

## 2 • Cartographic Content of Rock Art in Southern Africa

TIM MAGGS

Africa has an unassailable claim, based on the fossil and archaeological evidence, to be considered the cradle of humankind and of culture. Much of the current debate on the emergence of anatomically modern humans and of modern modes of behavior, including the origins of art, likewise centers on the African evidence. Although little evidence of early art has yet been forthcoming from tropical Africa, in southern Africa, defined here as south of the Zambezi and Cunene Rivers (fig. 2.1), rock art has been dated to at least twenty-five thousand years ago. This places the origins of African rock art in the same age range as the oldest art anywhere in the world.

In southern Africa, a significant change took place in the Stone Age sequence about thirty thousand years ago, leading to what is known as the Later Stone Age. This cultural phase, though not closely similar to the European Upper Paleolithic, is nevertheless similarly associated with painting and engraving on rock. Little can yet be said about the art of the earlier millennia, but the past five thousand years certainly saw an extensive production of images on the rocks. These images include paintings,

which occur in all areas of the subcontinent where the local geology and geomorphology has allowed the formation of caves and rock-shelters, and also engravings, which are found in many of the drier central and western areas where there are suitable rock outcrops. Where this art can be linked to particular groups of people, it is almost always to Khoisan hunter-gatherers, a group popularly, though often derogatorily, called Bushmen or San by others.

Interpretation of southern African rock art has proceeded through the twentieth century with a series of wide pendulum swings. The most important advance has come in the past two decades with the pioneering work of Vinnicombe, Lewis-Williams, and others. They have combined meticulous study of the art itself, the findings of modern anthropological research on the last surviving hunter-gatherers of the Kalahari, and an intense reworking of the nineteenth-century ethnography, recorded mainly by the Bleek family from surviving hunter-gatherers of the Cape Province.<sup>1</sup>

There is little direct link between the ethnography, both nineteenth- and twentieth-century, and the rock art. Precious little is recorded on what the communities who actually created the rock art thought about it. In fact most of the ethnography has come from areas where there is little or no rock art, while the best-known art is from areas where little or no ethnography was recorded before the demise of hunter-gatherers. It has therefore been difficult to understand the art and the motivation behind it. The extensive nineteenth-century records were largely incomprehensible (they were relegated to the category of mythology) until recent anthropological studies shed light on the cosmology of surviving Kalahari hunter-gatherers.

Central to the new paradigm is the role of shamanistic religion, now known to have characterized Khoisan



FIG. 2.1. REFERENCE MAP OF SOUTHERN AFRICA. This map shows the location of places mentioned in the text.

1. The first major works in this new paradigm of research were Patricia Vinnicombe, *People of the Eland: Rock Paintings of the Drakensberg Bushmen as a Reflection of Their Life and Thought* (Pietermaritzburg: University of Natal Press, 1976), and J. David Lewis-Williams, *Believing and Seeing: Symbolic Meanings in Southern San Rock Paintings* (London: Academic Press, 1981). There is now an extensive literature, particularly by Lewis-Williams and his students and colleagues.

hunter-gatherer societies. The art is considered to reflect this religion to a large extent, including the mystical experiences and visions of the shaman during trance ceremonies. This interpretation would clearly deny the art an essentially cartographic nature unless cartography is defined broadly to include cosmographical subjects.

An earlier generation of rock art researchers, mainly amateurs with a great deal of field experience in finding and recording rock art, did consider a few examples of the art as depicting landscape features. In general these researchers were operating within a nontheoretical paradigm developed between the 1950s and 1970s in reaction to the hyperdiffusionism of Henri Breuil and others who saw southern African art as the creation of offshoots from Mediterranean “civilizations.”<sup>2</sup> Examples where the rather literal interpretations of this approach have given way to more complex interpretations in keeping with the shamanistic paradigm are included below (see plate 1 and fig. 2.4). Although the current climate of interpretation would therefore argue against elements of the art representing actual landscape features, there are certain aspects that appear to be involved with spatial understanding at a cosmological level, and these will be discussed below.

In addition to the Stone Age culture, two other lifestyles reached southern Africa within the past two thousand years, before the advent of European colonialism. Pastoralists of Khoisan origin occupied parts of the drier west and southwest, while Bantu-speaking agriculturists with a metal technology covered the east wherever rainfall was adequate for crop production. Archaeologists are still not in agreement on whether the pastoralists contributed anything at all to rock art. The categories of images most likely to have been done by pastoralists—handprints and dot patterns—currently are not interpreted spatially, so this category of the art need not concern us here. Rock art by the agriculturists, however, though still little known and researched, has a dominant cartographic theme and therefore needs to be covered in some detail.

Some paintings, notably of the “late white” series, are attributed to agriculturist societies. These images, widespread in southern Africa and as far north as Tanzania, are the work of many different communities but are linked by being mostly white or yellow-white finger paintings with a major human and animal theme.<sup>3</sup> However, the more common images associated with agriculturist communities, and those that are predominantly of a cartographic nature, are pecked or scratched engravings done on exposed rock outcrops close to the archaeological remains of settlements of these people. The close proximity of the buildings to the engravings, and the fact that they reflect the same ground plan, allows for detailed comparison as well as dating. Because the settlement patterns are those that characterized these communities in

the past few centuries before the imposition of colonial rule, we are able to place most engravings in the past five hundred years, although the arrival of agriculturists in southern Africa is dated more than a thousand years earlier.

The hunter-gatherer art, widely scattered in many thousands of sites, is a rich graphic resource, though in the present context there are only a few elements relevant to cartography. On the other hand, the agriculturist engravings, much rarer and limited to a few areas, are centrally concerned with understanding the spatial elements of major importance to the community.

## THE HUNTER-GATHERER ART

This art is essentially figurative in content; the vast majority of images represent humans, animals, or therianthropes (figures combining human and animal characteristics). In earlier decades of research, a few claims were made that individual examples of rock art might be a form of map.<sup>4</sup> These were usually compositions with lines sometimes linking other motifs, including figures. Authors writing before about 1980 tended to regard these lines as paths or rivers. Within the current shamanistic framework of interpretation, however, such compositions would be regarded as more metaphysical than physical in nature.

This shift in interpretation is well illustrated by the scene known as “Fight and Flight,” from Clanwilliam in the western Cape (plate 1). In 1979 this was considered to be a straightforward depiction of a fight between two hunter-gatherer groups, one trapped in a rock-shelter from which a few individuals had managed to escape, their routes being shown as lines.<sup>5</sup> By 1990 several discrepancies in this interpretation were noted. For example, one of the peripheral figures holds a coil of the line, indicating it represents something less conventional than a footpath. Furthermore, the line the attackers stand on joins up with the bow and head of one of the other group. Recent reviewers point to ethnographic evidence that in the hunter-gatherer religion healing was regarded

2. See, for example, Henri Breuil, *The White Lady of Brandberg*, rev. ed., vol. 1 of *The Rock Paintings of Southern Africa* (Paris: Trion Press, 1966), esp. 9–15.

3. Frans E. Prins and Sian Hall, “Expressions of Fertility in the Rock Art of Bantu-Speaking Agriculturists,” *African Archaeological Review* 12 (1994): 171–203.

4. Some examples can be found in Harald L. Pager, *Ndedema: A Documentation of the Rock Paintings of the Ndedema Gorge* (Graz: Akademische Druck- u. Verlagsanstalt, 1971), esp. 325–26 and fig. 212, and D. Neil Lee and H. C. Woodhouse, *Art on the Rocks of Southern Africa* (Cape Town: Purnell, 1970), esp. 139–48.

5. R. Townley Johnson, *Major Rock Paintings of Southern Africa: Facsimile Reproductions*, ed. T. M. O’C. [Tim] Maggs (Cape Town: D. Philip, 1979), 63–64 and pl. 67.



FIG. 2.2. PORTION OF BAMBOO MOUNTAIN PANEL. This is an elaborate scene of mounted hunter-gatherers returning to their camp. The panel's left side, illustrated here, covers the camp, which is depicted in a realistic way. To the left, however, are a mystical rain animal and four humans that have shamanistic attributes (forward-bent posture, bleeding noses, raised hair, fly whisks). The scene is therefore not just

as a fight, often involving arrows, between evil spirits and the shaman in trance. In this painting, the figure to the left of the central set is impaled by five white arrows, each having an exaggerated notch with a red dash below it, a feature not found on the arrows used by these people. The painting is now seen as dealing with concepts of trance performance and mystical potency rather than a physical conflict.<sup>6</sup>

Having said this, we can still recognize elements of spatial patterning in the composition, even though the current interpretation would place this in metaphysical rather than physical space. A topographical feature, the rock-shelter, is represented. The artist carefully selected a natural hollow in the rock face to represent the shelter, then outlined the hollow with a broad stripe of paint, an unusual combination of graphic and relief techniques. Although it might be controversial to classify this painting as a cosmographical map, elements of such are certainly present.

Several compositions include spatial elements of activities such as dancing, hunting, and honey collecting (scenes with ladders, forms interpreted as honeycombs, and dots representing bees).<sup>7</sup> The last period of the art in the Natal Drakensberg range, dated to the mid-nineteenth century by the presence of horses and guns, includes detailed scenes of activity. This was a period of extreme stress when the last hunter-gatherers of the mountains were reacting to colonial expansion by raiding settlers' livestock. Figure 2.2 shows an encampment with women and children and is a detail from a larger panel where riders are driving presumably stolen horses and cattle toward the camp.<sup>8</sup> This type of composition is perhaps the closest to a geographical map that can be found in the hunter-gatherer art. Yet even in this scene there are elements that show it is at least partly concerned with cosmological rather than geographical space. Just to the

a record of an actual event. Original from the southern Natal Drakensberg, painted panels removed in sections to the Natal Museum, Pietermaritzburg, in 1910.

Length of entire panel: 250 cm. By permission of the Natal Museum, Pietermaritzburg (site no. 29929CB 44; acc. nos. A2a, A2b, A2c, A3, A4; detail 1980/94/24).

left of the encampment is a large hippopotamus-like creature, interpreted as a rain animal, being led toward the camp by four humans; a mystical activity performed by shamans in trance.

Other types of composition in which lines play a major role have been similarly interpreted in recent years. A thin red line often flanked by white dots links a variety of figures in some of the most complex compositions among the South African paintings, such as the Linton panel.<sup>9</sup> In these compositions the figures include humans, some with animal (particularly antelope) features such as hoofs, as well as animals. Most important among the latter are the eland, which the hunter-gatherers believed was a particularly powerful source of the mystical potency the shaman needed to carry out his spiritual duties in trance.

Lewis-Williams has argued that "whatever the specific meaning of the line and its dots, it clearly links depictions throughout the panel. Even though the panel is not a coherent, recognizable 'scene,' it is a conceptual unity bringing together the real world of daily life and the spirit

6. J. David Lewis-Williams and Thomas A. Dowson, "Through the Veil: San Rock Paintings and the Rock Face," *South African Archaeological Bulletin* 45 (1990): 5–16, esp. 5–6, and Royden Yates, John Parkington, and Tony Manhire, *Pictures from the Past: A History of the Interpretation of Rock Paintings and Engravings of Southern Africa* (Pietermaritzburg: Centaur, 1990), 52.

7. Aron David Mazel, "Distribution of Painting Themes in the Natal Drakensberg," *Annals of the Natal Museum* 25 (1982): 67–82, and Harald L. Pager, "The Magico-religious Importance of Bees and Honey for the Rock Painters and Bushmen of Southern Africa," *South African Bee Journal* 46 (1974): 6–9.

8. Vinnicombe, *People of the Eland*, 43–44 and figs. 24–26 (note 1).

9. J. David Lewis-Williams, *The World of Man and the World of Spirit: An Interpretation of the Linton Rock Paintings* (Cape Town: South African Museum, 1988), 2, 12–13. This important panel was removed from the Eastern Cape Drakensberg and is housed in the South African Museum, Cape Town.

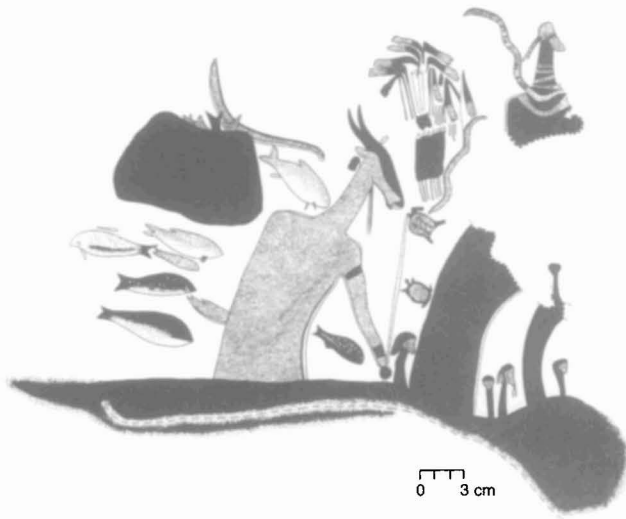


FIG. 2.3. ROCK SURFACE AS CONTEXT. Example of several figures emerging from a natural crack in the rock that has been outlined in black paint. Other aspects linked to trance include the antelope-headed human, bleeding nose, fly whiskers at top, and water creatures symbolic of the cold, underwater sensation felt by the shaman in trance.

Eastern Cape Drakensberg. From J. David Lewis-Williams and Thomas A. Dowson, "Through the Veil: San Rock Paintings and the Rock Face," *South African Archaeological Bulletin* 45 (1990): 5–16, esp. 8 (fig. 3A). By permission of the San Heritage Centre, University of the Witwatersrand, Johannesburg.

world that shamans enter through the activation of potency."<sup>10</sup> These rock art panels were not composed like Western illustrations but appear to have accumulated over time with additions by subsequent artists. "A complex panel is the distillation of many religious experiences and insights."<sup>11</sup>

Another cosmological aspect of space that is evidently featured in certain types of rock paintings concerns the "route" the shaman takes during trance. The sensations accompanying trance typically include coldness, looking down a tunnel or vortex, and hallucinations about the scale of oneself and one's surroundings, as well as corporeal detachment and out-of-body travel. The shaman may feel that he is traveling underwater or underground through a tunnel in the rock to reach the spirit world. Lewis-Williams and Dowson have argued that the rock-shelter's walls, with their paintings, were in a sense a "painted veil" the shaman felt he passed through during trance.<sup>12</sup> This sensation may be illustrated by paintings that make use of natural cracks, hollows, and other irregularities in the rock face. Such paintings often show figures, or even rows of figures, emerging from or entering the rock through such features (fig. 2.3). The figures may be human or animal and in some are an amalgam of different creatures such as the therianthrope eland-

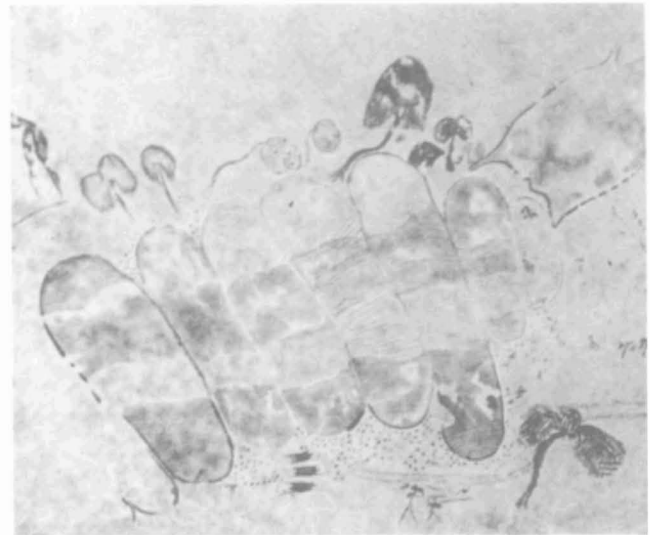


FIG. 2.4. PAINTING WITH TREES AND OVALS. This detail of the left half of a large composition shows a combination of trees, ovals, and streams of flecks with figures and an animal hide. Current research interpretation argues against the earlier landscape interpretation, suggesting instead that this painting is concerned with mystical potency. Watercolor copy by Elizabeth Goodall, based on a tracing of the original wall painting.

Size of the entire original: 122.5 × 227.5 cm. Robert McIlwaine National Park, Lake Chivero, Zimbabwe. From Elizabeth Goodall, "Rock Paintings of Mashonaland," in *Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland*, ed. Roger Summers (Salisbury, Southern Rhodesia: National Publications Trust, 1959), 3–111, esp. pl. 8 (p. 17). By permission of the National Museums and Monuments, Harare.

headed human, reflecting the shaman's belief that he could become an animal in trance, or serpents with ears and tusks that weave in and out of the rock face. Such paintings, which incorporate natural features of the rock, are widespread in South Africa. In a cartographic context, it is significant that the artists could, and on occasion did, incorporate natural facets of the rock canvas to represent "landscape" features, even though this was a cosmic rather than a natural landscape.

The rock paintings of Zimbabwe are generally accepted today as broadly reflecting the same hunter-gatherer cosmology as the art farther south. They do, however, differ from the southern paintings in that they have several elements that were for many years interpreted as landscape features. Cloudlike or linear arrangements of flecks were seen as vegetation or water, while oval forms tightly nested

10. Lewis-Williams, *World of Man*, 13. See also Thomas A. Dowson, "New Light on the 'Thin Red Line': Neuropsychology and Ethnography" (B.Sc. honors thesis, University of Witwatersrand, 1988).

11. Lewis-Williams, *World of Man*, 13.

12. Lewis-Williams and Dowson, "Through the Veil" (note 6).

together like sausages in a packet were seen as boulders on the granite hills so characteristic of Zimbabwe's rock art regions.<sup>13</sup> Figure 2.4 is part of a large painted panel on two sides of a boulder that incorporates these elements as well as trees and human and animal figures, making it easy to interpret as a scene of figures in a natural landscape. The trunk of one tree even bends around the top of an oval as if this were indeed a boulder.

Yet researchers are far from unanimous about the interpretation of these features. One recent suggestion is that the clustered ovals may represent the spatial divisions or exploitation territories associated with hunter-gatherer bands as known today from the Kalahari. If this is accepted, then the oval compositions would indeed be maps, even though the suggestion is that "these images are elaborations of exploitation territories, and have become metaphorical 'maps' of journeys made by trancers in states of altered consciousness."<sup>14</sup>

The principal current researcher on Zimbabwe rock art, Peter Garlake, however, dismisses a landscape interpretation for these characteristic features. He argues that both ovals and flecks represent not so much aspects of visual reality as different aspects of mystical potency. He sees a system within the paintings where the oval compositions are the key symbol representing the seat of potency. These are linked with the flowing shapes of flecks, which indeed often emerge from ovals, flowing toward and around other compositions. They are particularly associated with trees but cannot be interpreted merely as leaves. The flecks "seem to be a means of delineating a force that permeates nature and landscape."<sup>15</sup> Such compositions are not landscapes, but like the other aspects of hunter-gatherer art mentioned above, they appear to give graphic and spatial dimensions to cosmological concepts.

## THE AGRICULTURIST ENGRAVINGS

Unlike the hunter-gatherers, whose cosmology has only recently begun to be understood by academics, the agriculturist societies of southern Africa have been intensively studied since the late nineteenth century, and they are covered by an extensive literature. Whereas the hunter-gatherer way of life has been extinguished in all but the dry Kalahari region, most of southern Africa's population today is descended from the earlier agriculturist communities. It is therefore ironic that while the hunter-gatherer art is internationally well known, that of the agriculturist has seen little research until the past few years.

The practice of engraving is not generally considered to have been a feature of these Bantu-speaking communities, and therefore there is little direct ethnographic information on the images and the context in which they were made. Most of our understanding of them must be reconstructed by comparing them with other archaeo-

logical evidence and examining the social fabric of these societies as it is known from anthropological research. Our recent experience in the field has been that, although local people often recognize the images as representing the kinds of homesteads their ancestors lived in, they have no personal knowledge about who made them or why. The only specific case on record is from the Erskine site, near Muden in Natal, where in 1956 an archaeologist found two boys making and playing with engraved homestead plans. These boys, about six and eight years old, used larger and smaller pebbles, representing cattle and calves, which they moved in and out of the stock pens of the engraved buildings like counters in a board game. Their father said he had made similar engravings as a child, and that even then there were older generations of engravings on this site.<sup>16</sup>

Agriculturist engravings are far more restricted in distribution than hunter-gatherer art. For a start, they are limited to the eastern half of the subcontinent where there is enough summer rain to grow the tropical crops that were the staple food of these communities. But even within this region, the engravings are limited to particular areas, often quite small, as the distribution is known at present, and sometimes widely separated (fig. 2.5). Even at this early stage of research, it is apparent that these areas share two features that seem to be essential to the occurrence of such engravings. First, they are all characterized by grassland vegetation or are in savanna marginal to grassland. Second, they occur only near pre-colonial stone structures.

Broadly speaking, there are two contexts in southern Africa where agriculturist communities built extensively in stone. Stone walls occur on sites of the Great Zimbabwe tradition, where they were used to enhance the status and prestige of the ruling Shona aristocracy. This type of building is not reflected in the engravings. More common and widespread is the use of stone as an ordinary building material by smaller-scale, subsistence agriculturist communities. Earlier agriculturists remained

13. See Leo Frobenius, *Madsimu Dsangara: Südafrikanische Felsbilderchronik*, 2 vols. (1931; reprinted with new material, Graz: Akademische Druck- u. Verlagsanstalt, 1962), 1:16, 23–25 and related figures, and Elizabeth Goodall, "Rock Paintings of Mashonaland," in *Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland*, ed. Roger Summers (Salisbury, Southern Rhodesia: National Publications Trust, 1959), 3–111, esp. 60–76.

14. Andrew B. Smith, "Metaphors of Space: Rock Art and Territoriality in Southern Africa," in *Contested Images: Diversity in Southern African Rock Art Research*, ed. Thomas A. Dowson and J. David Lewis-Williams (Johannesburg: Witwatersrand University Press, 1994), 373–84, esp. 384.

15. Peter S. Garlake, *The Hunter's Vision: The Prehistoric Art of Zimbabwe* (Seattle: University of Washington Press, 1995), 105.

16. B. D. Malan, "Old and New Rock Engravings in Natal, South Africa: A Zulu Game," *Antiquity* 31 (1957): 153–54.



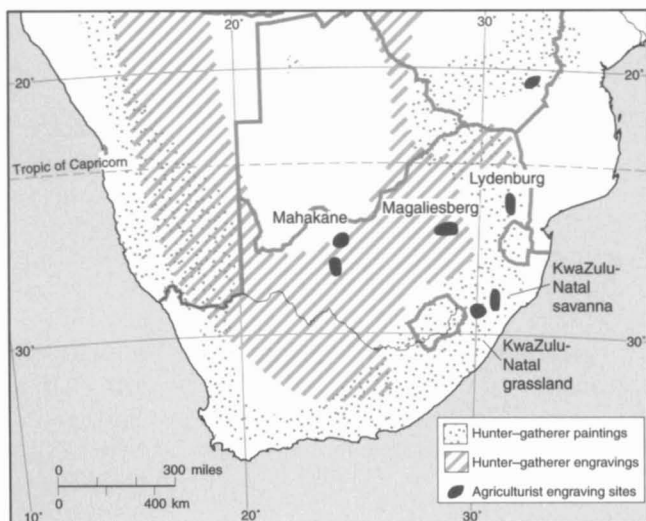


FIG. 2.5. ROCK ART DISTRIBUTION IN SOUTHERN AFRICA. This map illustrates the main areas of hunter-gatherer paintings and engravings in southern Africa, as well as areas where substantial numbers of agriculturist engravings have so far been recorded. Several other sites are known in addition to those marked here, and so this type of art is probably much more widely distributed. For example, several apparent homestead engravings from eastern Zimbabwe may well be of this type.

essentially in savanna areas where timber was plentiful and could be used as a building material. In later centuries, and particularly after about A.D. 1500, expansion took place into grassland areas where little or no timber was available, and therefore stone became an important substitute building material. Higher population densities in some savanna areas bordering on grasslands also led to the adoption of stone at this time, presumably because timber became scarce. These marginal savannas tend to support a low density of woody vegetation and are easily converted to grassland with heavy exploitation.

Local building styles reflecting cultural differences were translated from softer materials into stone, with their distinctive architectural patterns retained. In some cases it was only the stock pens that came to be built in stone. Other communities took to building complex courtyard patterns and walled roads, and some went as far as building hemispherical, corbelled stone huts.<sup>17</sup>

It is with this building in stone that the engravings are inextricably linked. Some communities of stone builders took to engraving, and present evidence suggests that none who continued to use the softer materials of earlier centuries engraved. The known engravings are all within a few hundred meters of ruined stone walls, and some are even on rocks incorporated into walls.<sup>18</sup>

This intimate link between engraving and building stone walls has led to the suggestion that building in stone provided a stimulus for engraving, perhaps because the

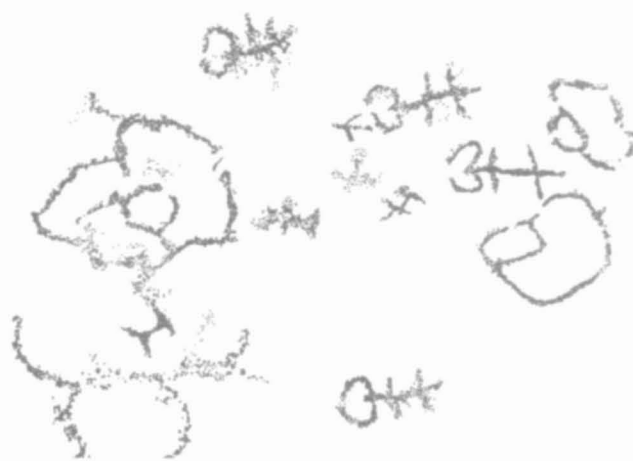


FIG. 2.6. ENGRAVING FROM MAHAKANE, NORTHERN CAPE. This engraving is one of the very few that represents livestock (in this case horned cattle) associated with the ground plans of buildings. The stylized, overhead view of the animals is also unusual.

By permission of Tim Maggs.

stone went through several processes before the wall was complete.<sup>19</sup> It sometimes had to be quarried, then it had to be carried to the building site, piled up, and carefully placed in a suitable position on the wall under construction. The patinated surfaces of the stones inevitably sustained bruises and scratches that show as prominent pale markings against the darker weathered surfaces. Some individuals, particularly children, might have experimented by making deliberate peck or scratch marks and patterns in this readily available and nonresistant graphic medium.

This procedure may help explain why engraving developed in widely separated areas of southern Africa about the time that stone became a major building material, but it does not explain the nature of the engravings themselves. For this we need to examine their subject matter and the societies in which they were created.

Like the mid-twentieth-century boys at Muden, the en-

17. T. M. O'C. Maggs, *Iron Age Communities of the Southern Highveld* (Pietermaritzburg: Council of the Natal Museum, 1976).

18. R. H. Steel, *Late Iron Age Rock Engravings of Settlement Plans, Shields, Goats and Human Figures: Rock Engravings Associated with Late Iron Age Settlements of Olifantspoort Site 20/71 circa A.D. 1500–1800, Rustenburg District, TVL (Sites 77/71 and 78/71)* (Johannesburg: University of the Witwatersrand Archaeological Research Unit, 1988), esp. 1–2 and figs. 2 and 3; Revil J. Mason, *Origins of Black People of Johannesburg and the Southern Western Central Transvaal, AD 350–1880* (Johannesburg: R. J. Mason, 1986), esp. 477–78; and T. M. O'C. Maggs, "Neglected Rock Art: The Rock Engravings of Agriculturist Communities in South Africa," *South African Archaeological Bulletin* 50 (1995): 132–42.

19. T. M. O'C. Maggs and Val Ward, "Rock Engravings by Agriculturist Communities in Savanna Areas of the Thukela Basin," *Natal Museum Journal of Humanities* 7 (1995): 17–40, esp. 19.



FIG. 2.7. CLASSIC ZULU HOMESTEAD. A downhill entrance and the presence of an outer wall or fence (*itango*), as well as a central cattle pen surrounded by huts, identify this nineteenth-century drawing as representing a classic Zulu homestead.

From Josiah Tyler, *Forty Years among the Zulus* (Boston: Congregational Sunday-School and Publishing Society, 1891), facing 41.

gravers generally concentrated on roughly pecking out the ground plans of homesteads. Very seldom were these elaborated with figures of the humans and domesticated animals that lived in them. The only recorded site whose engravings include numbers of animals is in the Mahakane area of the northern Cape. Among these are some highly stylized cattle seen from above and placed among images of buildings (fig. 2.6). In none of the known areas was it the custom to combine details such as figures or buildings viewed in elevation with the plans of settlements—a practice found widely among cartographic-type images from subsistence agriculturists in other parts of the world.<sup>20</sup> Indeed the only recorded buildings in elevation are from one site near Lydenburg, eastern Transvaal, where there are examples of concentric semicircles that represent hemispherical huts.<sup>21</sup>

The ground plan images range in complexity from simple circular forms to detailed representations of particular styles and, in some areas, clusters of homesteads.<sup>22</sup> The circle is the basis of agriculturist settlement patterns comprising the primary structures of cattle pen and domicile or hut (fig. 2.7). Other structures, including divisions of these two or courtyards, tend to have curved walls, often abutting a primary structure. Rectangular forms

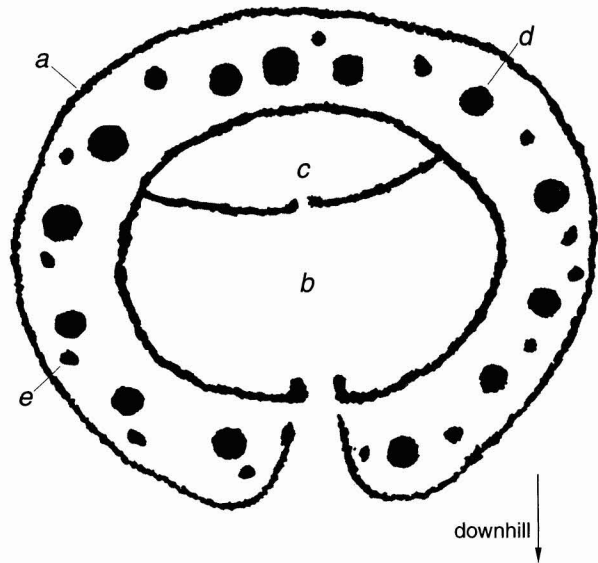


FIG. 2.8. ENGRAVING OF ZULU HOMESTEAD FROM ER-SKINE. Engravings from KwaZulu-Natal savanna areas such as this one illustrate several features of the Zulu homestead: (a) the outer wall (*itango*); (b) cattle pen with downhill entrance; (c) calf pen built at the uphill end of the cattle pen; (d) huts circumscribing the cattle pen; (e) granaries (*nqolobane*) beside or behind the huts of married women.

After T. M. O'C. Maggs, "Neglected Rock Art: The Rock Engravings of Agriculturist Communities in South Africa," *South African Archaeological Bulletin* 50 (1995): 132–42, esp. fig. 4 (p. 135).

were introduced only through colonial and missionary contact, so engraved rectangular plans can be dated after the nineteenth-century arrival of such influence.

Regional building styles largely influence the more detailed engravings. In the KwaZulu-Natal region, where stone walls were used only for the cattle pen central to each family homestead, most images are simple circles. In the lower-lying, marginal savanna areas, where the Zulu homestead pattern was the norm, engraved pens tend to have their entrances facing down the slope of the rock face to reflect the strict downhill orientation of these homesteads (fig. 2.8). In neighboring grassland areas, where the archaeological evidence shows just as strict an

20. Catherine Delano Smith, "Cartography in the Prehistoric Period in the Old World: Europe, the Middle East, and North Africa," 1:54–101, esp. 66–67 and fig. 4.8, and idem, "Prehistoric Cartography in Asia," vol. 2.2 (1994): 1–22, esp. 6, both in *The History of Cartography*, ed. J. B. Harley and David Woodward (Chicago: University of Chicago Press, 1987–).

21. Egbert Cornelis Nicolaas van Hoepen, "A Pre-European Bantu Culture in the Lydenburg District," *Archeologische Navorsing van die Nasionale Museum* 2 (1939): 47–74, esp. 70 and 73.

22. I use the term "homestead" in preference to "house" to denote the basic residential unit of an agriculturist family. This was most often a circular cattle pen with a small opening, surrounded by huts.

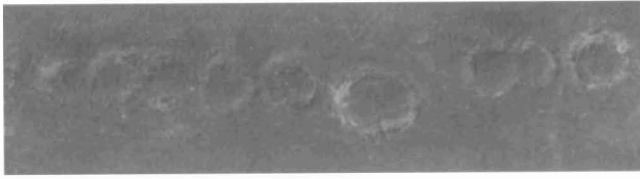


FIG. 2.9. KWAZULU-NATAL STONE SETTLEMENT RUINS. This aerial photograph shows a large stone settlement from about the eighteenth century with a row of nine cattle pens opening uphill. The settlement is surrounded by a wide ring of paved hut floors and other features. Size of the settlement (including houses and stores not shown here): ca.  $150 \times 235$  m; size of the row of circular stone ruins: ca.  $16 \times 140$  m. Mgoduyanuka, Bergville District, KwaZulu-Natal. Photograph by the University of Natal, Department of Survey, Flight 220/1/161. By permission of the Natal Museum, Pietermaritzburg (site no. 2829CB 6).

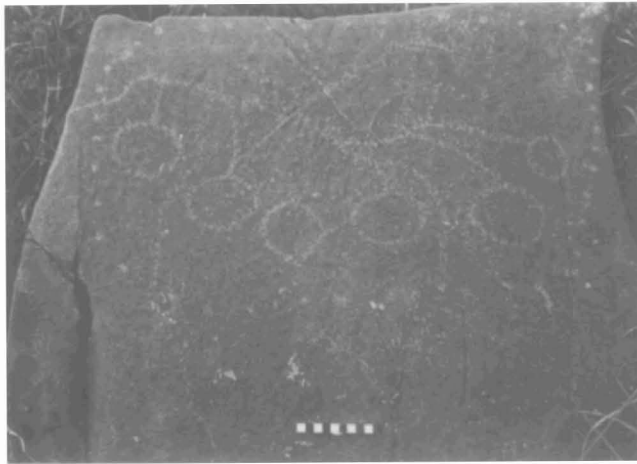


FIG. 2.10. KWAZULU-NATAL ROCK ENGRAVING. This is an engraving of a large homestead with six cattle pens opening up the slope of the rock, linked by paths and ringed by huts. Width of the engraved rock: ca. 76 cm. Hattingvlakte, KwaZulu-Natal. By permission of the Natal Museum, Pietermaritzburg (site no. 2829DD 19; acc. no. 1988/1/5).

uphill entrance orientation of the stone pens, the engravings likewise have entrances facing up the rock face.<sup>23</sup>

Sometimes the entrances have paths leading from them, then curving down the sides of the rock until they reach the ground, as if the path leads to a watering point for the cattle on the valley bottom. Both the entrance orientation and the paths indicate that the engravers perceive the rock canvas as a three-dimensional model of the landscape. Southern Bantu-speaking people have favored relatively elevated settlement locations on hilltops, spurs, or level plateaus on the sides of valleys for nearly a thousand years, rather than building in valley bottoms like their ancestors of the first millennium A.D. This cultural attachment to prominent landscape features, which appears to

be part of the belief system rather than the result of practical necessity, has allowed engravers to exploit the natural shape of the rock to express their ideal location for habitation sites. This is true not only of the Nguni-speaking communities that made the engravings in KwaZulu-Natal, but also the Sotho-speaking communities of engravers farther north.<sup>24</sup>

In the most complex settlement pattern known from precolonial KwaZulu-Natal stone ruins, several homesteads were apparently amalgamated, creating a row of up to nine cattle pens placed along the contour of a hill slope (fig. 2.9), with an oval ring of huts and smaller structures around them. Although this domestic pattern is not reflected in the ethnographic record (it became extinct about the beginning of the nineteenth century), it is

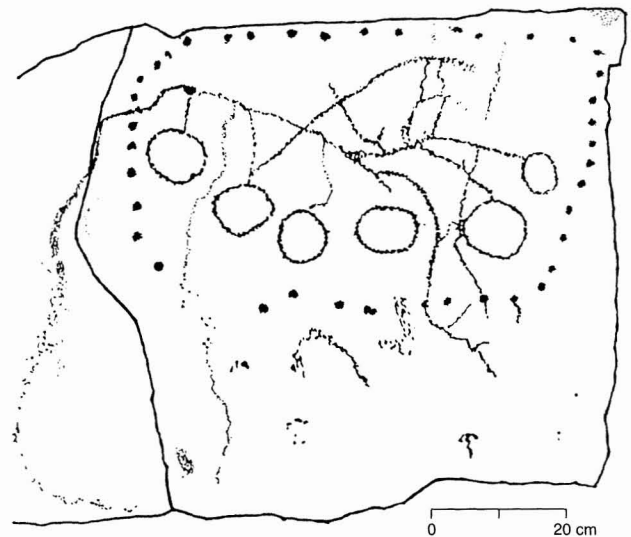


FIG. 2.11. LINE DRAWING OF KWAZULU-NATAL ROCK ENGRAVING (FIG. 2.10). By permission of Tim Maggs.

accurately preserved in the rock engravings. Figure 2.10 shows a detailed engraving that includes the network of cattle paths emerging from the uphill entrances, joining one another, cutting through the surrounding ring of huts, and descending the slope of the rock as if going to a valley bottom stream (compare fig. 2.11).

Relatively few engraved compositions cover areas larger than a single homestead, but there are examples where several homesteads are linked by paths. Such cases

23. Maggs and Ward, "Rock Engravings by Agriculturist Communities," esp. 23–25 (note 19), and Maggs, "Neglected Rock Art," 135–36 (note 18).

24. Maggs, "Neglected Rock Art," 140–41.





FIG. 2.12. NATURAL SURFACE OF ROCK AS TOPOGRAPHY. The engraver has used the natural occurrence of a smaller rock on top of a larger flat one to illustrate a group of homesteads, positioned on the lower, gentler slopes of a hill and linked by paths.

Size of the engraved rock: ca. 132 × 124 cm. Harmonie, KwaZulu-Natal. By permission of the Natal Museum, Pietermaritzburg (site, no. 2829DC 21; acc. no. 1994/5/34).

make particular use of the chosen rock surface, treating its natural features as models of topography. Figure 2.12 is an extreme example where a small cuboidal rock sitting on a larger flat rock provides a model of a steep hill with gentler lower slopes surrounding it (compare fig. 2.13). The engraver has placed circular homesteads on this surface, linking them with a network of paths.

Today among many Nguni-speaking rural communities (including Zulu) there is a tendency for homesteads to form loose clusters in the landscape. These groups are typically kinship based, the male heads of each household being closely related. This agnatic clustering is almost certainly reflected in the archaeological record, where both stone ruins and engravings show groups of homesteads.<sup>25</sup>

Although precolonial Nguni societies had clearly developed concepts of geographical units larger than the homestead cluster, including a nested series of political units up to the total kingdom, there is as yet little evidence of any graphic representation of such units. An engraving such as figure 2.14, where sinuous lines extend over three adjacent boulders (see also fig. 2.15), might be an attempt to illustrate a district with the cattle paths converging on a focal point, which could be the local political leader's homestead. But such interpretation is little more than speculation.

Farther north, in the Magaliesberg and northern Cape, engravings reflect the Tswana pattern of settlements still in use during the nineteenth century. Habitation was far more concentrated in these communities, where there were towns of up to twenty thousand inhabitants. Such

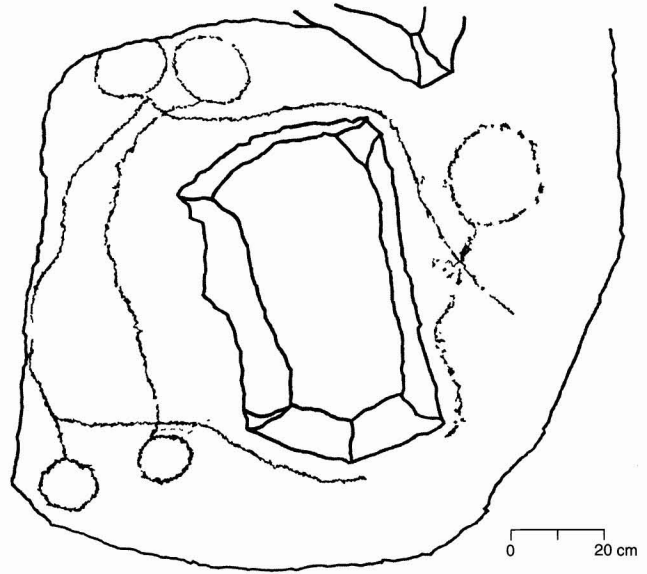


FIG. 2.13. LINE DRAWING OF THE NATURAL SURFACE OF ROCK AS TOPOGRAPHY (FIG. 2.12).

By permission of Tim Maggs.

towns were made up of a number of wards, each a ring of courtyard dwellings around a central cluster of stockpens. The engravings associated with these settlements show only one or two such wards, however, rather than the large aggregations that characterized major political units.<sup>26</sup>

In the Lydenburg area of the eastern Transvaal, extensive stone settlements were built by communities identified as northern Sotho based on ceramics and oral tradition. Numerous circular homesteads, up to one hundred in a settlement, were linked with stone-walled roads and surrounded by stone agricultural terraces. Situated on hills or spurs, some settlements extended at least three kilometers. Again, most of the associated engravings show only a single homestead or a small group, but several are more extensive. The largest examples cover whole boulders several meters in extent, with up to forty homesteads and complex networks of linking roads (fig. 2.16). These are both the largest and the most complex agricultural engravings yet recorded from the region, but they are clearly of the same genre as the others (see figs. 2.10, 2.12, and 2.14 above). In terms of cartographic coverage, there is again no indication of an attempt to represent a

25. W. D. Hammond-Tooke, "In Search of the Lineage: The Cape Nguni Case," *Man*, n.s. 19 (1984): 77–93, and T. M. O'C. Maggs et al., "Spatial Parameters of Late Iron Age Settlements in the Upper Thukela Valley," *Annals of the Natal Museum* 27 (1985–86): 455–79.

26. Compare Steel, *Rock Engravings*, fig. 13, with Mason, *Origins of Black People*, 359, fig. 149a (both note 18); see also Maggs, "Neglected Rock Art," figs. 12 and 13 (p. 137) (note 18).



FIG. 2.14. MEANDERING PATTERN OF LINES ACROSS THREE BOULDERS. Since lines normally denote cattle paths in agriculturist engravings and at least one circle is included, the composition may depict paths crossing three hills. Size of the three adjacent rocks: ca.  $320 \times 210$  cm. Ngudlantaba 1, KwaZulu-Natal. By permission of the Natal Museum, Pietermaritzburg (site no. 2829DD 59; 1994/5/10).

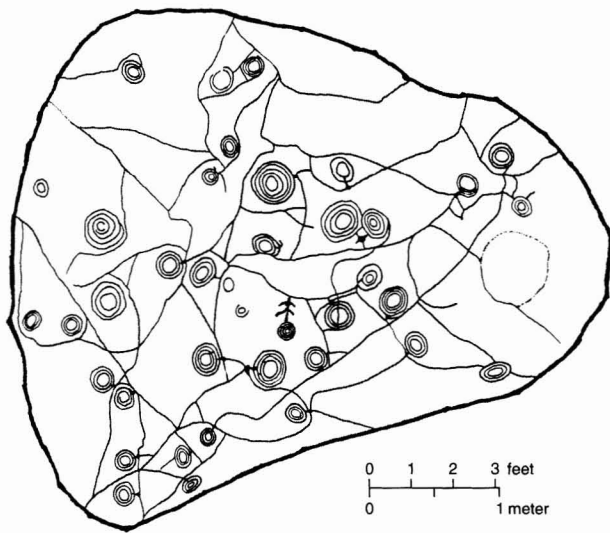


FIG. 2.16. LYDENBURG DISTRICT AGRICULTURIST ENGRAVING. This boulder is covered with engravings of circular homesteads and linking roads, some of which extend to where the boulder meets the ground, as if the paths were going down to a valley bottom stream. Such examples represent three-dimensional models of the large local settlements, each on its own hill. Size of original: ca.  $4.5 \times 4$  m. Lydenburg District, eastern Transvaal. By permission of Tim Maggs.

spatial concept wider than the single settlement (albeit a large one) on a hill.

Although in each of the areas described above individual images reflect the style of building in some detail, the engravings are not accurate representations of particular buildings. This is clearly seen in the larger compositions, where the irregularities of the specific rock surface pro-

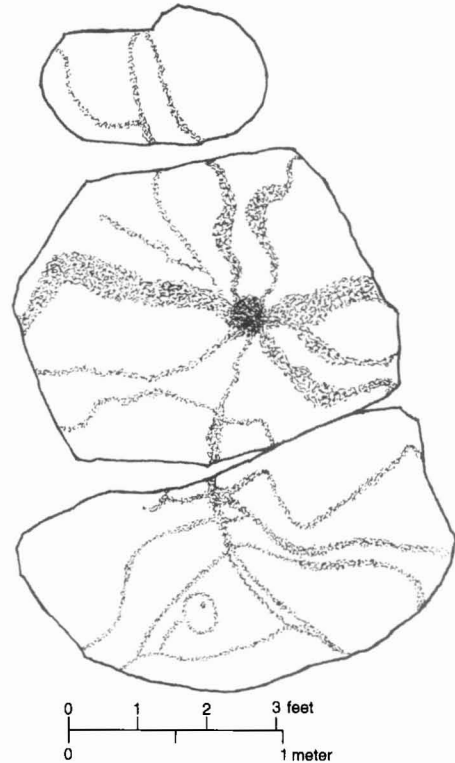


FIG. 2.15. LINE DRAWING OF MEANDERING PATTERN OF LINES ACROSS THREE BOULDERS (FIG. 2.14). By permission of Tim Maggs.

vide a ready-made model of a hill on which the images were placed (fig. 2.17). Homesteads and paths were positioned as they might be on an actual hill, yet the whole composition does not resemble one of the neighboring settlements more than another. The engravings are in effect simplified and idealized images of the built environment rather than actual plans.

Engravings differ consistently from real buildings in another important respect: they neglect those aspects of the settlement associated with women and their economic role. In these southern Bantu-speaking societies, the female sphere was concerned with crop production and the domestic outer circumference of the homestead, whereas the male sphere related to livestock, especially cattle, which occupied the center of the homestead. Field systems, even those defined by stone terraces, are apparently absent from the engravings. The all-important granaries appear in only a few KwaZulu-Natal images, and even the domestic huts are shown in only a few cases (see fig. 2.8 above). By contrast, the cattle pens and the paths or walled roads used by cattle are the focus of most engravings.<sup>27</sup> Returning to the case of the two young en-

27. Maggs, "Neglected Rock Art," esp. 139-40 (note 18), and Maggs and Ward, "Rock Engravings by Agriculturalist Communities,"

gravers at Muden, we may conclude that engraving was essentially pursued by males, and perhaps by youthful males.

Why should young males, or indeed any category of people in this kind of society, be so concerned with images of their built environment? To understand this we need to examine the cosmology of these societies, which were strongly patrilineal and had complex kinship systems. The family cattle herd not only was of economic importance but symbolized the family itself, including deceased generations. Mediation with the spiritual world was through the deceased male ancestors of the household head. The social and religious order was strongly reflected in the layout of each homestead, which therefore served as a map of both the physical and the cosmological structure of the community living there. In this context an image of the settlement pattern, especially an idealized representation, would be the best possible way to express in graphic terms the cosmology of the engraver.

### CONCLUSION

Rock art studies in southern Africa have so far given little consideration to cartographic representation or content. At the present stage of research it seems there are no images that can be classified as terrestrial maps in the sense that they represent an actual part of the land surface. There are also no substantial claims that any rock art can be interpreted as celestial maps.

This is not to suggest that the concept of representing actual spatial arrangements of things and features of the landscape in graphic form was completely unknown in these communities. It seems that the ability to create ad hoc sketch maps on the ground was practically universal and was certainly familiar to people of this region. Likewise, a nineteenth-century hunter-gatherer was able to provide the information for the ethnographer W. H. I. Bleek to create a reasonably accurate map of the informant's home territory.<sup>28</sup>

The rock art of hunter-gatherers and agriculturists in southern Africa had very different concerns, but both were expressions of their communities' cosmology. Natural landscape evidently played a negligible part in the hunter-gatherer art. Where spatial understanding appears to have influenced composition, it is a metaphysical rather than physical space: the realm of the shaman in trance during communal ceremony.

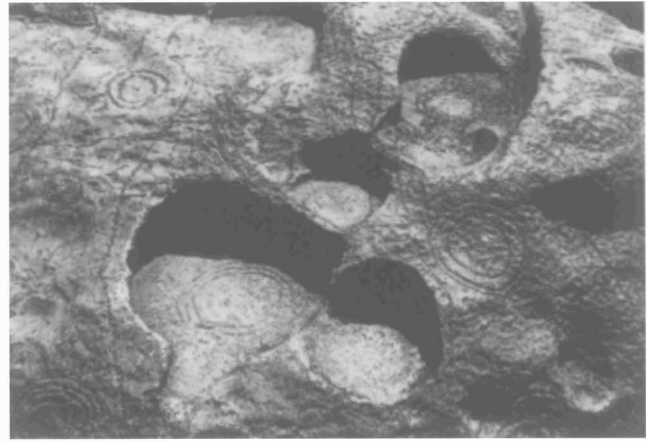


FIG. 2.17. ROCK ENGRAVING REFLECTS TOPOGRAPHIC PREFERENCE. Both Nguni and Sotho societies preferred to situate their homesteads on flat, elevated sites rather than in valley bottoms or on lower slopes. This engraving clearly reflects this practice. The circles representing homesteads are placed on level surfaces toward the top of the rock, and there are connecting paths that avoid steep routes toward them.

Total length: 1.44 m. From T. M. O'C. Maggs, "Neglected Rock Art: The Rock Engravings of Agriculturist Communities in South Africa," *South African Archaeological Bulletin* 50 (1995): 132–42, esp. fig. 22 (p. 141). By permission of Tim Maggs.

The agriculturists' engravings seem to have been a relatively inconsequential part of their culture. Only some of the communities that took to building in stone produced these images, most of which were pecked on outcrops outside the settlements. Engraving was evidently a male pursuit, and it may have been largely the work of youths, to judge by the ethnographic evidence and the crudeness of most examples. The apparently mundane images of homestead plans are, however, not just a child's picture of a house. In them we can see selectivity and emphasis on the central circle of the homestead—the stock pen where cattle were sacrificed to the ancestors to ensure the continuity and well-being of the family.

esp. 25 and figs. 9–11 (note 19).

28. P. J. Schoeman, *Hunters of the Desert Land*, 2d rev. ed. (Cape Town: Howard Timmins, 1961), and Janette Deacon, "'My Place is the Bitterpits': The Home Territory of Bleek and Lloyd's /Xam San Informants," *African Studies* 45 (1986): 135–55, esp. fig. 1.