found with a perforated stone	Morris (1992)

Table 2 continued

Location found/excavated	Other grave goods/notes	Source
Cape St Francis, Eastern Cape	Cranium found in sand dunes, with a <i>!kwe</i> stone and other stone implements	Morris (1992)
Cape St Francis, Eastern Cape	Cranium and mandible found in sand dunes, with a <i>!kwe</i> stone and other stone implements	Morris (1992)
Matjes River, Plettenberg Bay, Western Cape	Burial 3 feet down in Wilton layer; found with <i>!kwe</i> stone, tortoise shell, and 131 other objects	Morris (1992)
Matjes River, Plettenberg Bay, Western Cape	Burial 4 feet down in Wilton layer; found with incomplete <i>!kwe</i> stone, and 75 other objects	Morris (1992)
Matjes River, Plettenberg Bay, Western Cape	Burial 4.6 feet down in Wilton layer; found with complete <i>!kwe</i> stone and a tortoise shell under its head	Morris (1992)
Pearly Beach, Western Cape	Cranial fragments and two mandibles found with grinding stones, bored stones and stone flakes	Morris (1992)

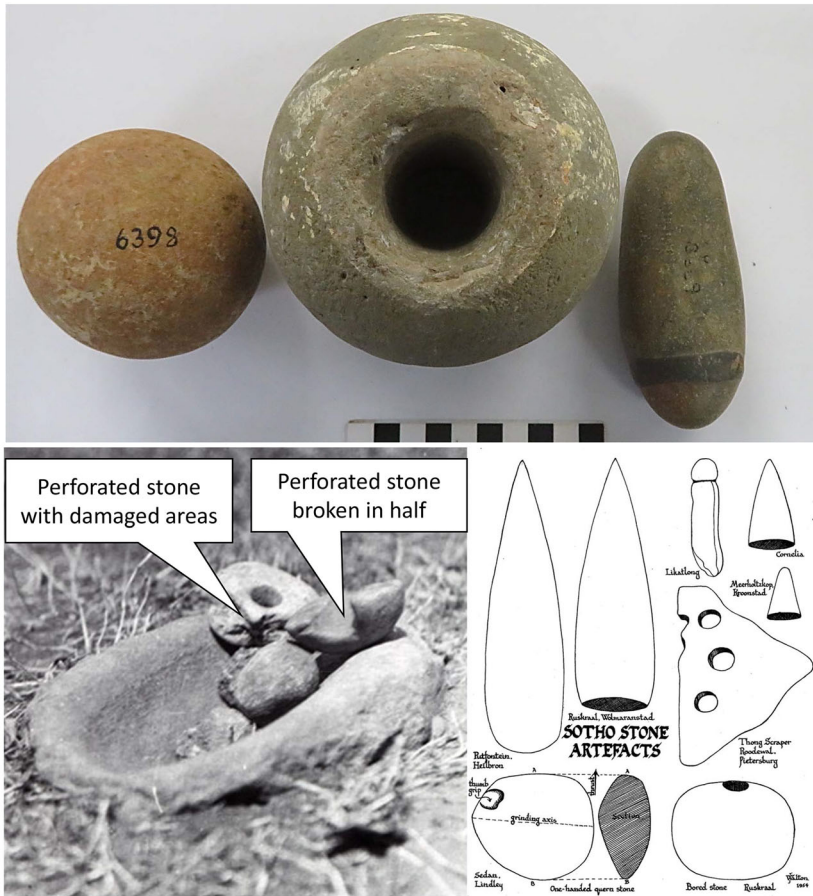


Figure 4. Top: A polished round stone, a bored stone and a phallic stone from Vrouenspan near Rooiputs in the southern Kalahari (Northern Cape, South Africa), in the area that Hoff (2011) conducted her research. The artefacts are currently curated at the McGregor Museum, Kimberley, South Africa. Photo Marлизe Lombard©. Bottom left: The rainstones on the grave of Jada a powerful rainmaker of the Bari people of South Sudan and Uganda, containing a bored stone with damage along its outer surface, and half of a broken bored stone. Photograph Seligmans (1928), used with permission of the Pitt Rivers Museum©. Bottom right: Sotho stone artefacts (illustrated by Walton 1956) showing phallic stones and bored stones that Dart (1948) suggested may relate to South African rainmaking ceremonies (but see Derricourt 2009). Image used with permission of the University of Stellenbosch©

the grave goods. These graves are both associated with the Wilton techno-complex that dates to about 8000–4000 years ago in southern Africa (Lombard et al. 2022). Wadley (1997), working from Goodwin’s field notes, describes one of these graves as that of a man lying on a bed of seagrass

beneath a cairn of gravestones. His remains were deliberately covered with ochre. On one arm, he wore a wide ostrich eggshell bracelet of intricate design, and four pierced conus shells may have been part of another piece of jewellery. Seashells filled with ochre were also found on his body, and next to him was an ostrich eggshell water bottle and several Middle Stone Age flakes. A bored stone lay on his right thigh with one end containing a black resinous mass perhaps as a plug, and from the other side an unbroken series of fish vertebrae was pushed into the hole. Next to his thigh was also a round grinding stone. Patrick (1989) dated the human remains associated with this burial to 4530 ± 70 bp (Pta 4449).

Research on painted images from the South African Later Stone Age suggests that therianthropomorphic shamans (i.e. individuals with mythological ability or affliction to morph into animals or hybrids by means of shapeshifting) are sometimes associated with bored stones (Figure 4 right; Lombard and Hollmann in press), and with fish as a metaphor for their ability to enter a deep altered state of consciousness that may be perceived as ‘traveling under water’ (Lewis-Williams 1984). Wadley (1997) therefore interprets the fish in the bored stone found with the Oakhurst burial as symbolising the trance experience. Amongst both the /Xam and Ju/’hoansi San (the latter representing a hunter-gatherer group from the Kalahari Desert on the boundary between Namibia and Botswana) a trancing shaman is thought of as ‘dying’ the same death as those who are buried (Katz 1982; Hollmann 2004). During the ‘trance death’ shaman souls leave their bodies—and their hearts become stars (Bleek 1935)—travelling to meet god and/or the spirits of the dead to beseech of them the group’s wellbeing (Katz 1982). Water holes are central to many southern African hunter-gatherer myths relating to the ‘travels’ of a shaman. In some of these myths, it represents the porthole through which the shaman can escape from the horizontal, mundane axis and break into the vertical axis of the spirits that dwell above or below (Lombard 2002). /Xam rain specialists were thought to enter a water source to work with ‘water things’ (Hoff 2011). Whilst we may never know to which extent these worldviews applied to the man who was buried at Oakhurst Shelter, the connection between bored stones, the dead, and their spiritual existence seems patent.

Bored Stones: Rainstones

Apart from the central rainforests, sub-Saharan Africa is known for its cyclic droughts. Rainmaking and rainmaking specialists are therefore central to most of the socio-economies and ritual activities of the region. In the third cameo above, a woman used her digging stick, weighted with a *!kwe* or star stone, to connect with the chameleon of the underworld in a plea

for rain. According to some /Xam informants, the rain's things (creatures associate with rainmaking or rain control) such as the chameleon and the water snake could also be buried to acquire rain (Hoff 2011). These creatures were thought of as having lights or stars (in this instance symbolised by a natural diamond or rock crystal) on their foreheads, representing the divinatory qualities of stars and water to move around and 'see' everything—in the same way that sorcerers or shamans do when they die symbolically and become stars seeing things that others don't (Bleek 1935). The /Xam often connected the stars with water (Hoff 2011), so that star stones or bored stones may have had a role in rainmaking, as implied in the cameo of the woman using her a stick with a bored star stone to connect with a rain animal. The bond of /Xam women with the potent, primal conditions of nature may be a reason why they were seen as better rain specialists than men, and why they were mostly the ones to contact the 'water people' by hitting the ground with bored and/or other round stones (Hoff 2011, Figure 4 Top). Whilst for hunter-gatherers such as the /Xam San periods of drought affected access to drinking water, and the abundance of veld-food and game to hunt, the impact is more severe on agri-pastoralist economies.

Five of the entries in Table 1 indicate the use of 'ancestral' bored stones in the context of rain ceremonies used by agriculturalists or pastoralists. Sanders (2002) suggests that gendered rainstones can be found throughout Africa. His informants are in agreement that some chiefs reigned because they 'owned the rain', and male chiefs or rainmakers own 'male rain' (thunderstorms), and women rainmakers own female rain (soft, gentle rain). In this system, each possessed their own sacred, gendered rainstones together with the esoteric knowledge of how to use them. "The two ritual leaders are held as ultimate authorities of the esoteric knowledge of rainmaking, contributing his or her unique and gendered wisdom to the process" (Sanders 1998:252), and "the union of the two symbolizes the insemination of the earth by the sky" (Williams 1949:205–206).

Some of the earliest accounts of bored stones associated with rainmaking and rainmaker graves were written about Bari-speaking groups in Southern Sudan and Uganda (Seligman and Seligman 1928). Here the rainmakers' ceremonies were expected to bring all kinds of prosperity to the people, not rain only. To fulfil such high expectations, rainmakers needed to manipulate the rainstones correctly. By doing so, their appeals would gain the support and power of their ancestors. The Seligmans (1928) describe ceremonies wherein the rainstones are washed, placed in a hollow grinding stone, and smeared with oil. A black goat is slaughtered close by (and sometimes the stones are smeared with the fat and stomach-contents of the sacrifice) and eaten—"and the rain comes" (Seligman and Seligman

1928:464). If the rain did not come, the ceremony would move to an ancestral rainmaker's grave.

One such grave was that of Jada, a powerful rainmaker whose rainstones were believed to be of great potency. The Seligmans were allowed to examine these stones that contained amongst them "half of a bored spheroidal stone of considerable size, resembling a Bushman's digging-stick weight, an artificially bored stone, an irregular mass of quartz with crystals springing from the matrix, and a pebble of a stone we did not recognize" (Seligman and Seligman 1928:467; Figure 4 bottom left). Some of the rainstones may also be smaller pebbles with natural 'eyes' and artificial perforations, many, if not all, of the rainstones of the Bari-speaking groups were thought of as being either male or female (Seligman and Seligman 1928).

Rainmakers are also the most important ritual specialists amongst the Sudanese Lugbara groups (Middleton 1973). They control rain by manipulating objects kept in a pot buried in the middle of a 'rain grove', set amongst their fields and farmlands. This grove represents the 'centre of the world' where creatures associated with 'divinity' dwell, and which only a rainmaker may enter. The objects in the rain pots vary amongst the rainmakers, but most of them include rainstones, male (phallic in shape) and female (round and pierced). Middleton (1963:306) writes that "All these objects represent many facets of basic experience—to do with heaven and earth and the essential nature of human beings [...] together they represent the totality of human experience. Rainmakers control fertility and death by actual manipulation of these objects".

Dart (1948) reports on the use of conical (male) and bored (female) stones amongst the Wagogo of Tanzania. Shaped as imitations of the male and female sex organs (but see Derricourt 2009), they are used in a range of ceremonies around rain, purification and initiation. Some rainmaking chiefs have more than a hundred rainstones, others only one or two, representing variation in ancestral fortune. Once a year it is the *Mtemi's* (chief's) prerogative to use the stones in his supplication for rain. Dart (1948:63) draws parallels to a South African rainmaking ceremony involving the use of bored stones (Figure 4 bottom right for Sotho examples of gendered stones). Since the rains are not always dependable here, the rainmaker must perform a ceremony wherein he prepares 'a certain medicine by himself in a house' whilst the people of the village come together to offer prayers to the ancestors. Once the medicine is prepared and the praying done, they move to the yard of the rainmaker's senior wife. In the middle of her yard a hole is dug, and a bored stone is placed over the hole in the ground. The rainmaker then pours some of the medicine through the stone into the ground after which young girls or boys (not having reached puberty) are chosen to sprinkle the remaining medicine around the boundaries of the village.



Figure 5. Top: The bored stone used in the agricultural fertility ritual observed by Berglund (1972) lying underneath a storage structure in the woman's homestead with its openings plugged with maize cobs. Photo from Berglund (1972: 579). Bottom: A bored stone with grain-slurry residues currently curated at the University of Cape Town, South Africa. Photo Marlize Lombard©

Bored Stones, Fertility Rites and Libations

In what is now KwaZulu-Natal, South Africa, Berglund (1972:579–582) witnessed an old woman preparing seed to be planted in a maize-field without knowing that she was observed. His record goes as follows:

She was preparing the seed while her son, the male senior of a homestead, was preparing to plough the field that was to be planted. The incident took place on a Saturday morning after good spring rains had fallen. In a secluded spot, hidden from sight by bushes and tall dry grass and low down on the slope of the field to be tilled, not very far from a stream of water, the woman, about sixty-five years old (possibly more) had scraped out earth to

form a small hollow in the field. [...] Covering the hole, she placed a plastic sheet over it [...] A boy was called from a group of herding youngsters, playing a short distance away. He was sent to fetch a stone [Figure 5 top] which the woman said was to be found in a certain place in the stream nearby. The boy returned with a bored stone, dripping wet. The woman received the stone from the boy and gave him a billy-can lid, instructing him to fetch water from the stream in it [...] The boy returned with the lid nearly full of water and walking carefully so as not to spill any. On receiving the lid with water, the old lady poured about half of the contents out behind herself (apparently there was too much water in the lid), placed the lid in the hole on the plastic after she had taken a mouthful of water from it, and placed the bored stone over the lid. From her clothing she produced a brown paper packet containing a powdered medicine, about a teaspoon full, which she poured into her left hand and then took into the mouth and mixed it with the water as one would do when rinsing one's teeth after brushing. From a basket containing seed which was to be planted she took a handful in the right hand and let the seeds run into the hole of the bored stone, falling into the lid with water. Having emptied her hand, she bent down over the hole and blew some medicine into the hole. This was repeated three times, the third handful of maize seed filling the hole in the bored stone. On this occasion she blew out the remaining medicine and water in her mouth. She lifted the stone from its position and called for the boy again, instructing him to return the stone to its place in the homestead. The billy-can lid was lifted from its position and the maize in it with medicine and water was emptied into the basket with maize seed. Carefully she lifted the plastic sheet in the four corners and poured the seeds and water which had run over into the basket. Thereafter she mixed the seed in the basket with her right hand, the left holding the basket in position. [...] She lifted the basket, and prepared to commence planting. The hole in the ground was left uncovered, the plastic and the brown paper packet returned to a pocket (presumably) in her clothing. [...]

From the discussion with the diviner [at eThelezini] the following emerged: Sometimes no medicines are used. But the water is regarded as essential. The diviner did not know whether the water always is blown out by way of the mouth into the hole in the stone, but he thought that would be the case. "That is the way with medicines." Without hesitation he associated the water in the billycan lid with the water of the womb and said: "From where do children come if not from water? So this is the water of children." Asked whether there was any symbolism in the hole constructed in the field, my informant, after some hesitation, said that the field is "the mother from whom we eat," suggesting that it is female. He was quite explicit that the ritual could only be done by an old woman. On the other hand, he also insisted that no male could do it. "Men do not sow. They slaughter the animals when there is to be meat. But they do not sow." Asked whether children could do it, he said that children do not know "how to do this thing," clearly indicating sexual symbolism. He was equally convinced that a preg-

nant woman could not do it “because she is hot with water and blood (menstrual blood and semen).” On the other hand, a woman who was not menstruating and not pregnant he thought could also do it.

Archaeological remains of such practices could be represented by a bored stone found beneath a grinding stone at a house entrance excavated on Melora Hilltop in the Limpopo Province, South Africa (Lombard and Parsons 2003). Goodwin (1947) suggested that agri-pastoralists of southern Africa probably imitated the bored stones of the San as a result of multi-levelled contact and inter-marriage, and that they continued using the artefacts after such contact. Not far from Melora Hilltop, at Rooisloot near Mokopane Mr. Sidney Maga provided information about the ritual uses of bored stones amongst the Bantu speakers of the region. Here, each *lelapa* (household) possessed such a stone and ritual uses included the sanctification of seed, harvest festival offerings, protection for the household and the treatment of ailments (Dart 1948). Not only were seeds sanctified by being passed through the hole in a stone, but the stones also played a role in first-fruit rituals wherein ‘green food’ is not eaten before the ancestors have been thanked. Grains would be boiled, the family gathered and some of the food offered to the ancestors by pouring it through the hole in the stone (Figure 5 bottom), which used to be embedded in the ground with the hole facing upwards (Dart 1948).

Dart (1948) also reports that beer libations were made through the holes of bored stones in South Africa amongst the Sotho-Tswana speakers of the region where most households have such a stone representing a revered ancestor who is deemed worthy of emulation. The inmates of the *lapa* (household) would ask for assistance and blessings from this ancestor by offering libations to the stone. They would sit around the spot where the stone is imbedded, the hole facing upwards, and the head or guardian of the *lapa* would lead the beer offering through the hole of the stone. This was also done when new beer was brewed. Before any of it could be consumed, it was strained, and some poured into the hole from a dipping calabash. “It is said that by so doing they were consulting the gods [...] Even nowadays this custom is still practised, but those who do so imbed a plant called *Lehwvama*” (Dart 1948:65).

Kleindienst (1961) reports that the people of Ufipa in Tanzania believe that different kinds of spirits dwell in the holes of bored stones. They find these stones “under the large trees growing near springs which are also held to be the home of spirits, although whether the present inhabitants found them there or placed them there themselves is not clear” (Kleindienst 1961:150). Father le Bordeaux told her that when diviners sacrificed chickens to find out where ‘bad influences’ came from, blood was dripped into the hole of a bored stone that was made by ‘*watu ya samani*’ or peo-

Table 3 Age estimations of bored stones from dated archaeological contexts (ka = thousand years)

Published age	Location	Technocomplex	Source
<i>Historical</i>			
~ 0.2 ka	Katamansu, Accra Plains, Ghana	Historical	Apoth and Gavua (2010)
Iron age			
~ 0.3 ka	Melora Hill, Limpopo, South Africa	Iron Age	Lombard and Parsons (2003)
~ 0.7 ka	K2, Limpopo, South Africa	Iron Age	Steyn and Nienaber (2000)
~ 0.7 ka	Mucucusse 3 Mine, Angola	Early Iron Age	De Maret et al. (1977)
~ 1.3 ka	Happy Rest, Limpopo, South Africa	Iron Age	Steyn and Nienaber (2000)
<i>Final later stone age with pottery</i>			
~ 0.3 ka	Grootdrink, Northern Cape, South Africa	Ceramic final Later Stone Age	Maggs (1977)
~ 0.4 ka (two stones)	Koffiefontein, Free State, South Africa	Ceramic final Later Stone Age	Morris (1992)
~ 1.3 ka	Cape Agulhas, Bredasdorp district, Western Cape, South Africa	Ceramic final Later Stone Age	Wells (1951) and Morris (1992)
<i>Holocene later stone age</i>			
~ 0.7 ka	Cape St Francis, Eastern Cape, South Africa	Later Stone Age	Morris (1992)
~ 1 ka	Waterbakke, Lutzville, Western Cape, South Africa	Later Stone Age	Morris (1992)
~ 1.9 ka	Olieboomspoort, Limpopo, South Africa	Later Stone Age	Lombard (2003)
~ 2 ka	Cape St Francis, Eastern Cape, South Africa	Later Stone Age	Morris (1992)
~ 2.1 ka	Likoaeng, Lesotho	Later Stone Age, post-classic Wilton	Plug et al. (2003)
~ 2.1 ka	Commonage, Knysna, Western Cape, South Africa	Later Stone Age	FitzSimons (1928) and Morris (1992)
~ 2.5	Strathalan, Eastern Cape, South Africa	Later Stone Age	Opperman (1996)
~ 2.6 ka	Commonage, Knysna, Western Cape, South Africa	Later Stone Age	FitzSimons (1928) and Morris (1992)
~ 2.9 ka	Goedgeloof, Eastern Cape, South Africa	Later Stone Age	Binneman (1995)
~ 3 ka	Wonderwerk Cave, Northern Cape, South Africa	Later Stone Age	Humphrey and Thackeray (1983)

Table 3 continued

Published age	Location	Technocomplex	Source
~ 3–6 ka	Matjes River, Western Cape, South Africa	Later Stone Age, Wilton	Morris (1992) and Lombard et al. (2022)
~ 4 ka	Cave James, Gauteng, South Africa	Later Stone Age	Wadley (1987)
~ 4 ka (four stones)	Wonderwerk Cave, Northern Cape, South Africa	Later Stone Age, Wilton	Humphrey and Thackeray (1983)
~ 4.4 ka	Hope Hill, Gauteng, South Africa	Later Stone Age	Wadley (1987)
~ 4.9 ka	Mumba Cave, Tanzania	Later Stone Age	Mehlman (1979)
~ 5 ka	Wonderwerk Cave, Northern Cape, South Africa	Later Stone Age, Wilton	Humphrey and Thackeray (1983)
~ 5–8 ka (two stones)	Oakhurst, Western Cape, South Africa	Later Stone Age, Wilton	Morris (1992)
~ 6.3 ka	Kondoa Rock Shelter, Zambia	Nachikufan I	Clark (1950) and Cole (1954)
<i>Pleistocene later stone age</i>			
~ 11 000–15 000 ka	Kalemba Rock Shelter, Zambia	Later Stone Age	Phillipson (1976)
~ 13.5 ka (two stones)	Dikboshch 1, Northern Cape, South Africa	Later Stone Age	Humphrey and Thackeray (1983)
~ 13 000–23 000 ka	Zombepata, Zimbabwe	Stone Age, Tshangula	Cooke (1971)
~ 17 000	Leopards Hill, Zambia	Nachikufan I, Later Stone Age	Miller (1969, 1971)
~ 20 ka	Matupi Cave, Democratic Republic of Congo	Later Stone Age quartz industries	Van Noten (1977) and Cornelissen (2016)
~ 21 000–24 000 ka	Leopards Hill, Zambia	Proto-Later Stone Age	Miller (1969) and Phillipson (1976)
~ 22–33 ka	Twin Rivers, Zambia	Later Stone Age	Clark and Brown (2001)
~ 27–37 ka?	Mumba Cave, Tanzania	Later Stone Age/Middle Stone Age intermediate	Mehlman (1989) and Gliganic et al. (2012)
~ 41–43 ka	Border Cave, KwaZulu-Natal, South Africa	Later Stone Age	Beaumont (1978) and d'Errico et al. (2012)
~ 44–45 ka	Border Cave, KwaZulu-Natal, South Africa	Early Later Stone Age	Beaumont (1978) and d'Errico et al. (2012)

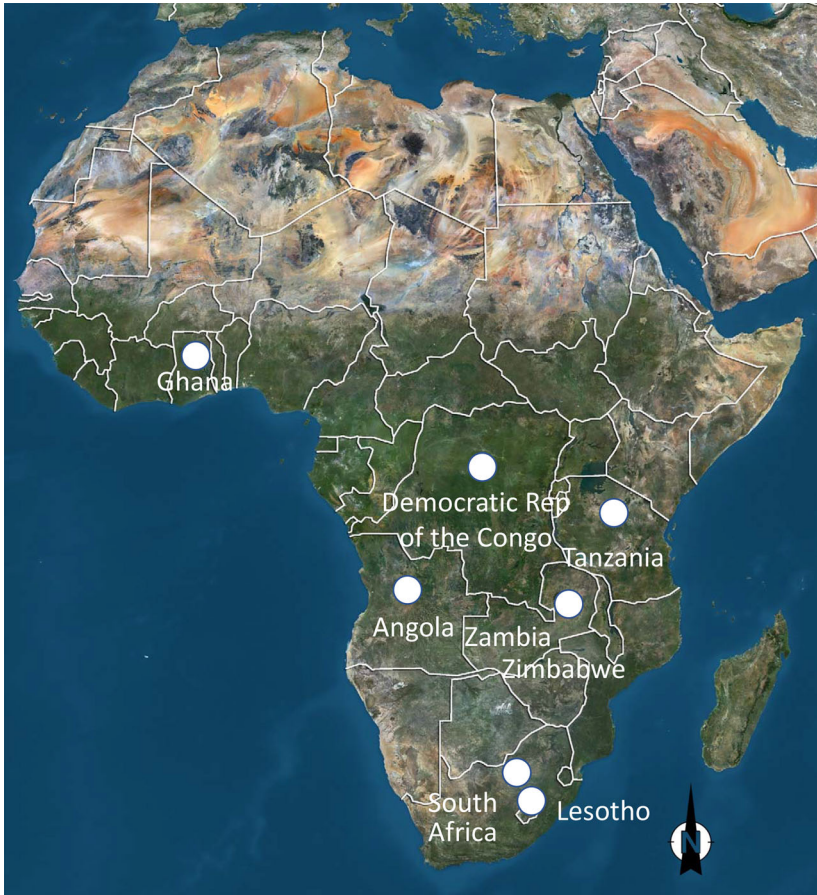


Figure 6. Regions in sub-Saharan Africa with bored stones from dated contexts

ple of long ago. The Wakimbu from Tanzania are also known to pour the blood of sacrificial animals through the holes of bored stones during times of severe stress (Harding 1963). For example, during a smallpox epidemic in 1906 and a locust invasion in 1931, when they needed to call upon ancestral spirits to intercede with *Ngu* (god) on their behalf, blood-pouring ceremonies involving bored stones were witnessed (Harding 1963).

The Time Depth of Bored Stones in Sub-Saharan Africa

Because human-made bored stones are morphologically so enigmatic, they are habitually collected from the landscape. In southern Africa today, many European-decent farmhouses have a few bored stones used as doorstops. From the historical recollections above (and Table 1), we saw that African agriculturalists also collected them from the veld or inherited them. It is therefore reasonable to suggest that such collection happened over a long period, resulting in relatively few bored stones found in *bona fide* archaeological excavations that can be dated. Yet, the list provided in Table 3 demonstrates that such stones have been excavated from a historical site in Ghana a few hundred years ago, where they are regarded as female spiritual curative objects (Apoth and Gavua 2010). In Angola and South Africa, they have been found in Iron Age (African farmer) contexts dating between ~ 300 and ~ 1300 years ago (Table 3; Figure 6). Two of these finds are grave goods and one may be associated with domestic ritual (Steyn and Nienaber 2000; Lombard and Parsons 2003). The arrival of herding populations in southern Africa from eastern Africa is often associated with the introduction of pottery during the final Later Stone Age (Sadr 2013; Lombard et al. 2022). These people, referred to as Khoe or Khoekhoen, seem to have often used bored stones as part of the grave goods buried with the deceased, which is the case for three dated examples from South Africa (Tables 2 and 3).

Twenty-two perforated stone artefacts have been found associated with 18 dated Holocene Later Stone Age contexts in Lesotho, South Africa, and Tanzania, representing hunter-gatherer lifeways of the last ten to twelve thousand years in these regions (Table 3; Figure 6). In six of these dated contexts in South Africa, the stones were found as part of grave goods, and at Oakhurst Shelter a grave with a bored stone dated to ~ 4,500 years ago may be that of a sorcerer or shaman. Eleven more bored stones come from Pleistocene Later Stone Age contexts dated between > 11,000 and ~ 44,000 years ago. If the human remains and bored stones from Mumba Cave, Tanzania, are of similar age and indeed date to ~ 27–37,000 years ago (Mehlman 1989; Mabulla 2007; Gliganic et al. 2012), they represent the oldest known instance of bored stones used as burial goods and therefore used in a symbolic, ritual and/or spiritual context. Other direct ritual associations for bored stones during the Pleistocene Later Stone Age are not known at present, but I return to two of the Pleistocene stones in the discussion below: i.e. the one from Matupi Cave in the Democratic Republic of the Congo with an age estimation of ~ 20,000 years, and the oldest known bored stone from Border Cave in KwaZulu-Natal in South Africa dated to ~ 44–45,000 years ago.

Concluding Discussion

The theme of this special volume centres around ‘ancestral stones’ and a reimagining of human relationships with stone from the Palaeolithic to the present. With this contribution I set out to collate historical accounts of the various symbolic, ritual, and spiritual relationships that different groups of people from across sub-Saharan Africa had/have with bored stones. Whilst the details may vary, the data show that such relationships exist/existed on the sub-continent in hunter-gatherer, pastoralist, agriculturalist, and historical contexts. All the symbolic functions imply that the stones served as representation of, or conduit into, the spiritual world of the gods and ancestors associated with the different groups that used the stones in ritualised settings. These relationships may thus serve as ontology, or a set of concepts within a sub-Saharan worldview pertaining to bored stones—over and above any practical uses they may have served for the respective groups (Ouzman 1997; Lombard 2003).

Archaeologists may battle to ‘excavate’ the symbolic application of seemingly mundane objects such as digging-stick weights. Through considering historical insights we may, however, gain some understanding about past human-stone relationships. Such insights show that far from being passive self-manufactured household objects, farming communities across sub-Saharan Africa viewed bored stones as made by god or the ancestors and active channels through which appeals to the ancestors could be made. These communities used the bored stones, not only for rainmaking, ensuring the fertility of the soil or first-fruit offerings, but also during situations of dire need such as drought, epidemic illness, or overwhelming plagues. Often the bored stones are considered the feminine counterpart of sets of ritual stones that may include conical or phallic stones that represent the male aspect in a worldview about gender and fertility that transcends human procreation.

As Whitelaw (2017:104) describes, in southern Africa “the hunter-gatherer contribution to the agriculturalist world was considerable, and ranged from genes to speech to healing to perceptions of the ancestors and other supernatural beings. The contribution occurred over a period of some 1600 years [in Kwazulu-Natal, and perhaps longer further north] although variation in the character of agriculturalist communities suggests differences in the way it was incorporated during that time”. Some groups such as the Mpondomise of the Eastern Cape, South Africa, used San rainmakers as specialists within their political system (Whitelaw 2017). It is also well known that most Bantu-speaking agriculturalists who arrived here did not make the bored stones themselves—instead the stones used in their ritual practices are perceived as made by god. Khoe or Korana herders who regu-

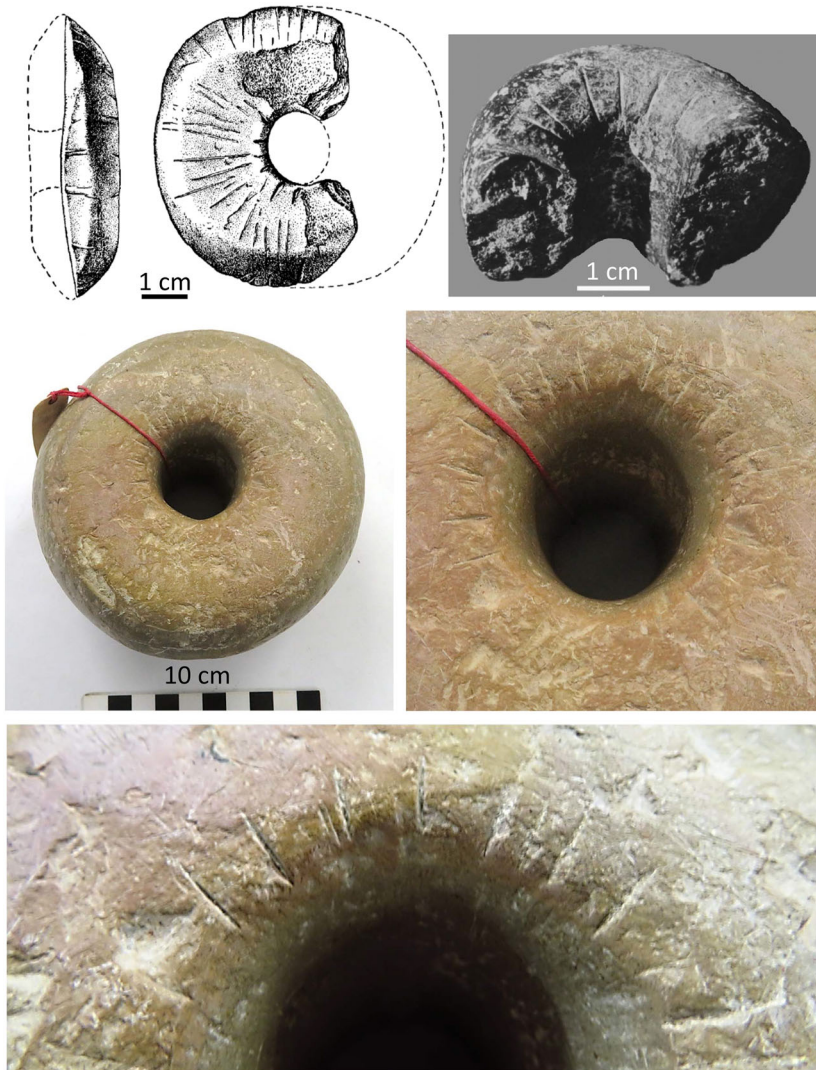


Figure 7. Top left: The broken bored stone from Matupi Cave in the Democratic Republic of the Congo dated to ~ 20 000 years ago with decorative radial incisions. Image adapted from van Noten (1977). Top right: The broken bored stone from Border Cave (KwaZulu-Natal, South Africa), dated to ~ 44–45,000 years ago with a diameter of ~ 5 cm, showing eight incised lines radiating from the perforation. Photograph by P. Nagel©. Middle and bottom: A bored stone found near Kuruman (Northern Cape, South Africa), with deliberate incisions around its perforation. The artefact is currently curated at the McGregor Museum, Kimberley, South Africa. Photo Marlize Lombard©

larly buried bored stones with their dead, however, acknowledge San hunter-gatherers as the makers of bored stones (Maingard 1932; Engelbrecht 1936; Ouzman 2005).

Above I posed a question about whether agri-pastoralists—for whom there is much evidence of the ritual use of bored stones—brought their ‘ancestral’ views about these objects to the areas where they encountered local hunter-gather populations. Currently, it is not possible to tease apart how the ritual and symbolic aspects associated with bored stones may have transferred between Bantu-speaking farmers originating from western and central Africa, pastoralists originating from eastern Africa and southern African hunter-gatherers. However, the fact that several of the dated and other Later Stone Age bored stones are associated with burials, demonstrates that at least some notion of a spiritual connection between humans and bored stones existed in hunter-gatherer groups long before contact with African farmers and herders. The Oakhurst burials may indicate that a shamanic association with bored stones existed by at least sometime between 4,000 and 8,000 years ago.

Whilst we may never know all the ways in which bored stones were used during the Pleistocene, it may be of interest to take a closer look at two of the older stones (Figure 7 top). The stone from Matupi Cave in the Democratic Republic of the Congo is a fragment of a perforated disc, decorated with star-like incisions and associated with a context of ~ 20,000 years old (Figure 7 top left). De Maret et al. (1977: 493) suggested that the stone provides “valuable details on the antiquity of these enigmatic instruments”, but gave no further details about why this as an ‘enigmatic instrument’. It is a small stone (~ 6.5 cm in diameter and 1.2 cm in thickness), so that it could hardly have served as a digging-stick weight, and the deliberate decorative incisions radiating from the perforation may indicate its symbolic value to those who owned or used it. The oldest known bored stone fragment from Border Cave in South Africa also has deliberate, decorative radial incisions emanating from its perforation (Figure 7 top right). This too is a small stone of ~ 5 cm in diameter and ~ 2.5 cm thick made of shist from at least 40 km away from the cave it was found in (Beaumont 1978).

Thus far, I weighed over 100 bored stones, and those falling in the size range of the Border Cave stone generally weigh between ~ 300 and 500 g, which does not add much in terms of digging force. These old decorated artefacts therefore speak against the origin of bored stones in sub-Saharan Africa as intended for weighting digging sticks. Instead, I suggest that their diminutive size and the decorative incisions radiating from the perforations allude to a possible symbolic function more than to an exclusively mundane one (also see Deacon 1982). Recently, I also recorded a stone found near Kuruman in the Northern Cape (South Africa) weighing 1174 g with

dimensions in the range usually associated with digging-stick weights (Figure 7 middle left). This stone too has deliberate, decorative radial incisions emanating from both ends of its perforation (Figure 7 middle right and bottom). Thus, if the incisions indicate a symbolic value or function, it was not limited to the ancient, small bored stones of the Congo and Kwa-Zulu-Natal, but can also be found in the Northern Cape region associated with both Khoe and San peoples, the latter of whom refer to the stones as ‘star stones’.

Goodwin (1947) published the last southern African inventory of bored stones. I am currently transcribing his morphometric data into an electronic medium, and revisiting museum and university collections to add the dimensions and weights of bored stones and stone discs that were subsequently accessioned. Once the stones are measured and weighed, geologists will identify the stone types they were made from, and explore where such raw materials can be collected from. Data about possible modes of manufacture, decoration, polishing, pecking, and damage are being recorded. Ultimately, the database will enable some testing of hypotheses about the production, use, and spatiotemporal distribution of the stones across southern Africa.

I started this paper by alluding to the fact that bored stones or *!kwe* stones are also known as star stones by at least two southern African hunter-gatherer groups who associate them with ancestral spirits living in the sky or in the ground. Women from both these groups are known to use these star stones to appeal to the spirits of powerful, deceased sorcerers for better hunting outcomes, or to rain animals for timely rains. Solid metaphors, like the bored stones, are not substitutes for linguistic metaphors or their translations into material form. They act most subtly and powerfully precisely when they are not linguistically translated. In this manner, they are a primary element of the unconscious in culture, a mapping of an experience from one domain onto another (Lombard 2002). Solid metaphors such as bored stones may thus gather layers of metaphorical meaning. People are simulating and experiencing themselves in the deepest sense by producing, using and experiencing such artefacts (Tilly 1999). There can be no direct historical analogy between the historical star-stone accounts and the Pleistocene artefacts with star-like incisions (Figure 7). Yet, I argue that there may be a relational analogy between these objects and the notion that they may sometimes facilitate communication with the spirit world.

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