# Iconography of Termites' Nests and Termites: Symbolic Nuances of Formlings in Southern African San Rock Art

## Siyakha Mguni

Formlings, now better understood to depict termitaria (termites' nests) and termites, are a pervasive category of San (Bushman) rock art north of the River Limpopo. This article investigates the associations of termites' nests in San thought, belief, and ritual, in an attempt to explain formling symbolism and why termites' nests, and not other subjects, were chosen for depiction. Unequivocal ethnographic testimonies of San spiritual world-view are compounded with iconographic analysis to show nuances of San understanding and perception of the spirit world. In turn, this ethnographic hermeneutic reveals a significant but previously unexplored facet of spirit-world imagery which evokes notions of creative and transformative power. This newly highlighted vignette of San cosmology unlocks aspects of San imagery, such as the interface between the natural and the metaphysical, that have hitherto been less understood.

If any single motif holds the key to understanding the basis of San art in Zimbabwe, it is the oval design (generally called 'formlings'...). Interpretations of these are the touchstone by which all approaches to the San art of Zimbabwe can be assessed. (Garlake 1990, 17)

### Formlings in southern African rock art

A recent study established that formlings (images based on vertically and horizontally compartmentalized sets of oval or lozenge shapes), through their distinctive morphology and their match with a particular natural subject, depict termites' nests (Mguni 2002). Formlings thus follow the pattern of nearly all San imagery in their derivation from physical phenomena (both natural and cultural), sometimes combined with spiritual metaphysical elements. Yet, contrary to popular belief, these images were neither simplistic mimicry nor direct records of the artists' real world (Walker 1996, 8). A consideration of San graphic principles in general shows that significant features were carefully chosen and highlighted in depictions. For reasons that will later become eminently clear, the artists chose an aspect of termites' nests that is not ordinarily visible: they emphasized their interior structure. This unfamiliar interior aspect

is not immediately discernible and comprehensible to uninformed viewers. For this reason, recognizing formlings has for many years been difficult. Even so, it must be acknowledged that San rock art was conditioned less by the desire to create facsimile of subjects than by the desire to capture their often hidden, but significant, elements (Mguni 2004).

As the above epigram affirms, the new understanding that formlings depict termites' nests and termites, affords recourse to relevant ethnography to explain the significance of this subject in San thought, belief and ritual. Fortunately, the twentieth-century studies of the Kalahari San have collated a huge corpus that can be used to evaluate various forms of expression of San cosmology and religion, such as rock art. Artistic imagery is now constantly and progressively re-evaluated against these ethnohistorical and ethnographic records. The Kalahari San do not paint on rocks, as few rocky formations exist in that region, but their world-view and belief system is comparable to that of the now culturally and linguistically vanished San who once occupied other regions of southern Africa (Fig. 1), and some of whom are understood to have produced rock art.

These include the nineteenth-century Southern /Xam San who lived in the Northern Cape of South

*Cambridge Archaeological Journal* 16:1, 53–71 © 2006 McDonald Institute for Archaeological Research doi:10.1017/S0959774306000047 Printed in the United Kingdom.



**Figure 1.** The regional distribution of formlings in southern Africa, with circled areas showing well known rock-art concentrations (Mguni 2004).

Africa (and were well-documented by Bleek & Lloyd 1911). Another, though smaller, corpus concerns the Maloti region where testimonies by a San informant, Qing, who in the 1870s explained some paintings to Joseph Orpen (1874), have contributed to our current views on this art. These and other corpora complement and elaborate on each other, especially in specific areas of San belief and symbolic system where parallels are demonstrable. Yet similarities only should not be over-emphasized, as divergences could be equally valid. In the main, there is a correlation between the established San belief systems from these corpora and the details of their rock art across southern Africa. This link can enable rock art to verify fundamental beliefs and cosmological contexts within which the imagery mediated generations of San hunter-gatherer social and political relations through space and time.

Whereas commonalities exist in southern African San imagery and oral testimonies contained in ethnographic corpora, regional peculiarities are evident. Formlings are a case in point in rock art (Fig. 1). Only a few examples are known from northern South Africa, where the art appears to have some affinities with that just north of the Limpopo (Mguni 2002). Though no dedicated statistical enumeration of formlings has been conducted, in Zimbabwe they are estimated in thousands (Garlake 1990, 17). While this may be an overestimate, 52 formlings were counted from a small

sample of 32 Matopo sites (Walker 1996, 81). The finest examples in Matopo exhibit complexity in the care and detail lavished in their execution (Walker 1996, 32). They are prominent in size and also in their associations with other imagery. Apart from formlings being a regional feature, this northern rock-art region abounds with images of typical animals (mainly kudu, then giraffe, various kinds of antelope and a few mega-herbivores), humans and material cultural items and plant imagery. The characteristic feature of this art is the wide-ranging subject-matter familiar in the Later Stone Age (LSA) culture. In Matopo, painting frequency co-varied with occupation intensity of shelters (Walker 1995; 1996).

Most large shelters that are awash with paintings were also preferred living sites, with evidence of both protracted and short-term Holocene occupation. So rock art was

closely related to home bases and repeated occupation (Walker 1995, 55). Occupation histories in part support the dating evidence, albeit incomplete, that places Matopo rock art in the 12,500–1500 BP range (Walker 1987; 1995; 1996), making it one of the oldest corpora in the region. Rock painting was related to periodic movements of hunter-gatherers, scheduled with the ripening of key fruits, principally Marula, Sclerocarya spp., and figs, Ficus spp., in Matopo. Between 12,500 and 9500 BP, occupation was only during autumn when these fruits were bountiful, but around 9100 BP the hills were settled permanently (Walker 1995, 238–43). The autumnal aggregated (communal) settlement phases were marked by intensified ritual activity, in patterns similar to those of historical Kalahari San (Lee 1972; Barnard 1979b).

The historical Kalahari (plus archaeological material: Denbow 1986; Yellen & Brooks 1989; Kinahan 1991; Deacon & Deacon 1999) context is comparable to the Matopo LSA (Cooke 1963; Walker 1987; 1995; 1996) in terms of aspects of material culture and inferable social, economic, subsistence and settlement organization, indicating partially the identity of Matopo hunter-gatherers. Further, two LSA Khoisan skeletons in Matopo can afford 'a link with present-day Khoisan people' (Walker 1994; 1995, 14, 99, 169, 205). While it exhibits regional variations, the rock art itself indicates a widespread artistic system deriving from a common cultural tradition and probably the related autochthons. With this evidence there is justification in cautiously seeking close Kalahari analogues that, after all, are still vibrant in regions adjacent to southwestern Zimbabwe.

Given the current proliferation of explanatory perspectives in rockart research, this discussion seeks to place our understanding of formlings within the graphic, social and cognitive contexts in which this symbolic materiality was produced and constituted. As I illustrate shortly, using three richly nuanced painting clusters, these contexts and associations are often very complex. I later interweave their previously unrecognized characteristics with oral elements of San religious expression. Analyses today concern the teasing out of nuances and subtleties of the imagery and ethnographic vignettes to reveal the symbolic associations in this art's sophistication. This article therefore applies three strands that may decisively place formlings as a category of San life and belief:

- painted contexts: juxtapositions and superimpositions of various metaphors focus the range of latent meanings of formlings;
- natural history of termites and termites' nests, in order to understand the primary symbolic import; and
- San tales, oral testimonies and cosmological associations featuring beliefs and notions about termites and termites' nests.

I first describe three painting clusters and then previous interpretations of formlings. I then posit a scenario situating the natural history of termites and termites' nests in relation to the San world-view and spiritual life. Finally, I deal with aspects of San symbolic logic that informed their image-making tradition and, especially the meaning of formlings.

## **Graphic contexts**

Figure 2A comprises several vertical cores with microdots. To the right are two therianthropes (part human,



**Figure 2.** Complex formlings associated with human figures, antelope, therianthropes, trees/plants and funicular motifs (A after Parry 2000, B after Mguni 2002).

part animal); then, in the middle, five human figures are superimposed on this formling. Two antelope and a feline stand in the middle. A thinly elongated image, botanical or funicular, bisects diagonally the two penultimate cores before it trifurcates at the top. Where it passes through an interstice between the two cores, there is a miniature figure clinging to it, on all fours and climbing upwards. The formling in Figure 2B has fourteen cores placed nearly symmetrically. Around the cores is an outline, on the bottom right edge of which emerges a multi-furcated image. On the far left, two possible trees and two giraffe are on a horizontal line that connects to the formling. Next to the giraffe, two vertical lines extend above and below this horizontal line. Another horizontal line starts from outside the formling and terminates near the middle of its cores. A fine polychrome giraffe is superimposed on this formling. Kudu cows, identifiable by their slender elongated necks and large ears, are below and within the formling and a tsessebe is a little below. A faded line descends from the formling, and then goes behind the one kudu cow and a human figure to link with the tsessebe. Superimposed over the right side is a multiple-legged blue wildebeest and under its forelegs are twenty oval flecks. A final feature is a partial, large and turgid rhinoceros- or hippopotamus-shaped image bestrides the formling.

Figure 3 is part of a six-metre long and over onemetre high formling from northern South Africa. Its contiguous cores have a delicate ashy-white outline which, on some cores, forms fine hair-like dentations. To the left and in the middle are women and other human figures. Associated animals include a small buck, three hartebeest and faded indeterminate species. Other images include 72 handprints in red, orange and yellow placed above and underneath the cores. At the base of the formling is a thick, near-horizontal line that has 42 upright finger-like dentations. A thin ashy-white funicular line meanders across the formling body. While nearly horizontal in parts, it is largely near vertical in over-all orientation. The line is intentionally discontinuous in parts but it is also partially broken up by fading. In places, it ends in well-rounded points to give an appearance of weaving in and out of the formling. It is also superimposed by handprints in parts.

## Interpretation of formlings

Formlings interpretation has, for a long time, been vexed. Former identifications were couched superficially in terms of topographic and climatic elements (Hall 1911; 1912, 595; Frobenius 1929, 333; Breuil 1944, 4; 1966, 115–16; Goodall 1959, 60–66; Cooke 1959, 42; Lee & Woodhouse 1970, 140–42), cultural objects and royal burials (Goodwin 1946, 17; Rudner & Rudner 1970, 86–7; Cooke 1969, 42; Holm 1957, 9; Frobenius 1930; 1962), or simple decorations (Mason 1958, 363) or wallpaper of lived shelters. These interpretations were reviewed, with reservations, by Mguni 2002; 2004).

In contrast to these often superficial readings, new ethnographic approaches place formlings within a category of San belief. They acknowledge potency, a supernatural power known as n/om (formerly n/um or num) among the Ju/'hoansi (Biesele 1995, 12). In one view, formlings represent behives or honeycombs (Cooke 1959, 146; Pager 1971, 347–52; 1973, 61; Guy

1972; Crane 1982; Woodhouse 1990), particularly the potency of bees and honey (Marshall 1969, 367; Huffman 1983, 50–51). One formling is said to represent metaphorical 'maps' or exploitation territories (Smith 1994), whilst some are argued to represent the human abdomen, specifically the liver and spleen (Garlake 1995, 96, 154) as sources of potency. In these readings, formlings are symbols of potency (Garlake 1995, 85–105; Walker 1996, 73–4) or even dancers (Garlake 1990, 19). Still, as is now apparent, there has been no specification of the primary model of formlings. Accordingly, those significant aspects of San cosmology at the heart of formling symbolism have been overlooked.

The symbolic and metaphoric intent of San rock art in Zimbabwe is now widely acknowledged in various studies (Huffman 1983; Garlake 1987; 1990; 1992; 1995; Walker 1994; 1996; Mguni 2002; 2004), following the demonstration of connections between details in the southeastern mountains' rock art and appropriate ethnohistorical and ethnographic records of San life, belief and ritual (Vinnicombe 1976; Lewis-Williams 1981a). Whereas constructing the meaning of images is a complex enterprise, their graphic contexts and ethnographic antecedents, the embedded symbolic associations, were not random. Instead, these were primarily informed by observations of natural phenomena and ecological systems (Whitley 1994; Whitley et al. 1999) within which the San live and lived. Aside from the primary studies of eland symbolism in southern Africa, ideas of natural modelling and how animal behaviour (often depicted as subtle attenuation of features and emphasis of certain postures) informs the San symbolic system have recently been used in rock-art research (Eastwood et al. 1999; Eastwood & Cnoops 1999; Hollmann 2002; Mguni 2002).

## **Ecological and cultural setting**

I now examine the interface between the operation and behavioural character of termites' nests and termites in their natural habitat and San culture and spiritual world-view to show that formling symbolism derived from this subject-matter. The San spiritual world-view is consonant with their experiences of the natural world (both physical and biological) they lived in. To situate this axiom, imagine the arrival of summer in the southern African savannas. It gets warmer and the atmosphere begins to feel slightly humid. Hazy skylines gradually transform into menacing towers of whitish-grey clouds pregnant with moisture. Distant sounds of thunder filter through the atmosphere, and occasionally, lightning flashes in the night skyline.



Figure 3. Part of a huge formling showing superimposed handprints and a sinuous line on the right (after Mguni 2002).

These signs of the wet season linger for days, even weeks, before the first rains fall. Suddenly, in a mysteriously synchronized manner at varied and distant localities, inestimable numbers of flying termites begin to emerge from underground nests. In their nuptial flights, they flirt and swell atmospherically and like a blizzard they overshadow, literally, the commonplace in a San encampment. These flights are timed variously among different species, but they always take place at the start of the wet season (Miller 1964, 15–16; Howse 1970, 48–56; Nonaka 1996, 30). Before nightfall, people scuttle and scramble to gather the 'fatty' insects (Thomas 1959, 153–4), which are a rare delectable delicacy.

Then, after the rains have started, another spectacle emerges above suitable ground and atop the mounds of the *Macrotermitinae* termites. These and Odontotermes genera, cultivate fungus gardens inside their nest chambers. Their common symbiont is a genus of fungus called Termitomyces (Howse 1970, 19) which, among its other mutualistic functions, helps termites digest food (Rouland-Lefévre 2000, 295-301). Occasionally, during the wet season, agarics (mushrooms) grow above ground, originating from these fungus combs (Uys 2002, 42, 56-7). The fruit bodies of termitomyces (van der Westhuizen & Eicker 1994, 9), also called 'beefsteak mushrooms' (Levin et al. 1985, 16), are collected as another delicacy from termite mounds. Although termites (and mushrooms) are important foods, their intermittent availability enables only occasional exploitation (Nonaka 1997, 81), often in bountiful wet seasons. As summer paves way for autumn and, eventually, the dry cold season, food resources diminish.

fungus-growers, including the widespread *Macrotermes* 



**Figure 4.** A Macrotermes mound within a savanna ecological setting showing associated vegetation (Mguni 2002).

Termites become scarce, their presence only indicated by occasional yet incremental repair work and extensions (Noirot 1970, 91) on their epigeous mounds, a landscape feature typical of the savannas (Fig. 4).

This resilience and timeless cyclical behaviour of termites and termites' nests has long fascinated the San. One peculiarity is that most termite species spend all their life inside underground nests, only emerging temporarily at certain times of the year. Their great creative and destructive powers however seldom pass unnoticed. Apart from their primary residence (in total darkness), they also build mounds in rock shelters and crevices and, for arboreal species, on tree hollows and branches. Depending on species, termites variously build mounds, chimneys and launching pads above ground. Macrotermes bellicosus chimneys in well-vegetated areas may resemble spires (Howse 1970, 96). Those of *Odontotermes transvalensis* often attain heights of 1.3 m or more (Coaton 1947). Older nests have gigantic mounds that reach heights of 6–8 metres and girths of 30 metres (Howse 1970, 94). These structures regulate climatic and gaseous exchanges inside the nests (Howse 1970, 107; Turner 2000, 143), although

similar, but smaller structures, serve as launching pads or emergence towers for flying termites (not in all termite species: Uys 2002, 46).

It has also been widely observed that termite 'mounds are frequently associated with trees or other vegetation' (Turner 2000, 151). This vegetation, often Catha edulis, Strychnos potatorum, Fagaropsis angolensis, and Euphorbia ingens (van Wyk & van Wyk 1997, 40, 252, 418), is caused by greater soil depth, improved drainage, higher pH values and nutrient concentrations due to termites' activities (Holt & Lepage 2000). Palatable plants and grasses growing on mounds in turn attract certain animals. Apart from specialized insectivores, such as aardwolf and aardvark which eat termites, the internally regulated conditions in active and abandoned mounds attract a range of other animals. Insects too, including honeybees, have been observed in many parts of Africa to use termites' nests for their own nesting activities (O. van Laere pers. comm. 2001). Recently, Namibian San from Tshumkwe mentioned an edible in-

sect that lives inside these nests, which they said is ""family" of the termites because they live together with the termites' (Jeremy Hollmann pers. comm. 2002). They added that mambas, too, also claim a part of this residence. Further, certain ant species, especially the thief ant, *Carebare vidua*, nest in termites' nests raiding their eggs and nymphs (Skaife 1979, 253). In all, termites' nests are a closed multi-faceted habitat system.

The nests, often below the visible mounds, are especially complex in most species. Their growth is everactive. They enlarge and alter in shape (Howse 1970, 111; Noirot 1970, 91) according to the age and size of the resident colonies. The casings tend to be very hard owing to cementation properties of termites' saliva and faecal material used in the construction. The most intriguing feature inside is the parent couple (colony founders), as the nucleus of activity essential to the colony's existence. The queen and king are nurtured by the worker castes, which also care for and prepare reproductives (alates) for the next season's nuptial flying. In what is known as physogastry, the incipient queens develop a grossly enlarged abdomen to allow continuous production of large numbers of eggs (Fig. 5). Through this process a *Macrotermes natalensis* queen can extend in length from 35 mm to 140 mm and increasing her weight 125 times. In an extraordinary act of fecundity, she can produce 36,000 eggs a day (one every 2 seconds) or 13,000,000 eggs in a year (Howse 1970, 21). Because their fatty hypertrophied abdomens are fraught with eggs, they have a luminescent white colour. These queens, as I show later, may have been held in awe and deeply inspired facets of San cosmology and symbolic cognition.

The San have deep and accurate knowledge of the faunal and floral species they interact with (Heinz & Maguire 1974; Silberbauer 1981, 76; Barnard 1988). They have observed fastidiously termites' cyclical behaviour and activity. And, since termites constitute a delicacy and a valuable source of fat and protein for most San (Silberbauer 1981, 216–17; Hitchcock 1982, 262; Nonaka 1996, 30–31; 1997, 81, 86; Walker 1996, 74; Guenther 1989, 27), they know how and what to exploit of these insects at different seasons. Lorna Marshall (1999, 216) witnessed the Ju/'hoansi picking termites up and eating them 'with excitement and relish', for it is a pleasant and rare taste. 'Termites are sweet to the taste', the Ju/'hoansi often say. In other areas, G/wi women also collect alates (flying termites), whose sweetness they liken to edible tree gum (Thomas 1959, 153–4). Flying termites, very rich in fat and protein, are plentiful during the early summer in Matopo (Walker 1996, 42–3). It is estimated that between 7.4 and 25.2 per cent of crude protein is obtainable from 0.7 grams of termites (Walker 1996, 43), which could be exploited from termites' nests in organized harvesting strategies. Writing on the Nharo (Naron) San, Dorothea Bleek (1928, 16–17) noted that:

After good rains the whole village decamps to the antheaps, in hope that the male white termites may fly out ... They are considered a great dainty on account of their fat, in which Bushman menu is often lacking, as only a few nuts of all the vegetable food contain fat, and most smaller bucks have little. Hence, there is great rejoicing over a fat eland or a successful haul of termites.

Note the importance the San accorded to eland fat or also that of termites. Similar observations were made from nineteenth-century Namaqualand San, an area next to where the well-known /Xam San originated,

... when game is not procurable they live on roots and such things as mice and beetles, lizards, eggs, and white ants, called 'rijs miere' (rice ants) by the Dutch people. The nests of these ants (termites) are underground and the Bushwomen are specially clever at finding these nests; they discover them by throwing down a stick which gives a hollow sound just above such a nest. (Currlé & Péringuey 1913, 113) But other San from the Carnarvon and Prieska districts whom Dr Louis Péringuey interviewed at the South African Museum (now Iziko) in Cape Town, were unaware of the use of digging sticks

for detecting the presence of white ants under the ground, but only for opening the ant-hills ... they go a long distance to hunt for white ants and roots — this being specially the women's contribution towards the menu (Currlé & Péringuey 1913, 119).

The early writers' use of the term 'rice ants' or commonly 'Bushman rice' is vexed. Consider Dr D.R. Kennemeyer's (1890, 120–30) usage in recounting how the northeastern Cape San exploited some insects:

The larvae of the anthills were also eaten ... Bushman ... availed themselves on the overmastering instinct of the mature insects, which makes the care of their young their first object. They made them collect the larvae ... outer parts of the mound were [then] broken away and staked at a short distance around a central core, left intact for the purpose ... when the contents of the whole anthill were closely packed into this circumscribed space, the core was removed, broken up and placed on the 'thkatsge,' or a small reed mat ... this was then shaken ... winnowed and discarded the mature insects and earthly matter from the glistening white mass, known to the Dutch as ant, or Bushman rice.

Whereas this excerpt may be describing ants, it must also be noted that there were often misunderstandings in the use of 'Bushman rice' with reference to termites. Kennemeyer mentions a reed mat similar to that which James Drury (1935, 94) described as 'a reed sieve, a mat woven of slender reeds in such a way as to leave a fine mesh ... for sifting termite larvae'. Further, the behaviour that he describes for these insects is common in termites, which evacuate and migrate (Noirot & Darlington 2000, 135) their eggs and nymphs to a circumscribed place when disturbed or threatened. Though termites themselves also tend to group in confined spaces during threats, aggregation is generally a behaviour of nymphs that establishes their cohesiveness and functionality (Nalepa & Bandi 2000, 61). Nymphs of cockroaches, the closest relatives of termites, also display this aggregation behaviour.

In most early writings, the terms 'Bushman rice', 'larvae', 'chrysalides' and 'anthills' with reference to termites were often used inappropriately. For instance, George Stow (1905, 59) explains 'Bushman rice' as 'chrysalides of white ants obtained from the ants' nests'. Some writers even used 'white ants' and 'ants' interchangeably to refer specifically to termites (e.g. Thomas 1959, 153–4). This misuse is understandable: many languages including English ordinarily refer to termites erroneously as 'white ants' (Howse 1970, 16).



**Figure 5.** *A distended physogastric termite queen with the timid king and other termites (after Abe et al. 2000).* 

Hence, in *A Bushman Dictionary* (D.F. Bleek 1956, 119), whereas 'k'ane or k'anisa (N1)<sup>1</sup> mean 'edible termites', it is added that these are also called 'ants'. Another entry, /ga:n (pl. /ga:ni) means 'large white ant' (SV<sup>2</sup>: D.F. Bleek 1956, 275), a termite species. Termites and ants are unrelated and clearly different. Like cockroaches (Howse 1970, 15–16), termites are hemimetabolous insects lacking larvae and pupae (Uys 2002, 8), as they hatch from eggs into white miniatures of adult insects called nymphs (Londt 1994, 56). By contrast, ants are holometabolous, with larval and pupal stages. Some, however, clarified that by 'white ants' they meant 'termites' (Currlé & Péringuey 1913, 113).

The terms 'white ants', 'ants' and 'Bushman rice' in early writings therefore referred to actual ants as they also meant termites' glistening eggs and nymphs. Yet the /Xam also ate the actual ants' chrysalides, called //*xe*: (Bleek 1875, 10–12, 16; Stow 1905, 59, 68; Marshall 1969, 367; Hewitt 1986, 35, 92, 97, 111, 150; Deacon & Deacon 1999, 144–5), which, like termites' eggs and nymphs, are white in the early stages. In the Kalahari, too, ants are eaten for their sour taste (Nonaka 1996, 35; Thomas 1959, 95) but, by comparison, termites are a more significant food (Nonaka 1996, 31; 1997, 81). To some degree, ants and termites were regarded as conceptually ambiguous because of the co-existent habitats that I pointed out earlier.

## Mythological and supernatural associations

Whereas termites and their nests (with agarics from the mounds and also the nest soil, which is widely consumed even today in Africa: Howse 1970) had imtual structure.

The Ju'hoan God,  $\neq Gao/na$ ,<sup>3</sup> indubitably linked with and the source of all n/om, is neither intrinsically good nor evil (Marshall 1969, 352; Keeney 1999, 107). Another of his names, Goaxa, refers to his power to create (Marshall 1962; 1999, 8; Katz 1982, 245), the same power that he used to create n/om, and then the lesser god, //Gauwa, together with //Gauwasi, spirits of the dead. Similarly, the !Ko God, Gu/e, has power to create called '/oa', which is also the name of the lesser god whom Gu/e created (Heinz 1975, 20). // *Gauwa* (called the same by other San) is intrinsically ambiguous — good and evil are crucial to his nature. The spirits of the dead, by contrast, are invariably evil agents of death (Marshall 1969, 373), even if their supernatural abilities are not insurmountable. Occasionally, they can also be made to comply with good causes for the benefit of the living (Barnard 1979a, 71), such as bringing potency or helping to cure the sick. Among the Nharo, these  $g / / \tilde{a}\tilde{u}a (g / / \tilde{a}\tilde{u}a - ne pl.)$ sometimes enter into temporary union with dancers to help them enter the spirit world (Barnard 1979a, 72, 75) and acquire supernatural potency.

1975; Barnard 1988), there is unity and

coherence in their fundamental concep-

Potency is therefore an entity that originates from Great God and can filter down the hierarchy of divinity to the people. To his favoured people, he gives enormous potency (Marshall 1969, 351; 1999, 8) through //*Gauwa*. Old K'xau's testimony to Megan Biesele (1975, 151–74; 1980) shows that  $\neq$ *Goa*/*na* does teach novices the techniques of harnessing potency when they visit his house (Marshall 1969, 352; 1999, 18, 21; Keeney 1999, 62, 107). As one Ju/'hoan man said of potency and this house, 'It [*n*/*om*] takes me up to a sacred place where I am filled up again with spiritual strength' (Keeney 1999, 59). To the Ju/'hoansi, n/om causes 'kw!i' ('half-death', Marshall 1962, 250; 1969, 377; Lee 1968, 40), which facilitates supernatural transformations and experiences. These transformations may take bestial and avian forms (Katz 1982, 100-101, 115-16; Biesele 1993, 94-8; Lewis-Williams 1981a, 71–101), allowing some people to engage in nocturnal hunting activities or to visit distant camps (Keeney 1999, 61) or travel to  $\neq Goa/na's$  house, where they may ameliorate mischievous supernatural interference in the fortunes of other people (Walker 1996, 66), or to encounter and also remonstrate with the spirits of the dead (Marshall 1969, 378). Whereas such access can be achieved in solitary contexts, as in dreams (Lewis-Williams et al. 2000, 129) and special revelatory circumstances (Biesele 1975, 173; 1993, 67-70), the healing dance (Marshall 1969) is central in San supernaturalism.

The Great God, however conceived in the often heterogeneous San belief, is 'the great owner of n/om' (Marshall 1999, 20) or 'the ultimate source of all n/um' (Biesele 1978, 933; Marshall 1962, 235, 238; 1969, 351–2; Vinnicombe 1976, 199). These notions of potency are embedded in creation folklore that reifies termites' nests and termites beyond ordinary accounts of their dietetic values. Significantly, fat and creation, as will become clear, are central and pervasive in San thought, belief and ritual.

I begin examining folkloric tropes with a tale that was narrated recently to rock-art researcher Edward Eastwood (pers. comm. 2004) by a Bugakhwe (Yiceu Ngavangava, May 2004) San man from Ngarange (Okavango Panhandle, northwestern Botswana) who said,

Flying termites (*yigri*) were the first meat that God, Khyani, gave to the Khwe people. In the beginning, Khyani created the first man called, Qara/Uma at Tsodilo. At this time both men and women hunted *yigri* — it was the only meat. Then Khyani felt sorry for the Khwe so he sent eland and kudu and taught them via dreams to make bows and arrows to kill this prey. And from that time men became hunters of big meat.

Perhaps that is why the Ju/'hoansi say that  $\neq$ Goa/na 'May tell you in a dream where ... to find an anthill (termites' nest)' (Marshall 1962, 238), as a source of delectable food. That the knowledge of finding termites can be bestowed by divinity in revelatory circumstances is imperative. Explicit mythological and supernatural associations of termites' nests with creator divinities are emphasized further in creation tales. In the 1970s a /Gwikwe man, Naxajiame, told how //Gamá (//gamahare — spirits of the dead), God, created people and their diversity:

At the beginning //Gamá was alone above everything in heaven and the whole sky was the belly of a woman and people just came from the belly of this woman. //Gamá started taking all the people out of a termite's nest. (Valiente-Noailles 1993, 193)

In an elaborated version of this testimony:

All people came from the ant-hill. They were packed inside it. The Basarwa were on top, then came the white people and then the Bakgalagadi and then right at the bottom, the Batswana. It was in this order that //Gamá took them out. He opened up the anthill and said to the Basarwa: 'You get out first'. Then he opened it up further and said to the white men: 'Now you come out', and the last time he opened it up was for the Batswana to come out.

The other things on earth came from the clay pot — '*saxwana*'. It was there that Modimo took the wisdom of the different people. The different skills for the people were taught by Modimo. (Valiente-Noailles 1993, 147)

Termites' nests are highly regarded for not only containing termites (thus fat and protein) and, intrinsically, creative potency, but also their symbolic mediatory role in conflicts. In the 1950s a G/wi man, Ukwane, related how termites' nests played a supernatural intermediary role between *Pishiboro* (G/wi God) and his vengeful elephant wife's in-laws (Thomas 1959, 52-4, 76–9). Pishiboro and his brother were sleeping when his wife caused them great discomfort by rolling them in between her thighs. They fled and, while Pishiboro ran ahead, his brother waited behind. As *Pishiboro* returned, he found that his brother had killed his wife and roasted her breast, and he is made to believe that his wife 'is meat to be eaten'. As they skinned her, the brother cut open the womb and, because she was pregnant, the fetus came out with amniotic fluid which defiantly flowed to the elephant's camp so that everyone there knew that she had been killed. While the elephants gathered for revenge, *Pishiboro's* brother had found a termite mound. He asked it to open itself and it obeyed. He prepared many of them in this way. *Pishiboro* was still cutting up the meat when the elephants approached. His brother told him to go to the termite mound which he had prepared but, when Pishiboro got there and asked it to open, it did not, and presently, when the elephants were very near, the brother found *Pishiboro* standing there helplessly. He then commanded the termite mound: 'Please open, so that this fool can go inside', and it opened and Pishiboro went inside. The brother, who had waited for the elephants alone, kills them all and, in another version, turns into a bird (Biesele 1993, 139-47).

In these narrations, termites were the first meat that God gave to humankind, before all animal meat was created; and their nests become supernatural spaces or portals into 'primal time' (also spirit world: Guenther 1999), where, in the second story, humankind is created and ordered, and in the third, a mound opens up and encloses within its interiors a deity as his safe refuge. There are strong reasons for the San to have made these supernatural associations with the natural history of termites and their nests.

Whereas termites' nests feature as supernatural spaces in tales, these stories are counterbalanced by associations with the creative potency of termites' fat emphasized in San rituals and beliefs around some key folkloric characters. One frequent protagonist in Ju/'hoan folklore is the super heroine, G!kon// 'amdima (one of several names) the first syllable of whose name means termite(s) (Biesele 1993, 148). The synonymity between termites and the heroine is unified by their repletion with fat, a distinguishing feature of flying termites, and pre-eminently termite queens (Fig. 5). Likewise, *G!kon//'amdima* is always described 'as beautiful, and especially as fat, with the smooth skin that comes of having plenty of fat under it' (Biesele 1993, 148). Maidens (Glkon / / amdima being the maiden *par excellence*), it must be recalled, are full of fat and potency. Girls at menarche are strong, or even dangerous, potency (Hewitt 1986) because they have a lot of fat (Lewis-Williams 1981a, 48).

This duality reminds us of a parallel belief that eland possess strong potency owing to their large amounts of fat. The performance of Eland Dance during the girls' puberty ritual demonstrates the link between fat and new maidens. An old Ju/'hoan woman, !Kun/obe, proclaimed, 'The Eland Bull Dance is performed because the eland is a good thing and has much fat. And the girl is also a good thing and she is all fat; therefore they are called the same thing' (Lewis-Williams 1981a, 48, 172). Fat is all important: for the Nharo, flying termites' fat, if available, is a perfect substitute for eland fat (D.F. Bleek 1928, 16–17). Hence, the association of the heroine or maiden, *G*!kon / / 'amdima, with termites is not misplaced; both symbolize fat and potency. In a remarkable parallel to the Eland Dance, this bond between termites and maidens is dramatized in ritual performance among central Kalahari Xade San. A species called //kàm//ặre (scientific name unverified) with a characteristic slow fluttering motion during nuptial flights has become a motif in the song and dance for girls' menarche ceremonies (Nonaka 1996, 31). Termites also feature in the Ju/'hoan avoidance observances accompanying boys' coming-of-age Tshoma rituals (Marshall 1969, 350–53; 1999).

## Metaphoric associations of formlings

Even with such substantial associations of termites' fat and potency, these links need to be rationalized against the painted record of formlings. The link between the ethnography and the formling is explicable by first summing up their most significant characteristics. The graphic contexts, though by no means exhaustive, include:

- human figures, at times in diagnostic postures and features of transformations related to altered states (e.g. elongation, details on their backs, navels, fingers, genital regions, heads, streamer-like emanations from their mouths, armpits and knees) usually sit, crawl, walk and recline on top of, or inside, next to formlings;
- the well-known, but less understood, category of distended human figures (mostly female), therianthropes and other anthropomorphic and zoomorphic conflations and transformations are depicted entering or exiting formling orifices;
- various animals that San consider to be spiritually powerful: e.g. giraffe, kudu, hartebeest/tsessebe, felines, and also aardvarks, flying termites, fish, reptiles etc. are associated with formlings;
- images of plants and other botanical forms which habitually feature next to, on top, or on the edges of formlings;
- funicular forms, sometimes with animals and people clinging and climbing on them, or handprints placed on these, recur with formlings.

These images relate and consolidate metaphoric and symbolic associations of formlings, linking them with a significant cosmological vignette of the San spirit world, which I discuss shortly. From these contexts, some previous views partially acknowledged the centrality of potency in formlings (Garlake 1990; 1995; Smith 1994; Walker 1996) without necessarily specifying the subject-matter. Formlings are however now understood to be termites' nests (Mguni 2002). Because these nests contain things that are full of fat — termites, nymphs, eggs and, crucially, the distended queens - they are powerful incubators of potency. The conceptual union between termites, the San heroine and potency has been clarified. The fat, a significant substance that features in fundamental San rituals and rites of passage (e.g. girls' menarche and boys' first kill, marriage and healing rituals: see Lewis-Williams & Biesele 1978; Lewis-Williams 1981a, 48–52; D.F. Bleek 1935, 2, 23) is crucial in formling symbolism. Fat is an anomalous food, transcending the eating and drinking opposition found in all other hunted and gathered foods. Like honey (the only

other food in this category), people can eat and drink fat (Biesele 1978, 927). It combines wet and dry, hot and cold (Biesele 1993, 86) and thus mediates diverse categories as an embodiment of potency (Marshall 1969, 351; Lewis-Williams 1981a, 51).

Fat and potency are a quality of large animals, which, as I noted, are also painted repeatedly with formlings. Of the large animals, the eland, kudu and giraffe are particularly spiritually powerful (Marshall 1999, 5). Few formlings feature eland since these are rare in the rock art north of the Limpopo. Giraffe, kudu, elephant and hartebeest/tsessebe, on the other hand, dominate in association with formlings. These great meat animals possess n/om and n/ow (Marshall 1957, 235, Biesele 1993, 94–5, 108), and some even /ko:öde (D.F. Bleek 1924, 10), which is an especially dangerous amount of potency. Additionally, contexts featuring metaphors of fish, turtles and crocodiles convey another symbolic focus, which some writers relate particularly to 'rain' and 'water' (Ouzman 1995; Walker 1996, 73). Flying termites are themselves rain metaphors for, as we saw, they emerge to swarm as portents of the wet season. The rain creature in Figure 2B perhaps alludes to this rain symbolism in some formling contexts. The symbolic content of formlings and metaphors in their various specific graphic contexts connoted multifarious supernatural associations or what Peter Garlake (1995, 97) correctly describes as 'multiple allusions'.

Formling graphic contexts, by and large, highlight particular San beliefs about the acme of spirit world potency. The San often embark on voyages to the spirit world in order to harness this potency and to engage in various supernatural activities. This potency is also obtainable from the great meat animals, plants, and potent insects. The Ju/'hoansi like to dance next to a freshly killed eland because in this state it effuses potency. They also like to dance when bees, another potent creature, are swarming, which saturates the atmosphere with potency (Lewis-Williams & Dowson 1999, 64). Similarly, Figure 6 may appear to depict the gathering of flying termites yet, as in the hunting of game or gathering of honey, such contexts are not only about gathering fat as food, but also the harnessing of its potency.

Mentioning fat and potency echoes the association of formlings with women (exemplified earlier by reference to maidens or a heroine). Some writers observed that, 'a female with one arm raised ... appears to direct the flow of arrows as they enter and exit the oval [formling]. Perhaps the figure is the very core of potency' (Coulson & Campbell 2000, 97). At times, only women's paraphernalia, such as digging sticks and tasselled bags (or aprons), occur with formlings and flying termites. Although ordinarily it is women who collect or dig up flying termites, I argue that, at a metaphysical level, this pervasive women/formling context links termites (especially the fat queens), women and the creative power of the spirit world (or the termites' nests as its avatar par excellence). This multifarious creative potency is echoed in the above tale of diverse humankind emerging from a supernatural termites' nest and its earthly parallel, a woman's belly. Termites' nests and women are allied in this spiritually powerful creative and reproductive function. The logic of this symbolism is not difficult to follow; because of the supreme fecundity of the termites' queens inside their nests (prolific containers of fat), these nests become eminent metaphors for women's bellies (human fertility and reproductive capacities). This association probably also derives in part from the observation that termite mounds sustain a thriving range of faunal and floral species as a self-sustaining and prolific natural (re)productive system.

The association of termites' nests and plants is noteworthy, and is also captured in formling contexts. While this choice is natural as these are often found together, they also share similarities and anomalies that unified them conceptually as significant subjects in San thought and cosmology. First, epigeous mounds, like plants or trees, have the propensity to link the earth, under ground and sky realms of the San cosmos. Mound chimneys parallel trees: they both emanate from underground and develop skywards. The sky and the underground in San thought are synonymous with the spirit world. Furthermore, when flying termites emerge from underground nests they, like the mound chimneys and trees, soar into the sky realm, thereby mediating the tiered cosmos (Fig. 7). Termites' nests and flying termites, therefore, like plants or trees (and also potent antelope) mediate the natural and supernatural worlds (Biesele 1978, 930–31) as metaphors of the axis mundi. The axis mundi, a term that Mircea Eliade used to describe supernatural means connecting the earth, sky and underground realms, appears as a rainbow, stairs, bridge, ladder, cord, vine, mountain, and so forth in different cultures (Eliade 1964, 259, 492). Yet the Hei//om (Heikum) may ride the back of an antelope to climb a lebensbaum ('tree of life') en route to God's house (Guenther 1999, 188).

Funicular images in formling contexts further suggest graphically this notion of *axis mundi*. In Figure 3, for example, a sinuous line weaves through the formling. It partially emerges and disappears beneath handprints. This relationship may not be accidental. Unlike the familiar graphic expression of people



**Figure 6.** Swarms of termites in nuptial flights are associated with plant forms and people collecting them (A after Mguni 2002, B redrawn from Pager, copy in Rock Art Research Institute archives, C after Parry 2000).

walking or clinging onto these lines (Lewis-Williams 1981b; Lewis-Williams *et al.* 2000), handprints perhaps allude to the holding of these lines. While the lines on formlings lack microdots such as found in some Drakensberg examples, their contexts refer to the same San notion of supernatural ascent along lines, strings, chains, cords and ropes that hang from the sky (Schapera 1930, 184, 188; Marshall 1962, 238; 1999, 21, 25; England 1968, 431–2; Biesele 1980, 55–6; Guenther

1999, 188), which the San also call the 'threads of the sky' or 'threads of light' that assist the soul's ascent to the sky realm (Lewis-Williams *et al.* 2000; Keeney 2003, 38).

## God's house: transformative and creative potency

The oft-mentioned 'threads of light' lead to powerful and dangerous entities of the spirit world: God and his house (Marshall 1962, 238, 241-2; 1999, 25; Keeney 1999, 61, 62). Ju/'hoan beliefs concerning  $\neq Goa/na$ 's residence vary (Keeney 1999, 61–2); in Nyae Nyae, they say he lives in a two-storey house next to a tree in the eastern sky, while / / Gauwa's (lesser god) house in the western sky has two trees. This house resembles an ordinary San hut, but its exterior is 'hairy like a caterpillar' (Schapera 1930, 184). Likewise, / / Gâuab, God of the Damara, lives in a village resembling a Damara village with a shady tree and a holy fire in the middle. In //*Gâuab*'s heaven, life is similar to ordinary life except that hunting there is more successful and foraging is easier (Vedder 1928, 62; Barnard 1988, 227). The eastern and north-western Kalahari Ju/'hoansi believe that honey, locusts, flying termites and butterflies are all superabundant in God's house (Schapera 1930, 184, 397). There are also leopards, zebras, lions, pythons, mambas (as we saw in the natural history of termites' mounds), elands, giraffe, gemsbok, and kudu (Biesele 1978, 933; 1980, 59; 1993, 94) in this house. For the G/wi, their God N!adima (also Pishiboro, we saw earlier) lives with termites and other invertebrate taxa as his creatures that he jealously protects (Silberbauer 1981, 75). Similarly, a Ju/'hoansi informant, Kunta Boo, from Tshumkwe (Kalahari), said that there are many termite mounds in  $\neq Goa / na's$  house, lots of food and everything (Jeremy Hollmann pers. comm. 2002).

In spite of these variations, the San all understand the associations of the great divinity's house and what can be encountered there. Their varied accounts are not precise on the nature of this house, but it appears to be in the form of ordinary San dwellings. Importantly, this house contains a litany of potent subjects as his possessions: spirit beings and creatures, trees, felines, potent insects, and great meat animals, principally giraffe and large antelope (Biesele 1978, 933; 1993, 94–5, 108). All these entities are compounded to saturate this place as the zenith of potency, which I subsequently refer to generically as God's house. In rock art, formling contexts feature vegetal and animal metaphors, as do these San testimonies about God's house. Formling contexts parallel this house as embodiments of the ultimate source of all potency (Biesele 1978, 933; Marshall 1962, 235, 238; 1969, 351-2; Vinnicombe 1976, 199). Termites' nests in the natural world thus evoke God's house in the spirit world as symbolic wombs of fat and, by extension, incubators of saturated potency. This conceptual transposition is logical in San thought and symbol, as there is a strong metaphoric correspondence between God's house and termites' nests:

• Both are located beyond the plane of ordinary life (Fig. 7): termites' nests occur underground, which

is synonymous with the spirit realm and the sky, where God's house is found. Termites' nests are also associated with rock shelters and crevices, which are powerful intermediary places (or portals) linking the material and spirit worlds (e.g. Lewis-Williams & Dowson 1999);

- Both contain saturations of fat and potency, as God himself, like flying termites and particularly the distended queens (Fig. 5), is especially fat (Walker 1996, 73);
- Both contain and sustain varied vegetal, animal and insect associations: the ecology of termites' nests encompasses floral and faunal species that co-exist with termites or that favour the specialized habitats of termites' nests as protected refuges. Likewise, God's house contains animals, trees, insects, and spirit creatures under his protection.

This correlation of termites' nests with avatars of God's house parallels what we saw earlier of how humankind and its diversity originated from such a nest, and also how *Pishiboro* sought refuge in a termite mound. A revealing acknowledgment of this observation came from /Kunta, a Ju/'hoan healer, describing how he obtained n/om:

It wasn't n/om which had come from people's hands, but n/om of the spirits. The one they call |Xu - |Xu|is G≠kao N!a'an [!Xu is another name for the great creative god who appears also in the folktales from 'another time'] — he gave me n/om. The spirits took this spot in the middle of my head and cured it. They took my head hairs to the leaders of the gods ... We Ju/hoansi say that 'Nonabe' [another name for the great god] helped me and I was fine. I've worked since then at my village. And the spirits help me. I've healed people. Nonabe is the 'owner of work', 'the owner of authority'. His name is like G≠kao N!a'an, he's Nonabe, it's his respect name. You don't see him — he just works through voices. He's like the Government ... He stays inside a termite mound. It is the speech of the one inside the termite mound. His speech is not he. The speech itself is what is the owner of authority. (Biesele 1995, 14)

Transmutations of these older San beliefs to the new Western notions of centralized authority are evident in the use of Government as a simile for divine authority. Similarly, recent Judeo-Christian theological views are now metamorphosed with the older stratum of San religious cosmological notions. Mathias Guenther (1989, 45–6; 1999, 117) documented a story by a Nharo informant, //Ose, who claimed that it was a genuine story of the old people (implying that it had been passed down from earlier generations; this is probably true considering that, regardless of the shifting characters the story espouses fundamental tenets of this belief).



**Figure 7.** A San cosmological schema showing related intermediaries of termitaria, termites, antelope, tree and a healer and the spirit world location of God's house (Mguni 2002).

Jesso Kreste [Jesus Christ] lives in a house not far from the two termite-hill houses inhabited by Addam and Effa [Adam and Eve]. They store bundles of healing arrows in front of their houses which Jesso Kreste will take and deliver to the //Gauwani, his servants. These arrows are then passed on to the dancers, to bestow them potency. Guenther argues that Christ amongst the Nharo is the latest incarnation of the older San trickster figure (e.g. *Pishiboro*). In accord with /Kunta's account, //Ose adds that 'His [Jesso] abode is //*Gauwa*'s realm, the "good place" in heaven

[spirit world] ... He lives on his own ... in a dwelling that is either a two-storey 'European house' or a tall termite-hill' (Guenther 1999, 118). Even with Western and biblical nuances, these accounts unequivocally clarify the San understanding of termites' nests as God's house profuse with potency. Moreover, the link between Adam and Eve and termite-hill houses clearly corroborates the notion of creation emanating from a termites' nest espoused in San testimonies that I cited earlier. This transposition is also consistent with San cosmology, where the underground (a realm where both termites' nests and God's house are located) is powerful and fraught with dangerous spirit creatures (Silberbauer 1965, 84, 86). The San speak about transformation as a precondition for entering and withstanding these menacing creatures and the dangerous potency in God's house (see Old K'xau's testimony in Biesele 1975, 151-74; 1980; Keeney 1999; 2003). God's house and termites' nests are both ineluctably places of great transformative and generative powers. As termites undergo biological transformations into reproductive mature (becoming alates) they accumulate fat, and thus potency. The ultimate quintessence of this transformation is the physogastric queen, found in nests underground, which is a supernatural realm where, in San thought and belief, divinities and spirit creatures live. Likewise, visitors to God's house transform or 'mature' into potent forms such as supernatural mambas and other creatures to withstand the ominous potency of this place. Reverting to the painted record, Figure 2A depicts a human figure climbing up a 'plant-cum-funicular' form across a formling, alluding to the axis mundi, while the associated therianthropes suggest spirit transformations in this realm. The gaping feline alludes to the frequent revelation that lions and leopards in particular are God's possessions in his house. Felines are also the most feared manifestations of uncontrollable and excessive potency. So too is San God, whose potency is feared by even the most powerful spirit travellers. In all, fat, transformative and creative powers are united in formling contexts as epitomes of God's house.

## Nuances and subtleties of God's house

The complexity of San belief and cosmological knowledge, in terms of the multi-layering of metaphors and symbols, is variously manifested in their artistic and oral forms of expression. There are subtle details in the features of San rock art that are supported by the nuances of oral commentaries in the ethnography. Termites' nests as the key physical phenomenon around which formlings were modelled are nature's wombs of

fat and, by extension, spiritual incubators of potency. Their spirit realm analogue is the all-powerful God's house as the zenith of creative and transformative potency. This house, as we saw, contains all manner of potent extra-corporeal creatures. Similarly, in the paintings, the frequent sectional view of these nests (formlings), intermeshed with a variety of other imagery, suggests a graphic revelation of this spirit realm entity. Both God's house and termites' nests highlight transformative and generative powers of the spirit world: it is in this realm where, among other things, spiritual visitors transform into bestial and other forms in order to withstand the ominous power of God. These visitors, however, transform back to ordinary life rejuvenated with potency. It is also in this realm that the San God transforms the dead people's souls into //*Gauwasi*, who thereafter become his eternal messengers. This God also rejuvenates these 'spirits of the dead' when they get old (Barnard 1979a, 72).

Such transformations are also evident in the natural history pertaining to the renewal of termite colonies, inception of new ones and the constant development of their nests. Nevertheless, as religious statements are symbolic, not iconic, because they signify by association of ideas rather than by likeness or similarity (Lewis-Williams 1981a, 3–7), formlings must not be seen as one-to-one configurations of any San notion of God's house (although specific testimonies describe God as living in termites' nests). Instead, judging by their graphic contexts and associations, formlings evoked and symbolized the multifarious God's realm, which fuses elements of both the natural and supernatural worlds. These multiple and richly nuanced metaphoric and symbolic associations based on the natural history of termites and their nests are consistent with the multifaceted San belief system. Yet, within this complexity some artists perceived these nests (potency houses) in idiosyncratic, but conceptually congruent, ways as the *gebesi* (stomach, which is the seat of potency in people, as adduced by Garlake 1990; 1995). This idiosyncrasy is a feature of San rockart and worship. Religious revelations and experiences of outstanding and charismatic (even idiosyncratic) individuals may become generally accepted as accurately representing the spirit world (Dowson 1988, 117). This point explains partly the broad uniformities in concepts evoked in San imagery and oral testimonies. It is also the reason for the pervasive notion of termites' nests as eminent avatars of God's house in the rock-art north of the Limpopo. Yet not all the reports of spiritual experiences have the same level of success; some remain or remained idiosyncratic revelations

(Dowson 1988, 117–18). So the *gebesi* vignette, while deviating from the general spiritual termites' nests canon, would also have been understood: the 'thought processes involved in' its 'creation were necessarily part of the San cognitive system' (Dowson 1988, 118) that allowed conceptual formulation, construction and apotheosis of termites' nests as God's abode. Formlings were penetrating symbols embedded at the core of a multi-layered matrix of San religious ideology. At one level of metaphoric mediation in San supernaturalism, they depicted how artists translated and articulated connections between the physical and the spirit worlds.

#### Acknowledgements

I gratefully acknowledge The Swan Fund (and in particular Peter Mitchell) in funding my fieldwork. I also thank the Rock Art Research Institute for use of its resources, then Stephane Hoerle and Catherine Namono for commenting on the draft. I also thank especially Edward Eastwood for sharing with me his views and some of his ethnographic information, and Jeremy Hollmann. I am grateful to Vivienne Uys for specialist input as a termitologist. David Lewis-Williams, Ben Smith, Christopher Chippindale and Janette Deacon encouraged this project; I thank them. Peter Garlake and Meg Cumming have commented positively on this research: I thank them too and, finally, the anonymous referees. Contents of this paper are my own responsibility.

> Siyakha Mguni Rock Art Research Institute University of the Witwatersrand P Bag X 3, Wits 2050 South Africa E-mail: siyakha@rockart.wits.ac.za

#### Notes

- 1. Northern Kalahari Auen San language.
- 2. Southern dialect of the San from the southern borders of Botswana.
- 3. For ease of reference and the complexity of the nature of this belief, I subsequently use this name or simply Great God (not the Judeo-Christian God) as an encompassing appellation when discussing Ju/'hoansi testimonies or very similar beliefs from other San, except when a specific linguistic San group is mentioned and an equivalent name is given.

#### References

Abe, T., D.E. Bignell & M. Higashi (eds.), 2000. *Termites: Evolution, Sociality, Symbioses, Ecology*. Dordrecht: Kluwer Academic Publishers.

- Barnard, A., 1979a. Nharo Bushman medicine and medicine men. Africa 49, 68–79.
- Barnard, A., 1979b. Kalahari Bushmen settlement patterns, in Social and Ecological Systems, eds. P. Burnham & R. Ellen. London: Academic Press, 131–44.
- Barnard, A., 1988. Structure and fluidity in Khoisan religious ideas. Journal of Religion in Africa 18, 216–36.
- Biesele, M., 1975. Folklore and Ritual of !Kung Huntergatherers. Unpublished PhD Thesis, Department of Anthropology, Harvard University, Cambridge.
- Biesele, M., 1978. Sapience and scarce resources: communication systems of the !Kung and other foragers. *Social Science Information* 17, 921–47.
- Biesele, M., 1980. 'Old K'xau', in *Shamanic Voices*, ed. J. Halifax. Harmondsworth: Penguin, 54–62.
- Biesele, M., 1993. *Women like Meat: the Folklore and Foraging Ideology of the Kalahari Ju/'hoan.* Johannesburg: Witwatersrand University Press.
- Biesele, M., 1995. 'Different people just have different minds': a personal attempt to understand Ju/'hoan storytelling aesthetics. *Current Writing* 7, 1–15.
- Bleek, D.F., 1924. *The Mantis and his Friends*. Cape Town: Maskew Miller.
- Bleek, D.F., 1928. *The Naron: a Bushman Tribe of the Central Kalahari*. Cambridge: Cambridge University Press.
- Bleek, D.F., 1935. Beliefs and customs of the /Xam Bushmen. Part VII: Sorcerers. *Bantu Studies* 9, 1–47.
- Bleek, D.F., 1956. *A Bushman Dictionary*. New Haven (CT): American Oriental Society.
- Bleek, W.H.I., 1875. A brief account of Bushman folklore and other texts. *Cape Parliamentary Paper*, Cape Town.
- Bleek, W.H.I. & L.C. Lloyd, 1911. Specimens of Bushman Folklore. London: George Allen.
- Breuil, H., 1944. South African rock-paintings: Landscapes of the Soul. Trans. M.E. Boyle. (Prologue for an exhibition by Walter Battis.)
- Breuil, H., 1966. Southern Rhodesia: the District of Fort Victoria and Other Sites. Paris: Singer-Polignac Foundation/ Trianon Press.
- Coaton, W.G., 1947. Biology of South African wood-eating termites. *Journal of Entomological Society of South Africa* 9, 130–77.
- Cooke, C.K., 1959. Rock art of Matabeleland, in *Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland*, ed. R. Summers. Salisbury: National Publications Trust, 112–62.
- Cooke, C.K., 1963. Report on the excavations at Pomongwe and Tshangula Caves, Matopo Hills, Southern Rhodesia. South African Archaeological Bulletin 18, 73–151.
- Cooke, C.K., 1969. *Rock Art of Southern Africa*. Cape Town: Books of Africa.
- Coulson, D. & A. Campbell, 2000. *African Rock Art: Paintings and Engravings on Stone*. New York (NY): Harry N. Abrams Publishers.
- Crane, E., 1982. *The Archaeology of Beekeeping*. London: Duckworth.
- Currlé, L. & L. Péringuey, 1913. Notes on the Namaqualand Bushmen. *Transactions of the Royal Society of South Africa* 3, 113–20.

- Deacon, H.J. & J. Deacon, 1999. *Human Beginnings in South Africa: Uncovering the Secrets of the Stone Age.* Cape Town: David Philip.
- Denbow J., 1986. A new look at the later prehistory of the Kalahari. *Journal of African History* 27, 3–28.
- Dowson, T.A., 1988. Revelations of religious reality: the individual in San rock-art. World Archaeology 20, 116–28.
- Drury, J., 1935. Preliminary report on the anthropological researches in South West Africa. Annals of the South African Museum 24, 89–109.
- Eastwood, E.B. & E. Cnoops, 1999. Capturing the spoor: towards explaining kudu in San rock-art of the Limpopo-Shashi confluence area. *South African Archaeological Bulletin* 54, 107–19.
- Eastwood, E.B., C. Bristow & J.A. Van Schalkwyk, 1999. Animal behaviour and interpretation in San rock-art: a study in the Makgabeng plateau and Limpopo-Shashi confluence area, southern Africa. *Southern African Field Archaeology* 8, 60–75.
- Eliade, M., 1964. *Shamanism: Archaic Techniques of Ecstasy.* New York (NY): Routledge & Kegan Paul.
- England, N.M., 1968. Music Among the Ju/wa-si of South West Africa and Botswana. Unpublished PhD Thesis, Department of Anthropology, Harvard University, Cambridge.
- Frobenius, L., 1929. The mystery of South Africa's prehistoric art: newly discovered rock-drawings of divergent style — the problem of the age and affinities. *The London Illustrated News*, 333–5.
- Frobenius, L., 1930. Prehistoric art in South Africa: 'The King's monuments' — a unique series of rock-drawings recently discovered in Southern Rhodesia. *The London Illustrated News*, 338–41.
- Frobenius, L., 1962 edition. *Madsimu Dzangara*. Graz: Akademische Druck.
- Garlake, P.S., 1987. *The Painted Caves*. Harare: Modus Publications.
- Garlake, P.S., 1990. Symbols in the paintings of Zimbabwe. South African Archaeological Bulletin 45, 17–27.
- Garlake, P.S., 1992. Rock Art in Zimbabwe. Unpublished PhD Thesis, School of Oriental and African Studies, University of London.
- Garlake, P.S., 1995. *The Hunter's Vision: the Prehistoric Art* of Zimbabwe. Seattle (WA): University of Washington Press.
- Goodall, E., 1959. The rock paintings of Mashonaland, in Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland, ed. R. Summers. Salisbury: National Publications Trust, 3–111.
- Goodwin, A.J.H., 1946. *Exhibition of Prehistoric Art in Southern Africa*. Cape Town: South African Association of Arts & South African Archaeological Society.
- Guenther, M.G., 1989. Bushman Folktales: Oral Traditions of the Nharo of Botswana and the /Xam of the Cape. Stuttgart. Franz Steiner Verlag Wiesbaden.
- Guenther, M.G., 1999. *Tricksters and Trancers: Bushman Religion and Society*. Bloomington (IN): Indiana University Press.
- Guy, R.D., 1972. The honey hunters of southern Africa. Bee

World 53, 159-66.

- Hall, R.N., 1911. Rhodesia Museum, Bulawayo: What Visitors Can See to which is Added the Bushman Paintings at Maatesjemshlope and Hillside, near Bulawayo. Bulawayo: Philpott & Collins.
- Hall, R.N., 1912. The Bushmen, the first human occupiers of Rhodesia. Proceedings of the Rhodesian Scientific Association 11, 140–50.
- Heinz, H.-J., 1975. Elements of !Ko Bushman religious beliefs. Anthropos 70, 17–41.
- Heinz, H.-J. & B. Maguire, 1974. The Ethno-biology of the !Ko Bushmen: their Ethno-botanical Knowledge and Plant lore. (Occasional Paper No. 1.) Gaberone: Botswana Society.
- Hewitt, R.L., 1986. Structure, Meaning and Ritual in the Narratives of the Southern San. Hamburg: Helmut Buske Verlag (Quellen zurKhoisan-Forchung 2).
- Hitchcock, R.K., 1982. The Ethnoarchaeology of Sedentism: Mobility and Site Structure among Foraging and Food producing Populations in the Eastern Kalahari Desert, Botswana. PhD Thesis, University of New Mexico (NM): University Microfilms International.
- Hollmann, J.C., 2002. Natural models, ethology and San rock paintings: pilo-erection and depictions of bristles is south-eastern South Africa. *South African Journal of Science* 98, 563–67.
- Holm, E., 1957. Frobenius' cigars. South African Archaeological Bulletin 12, 68–9.
- Holt, J.A. & M. Lepage, 2000. Termites and soil properties, in *Termites: Evolution, Sociality, Symbioses, Ecology*, eds. T. Abe, D.E. Bignell & M. Higashi. Dordrecht: Kluwer Academic Publishers, 389–407.
- Howse, P.E., 1970. Termites: a Study in Social Behaviour. London: Hutchinson University Library.
- Huffman, T.N., 1983. The trance hypothesis and the rock art of Zimbabwe. South African Archaeological Society Goodwin Series 4, 49–53.
- Katz, R., 1982. Boiling Energy: Community Healing among the Kalahari !Kung. Cambridge (MA): Harvard University Press.
- Keeney, B., 1999. Kalahari Bushman Healers. Philadelphia (PA): Ringing Rocks Press.
- Keeney, B., 2003. Ropes to God: Experiencing the Bushman Spiritual Universe. Philadelphia (PA): Ringing Rocks Press.
- Kennemeyer, D.R., 1890. Stone implements of the Bushmen. *Cape Illustrated Magazine* 1, 120–30.
- Kinahan, J., 1991. Pastoral Nomads of the Central Namibia Desert: the People History Forgot. Windhoek: New Namibia Books.
- Lee, D.N. & H.C. Woodhouse, 1970. Art on the Rocks of Southern Africa. Cape Town: Purnell.
- Lee, R.B., 1968. The sociology of the !Kung Bushman trance performances, in *Trance and Possession States*, ed. R. Prince. Montreal: R.M. Blucke Memorial Society, 35–54.
- Lee, R.B., 1972. !Kung spatial organisation: an ecological and historical perspective. *Human Ecology* 1, 125–47.
- Levin, H., M. Branch, S. Rappoport & D. Mitchell, 1985.

*A Field Guide to the Mushrooms of South Africa.* Cape Town: Struik.

- Lewis-Williams, J.D., 1981a. Believing and Seeing: Symbolic Meanings in Southern San Rock Paintings. London: Academic Press.
- Lewis-Williams, J.D., 1981b. The thin red line: southern San notions and rock paintings of supernatural potency. *South African Archaeological Bulletin* 36, 5–13.
- Lewis-Williams, J.D. & M. Biesele, 1978. Eland hunting rituals among northern and southern San groups: striking similarities. *Africa* 48, 117–34.
- Lewis-Williams, J.D. & T.A. Dowson, 1999. *Images of Power: Understanding San Rock Art*. 2nd edition. Cape Town: Southern Book Publishers.
- Lewis-Williams, J.D., G. Blundell, W. Challis & J. Hampson, 2000. Threads of light: re-examining a motif in southern African San rock art. *South African Archaeological Bulletin* 45, 123–36.
- Londt, J.G.H., 1986 (1994 revised edition). A Guide to the Insects of Southern Africa. Natal: Wild Life Society.
- Marshall, L.J., 1957. N!ow. Africa 27, 232–40.
- Marshall, L.J., 1962. !Kung Bushman religious beliefs. *Africa* 32, 231–49.
- Marshall, L.J., 1969. The medicine dance of the !Kung Bushmen. *Africa* 34, 347–81.
- Marshall, L.J., 1999. *Nyae Nyae !Kung: Belief and Rites.* (Peabody Museum Monographs.) Cambridge (MA): Harvard University Press.
- Mason, R.J., 1958. New prehistoric paintings in the Brandberg, South West Africa, and the Waterberg, Northern Transvaal. *Lantern* 7, 357–81.
- Mguni, S., 2002. Continuity and Change in San Belief and Ritual: Some Aspects of the Enigmatic 'Formling' and Tree Motifs from Matopo Hills Rock Art, Zimbabwe. Unpublished MA Thesis, Archaeology Department, University of the Witwatersrand, Johannesburg.
- Mguni, S., 2004. Cultured representation: understanding 'formlings', an enigmatic motif in the rock-art of Zimbabwe. *Journal of Social Archaeology* 4, 181–99.
- Miller, E.M., 1964. *Biology of Termites*. Boston (MA): D.C. Heath & Company.
- Nalepa, C.A. & C. Bandi, 2000. Characterizing the ancestors: paedomorphosis and termite evolution, in *Termites: Evolution, Sociality, Symbioses, Ecology*, eds. T. Abe, D.E. Bignell & M. Higashi. Dordrecht: Kluwer Academic Publishers, 53–75.
- Noirot, C., 1970. The nests of termites, in *Biology of Termites* 2, eds. K. Krishna & F.M. Weesner. New York (NY): Academic Press, 73–125.
- Noirot, C. & J.P.E.C. Darlington, 2000. Termite nests: architecture, regulation and defence, in *Termites: Evolution*, *Sociality, Symbioses, Ecology*, eds. T. Abe, D.E. Bignell & M. Higashi. Dordrecht: Kluwer Academic Publishers, 121–39.
- Nonaka, K., 1996. Ethnoentomology of the central Kalahari San. *African Study Monographs, Supplement* 22, 29–46.
- Nonaka, K., 1997. The role of edible insects in the dietary life of the '|Gui' and '||Gana' San in the central Kalahari Desert. (Japanese titled entomology journal)

3, 81–99.

- Orpen, J.M., 1874. A glimpse into the mythology of the Maluti Bushmen. *Cape Monthly Magazine* (N.S.) 9, 1–13.
- Ouzman, S., 1995. The fish, the shaman and the peregrination: San rock paintings of mormyrid fish as religious and social metaphors. *Southern African Field Archaeol*ogy 4, 3–7.
- Pager, H., 1971. Ndedema. Graz: Akademische Druck-und Verlagsanstalt.
- Pager, H., 1973. Rock paintings in southern Africa showing bees and honey gathering. *Bee World* 54, 61–8.
- Parry, E., 2000. Legacy on the Rocks: the Prehistoric Huntergatherers of the Matopo Hills, Zimbabwe. Oxford: Oxbow Books.
- Rouland-Lefévre, C., 2000. Symbiosis with fungi, in *Termites: Evolution, Sociality, Symbioses, Ecology*, eds. T. Abe, D.E.
  Bignell & M. Higashi. Dordrecht: Kluwer Academic Publishers, 289–306.
- Rudner, J. & I. Rudner, 1970. *The Hunter and his Art*. Cape Town: Struik.
- Schapera, I., 1930. *The Khoisan Peoples of South Africa*. London: Routledge & Kegan Paul.
- Silberbauer, G.B., 1965. *Report to the Government of Bechuanaland on the Bushman Survey*. Gaberone: Bechuanaland Government Printer.
- Silberbauer, G.B., 1981. Hunter and Habitat in the Central Kalahari Desert. Cambridge: Cambridge University Press.
- Skaife, S.H., 1979. *African Insect Life*. Revised edition. Johannesburg: Struik.
- Smith, A.B., 1994. Metaphors of space: rock-art and territoriality in southern Africa, in Contested Images: Diversity in Southern African Rock Art Research, eds. T.A. Dowson & J.D. Lewis-Williams. Johannesburg: Witwatersrand University Press, 373–84.
- Stow, G.W., 1905. *The Native Races of South Africa*. London: Swan Sonnenschein.
- Thomas, E. M., 1959. *The Harmless People*. London: Secker & Warburg.
- Turner, J.S., 2000. Architecture and morphogenesis in the mound of Macrotermes michaelensis (Sjöstedt) (Isoptera: Termitidae, Macrotermitinae) in northern Namibia. *Cimbebasia* 16, 143–75.
- Uys, V., 2002. A Guide to the Termite Genera of Southern Africa. Pretoria: ARC-Plant protection Research Institute.
- Valiente-Noailles, C., 1993. *The Kua: Life and Soul of the Central Kalahari Bushmen*. Rotterdam: A.A. Balkema.
- van der Westhuizen, G.C.A. & A. Eicker, 1994. Field Guide: Mushrooms of Southern Africa. Cape Town: Struik.
- van Wyk, B. & P. van Wyk, 1997. Field Guide to Trees of Southern Africa. Cape Town: Struik.
- Vedder, H., 1928. The Berg Damara, in *The Native Tribes of South West Africa*, eds. C. Hahn, H. Vedder & L. Fourie. Cape Town: Cape Times Ltd, 37–8.
- Vinnicombe, P., 1976. People of the Eland: Rock Paintings of the Drakensberg Bushmen as a Reflection of their Life and Thought. Pietermaritzburg: Natal University Press.
- Walker, N.J., 1987. The dating of Zimbabwean rock art. *Rock Art Research* 4, 137–49.

- Walker, N.J., 1994. Stone Age funerary practice in the Matopos, Zimbabwe: a contribution to understanding death rites in southern Africa. *South African Field Archaeology* 3, 94–102.
- Walker, N.J., 1995. Late Pleistocene and Holocene Hunter-gatherers of the Matopos. Uppsala: Societas Archaeologica Upsaliensis.
- Walker, N.J., 1996. *The Painted Hills: Rock Art of the Matopos*. Harare: Mambo Press.
- Whitley, D.S., 1994. Shamanism, natural modeling and the rock art of the Far Western North American huntergatherers, in *Shamanism and Rock Art in North America*, ed. S.A. Turpin. (Special Publication 1.) San Antonio (CA): Rock-art Foundation, 1–43.
- Whitley, D.S., R.I. Dorn, J. Simon, R. Rechtman & T.K Whitley, 1999. Sally's Rockshelter and the archaeology of the vision quest. *Cambridge Archaeological Journal* 9(2), 221–47.
- Woodhouse, H.C., 1990. Bees and honey in the prehistoric

rock art of southern Africa. *The Digging Stick* 6, 5–7.

Yellen J.E. & A. Brooks, 1989. The Late Stone Age of the !Kangwa-/Xai-/Xai valleys, Ngamiland. Botswana Notes & Records 20, 5–27.

#### Author biography

*Siyakha Mguni* was recently appointed Resident Archaeologist and Curator of rock art at Bushmans Kloof Wilderness Reserve and Retreat, Cederberg, South Africa. He was previously Research Officer at the University of the Witwatersrand where he completed a Masters (with distinction) in 2002. His Honours degree (University of Cape Town, 1997) applied Harris Matrices to sequence the South-western Cape rock-art chronology. He is consolidating his PhD study. His other interests include: current indigenous perceptions of prehistory; the archaeology archives and public interface; and the interpretation of Khoe-San rock-art imagery.