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The art of music. The representation of musical instruments in the rock art of Zimbabwe

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ABSTRACT

This article explores the relationship between music and rock art by looking at the occurrence of musical instruments at rock art sites in Zimbabwe. Much of the attention paid to the rich rock art heritage of this country has focused on the documentation of sites, the meaning of the painted and engraved motifs in them and the regional variability they display. Despite some brief mentions, the depiction of musical instruments is still in need of systematic study. This article's first objective is to compile the information about this type of motifs found in publications and the SARADA archive. Having identified and classified them, it then explores whether musical instruments depicted at rock art sites are connected to altered states of consciousness. The possible relationship between gender and music is also explored and regional differences in the depiction of musical instruments are commented on.

RÉSUMÉ

Cet article explore la relation entre musique et art rupestre à travers l'étude de la représentation d'instruments de musique sur les sites d'art rupestre du Zimbabwe. Jusqu'à présent, l'attention portée au riche patrimoine d'art rupestre de ce pays s'est principalement concentrée sur la documentation des sites, la question de la signification des motifs peints et gravés qui y figurent, et leur variabilité régionale. Malgré quelques mentions succinctes, la représentation des instruments de musique reste à étudier de manière systématique. Dans cet article, le premier objectif est de compiler les informations sur ce type de motif qui se trouvent dans les publications et les archives de SARADA. Après avoir identifié et classifié ces informations, nous considérons la question d'une association des représentations d'instruments de musique sur les sites d'art rupestre avec des états altérés de conscience. Nous explorons également une possible relation entre genre et musique, et nous commentons sur les différences régionales que l'on observe dans la représentation des instruments de musique.

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Introduction

In 1981, David Lewis-Williams began a short essay on ‘The art of music’ by stating that ‘the Bushmen of southern Africa are justly renowned for their splendid rock paintings,’ but they were less known for ‘their advanced development of another art form, music’ (Lewis-Williams 1981a: 8). He indicated that the medicine dance (which he later preferred to refer to as the trance dance) was often depicted in rock art, because it ‘was very largely associated with the work of the medicine men’ (Lewis-Williams 1981a: 8). The vocal nature of this type of music, accompanied by women clapping, meant that no musical instruments were associated with the dances. In contrast, he mentioned that instrumental music had a personal nature and was depicted less frequently in rock art, with a few exceptions such as musical bow players (Lewis-Williams 1981a). Soon after, however, Dennis Lee (1987) indicated that there were more musical bow players depicted in the rock art of southern Africa and that they could also be connected to trance. Despite this promising beginning, the topic was then dropped and for more than a decade nobody considered the connection between rock art and music or musical instruments to be an interesting field of enquiry, a silence only broken at the turn of the millennium (Ouzman 2001; for later literature see Rifkin 2009; Wurz and Rusch 2020; Wurz *et al.* 2020; Rust *et al.* 2022; Kumbani 2023). This is still largely the case across southern Africa, where rock art is believed to have been created by the San. We argue that the study of ‘musicking’, i.e. all musical activity and the analysis of the social and symbolic relations surrounding the practice of music (Small 1998), is an essential aspect of understanding past communities. The investigation of intangible aspects, such as sound and music, has the potential to greatly enrich our understanding of how past societies lived and perceived their environments. As such, it should be integrated as another aspect within archaeological enquiry.

The aim of this article is to identify, characterise and contextualise the presence of musical instruments in the rock art of Zimbabwe and to appraise whether the musical instruments depicted are related to motifs and attributes connected to altered states of consciousness. Rock art is one of the most prevalent types of archaeological sites in Zimbabwe; it is dispersed across the eastern half of the country (Figure 1: shaded area). Many rock art sites have been recorded and documented, with new ones still being discovered (Nhamo 2012). There are two major styles: finely painted hunter-gatherer art, believed to have been created by the San, and farmer rock art, which is mostly finger-painted (Garlake 1987a; Nhamo 2012); the latter is not considered in this article. Additionally, engravings appear in the form of geometric patterns and ‘formlings’ (Mguni 2002; Mlambo 2016). The hunter-gatherer rock art of Zimbabwe typically includes depictions of animals, human figures, therianthropes, plants and other motifs.

After a brief overview of past research into musical instruments and rock art in southern Africa, we describe the motifs depicting musical instruments identified in the rock art panels studied before discussing their likely connection with altered states of consciousness. Our research followed several phases. Firstly, we carried out a comprehensive literature survey of primary and secondary sources on the rock art of Zimbabwe. Second, we conducted a search for other images in the online South African Rock Art Digital Archive (SARADA), curated by the Rock Art Research Institute at the University of the Witwatersrand, Johannesburg (www.sarada.co.za). This phase also benefited from

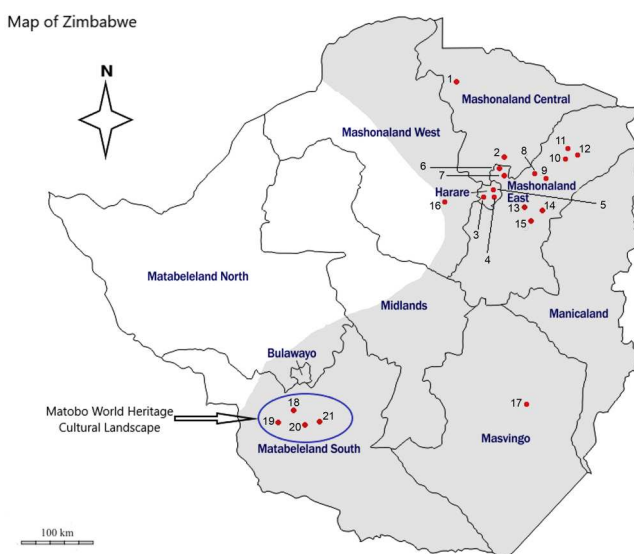


Figure 1. Map of Zimbabwe showing the distribution of rock art sites mentioned in the text: Mashonaland Central: 1 Guruve; 2 Chikupu; Harare Province: 3 Glen Norah West; 4 Epworth 1/Epworth Mission Farm; 5 Epworth 3; Mashonaland East: 6 Chinamhora; 7 Ngomakurira; 8 Mucheka; 9 Murehwa; 10 Manemba; 11 Guruve; 12 Gambarimwe; 13 Imire; 14 Lendy 1; 15 Ruare; Mashonaland West: 16 Bushman Point; Masvingo: 17 Rumwanda; Matabeleland South: 18 White Rhino; 19 Bambata; 20 Cave of the Trumpeter; 21 Hay Grange. The shaded area corresponds to the overall distribution of rock art sites in Zimbabwe.

information offered by other rock art researchers who were contacted to enquire about any additional depictions that we might have missed. In response, they confirmed that they were not aware of any others. Due to space limitations, we chose not to include other types of information about the connection between music and rock art, such as the acoustics of rock art sites (Santos da Rosa *et al.* 2024), dances, clapping and the possible use of long sticks as musical instruments (for further information on the last of these, see Rifkin 2009: 589–590). These topics will form the basis of future research endeavours.

In a third phase, our investigation led to the creation of a database in which five types of musical instrument depicted in Zimbabwe's rock art were identified. These instruments were categorised according to the widely used von Hornbostel-Sachs system (Hornbostel and Sachs 1961, which classifies musical instruments into ideophones, membranophones, chordophones and aerophones. The most common instruments found in Zimbabwe's rock art are ideophones in the form of rattles, followed by aerophones, among which we distinguish possible trumpets, flutes and a bullroarer. No obvious depictions of whistles have been found. There is also a drum, which is a type of membranophone. In contrast to other rock art areas in southern Africa, such as Lesotho (Stow and Bleek 1930: Plate 35), Namibia and South Africa (Vogels 2012), there is no indication of the depiction of musical bows in Zimbabwe (Garlake 1987a: 45).

The description of the motifs of musical instruments is organised first by instrument, as mentioned above, and then by province and archaeological site. Six provinces have been identified: Mashonaland Central, Harare, Mashonaland East, Mashonaland West, Masvingo and Matabeleland South (Figure 1). Following Lewis-Williams (1983) and

Garlake (1987a), we consider all sites in Zimbabwe as belonging to the same rock art region in southern Africa.

The goal of the fourth and final phase of our work was to consider the meaning of the musical instruments represented in rock art. Based on the database of instruments depicted in the rock art of Zimbabwe, their possible links with altered states of consciousness are thus appraised in the discussion section of this paper. The connection between gender and music is also assessed. Finally, we comment on the similarities and divergences between different areas in Zimbabwe with regard to the use of musical instruments.

The history of research into musical instruments and rock art in southern Africa

Southern Africa has one of the longest traditions of rock art research in the world (Garlake 1997; Smith 2013; Nankela 2015; Bourgent and Bourgent 2018; Ouzman and Smith 2022). Initially, the primary focus was on describing sites and the motifs depicted in them. Nevertheless, from early on scholars commented on other questions, including the connection between rock art, music, musical instruments and dance. In 1931, for example, British archaeologist Leslie Armstrong published findings on the Cave of the Trumpeter in Zimbabwe, but while he described the instrument present in some detail he did not use the occasion to discuss music (Armstrong 1931a: 273–274). Dance, an activity related to music, was occasionally alluded to in archaeological narratives, as illustrated by John Goodwin, who in 1953 stated that a ‘pictorial stem led to the perpetuation of historical events, memorable battles between tribes, classic hunts, raids on enemies, the fun of the *dance*; the desire to commemorate satisfaction or disappointment’ (Goodwin 1953: 127, emphasis added, in Lewis-Williams 2006: 356–357).

Despite alluding to dance, Goodwin’s studies predominantly favoured stone artefacts over other types of archaeological evidence (Lewis-Williams 2006: 356). His reluctance to consider dance (and music) as a primary focus of research, a reluctance shared by many other archaeologists before and after him in southern Africa and elsewhere, can be attributed to two main issues. On the one hand, there is the limited evidence of musical instruments found at archaeological sites, something largely due to their organic nature. On the other hand, the challenge of dating rock art and the impossibility of establishing a fixed relative chronology with other evidence found in stratigraphy means that one of the key elements considered essential by archaeologists — chronology — is not met. However, this difficulty did not halt research into rock art, as evidenced by the work of Van Riet Lowe (1952), Breuil (1955–1966), Willcox (1956), Cooke (1963) and others. In terms of the representation of musical instruments in rock art, a flute player from Bushman Point at Lake Chivero (formerly Lake McIlwane, Zimbabwe) even featured on the cover of the book *Rock-Paintings in Africa* (SAAS 1960; Rust *et al.* 2022: 104).

The lack of attention paid to the possible relationship between music and rock art contrasts with the interest generated by other types of sites, such as rock gongs, where sound and rock art were connected. Although this article does not focus on rock gongs, it is important to note that they represent an alternative source of information about past music in the archaeological record. In the 1950s, there was a strong impetus in research of this type of site in West Africa, which rapidly expanded to other parts of the continent. In a review of newly discovered rock gongs in Nigeria, Goodwin (1957) indicated a

possible finding in the Parys District of South Africa's Free State province and tasked Berry Malan with investigating it. Goodwin himself pointed to the typical connection between rock gongs, rock slides and rock art. By the time Malan and the Professor of Musicology at the University of the Witwatersrand, Percival Kirby, visited the area and produced a publication (Malan and Kirby 1959), palaeoanthropologist Alun Hughes (1957) had found another in what is now Limpopo province. Malan and Kirby's article concluded with a mention of another rock gong in King William's Town (Qonce) (cf. Fock 1972). In Zimbabwe, the first rock gong was published in 1958 by Keith Robinson (1958) Inspector for the Historical Monuments Commission of Rhodesia, who confirmed the connection between rock art and the rock gongs he had found. A second article on rock gongs in Rhodesia (i.e. modern Zimbabwe) was published a few years later (Cooke 1964).

It was not until the 1970s that interest in ethnoarchaeology led archaeologists to realise the importance of music at some rock art sites. J. David Lewis-Williams submitted his doctoral thesis in 1977, although it was not published until 1981 (Lewis-Williams 1981b). His study was primarily of a qualitative nature and was influenced by structuralism. However, he made extensive use of the work of anthropologists, including Lorna Marshall's research on the !Kung (Ju/'hoan) San of the Kalahari Desert in Namibia, as well as Megan Bieseles's (1993) and Nicholas England's (1995) work on ritual and music. In her work in the 1950s and 1960s in Namibia, Lorna Marshall (1976: 364) mentioned that while some dances were for pleasure the most significant were concerned with medicine or curing and the removal of potential evil or sickness from the group. In this context Lewis-Williams (1981b: 75) mentioned 'the /Xam preoccupation with medicine men and their depiction in the paintings of dances' and explained that:

'While the southern San [i.e. the Xam San] men danced in one of these patterns, the women provided the important musical accompaniment by singing and clapping (L.VIII.27.8414 rev.). Further rhythmic background was supplied by dancing rattles which the men wore (Bleek and Lloyd 1911, p. 351). All these dances were not, of course, medicine dances; some were probably purely for entertainment and did not involve trance performance' (Lewis-Williams 1981b: 75).

He also mentioned that there was a marked similarity between these southern San dances and the curing dances still performed today by the !Kung and other San groups (Lewis-Williams 1981b: 76).

After his PhD thesis Lewis-Williams further deepened his interest in ethnography. As he explained many years later, he:

'began to feel a great disjunction between what [he] had learned as a social anthropology student and the then popular conception of San rock art as a childlike record of daily life with, perhaps, a few 'mythical' images thrown into the mix' (Lewis-Williams 2013: 43).

In this context, Lewis-Williams published the short article mentioned at the beginning of this article (Lewis-Williams 1981a). However, as already explained, apart from a single, short publication on musical bows (Lee 1987), these two pieces did not lead to further research on the relationship between rock art and music. Consequently, southern Africa remained largely unaware of the surge in interest in musical archaeology elsewhere in the world during the 1980s and 1990s, something initially led by the ICTM Study Group on Music Archaeology and later by the International Study Group on Music

Archaeology (ISGMA) (Hickman 2007). In the more than a couple of dozen edited books that the members of these groups published in their first decades, there is no information about southern Africa, a situation that only changed in the late 2000s, initially in relation to the rock art of Namibia (Vogels 2009, 2012; Vogels and Lenssen-Erz 2017a). Moreover, also in the late 2000s, Rifkin (2009) published an article analysing the acoustics of Klipbak I in the Northern Cape Province of South Africa. This ritual site is characterised not only by a large quantity of rock carvings related to trance and rainmaking, but also by the presence of rock gongs and echoes. These articles were preceded by Sven Ouzman's (2001) canvassing the importance of senses other than vision in South African rock art, particularly sound, although this was related to activities such as singing, clapping, dancing and hammering certain rocks and engraved images (Ouzman 2001: 244), rather than to the use of musical instruments.

A decade ago, ethnomusicologist Roger Blench mentioned that 'the reconstruction of the prehistory of African musical instruments and musical structures has barely begun, despite the importance of music in African culture in the present' (Blench 2013: 31). The gap he rightly identified began to be addressed in South Africa by Sarah Wurz's team. Throughout the last few years, this group of researchers has published on ideophones (Kumbani 2020b) and membranophones (Kumbani 2023). They have also written on aerophones, including flutes (Kumbani *et al.* 2019; Wurz *et al.* 2019; Kumbani 2020a; Rust *et al.* 2022) and bullroarers or *!goin !goin* (Wurz *et al.* 2019; Kumbani 2020b; Rusch and Wurz 2020; Rusch and Wurz 2022). Finally, an article has also been published on chordophones — mainly musical bows — (Kumbani and Vogels 2021). This paper continues the effort to find information about musical instruments through the analysis of their depictions in rock art, with a focus on Zimbabwe. We turn now to discussing those instruments and their distribution.

Ideophones: rattles

Rattles are musical instruments commonly associated with dancing (Kirby 2013: 1). They were probably made from gourds and in southern Africa are depicted sometimes as hand-held and sometimes on the upper arms, shoulders or neck of the person holding them (Garlake 1987a: 45; Van den Heever 2021). It is important to take into account that not all gourds depicted in rock art are rattles and that normally a person holds a single rattle in each hand. Two or more gourds held only in one hand are unlikely to be rattles. We can see one example of this in the depictions at Chehara (Van den Heever 2021: 100, Fig. 5.38), which we do not consider to be a musical instrument. In many instances the hand-held rattles and those tied to the upper arms are held in postures such as raised or flexed arms, suggesting that they might be shaken. A total of 15 sites with possible rattle depictions have been found in Zimbabwe. Although leg rattles are known from South African rock art, none has been recorded in Zimbabwe, even though they are a common feature of traditional dance musical instrument ensembles there today.

Mashonaland Central

Motifs depicting possible rattles have been found in five out of six Zimbabwe provinces. They are found at several sites in Mashonaland Central with depictions of musical



Figure 2. Chikupu southern cave. Garlake (1987a) mentions that all the women have rattles tied at the base of their necks. Source: Garlake (1987a: Figure 66).

instruments at eight out of ten sites. We begin with Chikupu Cave, a site formed by three adjoining shelters and a fourth nearby. Two contain depictions of rattles (Garlake 1987a: 67). On the right side of the southernmost shelter is a weathered line of 18 women and children dancing. They all have hair or headdresses arranged in a series of spikes or antennae. These women have aprons covering their front and back, possible rattles tied at the base of their necks, short sticks, some have capes, and most are carrying tasselled bags at their stomachs (Figure 2). Garlake (1987a: 68) argues that they represent a dance. At Guruve there are no rattles. A follow up visit is needed properly to document this panel.

In the westernmost shelter identified as Bindura in 1995, there are 29 men in a procession that appears to represent a dance (Garlake 1987, 1995: 142–143). They are elongated, wear aprons and have long hair or head gear, some carrying arrows, some gourd-like implements that look like rattles (Figure 3). For instance, the eighth man from the left looks like he is playing or shaking the rattles. There are also several animal depictions, including images of giraffe, bushpig, sable antelope, tsessebe and Cape buffalo (Garlake 1987a: 68).

Harare Province

The Glen Norah West site, located next to the Glen Norah high-density suburb in Harare, features two panels with paintings that Garlake (1987a: 81) describes as unusual. On the first panel, positioned to the north, figures with their mouths wide open are depicted. Four of these individuals have thin fangs curving upwards, erect hair, short stout legs and no feet. Additionally, two individuals with tails and small tulip-shaped penises (Figure 4) appear to be holding rattles. Some four motifs on this panel have distended stomachs.

Both the Epworth Mission Farm (also known as Epworth 1) and Epworth 3 sites are located within the Chiremba National Monument, near the present-day suburb of Epworth (Nhamo 2012: 227). These sites feature paintings on two rock boulders in different parts of the landscape. Both depict therianthropic figures, which may symbolise the possible transformation of humans into another realm during trance episodes.

Goodall (1959: 85, Plate 45) provides a recording from Epworth Mission Farm or Epworth 1 showcasing several therianthropic figures with animal heads, some of which are depicted dancing. The images are well-preserved and collectively form one scene. This includes three therianthropic figures with very long limbs and antelope heads. Three animals resembling dogs are also depicted, with one surrounded by flecks of paint. In the middle of the scene, an elongated therianthropic male figure is



Figure 3. Chikupu western cave also known as Bindura. Some men in the left of the scene are holding objects that look like rattles (third and tenth men from the left, and probably also the eleventh). Source: by Elisabeth Mannsfeld, Frobenius Institute, Frankfurt-am-Main, ref. FBA-D1 02324. With permission.



Figure 4. Glen Norah West: two men holding possible rattles. Source: Coulson archive, Ref. E_2013-2034-22939. With permission.

depicted holding a stick and a rattle in one hand while bending forward (Figure 5). Behind the rattle player, another motif depicts a figure with a distended stomach and an antelope head. Seven figures in the scene are depicted as seated.

At the second of these two Epworth sites, Epworth 3, a therianthrope motif is depicted holding a rattle (Nhamo 2012: 274, Plate 117). The human figure from this site is stout with short limbs and depicted holding rattles in both hands (Figure 6).

Mashonaland East

The first site in Mashonaland East with rattles is Ngomakurira. The depictions are painted on a vertical cliff and not in a shelter (Garlake 1987a: 66). On a separate boulder, there are six motifs, mainly women wearing aprons and, as discussed later, holding pipes or flutes. To the left are two obese figures in a shallow overhang, one with a rattle on its left shoulder and the other with raised arms and holding rattles in its hands (Figure 7). They appear to be a man and a woman. Next to these motifs are four hunters adorned with headgear and carrying shoulder bags. On the right, there is

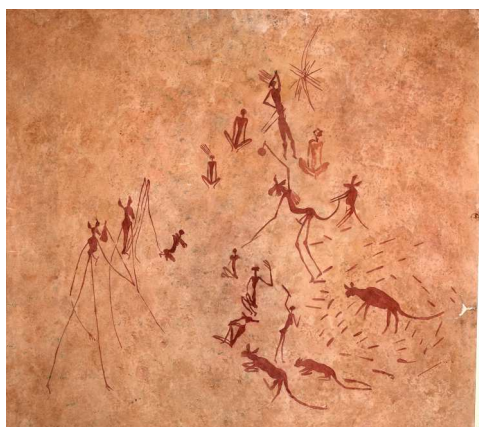


Figure 5. Epworth Mission Farm or Epworth 1: therianthrope figure holding a rattle. Source: by Elisabeth Mannsfield, Frobenius Institute, Frankfurt-am-Main, ref. FBA-C1 01612. With permission



Figure 6. Epworth 3: therianthrope figure holding a rattle. Source: Nhamo (2012: 274 Plate 117). With permission.

a kudu cow and seven small unidentified creatures entering a semicircular motif. Approximately four metres from this scene are a rhinoceros and a feline.

Another site with rock art in Mashonaland East is Mucheka. This is a large, deep rock-shelter with a variety of paintings depicting animals, with giraffe, kudu and eland the dominant species (Garlake 1987a: 70). Some of these animals are depicted wearing bangles and buckles. Additionally, there are figures with elongated bodies, seemingly dancing. On the shelter's roof are 15 hunters depicted with bags, quivers and staves; they are positioned near a group of seven individuals assuming different postures, all of whom hold bags and what appear to be rattles (Figure 8) (Garlake 1987a: 70).

The third site featuring rattles in Mashonaland East is Murehwa, an overhang shelter adorned with hundreds of paintings. In the centre, a hunter is portrayed next to four men in crouching and kneeling postures, at least two of whom are holding possible rattles (Figure 9). These men have lines emerging from their stomachs. A group of zebras is also depicted. Towards the rear of the recess, human figures are depicted, some seated and others in bending postures with inverted cones on their heads. Three women with aprons stand nearby, one of whom is carrying an infant. Additionally, there is a small snake with animal heads at both ends and a thin, running headless figure (Garlake 1987a: 71).

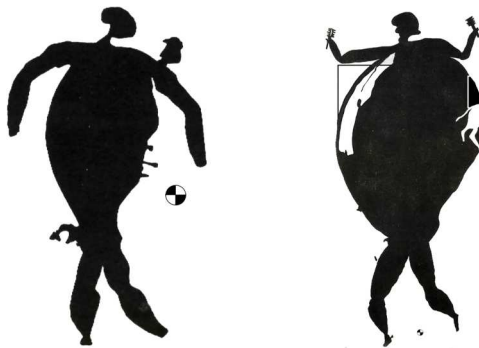


Figure 7. Ngomakurira: obese figures with rattles. Source: Garlake (1987a: Figures 101 and 64).



Figure 8. Mucheka: scene in which several figures are holding rattles. Source: Coulson archive, Ref. E_2013-2034-23011. With permission.

Another site featuring rattles, Manemba, is a shallow shelter adorned with figures made from dark and white paint (Garlake 1987a: 72). The site is well-illuminated. Several motifs are depicted on the roof, including a rectangular design, a tree, a collapsed buck, a hunter and a porcupine. Below these motifs are several obese female figures, with the one on the left holding a crescent in one hand, a rattle in the other hand, and rattles attached to her arm and shoulder (Figure 10). The second figure has lines extending from one arm and wrist; she is holding a rattle and has others attached to both upper arms. There is also a line extending from between her legs for approximately one and a half metres, branching into two lines and a small white ovoid design. Below these figures there are recumbent animals with bangles on their forelegs.



Figure 9. Murehwa: scene showing some figures holding rattles. Source: Garlake (1987a: Figure 71).



Figure 10. Manemba: two obese female figures. Source: Garlake (1987a: Figure 78).

On the lower level, two elands and a pair of felines are depicted. Two crouched dancers are also present, with a warthog in the middle. One of the motifs features a male figure holding sticks. At the bottom, three huge figures are depicted, while on the right, there are two kudus and a bushpig. Although some paintings on the right have faded, two bushpigs and three sable antelope remain. Next to the sable, two male fighting figures are depicted. Below them, a male figure is raising a club and holding a dog-like motif by the tail. Further below, a group is depicted with two people embracing and ten women wearing aprons and holding bags and short sticks.

Gurure is a single boulder located near the Mutoko main road (Garlake 1987a: 74). Unfortunately, some of the paintings are exposed to direct rainfall. Several motifs can be observed at the top of the boulder, including two obese females with large stomachs (Figure 11). These figures are depicted with bobbed hair, holding oval objects in their hands and wearing bangles. The motif on the right also features a possible pair of rattles on her upper right arm, with lines extending from both sides of the chest, and two lines originating from between her legs, along with a white dotted girdle. The third motif appears to depict an animal-like creature with a tail, one foreleg and one hind leg. Its head resembles ears or a trunk. Below these motifs, an ovoid motif and a rhino with a white outline and bangles on its forelegs are depicted.

Gambarimwe is a small dome-shaped shelter located in Mutoko (Garlake 1987a: 73; Green 2022: 73). The visible art is positioned high up, while other artworks have



Figure 11. Gurure: two obese female figures. Source: Garlake (1987a: Figure 77).

deteriorated over time. The paintings primarily depict camp scenes. At the top left, next to two rhinoceroses two obese female figures are depicted, one with two parallel lines approximately three metres long extending from between her legs. Both women have white-dotted hands across their chests, are holding crescents and have what look like rattles on their upper arms. Additionally, five crouched white figures with one arm and leg each are associated with the two obese figures. Unfortunately, we could not find a picture from this site.

The search in the SARADA database led to the identification of depictions of rattles on a panel at Imire, a granite boulder in the Wedza district. Although no photographs of the paintings are available in the database, the panel depicts 15 human figures, a baboon and two unidentified animals. Among these figures, four women and a man are depicted holding rattles; three of them are seated ([Figure 12](#)). Two of the seated women are also shown each holding two rattles. One individual is depicted in a supine position, possibly indicating a trance or an altered state of consciousness. Flanking the rattle players are two small human motifs, probably representing children, and there is also a depiction of a baboon.

From Lendy 1 in Marondera, Mashonaland East ([Figure 13](#)), a recording of a panel by Corona Thornycroft is available on the SARADA website (RARI CT 01 190HC). This historical copy features 11 figures. The recording is divided into three parts. In the left part there are four small anthropomorphic figures that, judging by their size, could represent children. Plant leaves are also depicted on the same panel (Van den Heever 2021: 261). Two recumbent figures, apparently dancing and appearing to float above the ground, are also depicted. These floating figures could be interpreted as being in a trance state. The figure at the centre of the scene resembles a therianthrope. In the middle of the recording, three figures are depicted: one on the left with a half body and no legs, a male figure in the centre who appears to be holding a rattle, and an animal, possibly a buck, on his right. The third part of the recording depicts what appears to be a man holding a bullroarer, a subject that we later discuss further below.

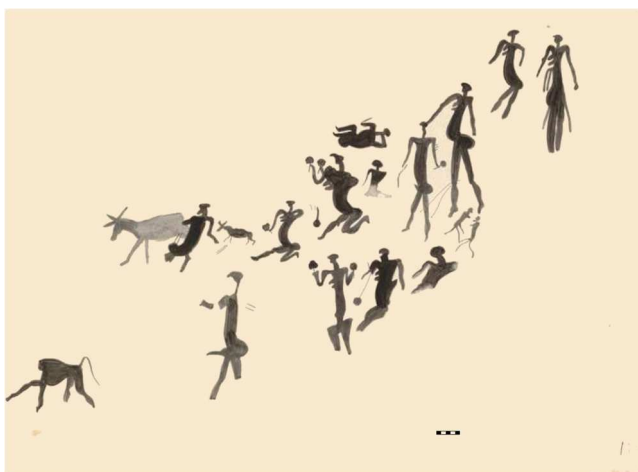


Figure 12. Imire: rattle players. Source: RARI CT 01 119HC, Courtesy of the Rock Art Research Institute, University of the Witwatersrand, and The African Rock Art Digital Archive (www.sarada.co.za). Scale has been redrawn for clarity. With permission.



Figure 13. Lendy 1: a figure in the middle holds a possible rattle and another (at far right) swings a possible bullroarer. Source: RARI CT 01 190H, Courtesy of the Rock Art Research Institute, University of the Witwatersrand, and The African Rock Art Digital Archive (www.sarada.co.za). With permission.

Mashonaland West

Bushman's Point, also known as Chivero 4 according to Nhamo (2012), is a shelter located near the dam wall of Lake Chivero, previously known as Lake McIlwaine (Nhamo 2012: 264). While the SARADA webpage mistakenly locates the site in the Mberengwa district, it was recorded by Goodall (1959: 56), as confirmed by Nhamo (2012: 265, Plate 111b; see Figure 14). The site comprises two panels, with the main one featuring animals, trees, fish and human figures. On the left side of the panel, a large hunter with hunched shoulders, elongated thighs and pinched knees is depicted. Below, four faded, striped elongated figures can be observed, one adorned with rattles fastened to its arms. Unfortunately, no image of this motif exists and it was not featured in Garlake's (1987a: 74) description of the site. Following Nhamo (2012: 264–265), it becomes apparent that this is the same site with two flute players and a drum depiction described in the following sections. This second panel is described below, when the drum is considered.

Matebeleland South: The Matobo World Heritage Cultural Landscape

No rattles have been found in the only site located in Masvingo Province with musical instruments, but they have been discovered at two of the more than five sites in the Matobo World Heritage Cultural Landscape (MWHCL), specifically in the White Rhino and Bambata Caves. The MWHCL, also known as Matopo Hills, Matopos and Matobo, is situated in the Matebeleland South province of Zimbabwe (Nhamo and Bourdier 2020). This area is renowned for its rich rock art that features a wide range of motifs such as giraffe, snakes, kudu, bushbuck, elephants, anthropomorphs and plant motifs (Walker 1996; Mguni 2002; Nhamo and Bourdier 2020). The predominant rock art in the landscape belongs to the San rock art tradition, with only a few pockets of farmer art. Today the MWHCL continues to be used for ritual purposes by various groups and the rock art there is regarded as sacred (Nhamo and Bourdier 2020).

The White Rhino site is described as a small shelter with finely detailed art (Garlake 1987a: 85). At the top left of the entrance, five wildebeest are depicted with eight superimposed running hunters holding quivers and arrows. A lion is portrayed adjacent to these figures. The outlines of more than five rhinoceroses and several humans are also visible. The site is named after a vivid white rhinoceros motif present in the artwork.

One prominent figure to the left of the rhinoceroses is depicted wearing conical headgear and holding a stick, with possible rattles on its shoulder and a line extending from its penis. Unfortunately, the image of the rattle player could not be located.

The second site in the MWHCL with possible rattles is Bambata Cave. The site features detailed art, although it is gradually deteriorating (Garlake 1987a: 86). At the top left are three huge, faded elephants, five large antelope of uncertain species, an eland and a line of five faded red roan antelope. Below the antelope, there is a line of hunters, a striped animal, a tsessebe and people sleeping, covered with mats, near three seated individuals. Additionally, three stylised human figures with outstretched hands and raised fingers resembling tree trunks with leafless branches are depicted, along with two small dark tsessebe and a figure leaning on a stick conjoined with a line of hunters. Garlake (1987a: 86) mentions that ‘on the left of the top group of buck [there] is a line of nine hunters, some with rattles or animal ears and one, with white stripes, holding a staff that ends in a crescent’, but did not include a figure of the paintings he describes.

Membranophones: drums

While Garlake (1987a: 45) stated that there was ‘no indication in any Zimbabwe painting that people used drums’, we argue here that there is, in fact, evidence of one at Bushman Point, as described below. Moreover, in his guidebook on the Matobo rock art in south-west Zimbabwe, Nick Walker, a former employee of the National Museums and Monuments of Zimbabwe, also mentions that ‘a couple of paintings suggest that men may have beaten the closed quiver ends as drums’ (Walker 1996: 36). However, it remains unclear which specific paintings he was referring to.

At Bushman Point an overhang granite shelter contains two panels with various motifs, one with possible rattles (see above) and another with a drum and flutes, in addition to animals and human figures. Among these motifs a large eland motif is superimposed onto an earlier, fading elephant motif. The drum motif is below the latter, partially superimposed by a darker flute player. We propose that this is a drum because in most cases African drums are broad at the top and narrow at the bottom (Kumbani 2023). To its right is another flute player of the same colour, with both flautists facing each other (Figure 14). Additionally, there is a human figure in a semi-squatting position, apparently holding a stick in one hand, although the item in the other hand is not clearly visible. The colour tone of this individual (light brown) is close to that of the drum, suggesting a possible association between them. However, it is worth noting that the position of this individual, literally on top of the drum, is not ideal for playing it. Behind this possible drummer, there are two smaller individuals, possibly dancing to the sound of the drum. Furthermore, two other individuals face the opposite direction, one of them seated and the other close to some black circular motifs that cannot be identified. In front of the possible drummer, there is a human motif bending forward in a dancing motion while holding two sticks. This motif is superimposed on the fading orange elephant motif described above.

Aerophones (I): trumpets

Aerophones, although less commonly than ideophones (such as rattles), are also found depicted in the rock art shelters of Zimbabwe. There are three main types of aerophones:

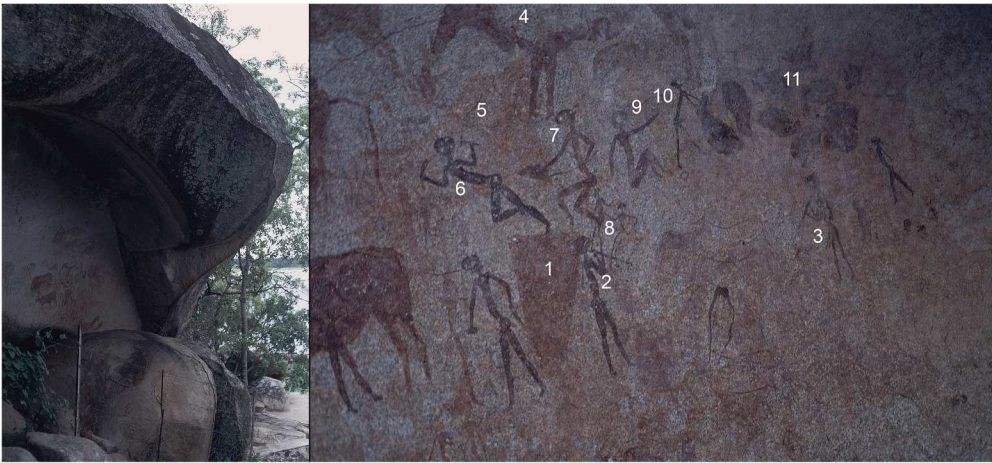


Figure 14. Bushman Point: 1) drum; 2 and 3) flute players; 4) eland; 5) elephant; 6) nose-dive figure; 7) figure in a semi-squatting position with a stick; 8) two small individuals; 9 and 10) individuals facing the opposite direction; 11) circular-shaped motifs. Source: SMT-ZIM-USH1–2; SMT-ZIM-USH1–31, Courtesy of the Rock Art Research Institute, University of the Witwatersrand, and The African Rock Art Digital Archive (www.sarada.co.za). With permission

trumpets, flutes and bullroarers. According to Garlake (1987a: 45), trumpets were regularly associated with dancers and were possibly ‘used to draw sickness from a patient in a curing dance’. These trumpets were probably made of bamboo (*Oxytenanthera abyssinica*), especially in the Matobo region, where it is an indigenous plant (Walker 1996: 36). Paintings of trumpets have been found in various locations, including Mashonaland Central Province (specifically at Guruve), as well as in Matebeleland South in the MWHCL area, where more than ten sites have been reported, including the Cave of the Trumpeter. We distinguish trumpets from flutes primarily based on size or length of the pipes. Trumpets are typically longer than flutes. Flutes generally do not extend beyond the player’s abdomen. In contrast, images of potential trumpets in rock art show that these instruments often extend past the abdomen and reach close to the players’ knees.

Mashonaland Central

Garlake (1995: 38, Figure 38) provides a recording of three men holding possible trumpets from Guruve. The three men are bending forward playing the instruments resembling trumpets; they are flanked by a fourth who is also bending forward, but his lower body appears to be facing upwards in a dancing motion (Figure 15). The caption for this image reads, ‘Figures hold long, rigid, light objects to their faces, possibly a form of musical pipe: a recurrent image whose associations with any other imagery and, therefore its interpretations, remain uncertain’ (Garlake 1995: 38). The recurrence of similar depictions of trumpet players in Garlake’s fieldwork in Zimbabwe suggests that he encountered multiple instances of such imagery. Based on the postures of the four men in the Guruve panel, it can be suggested that the fourth individual without the trumpet could have been going into a trance, depicted in a crouching or bending posture. While the bending



Figure 15. Guruve: three men playing trumpets. Source: Garlake (1995: 38, Figure 38).

postures of the trumpet players may simply reflect a comfortable stance for playing the trumpet, it remains unclear if they are also engaged in dancing.

Matebeleland South (MWHCL)

No trumpets are depicted in the Harare, Mashonaland West, Mashonaland East and Masvingo provinces of Zimbabwe. However, in the Matobo World Heritage Cultural Landscape, there is a clear depiction of one in the Cave of the Trumpeter. In the publication describing his expedition to Rhodesia in 1929, which includes the report on the excavation of Bambata Cave and research in the area, Armstrong (1931a) included a photograph and a tracing of a trumpeter. This depiction comes from a large rockshelter located ‘near a high plateau amidst the range on the east of Bambata Valley, and due east of Bambata Cave itself’ (Armstrong 1931a: 273). Interestingly, it seems that the shelter was not very visible, as Armstrong (1931a: 273) mentions that it ‘is most difficult to find and was stumbled upon by accident when first making our way to Bambata’. He describes a procession of small figures of recent date, as well as another group featuring the figure of the trumpeter, a tracing of which is depicted in Figure 16.

According to Walker (1996: 84), ten sites in the Matobo World Heritage Cultural Landscape depict men holding long trumpets and four show men holding short ones. However, he does not provide images of the trumpet players or the names of these specific sites. It is possible that one is the aforementioned Cave of the Trumpeter. The only redrawing given shows three elongated male figures apparently blowing long pipes that might be trumpets (Walker 1996: 58; Figure 17). However, it is not clear if these trumpet players were painted in isolation on the panel or if other motifs were left out.

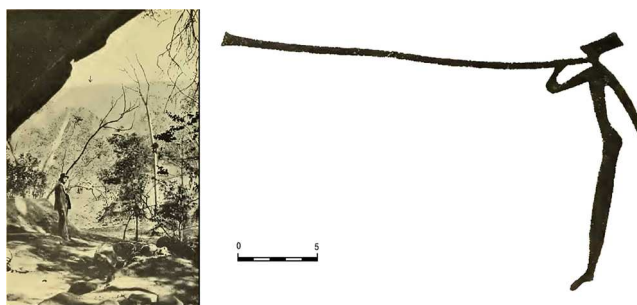


Figure 16. Cave of the Trumpeter: left: photograph (Armstrong 1931a: Plate XXXVII, Figure 1); right: tracing Based on Armstrong (1931a: Plate XXXVII, Figure 3).



Figure 17. Three men playing long trumpets at a site in the Matobo World Heritage Cultural Landscape. Recording based on Walker (1996: 58). With permission.

Aerophones (II): flutes

After conducting our literature review, we identified six rock art sites with depictions of flutes. However, there is a possibility that some of these flutes were played like whistles, as the difference between the two sometimes lies not in their shape, but in how they were played (Kumbani 2020a). Nevertheless, nothing similar to the clay whistles recovered from the archaeological record (Kumbani 2020a: Figures 13 and 14) is depicted on the panels. The sites occur in Mashonaland West (Bushman Point), Mashonaland East (Chinamora Reserve, Ngomakurira and Ruare), Masvingo (Rumwanda) and Matebeleland South (Hay Grange) provinces.

Mashonaland East

There is a possible depiction of a flute player from the Chinamora Reserve, located north of Domboshava Cave (Goodall 1959: 110, Plate 61). This panel consists of a single painted handprint and some dots (Figure 18). Superimposed over the handprint is a male figure holding a pipe-like implement, which may represent a flute.

The site of Ngomakurira described earlier also features depictions of rattles. Among the motifs present, six individuals are depicted holding tubes. Garlake (1987a: 31, Fig. 43) describes these as ‘short thick objects to their faces, possibly pipes’. He suggests that their purpose was ‘to draw off evil’. The individuals depicted playing these instruments include both men and women (Figure 19).

We identified another site in the Mashonaland East area from the SARADA website, namely Ruare III, located in Waddilove near Marondera. The paintings show a group of

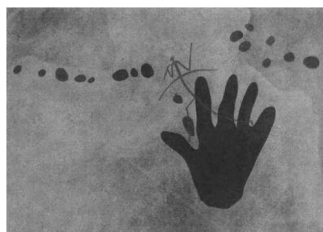


Figure 18. Chinamora: an individual holding a possible flute. Source: Goodall (1959: Plate 61).



Figure 19. Ngomakurira: six figures holding short thick objects to their faces, possibly pipes. Source: Garlake (1987a: Figure 43).



Figure 20. Ruare III: flute player. Source: RARI-CT-01, Courtesy of the Rock Art Research Institute, University of the Witwatersrand, and The African Rock Art Digital Archive (www.sarada.co.za). With permission.

four men, none of whom have complete legs. The second man from the left appears to have double arms without hands, while the figure on the right resembles a therianthrope figure. Of particular note, the second man from the right is depicted holding a pipe-like implement directly in contact with his mouth, which is indicative of flute playing (Figure 20).

Mashonaland West

At Bushman Point site, as mentioned earlier, two flute players are shown facing each other (Figure 14). The pipes are shown directly in contact with their mouths, indicating that they were blowing through the aerophones to produce sound. Additionally, the human motif in a nose-dive-like dancing motion, described earlier, shares the same colour (dark brown) as the flute players. This suggests a possible association between these three motifs.

Masvingo Province

At Rumwanda Farm, Elizabeth Goodall (1959: 47) mentioned a scene painted on the lower ceiling of a small shelter that represented a meeting scene with ‘men carrying what some

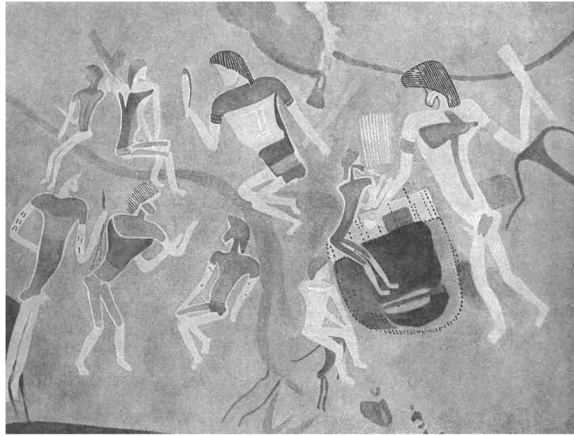


Figure 21. Rumwanda Farm: flute player. Source: Goodall (1959: Plate 24).

observers have called musical instruments' (Figure 21). The motifs were painted using the polychrome technique and are superimposed over dark-coloured animals. There are nine men depicted in black and white and Goodall mentioned that some interpretations suggested that they were holding musical instruments, describing the scene as a 'company of minstrels' (Goodall 1959: 47). However, she herself was doubtful of such an interpretation and suggested that the figures represented participants in an initiation ceremony, painted in white or ash. Despite Goodall's scepticism, we would argue that the black figure second from the right in Figure 21 appears to be blowing a flute. However, there remains an element of doubt regarding the interpretation of the other figures.

Matebeleleland South (MWHCL)

In his guidebook to the rock art of the Matobo Hills Walker (1996: Slides 46, 100) includes a photograph of a flute player, identifying the site as Hay Grange (Figure 22).



Figure 22. Hay Grange: flute player. Source: Walker (1996: 100 Slide 47). With permission.

The motif depicts a figure with what appear to be animal ears or headgear and playing a possible flute. Unfortunately, Walker provides limited information about the site itself.

Aerophones (III): bullroarer

Garlake (1987a: 45) refers to some crescent-shaped objects as possible musical instruments, ‘possibly one that “roars” or sounds when it is rotated rapidly’. While bullroarers are indeed crescent-shaped and known for producing sound through rapid rotation, the interpretation of such shapes in rock art can vary. While not including them in our detailed description, as their interpretation may be subject to speculation, it is worth noting a possible depiction at Lendy 1 in Mashonaland East, as mentioned earlier (Figure 13). A bullroarer can be spun either above the head or perpendicular to the body. In this instance, the potential bullroarer is being spun above the head. Similar depictions of bullroarers have been found elsewhere in southern Africa, with more realistic representations identified at the Doring River site in South Africa’s Western Cape Province (Rusch and Wurz 2022).

Discussion

In his pioneering work *The Native Races of South Africa*, George Stow (1905: 102) claimed that in their undisturbed state the San might be termed as the most musical people in South Africa. Likewise, Lorna Marshall (1976, 1999: 79–80) highlighted that among the Ju/’hoansi most of the time there was someone making music at the camp, either singing or playing a musical instrument (e.g. hunting bows or bows specifically adapted for music). The San, therefore, had a rich musical life and, despite a lack of ethnographic data referring specifically to Zimbabwe, the musical instruments depicted at its rock art sites by the hunter-gatherers once living in the area reveal a similar interest in music at that time. However, how can we interpret the musical instruments and music playing that the rock art depicts? Were they related to the trance or medicine dances, as Lewis-Williams claimed in 1981, or should we interpret them as portraying a leisure activity? Research in southern Africa has shown that rock art was especially located at places that had religious meaning to the painter communities. Among hunter-gatherer communities, ethnographic accounts show that some rock art shelters became important ritual centres due to the potency derived from the painted images in them (Lewis-Williams 1994; Ouzman 2001). These paintings are now generally regarded as reflections of hunter-gatherer cosmology (Pwiti *et al.* 2007).

In the panels where musical instruments are represented there are often other motifs or features that indicate altered states of consciousness. We have identified five of them (Table 1). The presence in rock art of therianthrope figures, depicted with animal characteristics such as crocodile-like heads, tusks, fur or antelope heads, has been associated with shamanism by several scholars, beginning with Vinnicombe (1976) and Lewis-Williams (1981b). These figures often exhibit dynamic postures suggestive of active participation in ritual dances. For example, at sites such as Glen Norah West, Mucheka and Epworth 1, therianthrope figures are depicted in dance postures, implying their involvement in ceremonial activities. The inclusion of therianthrope figures in trance or dances signifies a symbolic transformation or connection with the spiritual realm. The fusion of

Table 1. Summary of the features of all the Zimbabwean rock art sites discussed in this paper, showing the presence/absence of images of musical instruments and motifs related to altered states of consciousness, age and gender. Sites are organised by province (MC Mashonaland Central; MW Mashonaland West, M Masvingo) and the quality of published information is summarised at the bottom (1 poor; 2 medium; 3 relatively good).

Province	MC		Harare			Mashonaland East									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Site	Gurube	Chikupu	Glen Norah W	Epworth 1	Epworth 3	Chinamora	Ngomakurira	Mucheka	Murehwa	Manemba	Gurure	Gambarimwe	Imire	Lendy 1	Ruare III
Musical instruments															
Rattle		x	x	x	x			x	x	x	x	x	x	x	
Drum															
Trumpet	x														
Flutes						x	x								x
Bullroarer														x	
Motifs/features related to altered states of consciousness															
Therianthropic figures		x	x	x	x		x	x	x	x	x			x	x
Elongated bodies		x		x				x	x			x			
Human figures with distended stomachs			x		x		x		x	x	x	x			
Erect hair/head gear		x	x	x			x					x			
Crouching, recumbent or bending figures	x	x	x	x				x	x	x		x	x	x	
Age/gender in the panel															
Men	x	x	x	x			x	x	x	x	x	x	x	x	x
Women		x					x	x	x	x	x	x	x		
Children		x					x		x	x		x	x		
Player's gender															
Insufficient information	x					x								x	x
Fat men							x								
Other men		x	x					x	x						
Fat woman/women										x	x	x			
Therianthrope				x										x	
Indeterminate					x										
Quality of information	2	3	3	3	3	1		3	3		3	3	3	3	2

(Continued)

Table 1. Continued.

Province	MW 16	M 17	Matebeleland South				
			18	19	20	21	22
Site	Bushman Point	Rumwanda	White Rhino	Bambata	Cave of the Trumpeter	Hay Grange	MWHCL (unnamed)
Musical instruments							
Rattle	x		x	x			
Drum	x						
Trumpet					x		x
Flutes	x	x				x	
Bullroarer							
Motifs/features related to altered states of consciousness							
Therianthropic figures				x			
Elongated bodies	x			x			
Human figures with distended stomachs							
Erect hair/head gear			x			x	
Crouching, recumbent or bending figures	x			x			
Age/gender in the panel							
Men	x		x				
Women	x						
Children							
Player's gender							
Insufficient information	x	x	x	x	x	x	x
Fat men							
Other men							
Fat woman/women							
Therianthrope							
Indeterminate							
Quality of information	2	1	2	2	1	2	1

human and animal traits embodies the shamanic concept of spiritual journeying or transcendence beyond the physical self. In the context of Epworth 1, the depiction of a therianthrope figure with an antelope head holding a rattle in a dance posture suggests a ritualistic trance dance aimed at invoking spiritual experiences or accessing altered states of consciousness. The rhythmic movements of the dance, accompanied by the sound of the rattle, may serve as conduits for entering altered states of consciousness conducive to spiritual revelation or healing (Marshall 1969, 1976; Katz 1982; Bieseke 1993). Overall, the presence of therianthrope figures in rock art imagery provides compelling evidence of their involvement in trance or medicine dances, reflecting the profound spiritual beliefs and practices of ancient hunter-gatherer communities.

The second element that may be associated with altered states of consciousness refers to the depiction of elongated human figures. Scholars have interpreted this in two ways in Zimbabwean rock art, i.e. as either dancing individuals in trance states or as supernatural beings (e.g. Garlake 1987a: 49). These motifs were observed at seven rock art sites in five provinces across Zimbabwe (Table 1). The elongated, exaggerated proportions of these human figures suggest a departure from naturalistic representation, emphasising their symbolic or ritualistic significance. In the context of trance dances, elongated figures may symbolise the transcendence of ordinary human boundaries and the attainment of altered states of consciousness (Lewis-Williams 1981b). The presence of elongated human figures in Zimbabwean rock art underscores the rich spiritual and ritualistic significance of these ancient artworks. Whether depicting trance dancers or supernatural beings, elongated motifs offer valuable insights into the religious beliefs, cultural practices and ceremonial traditions of prehistoric communities in Zimbabwe.

The presence of human figures with distended stomachs in Zimbabwean rock art provides another clue suggesting a connection to trance or medicinal practices, particularly when combined with depictions of rattles. Garlake (1995: 89) suggests that these figures with distended stomachs symbolise individuals in a trance state, pregnant with spiritual potency. Huffman (1983) mentions that these fat figures are associated with potency that is exploited by trancing individuals and that the potency is being released as fluid which could be menstrual blood. The presence of lines emanating from between the legs or abdomen of these figures further reinforces their association with fertility and the potential for transformative experiences (Solomon 1992: 321). For instance, the female motifs at Manemba and Gurure have lines emanating from between their legs. While some interpretations suggest that the lines may represent symbols of female fertility, others propose that they serve as trance metaphors (Lewis-Williams 1981b: 95).

A fourth element is the association of erect hair with trance metaphors, as proposed by Lewis-Williams (1981b: 91). Erect hair is believed to symbolise the altered states of consciousness experienced during trance rituals, particularly by medicine people or shamans. Lewis-Williams suggests that the image of erect hair may be connected to the dying eland, a significant animal in San mythology, which is often depicted gasping for air with its nose wide open and shivering (Hollmann 2002). This association with the eland's struggle for life may symbolise the intense spiritual experiences undergone by participants in trance rituals (Lewis-Williams 1981b; Hollmann 2002). However, Lewis-Williams (1981b: 77) also acknowledges that erect hair could simply represent headgear associated with dance, indicating that not all instances of this motif necessarily signify altered states of consciousness. Therefore, the interpretation of erect hair in rock

art must take into account contextual factors such as the presence of other symbolic elements and the broader cultural context of the scenes depicted. Seven sites featuring human figures with erect hair or wearing headgear have been identified across four provinces in Zimbabwe, indicating the likely widespread significance of trance and ritual practices in Zimbabwean rock art.

Finally, the prevalence of specific postures, such as crouching, recumbent or bending forward, at Zimbabwean rock art sites with musical instruments suggests a connection between these gestures and altered states of consciousness or trance rituals (e.g. Lewis-Williams 1981b: 88; Garlake 1987a: 35). These postures may signify preparations for entering an altered state of consciousness, with dancers often depicted crouching or bending forward before potentially falling to a kneeling position (Lewis-Williams 1981b: 88). Crouching figures are a common motif in Zimbabwean rock art, with Garlake (1987a: 185) noting their usual combination with trance. This suggests that these postures may have ritual significance, possibly related to altered states of consciousness or to spiritual experiences. The occurrence of these postures at 11 sites with musical instruments across most of Zimbabwe (see Table 1) indicates their widespread significance in the context of ritual practices depicted in rock art and suggests that their significance extended beyond merely accompanying music-making activities.

Does the depiction of instruments also give clues to the latter's possible relationship with altered states of consciousness? Even if some do, are all instruments equally connected to this? Starting with rattles, their presence alongside clues indicating altered states of consciousness, such as therianthropic figures, figures with distended stomachs and figures with erect hair, suggests a close association between musical activities and ritual practices in the rock art of Zimbabwe. This association implies that music-making was not just a form of entertainment but held deeper spiritual and ceremonial significance within the past societies that created the rock art. The prevalence of rattles at more than half of the sites discussed underscores their importance in practices involving altered states of consciousness in these societies. Rattles probably played a crucial role in facilitating the attainment of altered states of consciousness and healing rituals, as suggested by their association with figures exhibiting trance-like postures and features. Furthermore, most of the sites with rattles in Mashonaland East are associated with male and female motifs with distended stomachs. In some cases, the figures with distended stomachs have lines emanating from between their legs, for example at Manemba and Gurure. Figures with erect hair are found at six sites with rattles in three of our established areas.

The comparison between Zimbabwe and South Africa regarding the depiction of rattles in rock art sheds light on the cultural significance and symbolism associated with these musical instruments in different contexts. In Zimbabwe, specific types of rattles such as neck rattles and those tied onto the upper arms are found, suggesting unique cultural practices or traditions associated with these instruments. The presence of rattles in conjunction with other elements indicating a religious or ceremonial nature of the site suggests a connection to altered states of consciousness or ritualistic practices.

Similarly, in South Africa, rattles are also depicted in scenes representing dancing individuals showing altered states of consciousness. The presence of leg rattles in these contexts suggests their role in facilitating trance states or enhancing the spiritual atmosphere of the ritual. For example, as illustrated in the case of the Halstone site in the

Eastern Cape Province (Lewis-Williams 1981b: 80). However, hand-held rattles are found in both countries. In the Attakwas Kloof site in the Karoo the motifs with hand-held rattles indicate trancing individuals who are in dancing motion (Rust *et al.* 2022).

The gender associations with rattles in Zimbabwe's rock art sites provide intriguing insights into the cultural context of their use. At some sites, rattles are depicted in relation to groups of men (Chikupu, Mucheka, Murehwa and Glen Norah West). On the other hand, at other sites rattles are shown in the hands of two fat women (Manemba, Gurure and Gambarimwe). However, beyond these seven sites, another three do not follow these two rules mentioned above: at Ngomakurira, for example, the fat figures seem to represent men. At Imire we find the single example in which representatives of both genders are playing rattles together: these are the four not-fat women and a man playing in the same scene at Imire. Finally, at Epworth 1 and 3 we find therianthropes, one seemingly male and the other indeterminate, playing a rattle. These gender associations with rattles highlight the diverse roles and responsibilities within past societies in Zimbabwe and suggest the importance of gender in the performance of ritual activities or the expression of cultural traditions.

What about membranophones? The presence of a drum motif at Bushman Point in Mashonaland West, depicted alongside other musical instruments such as flutes and rattles, as well as figures engaged in dance-like postures, suggests a religious or ritual context that could be linked to altered states of consciousness. Similarly, in other regions of southern Africa, such as the Eastern Cape, drum depictions have been associated with trance dances or other ritual activities. For example, at Grootvlei, one is depicted being played and it has been argued that this may have been in a trance or medicine dance (Kumbani 2023), further emphasising the connection between membranophones and ceremonial practices across different cultural contexts in the region. While drum motifs are relatively rare in southern African rock art, their presence at select sites underscores their significance as musical instruments with deep cultural and ritual importance. It seems interesting to point out that the drum depiction at Bushman Point looks like a wooden drum covered with an animal skin when one considers its shape and size. The technology used to make them means that these large wooden drums are more likely to have been introduced by Iron Age farming communities in the first millennium AD (Pwiti 1996). This painting could therefore have been made after hunter-gatherers had come into contact with farmers and were introduced to wooden drums.

The aerophone motifs, including trumpets, flutes and bullroarers, in Zimbabwean rock art also provide some insights into the musical and ritual practices of ancient societies. Regarding trumpets, only at Guruve in Mashonaland Central does there seem to be a clear connection to altered states of consciousness, although the poor quality of the data from the MWHCL does not allow us to draw firm conclusions. A similar situation is found regarding flutes. The quality of the published data is poor, except for Ngomakurira where many elements point to altered states of consciousness and a male player (Table 1). In South Africa flutes have been found in the Western Cape at Attakwas Kloof and Ezeljagdspoor and interpreted as being featured in altered states of consciousness, whereas at Zimri and Procession Shelter the instruments appear to be being played for entertainment (Rust *et al.* 2022).

The depiction of a bullroarer at the Lendy 1 site in Mashonaland East Province, alongside other motifs with religious significance, such as therianthrope and recumbent dancing figures, suggests the depiction of ceremonial or ritual activities. Similarly, in South Africa bullroarers are depicted at sites such as Doring River in the Western Cape (Rusch and Wurz 2022). At this site, eight people are shown swinging bullroarers, indicating their participation in trance dances or other ceremonial activities. This aligns with ethnographic evidence that San hunter-gatherers used bullroarers during dances (e.g. Nurse 1972).

Regarding gender, an interesting observation is that there is only one instance in Zimbabwean rock art where musical instruments in the form of rattles are shown being played by both men and women simultaneously. When rattles are depicted, women who play them often appear in pairs and typically have rounded figures. On the other hand, aerophones, such as flutes and trumpets, seem to be exclusively played by men, with no obvious depictions of female players. The gender of the player in the only drum depiction is not clearly indicated. It is noteworthy that in panels where musical instruments are depicted, there is often a mixture of men, women and sometimes children. This suggests that music-making and associated rituals like trance or medicine dance may have been gendered, communal activities involving individuals of various ages, contributing to the social and cultural fabric of ancient communities in Zimbabwe.

A final note regarding distribution. It is interesting to note that, generally speaking, sites depicting musical instruments occur across the full geographical range of rock in Zimbabwe (Nhamo 2012: Map 1; and see the area marked in grey in Figure 1). As happens with the general distribution of sites, however, there appears to be a concentration of rock art sites with musical instruments in two areas: the Harare and Mashonaland East provinces on the one hand, and the MWHCL in Matebeleland South on the other. Given the relatively poor quality of the information in the latter area, it is difficult to compare them on a sound basis. The only difference that seems clear is the presence of trumpets in MWHCL, an instrument that has not been identified in the first area. In relation to other areas in southern Africa, the absence of depictions of musical bows and leg rattles should be noted. These differences reinforce others found at rock art sites, such as the predominant representation of kudu in Zimbabwe and of eland in South Africa (Garlake 1987a: 181; although see Eastwood 2006).

Conclusion

In conclusion, the rock art of Zimbabwe provides valuable insights into the musical practices and cultural traditions of ancient communities in the region. The presence of various possible types of musical instruments, including rattles, flutes, trumpets, a bullroarer and a drum, reflects the diversity of musical expression among these communities. Comparing Zimbabwean rock art with that of South Africa highlights both similarities and differences in the depiction of musical instruments. While in both countries there are depictions of flutes, rattles, bullroarers and drums, there are variations in the specific types of instruments shown. For example, Zimbabwe shows rattles tied onto the arms and necks, while South Africa also depicts leg rattles. Additionally, South Africa and Namibia feature musical bow depictions, which are absent in Zimbabwean rock art. These differences and similarities provide valuable insights into the diverse

cultural practices and artistic expressions of the societies who lived in this large region. While the presence of motifs such as therianthropic figures, elongated bodies, distended stomachs, erect hair or head gear and crouching/recumbent or bending postures that indicate altered states of consciousness or medicine dances suggests a religious or ceremonial context for the use of these instruments and the meaning of the panels in which they were depicted, it is also plausible that they were used for entertainment. Nevertheless, we have not found any clear indication of musical instruments painted in the art representing a leisure context.

Future research should aim to provide a more comprehensive understanding of the role of musical instruments in pre-colonial Zimbabwe and in southern Africa as a whole. This could involve recording the landscape context of rock art sites, employing advanced technology for tracing figures to create much better-quality recordings and conducting excavations to investigate the use of these sites for ritual, dance and musical activities. By integrating archaeological, ethnographic and artistic analyses, researchers can shed more light on the cultural significance of musical instruments in ancient Zimbabwe, contributing to a deeper understanding of the social and religious practices of past societies in the region.

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