Sounds and sound thinking in |xam-ka !au: “These are those to which I am listening with all my ears”

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LITERATURE, LINGUISTICS & CRITICISM | RESEARCH ARTICLE

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Neil Rusch*

Abstract: This paper questions preconceptions that situate the |xam in a Stone Age past where they can be objectified by a timeless gaze. From such appropriations and (mis)-representation, the |xam emerge either as shamans or victims or as the quintessential proto-scientists. We explore instead the expressive culture of the |xam and describe its significance as “applied history” for people’s lives in the present. Our investigation follows two routes; firstly, via notions of vibration, sound and rock engravings as they remain available for intermedial comparison in the archaeological and ethnographic records. Secondly, we consider the complex ontological instabilities and continuities in an oral tradition by focusing on !khwa—rain potency. From this we demonstrate how cultural literacy, with no direct written form, is translated from an extinct |xam language and culture and finds meaningful leverage among present-day descendants of the |xam who are genetically extant but now speak another language, Afrikaans.

Subjects: Archaeology; Landscape; Literature & Culture; Literature & Translation; Social & Cultural History

Keywords: oral literature; memory; intercultural translation; rock engravings; rock gongs; senses; sensorium; foreignness

ABOUT THE AUTHOR

Neil Rusch designs and publishes books, most recently First People: Ancestors of the San (2015), Sonqua: Southern San History and Art After Contact (2015) and Karoo Cosmos: |xam-ka !au and the |xam (in print). He is the co-author of San Rock Engravings: Marking the Karoo Landscape (2010) and Karoo Rock Engravings (2008). His collaborations with the Universities of Cape Town and the Witwatersrand include recording oral history and documenting archaeology, engravings and paintings. He is presently working on Grave Encounters: Archaeology of the Green Point Burial Grounds, South Africa.

PUBLIC INTEREST STATEMENT

Sounds produced by bells and rock gongs were linked in the |xam language. There was magic power in the ringing sound of certain rocks such that they were deemed instrumental in the manipulation of rain. Rain still influences the lifeworld of people living in the semi-desert Karoo region, including descendants of the |xam who can no longer speak nor understand |xam since the language is now extinct. Nevertheless, beliefs about water sources and the hydrological cycle are retained and continue to animate ideas about the rain. In this paper, we suggest that water animals and rain snakes are better understood as manifestations of holistic thinking that places emphasis on relationship and relatedness. Once thought quaint or worthless, these ideas, communicated through stories and rock depictions, appear ever relevant in a region beset by climate change and the challenge that Fracking poses for the underground water system of the region.

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What you hear in the Karoo and |xam-ka !au is stillness but if you listen, what you hear is not silence.

1. Outline
The |xam San who lived to witness the demise and decimation of their culture and people inhabited the area once known as Bushmanland, but the |xam called their place |xam-ka !au (dust of the |xam), which is situated in the Karoo region of southern Africa. Karoo, a KhoeSan word, is both biome—“the place of great dryness”—and a geological system.

In an extraordinary collaboration in the nineteenth century, several |xam informants and storytellers told their stories (kukummi) to the German philologist Dr. Wilhelm Bleek and his sister-in-law Lucy Lloyd. Filling many notebooks and exceeding ten thousand manuscript pages, this material is recognised as part of UNESCO’s Memory of the World—Register for Documentary Heritage (The Digital Bleek and Lloyd http://lloydbleekcollection.cs.uct.ac.za/). According to the UNESCO website, this collection of literature and testimony “provides an invaluable and unique insight into the language, life, religion, mythology, folklore and stories of this late Stone Age people”.

2. Introduction
Investigating the |xam language reveals a set of acoustic analogies which convey a rich and meaningful experience of sound. For present purposes, we use Dorothea Bleek’s *A Bushman Dictionary* as our main source, but a vast nomenclature of sound words exists throughout the corpus of recorded |xam materials (Bleek, 1956; Bleek & Lloyd, 1911; Hollmann, 2004). As a spoken language |xam is extinct, but it is possible to gain an approximation of the |xam-ka !au soundscape by listening into the words that stand on the page in place of the sounds. It proves to be a worthwhile endeavour since the |xam representation of sound is both revealing and encourages a primary mode of listening. As an exercise, moreover, it will serve our purposes here, which will be to investigate sound and vibration. Further it allows a consideration of rock gongs, that is, large rocks that have demonstrably been used as percussion instruments (Figure 1). These tangible artefacts, the rock gongs, reflect in turn upon the immateriality of sound and vibration which strictly speaking are not available in the archaeological record, although recuperations are attempted (Mazel, 2011; Ouzman, 2001; Rifkin, 2009).

Audio 1. Audio recording of a rock gong as played by the author but without precise knowledge of how it was played or what sounds were produced by the people who used the instrument in the distant past. Source: Author, personal archive.

3. Sound, sight and vibration
At the outset we should be able to agree that sound is non-directional, radiating from source on waves of non-discretionary vibration, and whereas hearing is extractive, listening is inclusive and receptive. The variables of hearing and listening are the human modalities through which soundscapes are assimilated and elaborated. Sound travels, obviously, but sound also reverberates and it is in reverberations that sound, curiously, travels “silently” to other places. For example, the soundscape of |xam-ka !au is layered, by analogy, onto nineteenth-century metropolitan Cape Town when a group of |xam from the Sak River Mission hear the sound of a church organ and compare it to the sound of swarming bees (Kicherer, 1804). Auditory experience is not always or necessarily a bilateral encounter. The asymmetry of imposed and intrusive sound becomes apparent when Dialkwain explains: *Ikhwa-ka hhouiten hhouiten*. Translated, the |xam words are: the rush of the storm, but the narrator compares this to the sound of the wind from a cannon ball (Bleek & Lloyd, 1911, pp. 324–325). Above all the sounds of |xam-ka !au, located or relocated, are embodied and intimate.
With this in mind let us note that |xam has a cluster of words associated with vibration—!khaoken (tremble), !kwabbaken (flutter), darrakendarraken (vibrate), /xa:mmong (shudder)—and what is apparent is that these words insinuate and associate vibration with bodily and physical vibration. What is equally significant, however, is that there is no exclusion of the invisible. Implicitly and explicitly, the |xam accepted that unseen vibrations pass through space and objects and are effective over distance. One example, seemingly prosaic but demonstrably in accord with the foregoing principal is the verb | kaunu | kaunu; to jingle as one would a bunch of keys; however, the narrator brings vibration and sound together when he points out that jingling can also be the vibration of a glass caused by a dog’s bark (Bleek, 1956, p. 304). Very little extrapolation is required to take the next step. Vibration inheres and is a core element within the nature of things and materials. Vibration is released in the form of sound when a dog barks, setting in motion a sympathetic vibration that animates a glass. Understanding this principal is fundamental and pervasive, and is manifest throughout |xam thinking. Hence it is that the composition, chemistry and physical properties of materials were worthy of intense experimentation and investigation. Bow strings (!nuiŋ), to take an example, are made from Springbok leg sinews and the back sinews of Gemsbok and Hartebeest. Was this choice made on the basis of the acoustic or tensile properties, or both? We do not know since it is not clear from the brief description (Lucy Lloyd E4.4.2, unpublished note) whether these particular strings were intended for the manufacture of musical instruments or for making hunting bows. Anteater hide, another example, because of its strength (BC 151 E.4.3) made shoes and thongs (!hãũ) besides producing sound like a !kummi, a musical instrument played by women (Hollmann, 2004, p. 171).

Metal became a powerful descriptive not only of material substance but for the sound qualities of the material. The obvious manifestation of this for the |xam was the bell: !gwárra n. metal, bell (Bleek, 1956, p. 391). Here we must point out that bells (metal) and their associated sounds are implicated and introduce complexity into the following questions: What is a ringing rock? And, on what occasions were rocks struck to release sound from them? Not unlike the sound that resides in bells and the stillness of metal there is inherent sound in particular rocks, which predisposes them for use as percussion instruments.
The Xam interest in bells conveys obliquely a perceptive sensitivity to the qualitative sounds of ringing. One key reference to bells—*lgwárra lgwárra*—in particular associates metal, bells, rock gongs and rain most powerfully. The formulation is: “it sounded like a bell, which people were striking” (Bleek, 1956, p. 391). The insinuation is that striking a bell could either encourage or dissipate *ikhwa*: that is, the rain and associated forces, benevolent or malevolent. "It was a bell of *igi*: (magic power), the bell of a rain which kills people" (L.VIII.23: 8011–8017; Bleek, 1956, p. 382). In addition, the sound of the bell (gong) is not dissimilar to the sound of lightening, thunder and rain. The narrative in which these words occur provides the context and gives a Xam view of the flood that swept through Victoria West in 1871, drowning 62 people. Moreover, the reiteration in the story; *lkám, lkám, lkám, lkám*, *lkám* conveys ideophonically the action and the sound of a bell or gong being struck to release its vibrational potency (*igi*); understood as magic power (Bleek, 1956, p. 383). The relationship between rain (*ikhwa*); and rain’s men (*ikhwa-ka ike*) and rain’s sorcerers (*ikhwa-ka *lgicen*) is intimate and extends to sounds from gongs and strings. What is clear is that the relational continuity includes vibrating (strings), ringing (metal) and rock gongs (bells), typically located on hilltops.

Mountain tops and waterholes were the two places of choice where rain’s men went to fetch or cut the rain. The thong (*hãũ*) used to restrain and lead the rain animal (*ikhwa-ka xoro* lit. the rain’s xoro) from the waterhole made a vibrational sound: “[and] therefore the thong did this, it vibrated with a little ringing noise, it sounded [as if] a bullroarer (*goĩŋ goĩ:iŋ*) was that which passed along the sky” (Bleek, 1956, p. 566). The mountain top figured in ||kabbo’s reckoning of rain. ||kabbo, a master storyteller and key informant, said, “[…] the she rain is drawing her breath which resembles mist; you must therefore go and cut the rain at the great waterpits which are on the mountain” (Hollmann, 2004, p. 156). And finally, the thong (*hãũ*) and the string (*nuiŋ*), not unlike the closely associated bell and rock gong, are included in this entry: “then the thong made a sound like a musical bow, as it passed along the sky” (Bleek, 1956, p. 456).

Time and again vibrations and sounds emitted from thong, string and rock are emphasised as the mechanisms that empathetically connect and mediate between “earth’s things” and the “sky’s things”. The fact that musical bow and gong are both instrument and instrumental in a process of reciprocal exchange is what we turn our attention to now in so far as it involves *ikhwa*; rain liquid *ikhwa: *ki, clouds, thunder and lightning.

### 4. Listening for sounds in silence

The archaeological record does not retain sound. Strictly speaking it is silent on the lives, activities and rituals performed by the people who left it behind. However, in the landscape of Xam-ka lau the rock gongs provide remnant clues of the former sound-making activities. Gongs are not common, in fact they are rare, but when they are found they are located on or near hilltops (*koppies, brinkoppe, blinkoppe, bruinkoppe*), which are a defining feature of the Karoo geology. This geological context also provides the canvas for engravings (petroglyphs) that are incised, scraped and pecked into the iron-rich rocks (Figure 2). These rocks were extruded from the molten core of the earth many millennia ago and have since been exposed on the surface to patination and weathering.

In many respects what we encounter—recorded words, engravings and artefacts—are the residual silent remains of human activity that was enveloped in sound and sound-making activities. Reading the record—ethnography, archaeology and engraved images—is a logical and imaginative effort to reanimate originating contexts. This is the case when we attempt to reinvest *koppies* with sound. In this regard a comment made by Dialkwain is most helpful. He says, “[…] and rain lightning went over us; and the rain did as follows to a stone which stood outside, in front of our hut, the rain lightning shivered it” (Bleek & Lloyd, 1911, p. 323). Dialkwain’s evocative expression—“shivered”—is redolent with sound. There are many, many shivered rocks that are now silent. Each one provides
evidence of a sound shattering occurrence and is suggestive of life lived among the rocky hills. On the particular occasion described by Dia!kwain the lightning strike is caused because he is playing a musical instrument, a ||ha or goura (Bleek & Lloyd, 1911, p. 321). As with the gongs, musical sound and vibration induces weather phenomena. Moreover Dia!kwain, against his mother’s instruction and without initiation or precise knowledge, was playing the goura and mimicking a rain sorcerer by the name of ||kuññ, otherwise known as Coos Groot-Oog or Koos Large Eye (Bleek & Lloyd, 1911, p. 323n). Dia!kwain acknowledges his misdemeanour, “I had acted thus, when mamma told me to leave off playing the goura,—like ||kuññ—I would not listen; I was the one who saw that the rain had intended to kill us, on account of my doings” (Bleek & Lloyd, 1911, p. 325).

Audio 2. Audio recording of a thunderstorm in which the dangerous male (gwai) aspect of !khwa gwai, spoken of by Dia!kwain, is audible. What may be mistaken as gunshots are the sound of the lightning strikes, hitting close by. This contrasts to the gentle, benevolent female (|aiti) qualities of !khwa |aiti. Source: Author, personal archive.

Dolerite rocks face a number of challenges in addition to lightning strikes. High daytime and low night-time temperatures in these semi-desert conditions produce massive, fairly rapid, temperature differentials that crack the dolerite rocks. In most cases, the sound possibilities are enhanced by spherical fracturing, although not all such rocks are chosen to become gongs. Other factors play a role. In addition to the “frost effect”, alluded to above, air temperature gradients influence atmospherics and therefore sound production and reception. The “atmospheric effect” is known to present-day Karoo residents and was acted upon by |xam-ka lau inhabitants in an intriguing way. This was related by Dia!kwain to Lucy Lloyd (1889 report) who noted that “in a peculiar state of the atmosphere, in which sounds can be heard at a considerable distance, sitting instead of standing, is recommended; for fear of evil consequences. Standing over those who are sitting, on account of its injurious effects, is also objected to, etc.” (L.V.20. 5559 rev.5568 rev.). Once again vibration and sound are acknowledged as having repercussions.
What Dia!kwain is talking about is refraction, when sound or light “bends” upon encountering a differential medium of density. Clearly the peculiar Karoo air temperature gradients and the sound bending acoustic phenomenon, allowing sound to travel further, was not unknown to the |xam but the question is: Was it exploited positively for gonging? There is a specific context that may shed light on the matter. At Nelspoort, there are two identifiable rock gongs which are located within visible proximity. Each gong is situated on an independent brinkkop (singular) separated by a wide shallow valley. It is questionable whether a gong sound could travel the distance across the valley, however, in optimal sound-bending conditions this is feasible. Could it be that two gongs were induced to “talk” to each other over an unusually long distance? Moreover, if brinkkoppe (plural) provided the high places, what of the valley in the Nelspoort setting? Does the shallow valley have acoustic characteristics that supplement the atmospherics? Elsewhere, in the Cape Fold Belt region and the Drakensberg, are caves and rocky overhangs simply shelters, or do they hold sound enhancing potential? These questions are under investigated but are potentially a fruitful field for research.² What is certain however, and can be inferred from the rock gongs, is that the landscape and its topography are integral to any consideration of soundscape.

Sound by default is missing from the archaeological record except where sound traces remain visible as with a rock gong in the impact marks left by former sound-making activity. Most certainly the inhabitants of these landscapes and the rain’s men were listening to sounds but additionally they were attuned to the acoustic potential provided by topography. Attentiveness such as this posits great emphasis on the productive interaction between the landscape, stillness and the vibration induced by atmospheric features.

5. Thinking strings; sound thinking
Since Plato’s time the prevalent metaphor for knowing is vision (Plato, 1928). To know is to possess the image (eidos) of an object.³ This is persuasive and convincing and is the primary verification of objectivity. In a linguistic system that is predisposed to the eidetic metaphor, this is problematic and makes it difficult to enter the paradigm of sound thinking. What is sound thinking? First let us say that one begins to suspect that the prevalence of sound analogy, which we encounter in the |xam archive, is perhaps, on the one hand a consequence of sound thinking. However, the proliferation of sound analogy might equally have been generated in order to facilitate cross-cultural understanding, and this required the transposition of soundscapes from one location to another. This is logical and understandably necessary, but it signals a caution because much of the specificity of place and the primary soundscape of |xam-ka !au will have been lost through displacement. For example, why make the comparison: the noise of the kaross (skin cloak) sounds like many horses (Bleek, 1956, p. 503; Hollmann, 2004, pp. 380–381) if verbal bridging is not the purpose? Likewise, having experienced the wind and the approaching sounds of a Karoo thunderstorm, why associate this with the sound of a bellows breathing, if not to assist the understanding of someone who has no experience of this Karoo phenomenon? Sound, given the human necessity to grasp it, was firstly, and above all, a point of contact with surrounding reality. Only afterwards was cross-cultural understanding made possible through interpolations and comparisons.

Three observations arise in consequence of the above: such sound analogies are purposeful in aiding cross-cultural understanding and are sympathetic to listeners who have not heard the primary sounds.⁴ Secondly, they demonstrate an acute interest and sensitivity to sound and listening. Following from this we have the integration of sound with thinking which is aided and abetted by the notion of thinking strings (||kau ||kaiken): “The story he told nicely, I did get it, as it lay in my thinking strings” (Bleek, 1956, p. 564). The |xam understanding of thinking strings links sound and thought, elevating sound and foregrounding it alongside thought. Dorothea Bleek recognizes sound thinking, expressed linguistically, when she says; “short sentences and phrases recurring again and again with very small changes [produce a] chorus of sounds, not words”. The ideophonic qualities of word-sounds are recognisable, for example, in the Blue Crane’s song, the narrative Dorothea has in mind when she makes her observation (Hollmann, 2004, p. 420). If the qualities of speech resonated sympathetically setting the strings nicely in motion then thoughts vibrated accordingly. This is not
word play. Life is made palpable through sound and sound gives life meaning. When this is removed: “The place feels as if it stood open before me, because the string has broken for me” (Bleek & Lloyd, 1911, p. 237). “I do not hear the vibration which I used to hear, a ringing sound in the sky” (Bleek, 1956, p. 566). The |xam were aware that the sky pulsated with sound and that stars emitted light and sound. They said that Sirius and Canopus, winking (dabba) and blinking (dabba dabba), sounded; tsau!, tsau! (Bleek & Lloyd, 1911, pp. 81–83, 231–233). Without doubt the consequence of a broken string at cosmic scale, indeed at any scale, was immense.

No landscape has a pristine soundscape. As these acoustic analogies indicate, sound can be intrusive as well as the first point of contact—horses, cattle, bellows and bells. Against this, nevertheless, in global terms the Karoo is recognised as a clean soundscape. What you hear in the Karoo and |xam-ka lau is stillness, but if you listen, what you hear is not silence. ||kabbo’s words used in the title of this paper—“These are those to which I am listening with all my ears”—challenges the eidetic trope.

6. What are we listening for?

Any attempt to map “all ears” onto a Western sensibility runs into problems. Inconveniently it does not match the classification inherited from Aristotle, who theorised five discreet senses (Aristotle, 1984, pp. 693–713). The received model neglects the experiential domains of kinaesthetic sensitivity and proprioception (Geurts, 2002; Paterson, 2007). Consciousness arising from cross-modal and inter-modal operations is in consequence diminished (Geurts, 2002, pp. 3–19). Coming from the received Western paradigm it takes renewed attention to hear the nuanced listening in the following exchange, for example: “It, the porcupine, stands as it listening stands breathing, therefore it questions, as it listens to our hearts that beat” (Bleek, 1956, p. 543). A better description of the interplay between the outward (exteroceptive) and inward (interoceptive) faculties of perception is hard to imagine. Can we go further and say that inter-species communication is taking place between porcupine and hunter and that this is attained through a highly attuned multi-sensory perception, which harbours possibilities for humanimal transformation?

In a relational ontology where humans do not preside over animals the answer is surely yes. Equally, humans do not hold pre-eminent status in relation to natural phenomena. In conditions such as these animation and co-creation are the accepted order (Guenther, 2015). The Ikhwa-ka igixa as ritual specialist can make interventions within the relational order and affect outcomes but come the nineteenth century that expertise, ethos and world view (weltanschauung) was challenged. Foreigners with cattle and livestock were encroaching on |xam lands and the water sources were contested. Furthermore, in the early twentieth century, technology was introduced that impacted the hydrology of the region. Either from forgetfulness, neglect or coercion, a new inscription took place. The primacy and importance of a sensory attention, peculiar to relational ontology, were confronted by a new dispensation.

Science and technology have advanced in more than direct ratio to the ability of men to contrive methods by which phenomenon which otherwise could be known only through the senses have been brought within the range of visual recognition and measurements and then become subject to that logical symbolization [...]. (Ivins, 1973, p. 20)

The first windmill or waterpomp (wind pump) was installed in 1902 in southern Africa giving access to subterranean water and removing absolute reliance on surface water. A water hole (Afrikaans: waterpitt; |xam: tsaxauk Sơn) (Bleek & Lloyd, 1911, p. 195n) is an artesian well (improved sometimes by excavation) and its reliability is determined by rainfall and seasonal weather. A borehole, with wind pump, by contrast plumbs deep into the earth and is far less susceptible to shifting weather patterns and erratic rainfall. Before the windmill the water pit was the water source of last resort when surface water in the pans, vleis, kolks, goras and leegtes dried up. Reliance on ground water in Bushmanland meant that in the long dry seasons the water pits with capacity were few and far apart but they were crucial. Waterholes were a functional necessity but also special places. With the
introduction of the windmill this situation changed. By the magic of technology and wind-powered pumps, the landscape was transformed. One could say that the law of the land (grondwet, Afrikaans lit. ground rule) was determined by its lifeblood, which was and is water. Technology, even a seemingly “benign” wind-powered technology, changed the natural laws of the land—the manner of interacting with the land, in particular sound-driven, and the possible ways of thinking about it. Incrementally, the endemic cultural traditions associated with water sources and rain fell away.

7. Chronology of recent changes
Among |xam descendants there is recognition that rock gongs exist, and they have a name: Boesman klavier (Bushman piano). In the Afrikaans name there is recognition of the originators but there is no knowledge of how the rock gongs were used, or why. Even in the nineteenth century, the descriptive was !gwárra connoting metal and bell. No explanation of their use is given either because the question was not asked or because gong playing was no longer practiced. The latter is likely because in the mid-to late nineteenth century when Bleek and Lloyd interviewed their informants there was no recollection of the practice of rock engraving either. The most direct reference was a memory given by Dialkwain that was recorded by Lucy Lloyd in a note to herself: “!kann (where D.H.’s [Dialkwain] father’s fathers’ chipped gemsbok, quagga, & ostriches, i.e. at a place where they used to drink, before the time of the boers)”.

All was not lost, however, as is made manifest through field-work that commenced two and a half decades ago (1991). These investigations revealed that the !khwa-ka xoro had residual existence among |xam descendants. This creature, recorded in oral literature and represented as images on rocks, had migrated through generations and was retained within memory among a generation of select elderly people of whom the majority were older than 70 years (Hoff, 1998). Prevalent too was the widespread but variable belief in the water snake. It was discovered that the water snake, like the !khwa-ka xoro, not only resides but is the source of springs, fountains (Afrikaans: fontein; |xam: xhwarra) water holes and even gora (seepage where water collects); in other words, always in naturally occurring water sources. Indeed, water sources such as these are the physical manifestation of the !khwa-ka xoro. “The people say that the rain’s bull goes out from his pit, and the pit becomes dry [because] the rain has gone out” (Bleek & Lloyd, 1911, p. 195n; Hoff, 1998, pp. 120–121). The abode of the snake and the xoro, besides water holes and such places, includes and is weather and meteorological phenomenon most particularly associated with rain. Contemporary descriptions of the water snake typically bear the traces of !khwa: metamorphosing from animal into serpent, shifting from water source into clouds, then coming down to earth again and disappearing underground. These shape-shifts manifest as precipitation in various forms but included lightning, wind and whirlwinds. In one evocative description, !khwa: is seen “trotting” and “[h]e resembled a bull (xoro), he felt that he was the rain’s body” (Bleek & Lloyd, 1911, p. 192). As we will see later the metamorphosing weather–water–rain—snake or xoro, and their transformational qualities bear correlation to the humanimal therianthropes; the part-animal part-human creatures that cross the threshold of ordered taxonomies. !khwa:, and indeed the entire water cycle and rain-related phenomenon, are given animation through !khwa-ka xoro and the water snake. Both provide an interactive interface between people and !khwa:, as is confirmed by present day |xam descendants (Hoff, 1997, pp. 24–25).

Hoff’s assessment is that “[t]oday only the elderly have knowledge of the water bull. To them the water bull is a reality, but their knowledge is based on memories and not on current experience as is the water snake” (Hoff, 1998, p. 110). Nevertheless, two of the Afrikaans-speaking |xam descendants had retained the |xam word xoro (Hoff, 1998, p. 111). In their physiological descriptions of snake and water bull Hoff’s informants made clear distinctions between the two and yet “I have, however, heard informants within the |xam area refer to the Water Bull as a snake” (Hoff, 1998, p. 111). Over a period of one century a change takes place, such that “[i]nformants do not always distinguish clearly between the Water Snake and the Water Bull, and present informants talk only of their relationship with the Water Snake” (Hoff, 1998, p. 115).
Snakes and rain animals depicted in the rock art indicate that they have had considerable longevity within the belief systems of the southern San. Equally remarkable, given recent historical turbulence plus language shift (diaglossia) from |xam to Afrikaans (Traill, 1996, pp. 161–183), is the cognitive resilience which maintains the values and enigmatic meanings that these creatures represent. Nevertheless, at the same time, we are witness to the terminal stage of the !xwa:ka xoro’s existence, as a conceptual placeholder. The demise of the xoro was presaged by historic causes to which the wind pump technology contributed not insignificantly in the final stage. Coincidental with the colonial impact and social turmoil was the shift to Afrikaans. This certainly added to the conceptual extinctions and discontinuities. But with the xoro gone, it is yet true that !xhwa: continues to exist as a real presence among Afrikaans-speaking |xam descendants albeit now in the form of the water snake.

8. One image in two minds
Curiously, the interchangeability between water snake and rain animal is at the centre of a conundrum that has vexed researchers for years (Challis, Hollmann, & McGranaghan, 2013, pp. 1–24; De Prada-Samper et al., 2016, pp. 96–101; Jolly, 1995, pp. 68–80, 2006, pp. 68–75; Lewis-Williams & Pearce, 2004, pp. 137–157; McGranaghan, Challis, & Lewis-Williams, 2013; Solomon, 1997, pp. 3–13, 2007, pp. 150–159). Dia!kwain when asked what he saw in a copy of a rock painting from the Maloti Mountains, Lesotho shown in Figure 3 (Sehonghong River Valley) is reported to have said that what he saw was a “water thing”, or “water cow” (Bleek in Orpen, 1874) while Orpen’s informant Qing said, “[t]hat animal which the men are catching is a snake (!)” (Orpen, 1874, p. 10; original italics and bracketed !). What at first sight appears to signal disagreement and contradiction should alert us to territorial variability and the mercurial, transformative nature of the beast. These statements, first one thing then another, adumbrate more than 100 years later in Hoff’s findings. As one informant explained it to her, “[t]he Water Bull and Water Snake are one like brothers”. Both are “Water Things” Hoff was told (Hoff, 1998, p. 115; See also Morris, 2002, p. 157). This certainly presents a case of heterogeneity emanating from !xhwa:. This point deserves emphasis, which we attend to below; in particular Figure 6 since pictorially it highlights this characteristic of !xhwa:’s nature.
9. Image-making through time

!khwa: is not a singular monological concept. On the contrary, the evidence suggests a heterogeneous entity composed of many voices and multiple layers of memory and meaning. To further demonstrate an aspect of this we will consider the images in Figure 4, but first let us note that underwater and underground have complex associations predicated on an ambiguous reciprocity between the body as an alive, sensual locus of expression and the body traversed by other (otherworldly) impulses that challenge the body's subjective integrity. The signs: body and non-body demarcate this continuum, which is anything but steady or stable. In this model, underwater can be analogous to trance-induced transcendence, for example, (Lewis-Williams & Challis, 2011, pp. 110–131; Lewis-Williams & Pearce, 2004, pp. 137–183). Moreover, in the Karoo underground and underwater are synonymous because in dry-land conditions water is underground, ultimately. In this context, underwater and certainly underground are additionally the abodes of the spirits of the dead. A waterhole is the genius loci because of functional necessity but more than this the waterhole is a definitive nexus mediating the living (bodies) and spirit realms (non-bodies). This formulation receives corroboration in the following statement, bifurcating as it does towards the understanding postulated here.

Dead people who come out of the ground are those whom my parents used to say that they rode the rain, because the thongs with which they held it were like the horse's reins, they bound the rain. Thus they rode the rain, because they owned it.

Therefore people say, when there is a big rain, that the sorcerer has gone to loosen the thong. Then the rain falls and increases [...]. (L.V111.27: 8399 rev.-8400 rev. and Hollmann, 2004, p. 149)

The seemingly quotidian depictions in Figure 4 clearly date from the colonial, contact period. As such they have been considered graffiti (not original, whatever that might be) or at best simply farmyard scenes. But is this really all that they are given previous discussion about thongs—their controlling attributes and sound-making properties? Surely, Dialkwain’s provocative words describing rain men riding the rain applies? In the description that he gives, thongs and reins as synonymous. Does this not suggest that !khwa: is imbued into these images of animals being controlled with reins and thong? Is the !khwa-ka xoro not present by innuendo? Farmyard scenes these might be but they cannot be normalised, as such. !khwa:’s presence denies their domestication.

The windmill in Figure 5 represents and records a history of contested waterholes and the diminution of the !khwa-ka Igitan’s role. This accepted it does not negate that the windmill is allied to water and thus related to !khwa:. We have noted !khwa:’s familiarity with the nether realm, underwater and underground, encompassing the spirit world. Were aspects of this retained in the engraver’s mind when he created the image, and in particular the decision to carefully display the windmill’s workings underground?
Contact images such as these intersect and run in parallel with the proliferation of sound analogy. Earlier we highlighted the sounds of first contact—horses, cattle, bells—and how the resultant sound analogies are proliferations and assimilations of foreign sounds. Recall the rush of the storm that attaches to the cannon ball. It conveys the malevolent force of !Khwa:. In another example, it was said that the rapid fire of a revolver “sounded like cracking thunder and that men who possessed such things could rain fire” (Stow, 1872, p. 78). Testimonies these are of historical encounters, often violent, but in addition they carry the sounds and undertow of !Khwa:—storm, rain and lightning.
Another engraved image which pictorially combines elements of the !khwa: phenomenon is shown in Figure 6. It resonates powerfully with descriptions of the water snake that is said to have a “serrated ridge on the back and a horse-like head” (Hoff, 1997, p. 35). Moreover, harking back to the earlier conundrum, “The water bull [xoro] and water snake were regarded by all [Khoekhoen and |xam] as belonging to the category of water phenomena and both were referred to as snakes” (Hoff, 1998, p. 121).

The image is distinctly more a snake than a typical rain animal. It has therianthropic characteristics and it has a flash-like quality, which begs the question: Is it the product of a trance-induced apprehension? It could also be that the flash represents lightning in addition to being a water snake with an animal like head. This is not strictly speaking a typical humanimal therianthrope. It depicts the hybridisation of reptile, rain xoro and lightning and it blurs the therianthropic boundaries. The question remains: Was this creature the result of trance-induced transcendence or is it the product of a heightened state of consciousness when other (otherworldly) forces traversed the body of the engraver?

Where exactly this image stands in the chronology of image-making is an intriguing question but difficult to answer. What is not in doubt is that the associations will have been comprehensible 20 years ago to “|xam descendants who connect lightning principally with water snake and water bull” (Hoff, 1997, p. 27, 1998, p. 115). In fact it is said that the water snake has a jewel or light on its forehead and that this is a lightning conductor, according to some accounts. These associations place the depiction well within present understanding but don’t solve the problem of its age.

The association with water is further enhanced by three engraved flamingos that are placed on the same boulder, immediately to the right of the lightning snake. From this vantage point on the hilltop (brinkkop), there is a clear line-of-sight to the nearby Lekkerlé Leegte (dry river course). Flamingos frequent this place when seasonal rains are exceptional, leaving accumulated water standing (lekkerlé, lie nicely) in the leegte every seven years or so (Pers. Comm. Nak Reichert July, 2013).

At this point we are back where we started: rock gongs, inherent sound and vibrations. The lightning snake is thoughtfully positioned facing a crack in the rock, caused either by lightening or a sharp temperature change. Notice how the head of the lightning snake-xoro is nested into a niche, through which the crack in the rock runs. By extrapolation this is a water snake-xoro about to enter a water hole; it is also a snake about to go through the “veil” of the rock face into the spirit world (Lewis-Williams & Challis, 2011, pp. 106–107). Since rocks, and rock gongs in particular, have vibrational potency (!gi:) is it not the rock itself which is the attractor? Surely this is the raison d’être for rock gongs that the rain men used to control and manipulate !khwa:.

The interlinking sense-field integral to all of this are the thinking strings. As one would expect in a relational ontology, with heightened somatic awareness and kinaesthetic sensitivity, the thinking strings are tuned to vibrations and !gi:, which connect animals, plants, rocks and spirit realm together in myriad ways, not always obvious. In this specific case, the rock engraving suggests an empathetic linkage between !khwa: (xoro and snake), ringing rocks and rain men. The depiction conveys a metaphysical reality but it is not detached from reality either since lightening is attracted to the high metallic content of the boulders concentrated on the brinkoppe.

The inclusion of three water birds (bottom right on the boulder) of a type known as slanghalsvoël (Afrikaans: snake-neck bird; Latin: Anhinga rufa, Pers. Comm. Nak Reichert July, 2013), in addition to the flamingos, is complementary to the !khwa: phenomena since slanghalsvoëls (besides the name) feed by diving underwater to catch frogs and fish, with all the connotations of snakes and underwater previously alluded to.
It is appropriate that this image-set is situated at the epicentre of the |xam-ka lau territory, just eight kilometres distant from the |xara kam waterhole, the omphalos (Greek; navel) of ||kabbo’s homeland, which he called the Bitterpits.

10. Conclusion
The images here presented span a period of at least 200 years but in all probability their age distribution is much greater. They are examples of the cultural expression and memory of !khwa: re-configured and reconstituted. The sounds and vibrations of earlier eras might, in many instances, be gone but what we have attempted to show, deploying gongs, text and images, is that a single unifying voice or grand-narrative is inadequate to explain !khwa:’s heterogeneous quality and multiple presences.

Further, the thinking strings and their empathetic vibration shed light on the question: What is heightened conscious from a |xam perspective? Thinking strings are indicative of altered states. They lie near the throat artery (Bleek, 1956, p. 577) and they reveal shifting awareness because they stand up and fall down (Bleek & Lloyd, 1911, pp. 87–88). Literally, a broken string means to lose one’s senses. Thinking strings are the senses; and senses are the thinking strings. The same word ||khou ||khougn is applied interchangeably (Bleek, 1956, p. 577; Hollmann, 2004, p. 115). Further layers of meaning accrue to the thinking strings because there is another word for the senses; |xutten-|xutten, which has three associated connotations, i.e. the senses, magic and quiet literally. |xutten-|xutten are arteries (Bleek, 1935, pp. 14–15, 1956, p. 367; Lewis-Williams & Challis, 2011, pp. 126–127). By this account the spectrum of consciousness is a sense-field, physically located (arteries) and is comprised of component parts: thinking strings, senses and the arteries. This is not a conventional model of the senses by familiar Western standards. The production of Igi: and the role of the Igix:a challenges what sense we make of the senses. With that our understanding of somatic sensitivities and the role that the senses play in the vivification of Igi: quite rightly, finds itself under interrogation because we don’t fully understand how the thinking strings, arteries, magic and Igi: work together. In fact the arteries, as such, don’t correlate with known medical knowledge’ (Low, 2007b). With reference to the |xam idiom in particular, David Lewis-Williams and Sam Challis ask, “What are “their senses”? In |xam thought the Igi: that enabled people to be Igix:tan was, at least partially in their arteries […] though there is really no such anatomical feature” (Lewis-Williams & Challis, 2011, p. 127).

Further investigation is required, although work has been done towards improving our understanding. Medical anthropology has foregrounded haptics (massage, touch) smell and “wind” (Low, 2007a, 2007b, 2012, 2015) and the significance of such in making the arteries stand up (activation) or lie down (pacification). Energy activation through physical exertions in the trance/healing dance is well documented (Keeney, 2003; Lewis-Williams & Challis, 2011; Lewis-Williams & Pearce, 2004). More recently considered is the role that dopamine plays upon its release during persistence hunting (Rusch, 2016). Linguistic study has shown taste to be a significant cognitive marker, thereby demonstrating that a revision of our understanding of the senses and sensorium is called for (Brenzinger & Fehn, 2013). To the notion of “listening body” (Low, 2015) we add “sound thinking” and “all ears”, urging further investigation of the senses and the role they play in the vivification of Igi:.

All that has been presented should be strange and startling but it is not new. It has always been a pre-condition of storytelling and image creation that they should open and reveal other worlds, not elsewhere or distant but available now in this one. This echoes Legassick when he says that, “[a]ppplied history looks for transformation in the present on the basis of evidence from the past” (Legassick, 2016, p. xix). The latter formulation is crucial. It attributes agency to people who have inherited a dynamic ethos and places them in control of applying their own history contra to being the “late” representatives of a Stone Age past. Without agency, and denied such a disposition, individuals emerge as shamans or victims (Moran, 2009, p. 7; Solomon, 2014, p. 333), or as the quintessential proto-scientists (Jive Media, 2015), living half-lives or worse, possessing no life of their own.
Funding
The author received no funding for this research.

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Citation information
Cite this article as: Sounds and sound thinking in |xam-ka !au: “These are those to which I am listening with all my ears”, Neil Rusch, Cogent Arts & Humanities (2016), 3: 1233615.

Cover image
A late afternoon thunderstorm with lightning strike in the |xam-ka !au landscape, Karoo region, South Africa.

Source: Author, personal archive.

Notes
1. The activities of rain men and rain sorcerers were not restricted to rain making per se since it involved the manipulation of rain, which entailed controlling the harmful and encouraging the helpful manifestations of ikhwas.
2. Mazel (2011) flags the general neglect of acoustics but highlights the role that acoustics might have played in Didimo Gorge, one of the most densely painted valleys in the Drakensberg. In similar vein, Rifkin (2009) emphasises acoustics at a rock engraving site.
3. Plato’s “vision of truth” is central to the cave myth and the essence of what can be known, the proper object of knowledge, is the Form or the Eidos.
4. Context is vital and is emphasised by the !kun story teller Kapilolo Mahongo. Attempting to find a meaningful translation for his name he says, “Kapilolo is the !kun name for whistle”. However, this is not strictly correct for he goes on to explain: “When I was young it (the whistle) was made from a reed in southern Angola, which we cut and pressed on the one side so that we could blow music into it with our breath. This whistling imitated the call of the young duiker to its mother and, in this way, we could call it and hunt it. That’s my name.” (Skatnes, 2010).
5. Although Aristotle did propose a common sense (aesthetes koine), the exact meaning of which remains contested, it seems that in the final analysis he gave primacy to vision and the eidetic bias (Paterson, 2007, pp. 18–21).
6. Omphalos is a reference to what the !xam called the mphalos.
7. Chris Low (2007b, p. 787) notes that “[n]o !Khoisan I encountered had clear knowledge of arteries and veins, and all who made cuts to release blood explained their reasons in entirely unfamiliar terms. It is hard to believe !Khoisan ideas of bleeding ever overlapped with Western medical ideas, past or present.”.

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