Taking Stock

Identifying Khoekhoen Herder Rock Art in Southern Africa¹

by Benjamin W. Smith and Sven Ouzman

Recent archaeological research has identified a widespread southern African rock art tradition that materially affects the debate over what archaeology can tell us about prehistory in southern Africa. This tradition differs from the one attributed to the ancestors of today's San in being dominated by rough-pecked and finger-painted geometric imagery. Using appearance, technique, age, geographic distribution, site preference, and relationship to known San-produced rock art, this article considers various candidates for its authorship—San foragers, Bantu-speaking farmers, Khoekhoen herders, European colonists, and multiethnic groupings—and concludes that it was predominantly Khoekhoen. The identity of the Khoekhoen, their origins, the route(s) by which they traveled, their relationship with foragers, and their material culture signature are contentious issues. The identification of a Khoekhoen rock art tradition provides another element for the study of the San-Khoekhoen relationship.

BENJAMIN W. SMITH is director of the Rock Art Research Institute, School of Geography, Archaeology, and Environmental Sciences, University of the Witwatersrand (Private Bag 3, PO WITS 2050, South Africa [bws@rockart.wits.ac.za]). He was born in 1969 and educated at the University of Newcastle-upon-Tyne (B.A., hons., 1991) and Cambridge University (Ph.D., 1995). His research interests include herder and farmer rock arts of Africa, the Batwa rock art of central Africa, and rock art methodology and management. His publications include Zambia's Ancient Rock Art: The Paintings of Kasama (Oxford: Nuffield Press for the National Heritage Conservation Commission of Zambia, 1997), "The Tale of the Chameleon and the Platypus: Limited and Likely Choices in Making Pictures," in The Archaeology of Rock-Art, edited by Christopher Chippindale and Paul Taçon (Cambridge: Cambridge University Press, 1998), and "Visions of Dynamic Power: Archaic Rock Paintings, Altered States of Consciousness, and 'Clever Men' in Western Arnhem Land (NT), Australia" (Cambridge Archaeological Journal 10:63–101).

SVEN OUZMAN is former head of the Rock Art Department of South Africa's National Museum and a Fulbright scholar at the University of California, Berkeley (Anthropology, 232 Kroeber Hall, University of California, Berkeley, CA 94720-3710, U.S.A. [ouzman@berkeley.edu]]. He was born in 1969 and educated at the Universities of the Witwatersrand (B.A., hons., 1992) and California at Berkeley (M.A., 2003). His research interests include landscape, nonvisual uses of rock art, identity politics, and indigenous intellectual property rights. His publications include The Wind Blows Dust: Traces of the /Xam and Other San of the Central Interior (Bloemfontein: Quali-Press, 1995), "Spiritual and Political Uses of a Rock Engraving Site and Its Imagery by San and Tswana-speakers" (South African Archaeological Bulletin 50: 55–67), and "Seeing Is Deceiving: Rock Art and the Non-Visual" [World Archaeology 33:237–56].

The present paper was submitted 27 X OI and accepted 28 I O4.

[Supplementary material appears in the electronic edition of this issue on the journal's web page (http://www.journals.uchicago/edu/CA/home.html).]

The past three decades have seen fierce debate about the presence, identity, and material culture signatures of "San" forager and "Khoekhoen" herder communities in southern Africa (fig. 1).2 Some writers have lumped the two macro-ethnic categories as "Khoisan" (Schultze 1928:211), though many forager and herder descendants consider separate identities of prime importance. Archaeological research seeks to clarify the nature of this ethnic division—if in fact it exists—by juxtaposing the observations of early European settlers with archaeological remains. In this endeavor, o CE is a watershed for the peopling of southern Africa, the point at which nonforagers such as Bantu-speaking farmers and perhaps Khoekhoen herders appear in the archaeological record (cf. Mitchell 2002: chap. 9). Mid- and late-seventeenthcentury-CE European reports from what is now South Africa's Western Cape Province call most non-Bantuspeakers possessing pottery and domesticated animals "Khoikhoi" (now "Khoekhoen" [A. Smith 1998]). Most people who gathered and hunted and did not possess pottery or domesticated animals were called "Bosjemans" and variations of "Sonqua" and "Soaqua," from which "San" is derived (Wright 1996). Researchers today wonder whether this ethno-economic division was not much more fluid, definitional rigidity being the product of a confusing, biased, and economic-determinist nomenclature. Furthermore, revisionist scholars ask whether historically observed differences have any time depth beyond the reach of ethnographic capture. Some suggest that they may be the product of recent cross-cultural interactions combined with the devastating effects of European colonization (e.g., Schrire 1984, Elphick 1985, Wilmsen 1989)—indeed, that we may be extrapolating race-based apartheid-era classifications into the past (e.g., Schrire 1996).

1. We thank site custodians for granting us access to sites. Sharon Holt, Rentia Ouzman, Gabriel Tlhapi, and Wendy Voorvelt assisted with the illustrations. We are grateful to Geoff Blundell, Chris Chippindale, Ed Eastwood, Jeremy Hollmann, Tom Huffman, David Lewis-Williams, Siyakha Mguni, David Morris, David Pearce, David Phillipson, Andrzej Rozwadowski, Karim Sadr, Andy Smith, Anne Solomon, Gabriel Tlhapi, Royden Yates, the CA reviewers and Ben Orlove and the editorial staff for their critical input. We received financial assistance from Anglo American, AngloGold, De Beers, the James A. Swan Fund (U.K.), the Ringing Rocks Foundation (U.S.A.), the National Museum (South Africa), the National Research Foundation (South Africa: funded under GUN2050341 and 2053470), the Research Office of the University of the Witwatersrand, and the South African Archaeological Society Kent Bequest. The opinions expressed and conclusions arrived at are our own. 2. We use "foragers" to refer to the groups called "gatherer-hunter" or "hunter-gatherer" in other texts. Ethnonyms for the foragers and herders of southern Africa are a sensitive issue. We use "forager" for archaeological periods without ethnography and "San" when more than one evidential source is available and a San ethnicity is tenable. "Early herder groups" are the sheep/goat owners, whether San or Khoekhoen, who become visible in the southern African archaeological record some 2,000 years ago.

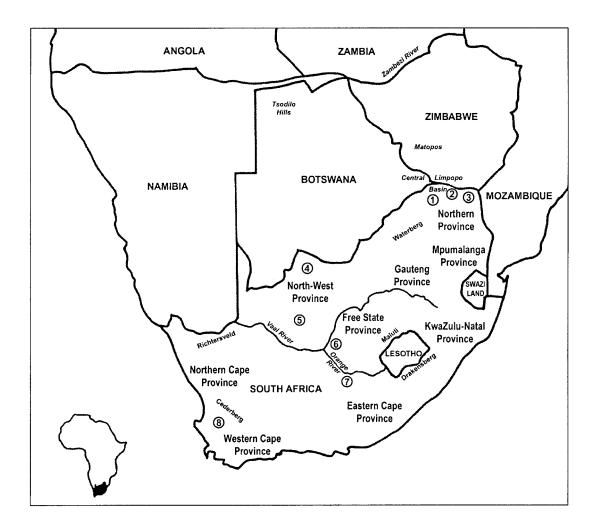


Fig. 1. Southern Africa, showing sites and areas mentioned in the text. 1, Salt Pan shelter and the Soutpansberg; 2, Schroda; 3, Eastern Venda; 4, Mahakane; 5, Klipfontein; 6, Driekopseiland; 7, !Garib Dam site; 8, Stompiesfontein (courtesy of the Rock Art Department, National Museum).

Pursuing Southern African Identities

In the archaeological imaginary, opinion on southern African identities slides along a continuum between two poles. At one pole, herders are seen as a distinct "ethnic" group that migrated southward about 2,000 years ago into a southern Africa occupied by multiple forager communities ancestral to today's San (e.g., Westphal 1963; Ehret 1982, 1998; Elphick 1985:10-13; A. Smith 1997). At the other, herders are viewed as precocious foragers who gained access to domesticated animals and pottery from Bantu-speaking farmers by exchange, diffusion, and acculturation (Deacon et al. 1978; Schrire 1992; Kinahan 1995:211; Sadr 1998; see also Barnard 1992:156-99) before the arrival some 1,400 years ago of immigrant herders bringing with them a distinctive package of material culture. Most researchers accept that individuals and even some groups crossed the forager-herder divide, if not necessarily cognitively. The perceived broader cultural and linguistic differences observed historically remain to be explained, and the debate has produced no consensus. Central to the debate is ethnography—its construction, application, and testing. The catch-22 of ethnography is that it approaches magical realism—providing a model (not always critically or consciously applied) of pasts, places, and people, usually other than our own, that also closes off or makes less likely investigation of other possible pasts, places, and people.

As a study of material culture, archaeology can potentially discipline our understanding of the Khoe-San past, independently verifying or refuting ethnographic information (see Wylie 2002). Because objects cannot speak for themselves, this strategy is only partially successful, and to understand them we must rely on ethnographic animation. Yet, material culture studied in context, with an explicit awareness of its ethnographic underpinnings, does provide a few unambiguous waypoints and can suggest more and less likely lines of argument. For example,

the physical remains of domestic animals seem not to exist in southern Africa before about 2,200 years ago (Vogel, Plug, and Webley 1997). Likewise, Bantu-speaking farmers have no known material presence in southern Africa before about 2,100 years ago (Mitchell 2002: chap.10). Prior to these introductions we are dealing materially with a forager's world, though not a hermetically sealed one. Forager groups were linked in extensive networks through which knowledge of other people to the north could have been gathered. However, when greater specificity on the archaeological and historical identity of foragers and herders is desired, excavated and collected material culture is taciturn. Even the usually distinct material cultures of farmers and foragers blur during initial contact. Early Iron Age sites (ca. 0–1000) CE) sometimes have high wild rather than domestic faunal counts, little iron, and abundant lithic inventoriesa signature hard to distinguish from that of foragers.

These human entanglements demand both caution and creativity in ascribing identity via artifacts. Moreover, herder material culture has proved remarkably difficult to discern. The problem may be that we are not excavating in the right places, that the sites are ephemeral, or that excavated material culture is not sufficiently differentiated and we are therefore assigning herder artifacts to foragers and farmers. Bone preservation is poor at most sites, and diagnostic sheep/goat remains are consequently elusive. Although pottery such as Bambata and/or spouted ware is found in old contexts, its cultural origins remain unclear (but see Huffman 1994, Bollong, Sampson, and Smith 1997). Beyond this, these "gatherer"-"hunter"-"herder"-"farmer" econo-ethnic divisions may be more imagined than real, resulting in an uncritically constructed archaeological "record" (Schrire 1992, Berggren and Hodder 2003). We know that recent Khoekhoen herders also gathered and hunted and that their sites contain forager-like subsistence evidence (Sadr 1998). Similarly, many San kept stock to varying degrees, and their sites acquire the appearance of herders' (A. Smith 1997). The reuse of sites by foragers and herders either sequentially or contemporaneously—produces further blurring. Andrew Smith and colleagues (1991), adopting a more contextual approach, suggest that a paucity of retouched lithics is diagnostic of a herder presence (but see Wilson 1986). Lita Webley's ethno-archaeological research with Khoekhoen-descended Nama suggests that large unretouched "scrapers" derive from herder skin preparation (Webley 1990). There is evidence of foragers' making larger ostrich-eggshell beads for external trade and smaller ones for their own use (Royden Yates, personal communication, August 2000). There is, then, some evidence of material culture differences between these lifestyles, but human remains are equivocal because Khoekhoen-San morphological variability overlaps (e.g., Morris 1992:171–73). Genetic evidence indicates two separate macro-groups that "mixed" but cannot date this mixing (Nurse, Weiner, and Jenkins 1985).

An instructive case study of a mixed and oscillating lifestyle is the "Type R" occurrence in central South Africa. Along 135 km of the Riet River, at least 92 low

circular stone-walled settlements occur in clusters of 2-13 enclosures and date to between 1380 and 1780 CE (Maggs 1971). These settlements do not conform to the "central cattle pattern" of Iron Age Bantu-speakers (e.g., Kuper 1980, Huffman 1986). The associated material culture is thin and mixed, consisting of both wild and domestic animal remains and evidence of plant-food processing but not horticulture. Lithics are large, with some microliths, and thick, undecorated grit-tempered pottery is ubiquitous. Spatially associated are at least 83 burials "likely to represent a single, relatively homogeneous population" perhaps San or Khoe but probably San with unidirectional gene flow to Sotho-Tswana farmers (Morris 1992:152). The equivocal archaeological evidence and the confused historical ethnographies (see Humphreys 1998) suggest San foragers who had adopted a herding way of life. This example highlights the difficulty of determining distinct or even contextual identities. Not all cultural materials are equally informative, and not all material cultures are equally well theorized.

Archaeology has traditionally been deficient in the critical examination of its disciplinary history (but see Trigger 1989, Murray 2001). It has been complicit in imperial, colonial, and nationalist agendas through its obsessive pursuit of cultural classification (Trigger 1989: 174–85). Differences in material culture—the presence or absence of objects such as metal, art, writing, and architecture—have been crucial to this classification. One of its numerous gradations and variants (phases, assemblages, traditions) has been the "Neolithic"—a period of incipient farming and/or agropastoralism, including herding. Expunged from the southern African archaeological sequence by archaeologists who desired a local schema that was not an extension of a European archaeology (Goodwin and van Riet Lowe 1929), it has recently been recommended (Sadr 2003) as a chronological marker that does not automatically associate "herding" with "Khoekhoen." Though well-intentioned, this move fails to address the core problem of how archaeology identifies peoples.

The archaeological urge to quantify can be debilitating (Ouzman 2003), especially with regard to the importance of relationships in constructing and maintaining identities. There are four key relationships: people and places, people and ecology, people and others whom they know, and people and strangers. Contemporary identity discourse stresses the adaptability and hybridity of personhood in a transnational world as opposed to an ossified "traditional" past, but these may be persistent and even "natural" features of social being, with "tradition" being the mechanism that makes innovation possible (Hobsbawm and Ranger 1992). Decentering the sovereign Cartesian individual and acknowledging the dynamic relationships of time, place, people, and artifacts is especially important in contexts of cross-cultural contact. The o CE watershed saw the coming of Iron Age farmers, bringing their paraphernalia and their notions of property to create new relations between people, animals, places, and artifacts. Whether herder peoples were physically present at this point or only 600 years later, a herding way of life is represented at about 2,000 years ago by ovicaprine bones and possibly pottery. Though southern Africa has creative excavators, most material culture is not sufficiently demonstrative of a cultural identity or affinity, and a set of contextual relationships between objects and places, people, and other objects needs to be constructed.

Studies of cultural landscapes that utilize multicomponent data sets such as John Parkington and associates' work in the Western Cape and Garth Sampson and associates' work in the central interior of South Africa are capable of more refined considerations of authorship, but they are rare because of the investments of time, resources, continuity, and dedication that they require. Attention should continue to focus on frontier conditions and interactions that include hybridity, adaptability, and flux and representations of such interactions (e.g., Humphreys 1998). Most new arrivals tend to bleed into a landscape discontinuously and often adapt to local conditions rather than importing a package of archaeologically distinctive cultural elements and practices. Use of local materials and customs means that archaeological assemblages will necessarily be mixed and "fuzzy," but fuzziness at the boundaries does not mean that the categories do not exist. Even numerically insignificant newcomers and/or their artifacts are disruptive, causing people to examine who they are in order to understand who the other people are. This examination is conducted partly in the material world and may reasonably be expected to leave observable traces. But rather than use the "type fossil" approach, we could consider artifact "assemblages" as distinct in the aggregate.

We put forward for discussion an artifact that is consciously produced and closely concerned with identity—rock art, which has become one of the most theoretically informed means of reconstruction of lifeways past and present (e.g., Helskog and Olsen 1995, Whitley 2001). Visual imagery's capacity for framing and transmitting information is unsurpassed (Scarry 1994, Elkins 2002). Furthermore, rock art's association with place permits subsequent rock arts to comment on what has already been inscribed. We suggest that the rock art evidence requires a decisive shift in the revisionist debate.

The Rock Arts of Southern Africa

Southern Africa is an ideal region for rock art study, with thousands of sites located in diverse landscapes and associated with a range of archaeological assemblages. The region's best-known rock art tradition is the engravings and paintings produced by forager or San communities. Though considered predominantly shamanistic and symbolic, San rock art also concerns gender, landscape, and politics (e.g., Vinnicombe 1976, Lewis-Williams 1981, Deacon 1988, Morris 1988, Yates, Parkington, and Manhire 1990, Dowson 1992, Solomon 1992, Garlake 1995, Ouzman 1998, Blundell and Eastwood 2001). Many people have considered all southern African rock art Sanproduced, but the labors of researchers, often informed

by indigenous communities' inputs, over the past 120 years permit us to discern four other rock art traditions, which we list in no particular order.

First, there is Bantu-speaking farmers' rock art, made by groups that appeared in southern Africa about 2,000 years ago (Vogel 1995) from East and Central Africa (e.g., Ten Raa 1974; B. Smith 1995, 1997, 2002). This art has several distinct traditions, among them the northern Sotho initiation and protest rock arts (Smith and van Schalkwyk 2002, van Schalkwyk and Smith 2004), the rock engravings of Late Iron Age settlements (e.g., Maggs 1995), and the boys' initiation rock art of the southern Sotho and Zulu (Frans Prins, personal communication, and our field observations). Most of these traditions are informed by oral history, and some may continue to be practiced.

Second, there is European settler rock art, with several distinct traditions: the names and dates of early travelers seeking to inscribe themselves on the land, inscriptions made during the Anglo-Boer War (Ouzman 1999), quotidian images made by workers during the Great Depression, and prison inscriptions. This rock art calls into question the distinction between "rock art" and "graffiti," though both categories are rich sources of social information. There was considerable mobility in who was and was not classified as "European," and this tradition can destabilize monolithic race-based identities.

Third, there is the magical and military rock art of the Korana (Wadley 2001:174; Ouzman n.d.). The Korana had at least two iterations prior to their post-1994 reemergence as Khoekhoen descendants. First was an originary ca. fifteenth-century !Kora or !Ora herder group with a social structure that allowed quick fission and fusion in response to emergent threats and opportunities (Ross 1975). One such opportunity was the chaotic Dutch and British colonial frontier (1652–1890 CE), when the Korana were multiethnic stock-farmers and raiders. This Korana amalgam seems to have produced over 450 rough finger-paintings at 31 sites (usually hidden cavelike locations) that include armed riders, magical serpents, smears, meandering lines, pigment splatters, and spreadeagled animal skins (Ouzman n.d.; see also Dowson, Blundell, and Hall 1992). These "mixed" images implicate several other iconographies. Spread-eagled animal skins are almost certainly borrowed from Bantu-speakers' initiation art. Species-indeterminate serpents occur in the art and ethnographies of most southern African groups. This mixed character shows rock art's capacity for cross-cultural conversation. Indeed, rock art should be among the first artifacts analyzed when a frontier condition and its necessarily situational identities are suspected.

The recognition of these four rock art traditions is exciting and unsettling and is reason to reexamine southern Africa's rock art inventory. Taking stock, we recognize at least one further rock art tradition, hitherto hinted at: the schematic and geometric motifs pointed to by Desmond Clark (1958:72). Other researchers (van Rijssen 1994; Woodhouse 1994:29; Anderson 1997; Manhire 1998) have examined this rock art in localized areas,

but they have not connected their observations to the extensive tradition that we will argue is predominantly the work of Khoekhoen herders. We first describe the geometric rock art in the Central Limpopo Basin before examining other examples in southern Africa and discussing their dating, distribution, site preference, technique, iconography, and associated contexts.

Geometric Rock Art in the Central Limpopo Basin and Beyond

Overlooking the Early Iron Age settlement of Schroda³ (ca. 900-1025 CE) is a small (< 50 m²), deep (4 m), dark, low-ceilinged rock shelter. The shelter is unsuitable for human habitation, and the shallowness of the ground deposit (< 150 mm) makes it of minimal interest to excavators. For rock art researchers the site appears to hold little potential—its walls are uneven and mostly inaccessible. This is not a site suitable for forager rock art, and it contains none. But, by maneuvering supine into the shelter, one discovers on the low ceiling two fingerpainted red outline circles 400 mm in diameter (fig. 2).4 Within these outlines, two red lines bisect each other, quartering each circle. Short (< 60 mm) white fingerpainted lines radiate from the outer edges of the circles. Further finger-paintings are screened by boulders and survive as remnants of similar circles associated with horizontal rows of red finger dots. These rock paintings are unlike the brush-painted representational images that typify forager rock art. On the other side of Schroda, in a similarly elevated rock shelter with a low cavelike inner recess, is another large red-and-white circular outline with internal red cross-like division and white external rays, all finger-painted. There are also finger dots and vertical finger smears. No fine-line imagery is present.

The Schroda shelters contrast with other rock art sites on the same hill and in adjacent areas, which have larger and smoother rock surfaces bearing a range of brushpainted animal, human, and spirit-world subjects (Eastwood and Cnoops 1999) similar to those of forager rock paintings throughout southern Africa. Further work reveals that the geometrics of Schroda are not unique; at least 135 geometric finger-painting sites occur in the Central Limpopo Basin and its environs (Eastwood and Cnoops 1999, 2001). Of these sites, 35.5% (n = 48) have no forager rock art. In contrast, most sizable rock shelters have forager rock art (n = 305, 87 of which - 28% - also)have geometric finger-paintings), creating a pattern of omission and congruence that suggests either a subtradition of forager rock art or a separately produced tradition. Northern South African sites without forager rock

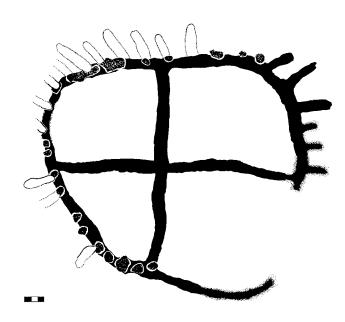


Fig. 2. Finger-painted circle, Limpopo. Black represents red, stipple represents light red. Scale bar 30 mm (courtesy of the Rock Art Research Institute).

art repeat a limited and distinctive set of geometric forms: circular outlines (sometimes with internal division), crosses, lines, concentric circles and oblong forms with vertical and/or horizontal divisions, and finger-applied paint dots in rows, columns, and clusters. Some finger dots are short (< 80 mm) strokes. At 12 of the 48 exclusively finger-painted sites there are handprints, usually small and made by covering the palm and fingers with red, orange, or white pigment.⁵ In contrast, only 4 (1.3%) of 305 sites with fine-line forager rock art have handprints not associated with finger-painted geometrics.

Beyond the Central Limpopo Basin, other parts of southern Africa also have finger-painted and roughpecked geometric rock art. Since 1997 we have covered about 900,000 km² investigating 345 sites with only finger-painted geometrics, 2,921 sites with only fine-line and fine-pecked forager rock art, and 489 sites with both traditions. Instances of the geometric tradition are similar in both iconography and site preference. Shelters with finger-painted geometric rock art tend to be scattered swathlike along the watercourses of the central interior. Many are small and poorly protected and have low inner recesses—relatively rare among rock shelters. These cavelike shelters exhibit circles, rayed circles, divided circles, finger dots and finger strokes, "stitch," "comb," and "trident" motifs, and squares and rectangles. Sometimes non-finger-applied fine white, red, or orange dots are placed on top of these finger-painted lines (fig. 3).

Geometric rock art continues on the boulders, glaci-

5. Southern Africa has no known hand stencils.

^{3.} We provide the real names of sites only when they have adequate access controls.

^{4.} We use photographs and redrawings to represent rock art. Neither technique is neutral, though they are complementary. [More images and additional references appear in the electronic edition of this issue on the journal's web page.]

ated pavements, and dolerite hills of the central interior of South Africa in a seamless transition to an engraved form (e.g., Fock 1969; Morris 1988:113-14). In contrast to the numerous finely pecked, incised, and scraped representational forager rock engravings, these engravings were usually made with a rough-pecked technique (e.g., fig. 4). Sites with rough-pecked geometric art tend to occur in bands along watercourses and sources: "Geometrics and objects are prominent only at sites with a permanent water supply, particularly on river bed rocks or near springs" (Butzer et al. 1979:1211). They seldom occur on the hills and ridges favored by forager engravers, though they intermingle with such engravings on occasion. Interestingly, rough-pecked engravings exhibit a wider range of geometric forms than do finger paintings (fig. 5). Both techniques have a small representational element (> 5%) consisting of rudimentary animals, humans (e.g., fig. 6), and handprints. There is also a signature set of detailed aprons and loincloths $(n \sim 500)$ with a strong visual similarity to those in forager rock paintings (Blundell and Eastwood 2001). With this important exception, finger-painted and rough-pecked geometric rock art is distinct from forager rock art and displays separate site preferences.

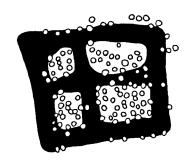
An inevitable question raised by an overwhelmingly geometric rock art is whether we might be creating a "tradition" out of a subset of forager rock art, namely, the entoptic phenomena that some San shamans experienced during altered states of consciousness (Lewis-Williams and Dowson 1988). We address this issue before examining the spatial and temporal variation in rough-pecked and finger-painted geometric rock art.

Geometric Rock Art and Entoptic Imagery

Geometric form is not in itself a denotative of an entoptic phenomenon. It is a truism that the more general a form, the greater the range of potential explanations for it (e.g., Berger 1995). For example, the white outline



Fig. 4. Rough-pecked geometric engravings, Driekopseiland (courtesy of the Rock Art Department, National Museum).



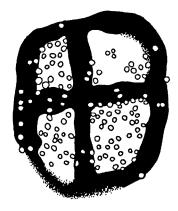


Fig. 3. Red circular and angular geometric rock paintings with fine white dots, Eastern Cape, South Africa. Scale bar 30 mm.

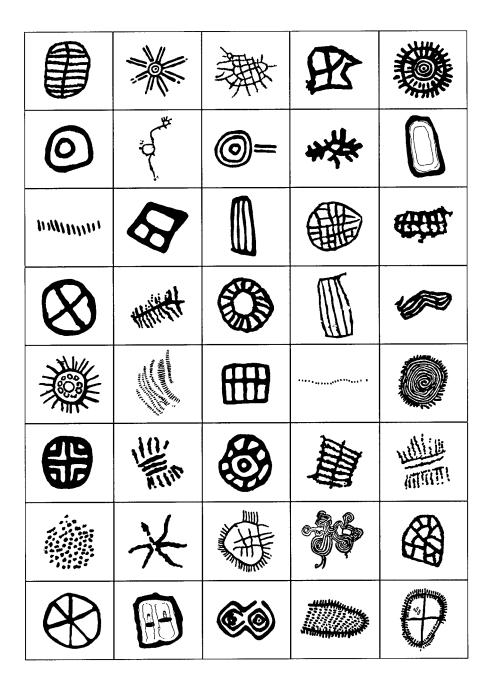


Fig. 5. Range of geometric images in southern African herder rock art (courtesy of the Rock Art Research Institute).

circles, filled circles, concentric circles, and grid forms encountered in Chewa Bantu-speakers' rock art in Malawi relate to girls' initiation and have nothing to do with altered-state experiences (B. Smith 1995, 1997). Similarly, the concentric circles, "sunbursts," cup-and-ring marks, and similar forms found throughout the world may relate to many different and often exclusive concerns such as astronomy (Ruggles 1999), way-markers, calendrics (Marshack 1972), and group identity. Even the geometric forms of Upper Palaeolithic European rock art are not considered unalloyed entoptic phenomena (Clottes and Lewis-Williams 1998), and those of European Neolithic tombs and monuments require close empirical study to differentiate diagnostic entoptics from other forms the meaning of which is not yet known (Dronfield 1995).

We do not deny that entoptic imagery is present in southern African forager rock art (see Lewis-Williams 1988; Lewis-Williams and Dowson 1988:206; Dowson 1989). It is well-established and has a restricted and dis-

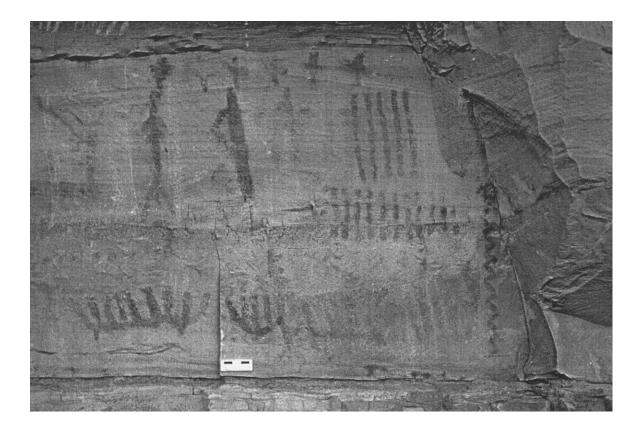


Fig. 6. Red finger-painted rudimentary human figures and red geometrics, Northern Cape. Scale bar 30 mm (courtesy of the Rock Art Department, National Museum).

tinct iconographic range dominated by angular zigzags, nested catenary curves, microdots, flecks, and grids (fig. 7). These entoptics seldom, if ever, occur alone. There are, for example, nested "U" forms from which bees emanate, a catenary curve with zigzags below two parthuman, part-animal figures or "therianthropes," another therianthrope with geometrics spilling off its cloven leg, a human figure with zigzag neck and legs, hallucinatory rain-animals surrounded by zigzags, and geometric markings on animals and therianthropes. Microdots and flecks are used to indicate concentrations of supernatural potency (see, e.g., Dowson 1989:91). In terms of the three-stage neuropsychological model established by Lewis-Williams and Dowson (1988), these iconic examples are stage 2 "construal" hallucinations. They seldom occur as free-floating image isolates because their meaning relates to specific contexts known to have been supernaturally potent.

The examples of noniconic, unalloyed geometric forms that concern us here fall outside of the criteria for entoptics established by neuropsychological research. They include mazelike images, sunbursts, square and circular shapes with internal divisions, diamonds, and meanders, with a small overlap with entoptics in the form of zigzags, basic grid forms, and microdots (see figs. 5 and 7). They tend to occur alone or clustered with other rough geometrics and are not integrated with represen-

tational imagery. Significantly, they are usually fingerpainted or rough-pecked. We argue that unalloyed entoptics are rare in if not absent from San rock art and that we must go beyond neuropsychology to account for the geometric rock art tradition. We are not the first to notice this disjunction: "Does this difference suggest two radically different arts? Do the geometric forms constitute an artistic system entirely distinct from the depictions of people and animals with which, in the engravings, they are often associated?" (Lewis-Williams 1988: 1). Other researchers have recognized that unalloyed geometric forms do not conform to an entoptic form repertoire (e.g., Morris 1988:113-14) and have labeled them "problematic" (Butzer et al. 1979:1204). Alec Campbell and colleagues (1994:153) have encountered a similar problem with finger-painted geometrics at Tsodilo Hills that they call "paintings like engravings," suggesting that "Tsodilo art is an integral component of the younger period of engravings, and . . . a study of the art could possibly throw more light on the interpretation of the [Northern] Cape engravings" (p. 158). The unease these researchers have experienced with "rough" and "fine" geometrics is justified. The two differ in technique, form, and association with representational imagery. We suggest that this problematic geometric rock art is either another expression of forager rock art or a separate tradition.

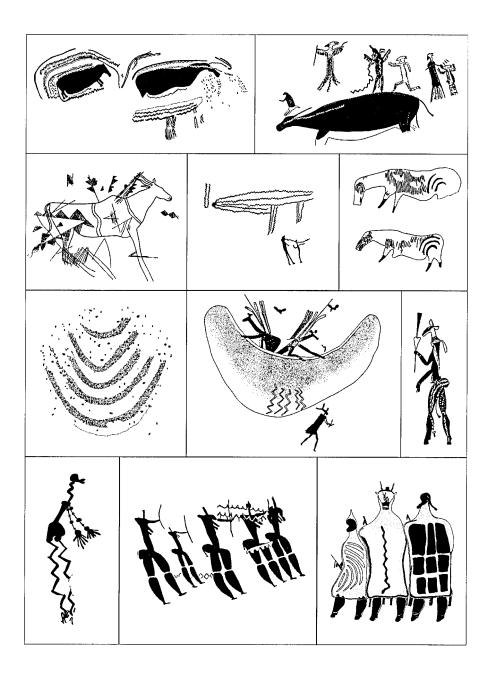


Fig. 7. Range of entoptic phenomena in southern African forager rock art (courtesy of the Rock Art Research Institute).

A Nonrepresentational Forager Rock Art Tradition?

The enormous variety of forager rock art makes us ask whether, given its frequent superimpositioning on known forager rock art, geometric rock art may not be a nonrepresentational, nonentoptic subtradition developed in response to a multicultural "contact" landscape. This suggestion is theoretically possible but lacks empirical support. Southern African forager rock art is not monolithic and unchanging but a socially generated artifact responsive to place, time, event, circumstance, and personality. For example, analysis of a database of over 34,000 fine-line rock paintings at 685 sites in east-central southern Africa combined with iconography, superpositioning, linkage with excavation, climatology, and site and pigment preference produces a three-phase trajectory of this region's forager rock art pre- and postcontact (Loubser and Laurens 1994). The largest phase (78%— 27,500 images at 448 sites) consists of fine-line images painted in exotic ferric-oxide-derived paints. Its iconography is wide, with over 60 animal species, human, and spirit-world elements. This is the "classic" rock art implicated in San shamanism. Much of this phase may be older than 2,500 years, with elements persisting into contact times (Mazel and Watchman 1997). Consistently superimposed on this imagery is an iconographically and numerically more limited rock art (18%—6,704 images at 165 sites) executed in angular, "blocked" brushwork using local hydrous ferrous-oxide-derived paints. Most shamanistic images give way to a circumscribed set of images: domestic animals, stock raiding, weapons, and conflicts. This phase is predominantly concerned with identity, landscape, and resistance. It is not invariable and occurs only in areas of intense intercultural conflict. The third phase (4%—478 images at 72 sites) consists of bizarre figures painted in white pigment in an eschatological art (Ouzman and Loubser 2000).

Thomas Dowson's work (1998a) shows the technique and pigment of the "classic" phase continuing as the earlier egalitarian context gives way to the contact period's opportunities for acquiring power and prestige. Even "classic" imagery can be implicated in contact, either as a masking ideology or as a product of people not unduly affected by contact. Fine-line rock engravings from parts of southern Africa's central interior similarly mark the appearance of domestic animals, spear-wielding peoples, conflict, and a new set of fantastic beings (Dowson 1992).

The variety of San rock art responses to culture contact is to be expected from the confrontation of diverse forager communities with similarly diverse newcomers over hundreds of years. Carving, drawing, beadwork, and other media also expressed San views on unfolding colonial processes (e.g., Skotnes 1996). None of these media display purely geometric imagery. Would people have entirely abandoned their sanctioned techniques of visual representation and produced a rock art in a hitherto unknown technique in the face of end-time threats? This seems implausible given that San fine-line representational rock arts that fully addressed culture contact exist. The little direct commentary we have from San (albeit by then a devastated people) on fine-line and rough geometric rock art supports non-San authorship for the latter. In the 1870s a /Xam adviser (informant) commented knowledgeably on copies of representational forager rock art but when asked about associated finger dots expressed no knowledge ("spots unknown" [Stow and Bleek 1930:pl. 48]). "These symbols, found occasionally among the paintings and more often among rock engravings, have never been explained. The Bushmen said they did not know them" (pl. 25).

Revisiting northern South Africa emphasizes how implausible it is that foragers produced the geometric tradition rock art. One cannot explain the appearance of geometric rock art in terms of diffusion because of its stratigraphic relationship to forager rock art. The overlay sequence shows geometric rock art in northern South Africa as a relatively brief but intense episode of perhaps several centuries' duration, with forager rock art both under and over it. Explaining this pattern of superpositioning in terms of diffusion would require that foragers

came into contact with other people either directly or via intermediaries, acculturating to the extent of adopting an entirely new rock art tradition, and then abandoned that tradition entirely a few centuries later in favor of their former one. In Western Europe diffusionist explanations are plausible because changes are gradual and cumulative. It is the subsequent and complete reversion to representational imagery in the southern African case that makes diffusion unlikely. A failed or regionally specific cultural experiment might explain a few singular cases but not some 834 sites distributed in bands over nearly 1 million km². These features also make it unlikely that this rock art was the product of a multiethnic amalgam, which would more likely have produced a "hybrid" iconography such as that of Korana rock art.

We therefore discount San authorship and recognize the purely geometric art as a separate rock art tradition produced by either farmers or herders. To evaluate these two possibilities, we consider the rock art's dating and distribution.

The Geometric Tradition

AGE

Southern African rock art dating is notoriously sparse, with fewer than two dozen direct or associated examples (Thackeray 1983, Jerardino and Swanepoel 1999). Fingerpainted and rough-pecked geometrics enjoy the bulk of the dating support. Sites at which geometric rock art cooccurs with forager imagery allow examination of stratigraphic relationships. We start in northern South Africa and move south-westwards.

In northern South Africa the largest assemblage of diverse rock arts in stratigraphic association occurs at Salt Pan shelter, which contains over 1,000 images of at least three rock painting traditions: San forager fine-line paintings, geometric finger paintings, and a Bantu-speakingfarmers' rock art (Hall and Smith 2000). A substantial San forager-painted sequence (55% of images) is overlain by a geometric sequence (43% of images), which is overlain by a handful of San forager and seven farmer images. This stratigraphic pattern is repeated across northern South Africa (Eastwood and Cnoops 1999, 2001). No San forager images are sandwiched within the geometric sequence at Salt Pan or elsewhere in northern South Africa. Geometric rock art is thus a relatively recent, intensive and uninterrupted episode in the local rock art sequence. Linking this painted stratigraphy to excavation at Salt Pan and other sites, Hall and Smith argue that geometric art dates to the early first millennium CE (2000:40-44). Now that we have ruled out foragers as producers of this art, we focus on early farmers and herders.

As one moves to central South Africa, most roughpecked geometrics are less weathered than most fineline forager engravings. (Patination is, however, a relative indicator best employed with broad sampling universes.) Gerhard Fock and colleagues' multidisciplinary study at the geometric-dominated site Driekopseiland at the Riet



Fig. 8. Red representational finger paintings, Western Cape. Image cluster approximately 1.5 m long (courtesy of the Rock Art Research Institute).

River found three engraved episodes (Fock et al. 1980). The earliest is made up of 51 fine-pecked animal engravings and dates between 750 BCE and 700 CE (p. 311). One deeply patinated antelope is overlain by a less patinated sunburst (p. 311). This sunburst and almost 3,000 other rough-pecked geometrics (e.g., fig. 4) date to between 700 and 1500-1600 CE. The terminal engraving episode has relatively unpatinated geometrics dated to the past 300 years. Whitley and Annegarn's (1994) cationratio dating at Klipfontein, 70 km away, challenges the comparatively recent Driekopseiland dates by giving a range of "modern" to 8,400 years for the site's geometrics. This discrepancy is, however, a product of conflating rough-pecked pure geometrics and fine-line entopics in a single sample category; at Klipfontein all but the "modern" grid form are entopics. The ancient dates are consistent with our knowledge of the antiquity and continuity of entoptic rock art. By contrast, the Fock dates are from a nonentoptic rock art that appears in the central interior a few centuries after it appeared in northern South Africa.

Available dates for finger-painted geometrics support the Driekopseiland findings. Garth Sampson's meticulous work some 250 km to the south links finger-painted geometrics to pottery-bearing phases 3-6, which date to the past 1,000 years (Sampson and Sampson 1967:28). At !Garib Dam shelter rectangle grids are finger-painted on a flake scar exposed when the shelter wall collapsed into a 1680-1720 CE archaeological layer (Sampson 1972: 209), establishing a terminus post quem of no more than

325 years. Unlike those of northern South Africa, the geometrics of the central interior are sandwiched between layers of forager imagery, suggesting a longer, more complex relationship.

In southernmost South Africa we find the most recent finger-painting dates. Handprints, oddly absent in central interior, reappear, and for the first time representational motifs—human figures, cattle, sheep, and European material culture (fig. 8) make a sustained appearance. One of South Africa's rare direct rock art dates, 1550 ± 140 CE (OxA-515), comes from a black human figure fingerpainted on top of a painted eland (van der Merwe, Sealey, and Yates 1987). Historical subject matter at Stompiesfontein suggests a mid-eighteenth-century CE date (Anderson 1997:18).

These broad brushstrokes establish a first-millennium-CE appearance for nonentoptic geometric rock art in northern South Africa, with progressively younger dates through the central interior to the Western Cape. But even precise dating does not help us assign the rock art to early farmers or to early herders, because the traditional model puts them in South Africa at about the same time. For this, distribution rather than dating is key.

GEOGRAPHIC DISTRIBUTION

The distribution of geometric rock art is banded along watercourses. To identify its makers we need to deter-

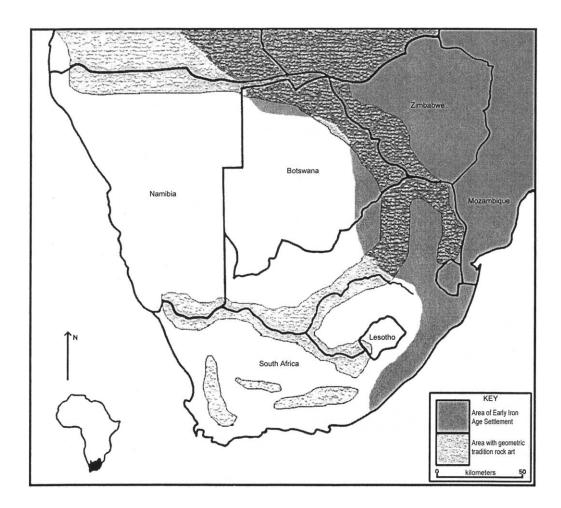


Fig. 9. Distribution of Early Iron Age and nonentoptic geometric rock art areas (courtesy of the Rock Art Research Institute).

mine which groups inhabited the regions in which it is found at the hypothesized time of its making.

We have a good understanding of the distribution of Bantu-speaking farmers in southern Africa in the Early Iron Age (ca. 0–1000 CE). These farmers first settled in what is now Botswana and along the edges of the Central Limpopo Basin (Denbow 1990). Early Iron Age settlements are also found from the eastern coastal plain to the escarpment of South Africa (Maggs and Whitelaw 1991, Binneman 1996). Expansion in this period was limited by rainfall, and settlements are not found to the west of the 600-mm isohyet, where millet and sorghum could not survive. Much of South Africa's central interior is therefore, except for some stock outposts, devoid of any substantial Iron Age presence.

In contrast, excavated archaeological evidence of early herder groups—whether foragers with sheep or Khoekhoen with sheep—is contentious (e.g., Schrire 1992, A. Smith 1997), and we can talk only of overall distribution. Early herder evidence is, as we have seen, found not in site clusters but in extensive linear bands along water-courses. This pattern suggests an early herder presence

in the central interior, continuing beyond the 600-mm isohyet into winter-rainfall regions (Sadr 1998).

Lesotho and South Africa's KwaZulu-Natal and Northern Cape Provinces are critical to identifying the source of nonentoptic geometric rock art. Lesotho and KwaZulu-Natal—areas that have good excavation coverage (e.g., Mazel 1989) and excellent rock art coverage (e.g., Pager 1971, Vinnicombe 1976)—show an almost total absence of herder sites and of geometric rock art (fig. 9). In contrast, the rivers of the central interior that herders are thought to have followed have a dense concentration of predominantly engraved geometric imagery and very few settlements from the Iron Age (Humphreys 1976). Besides this clear distinction in the distributional evidence there is also a clear distinction between known Bantu-speakers' rock art and nonentoptic geometric rock art. Although both use finger-applied and rough-pecked techniques, there is almost no overlap in form repertoires. Some sites, such as Mahakane (Maggs 1995:138), have both geometrics and Bantu-speakers' engravings, and these show clear technical, conceptual, and visual differences. Geometrics are not repeated significantly in

Bantu-speakers' rock art, which is dominated by representational imagery that includes human figures, animals, spread-eagled designs, trains, and wagons painted in clay or slurry-like paints. The dominant color preference also differs: red is the primary color of geometric rock art and white the primary color of Bantu-speakers' (Prins and Hall 1994, B. Smith 1997, Smith and van Schalkwyk 2002). We can reasonably exclude Bantuspeakers as the producers of geometric rock art. Europeans are similarly unlikely, as they cannot have produced rock art older than 350 years, and the same is true of the multiethnic Korana of the colonial frontier.

Khoekhoen is the only remaining known identity that fits the distributional evidence. The coherence of the imagery, age, technique, and distribution of the art suggest its production by a community coming from the north (i.e., through migration rather than acculturation or diffusion) during the first millennium CE, and this accords with traditional archaeological and linguistic evidence for Khoekhoen migrations. We predict that new geometric rock art finds will cluster in areas of known Khoekhoen presence such as southern Namibia and perhaps parts of Zimbabwe (e.g., Cooke 1965) but not in Lesotho or KwaZulu-Natal.

Rock Art and Khoekhoen Origins

The rock art evidence seems to confirm the evidence for Khoekhoen migrations, but it must be integrated with other sources of evidence such as archaeological excavation, linguistics, ethnography, and genetics to produce an adequate account of Khoekhoen origins and movements. There is consensus among archaeologists who accept the existence of Khoekhoen migrations that a southward movement took place from somewhere in or near northern Botswana or perhaps a little farther north and east. The timing of this move is contested. Richard Elphick (1985; see also Walker 1983, A. Smith 1990) suggested that herders who had previously been foragers acquired livestock from Bantu-speakers in the northern Botswana-western Zambia region and then, as Khoekhoen, moved south and west, reaching South Africa's Western Cape Province 2,100-1,900 years ago (on the basis of direct dating of excavated sheep/goat bones [e.g., Sealey and Yates 1994, Vogel, Plug, and Webley 1997]. A second model proposes that sheep and pottery arrived in southern Africa ca. 2,000 years ago by southward diffusion among various forager groups and that it was only at ca. 1000-1400 CE that the herder groups ancestral to modern Khoekhoen entered the region, bringing with them a distinctive lugged form of pottery (e.g., Sadr 1998). The evidence from excavations has supported these two competing models equally.

Using linguistic and archaeological evidence, Westphal (1963) and Ehret (1982) concur that Khoe languages formed about 2,000 years ago by splitting from the Tshu-Khwe language family. A clickless proto-Khoe language came into contact with San click languages around northern Botswana and must therefore have originated somewhere north of Botswana, near western Zambia or Angola. The distinction between northern Botswana and western Zambia or Angola is crucial because there is a hiatus in rock art traditions along the Zambezi River. South of the Zambezi, in Botswana, Namibia, Zimbabwe, and South Africa, is the San forager zone, with fine-line rock art and click languages. North of the Zambezi is Clark's Central African "schematic" rock art zone (Clark 1958), belonging to foragers ancestral to modern Pygmy groups (B. Smith 1995, 1997) that seem to have spoken a clickless language (Ehret 1982). These people and their languages constituted the proto-Khoe. Their rock art, found throughout central Africa, consists of finger-painted and roughly engraved geometrics (Redinha 1948, Clark 1958, Phillipson 1972, B. Smith 1997, Barham 1998. The apparently isolated and hitherto enigmatic rock art of Tsodilo Hills now "stands like a stepping stone between the geometric art of Central Africa and the younger engravings of the northern Cape" (Campbell, Denbow, and Wilmsen 1994:158).

Central African geometric rock art uses the same basic repertoire of forms found in southern African Khoekhoen art. Khoekhoen migrations may therefore be understood in terms of clickless proto-Khoe-speaking foragers in the region of western Zambia/Angola acquiring sheep and perhaps pottery from Bantu-speakers, realigning their society to herding as well as hunting and gathering, and moving southward into a southern Africa inhabited by click-language-speaking San foragers. To understand the timing of and motivation for the migration we must turn to the Central African excavation sequences rather than just those often cited from northern Botswana. Nicholas Katanekwa shows that Bantu-speaking farmers had relatively extensively occupied western Zambia early in the first millennium CE (Katanekwa 1978, 1979), and this is also the case for most of southern Zambia (Vogel 1984, 1987). As Bantu-speaking farmer settlements expanded, those of foragers in southern Zambia diminished, and by ca. 250 CE most of the latter had been abandoned (Fagan and van Noten 1971). Thus the Zambian data support the earlier of the competing archaeological models for the herder migrations.

The Central Limpopo Basin data likewise point to the earlier date. Those in favor of more recent migrations have Khoekhoen arriving after 800 CE (e.g., Sadr 1998), when there was already a substantial Early Iron Age presence. This would have been a difficult time for immigrants to the basin. Hall and Smith (2000:42-44) show that by this time foragers were excluded from parts of the landscape and from previously open and bilateral forager-farmer relationships. Though clientship, trade, and religious relationships between Bantu-speaking farmers and foragers are acknowledged in oral histories and archaeologies, there is little support for similar relations between farmers and Khoekhoen. It is more likely that the northern South African geometric finger paintings were made in the first half of the first millennium CE, when farmer settlement in the basin was peripheral and pasturage for the grazing of Khoekhoen stock was abundant (e.g., Huffman 1986). With the Zambian data, the record from the Central Limpopo Basin shifts the balance of evidence toward an early Khoekhoen migration, perhaps stimulated by the southward movement of Bantuspeakers.

In addition to helping tie down its dating, geometric rock art may also indicate the routes of Khoekhoen migration. From northern Botswana and northern South Africa through the central interior to the Western Cape, the distribution of geometric rock art closely matches the path suggested by some linguists for the movement of Khoe languages (Westphal 1963; Ehret 1982, 1998; but see Argyle 1994–95). Ehret suggests that the "Limpopo Khoi" moved into eastern Venda about 2,000 years ago (1982:163). No excavations have been conducted here, but a recent field survey has shown the area to be rich in finger-painted geometrics (Eastwood and Cnoops 2001). Ehret also postulates a second westward Khoekhoen movement from Botswana into northern Namibia and then south. Excavation confirms the move into northern Namibia but not the subsequent southward movement (Kinahan 1995). The available rock art data support excavation data showing a northern Khoekhoen presence (e.g., Vogelsang 2002). The evidence from central Namibia is more equivocal (Scherz 1970); there rough-pecked geometrics are mostly unpatinated and suggest recent manufacture.

The combination of linguistic, excavation, and rock art evidence shows that a distinctive way of life, material culture, and set of relationships, including Khoe languages, sheep, goats, geometric rock art, and perhaps pottery, arrived in southern Africa 2,000 years ago. People known today as Khoekhoen or part-Khoekhoen such as the Griqua, !Kora/Korana, and Nama retained aspects of this distinctive way of life into the twentieth century. Some still herd and use geometric imagery in ceremonies (Rudner 1982:112-14; Waldman 1989:33 and personal communication, July 2001), though the making of rock art has ceased. It is possible, using a multistranded data set, to demonstrate elements of cultural continuity from ethnographically observed Khoekhoen to early herders in a set of traits including language, specific site preferences, rock art, and a herder lifeway. This is not to say that Khoekhoen culture was static or "pristine" or that there was only one migration. Rather, we see a process of change, and through linguistic studies, excavation, and rock art research we can chart some of this change.

Khoekhoen Herder Rock Art over Time, Space, and Cultures

Change is evident in Khoekhoen rock art's regional and temporal variation. The nature of this change, whereby an older, more homogeneous artistic canon took on local developments, further supports the idea of Khoekhoen rock art as an imported expressive medium capable of adapting to particular physical and cultural demands. This dynamism is seen in a series of cross-cultural "con-

versations" that challenge and extend our understanding of ethnicity and culture contact.

Compared with the circular forms that dominate Khoekhoen rock art in northern South Africa, the Khoekhoen rock art of the central interior is dominated by angular motifs. Representational forms—people, animals, aprons, and loincloths—appear later and increase in number and range in the Western Cape Province. At least some Khoekhoen rock art in northern and interior South Africa is more than 1,000 years old (Sampson 1972, Hall and Smith 2000), beyond the limits of ethnography and modern Khoekhoen memory. Old Khoekhoen rock art shows limited formal variability compared with more recent Khoekhoen rock art. On the peripheries of primary Khoekhoen settlement there is greater variability. In the Eastern Cape Province, geometric rock paintings become scarce and take on a fresher, more elaborate appearance (Derricourt 1977:40-42), using local hydrous ferrous-oxide-derived paints that date to 150-600 years ago. Their distribution and relative age match our provisional knowledge of Khoekhoen herder settlement here in the sixteenth century CE (Derricourt 1977: 206-11) and perhaps earlier (Leslie 1989). In the Richtersveld and southern Namibia, extensive Khoekhoen engraving assemblages (e.g., Dowson 1992:34-47) with a particularly fresh appearance may be linked to recent Khoekhoen (Nama) migrations (e.g., Penn 1986).

In certain places San and Khoekhoen rock arts occur at the same site (fig. 10). We have documented 489 such sites. Most of the images can be readily identified as San or Khoekhoen, but there are instances of overlap, connectivity, and conversation. More than a dozen sites have fine-line depictions of fat-tailed sheep, an introduced animal closely associated with the Khoekhoen. Some fattailed sheep images are accompanied by human figures and have been placed next to geometric rock art even though unpainted and technically more suitable expanses of rock wall were available. Accompanying herder figures often wear distinctive back aprons that differ from the loincloths and aprons observed on San (Blundell and Eastwood 2001). Aprons and loincloths are rare motifs common to both rock arts and will be key to further interpretive work.

As we move into the central interior, images from the two rock art traditions are regularly superimposed on each other, suggesting ongoing use of the same landscape. The responsiveness of San forager rock art allows it to translate elements of geometric rock art into its logic. For example, finger dots, a core element of Khoekhoen rock art, also occur in San forager rock art in parts of South Africa's southern Free State, the adjacent Eastern Cape, and the Cederberg Mountains of the Western Cape. Visually and by stratigraphic association, these San-produced finger dots are recent. The concatenated finger dots of a painting from the Free State (fig. 11) differ from Khoekhoen finger dots in being joined by a painted line. Some finger dots are anthropomorphized, sprouting brush-painted legs, an arm, buttocks, a neck, and a penis. Though Lewis-Williams and Blundell (1997) suggest that these particular finger dots were a San attempt at visual

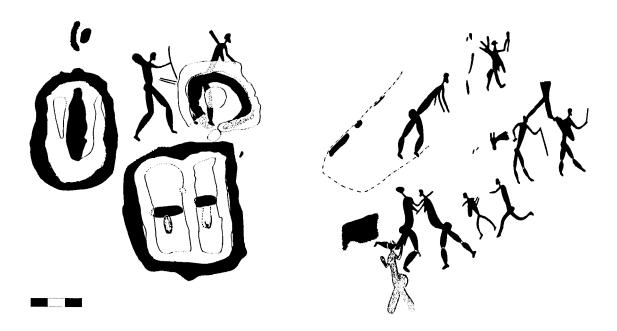


Fig. 10. Red and white Khoekhoen geometric finger paintings on top of San brush paintings, Free State. Scale bar 30 mm.

and tactile access to the spirit world behind the rock face, they cannot be fully explained without also recognizing a Khoekhoen presence; the site also has fingerpainted geometrics superimposed on San human figures (fig. 10). We can, however, treat these dots as part of a conceptual whole in which traditional Khoekhoen finger dots were interpreted in terms of a San world-understanding. The finger dots became like the entoptic microdots sometimes experienced in altered states of consciousness (e.g., Lewis-Williams and Dowson 1988), states in which San regularly changed their definitions of self.

At the same time, the entoptic forms in San forager rock art may have reminded Khoekhoen of their own geometric imagery. In a painting from the Eastern Cape (fig. 12), a tusked eland's body divided by entoptic grid shapes is superimposed on a tusked serpent and surrounded by ten human figures in a variety of postures associated with the shamanic component of the Medicine Dance (Lewis-Williams 1988). A zigzag form in lighter red paint and rows of light red and orange finger dots are painted on top of the San fine lines, creating the false impression that the human figures emerge from the zigzag form (their faint legs are visible below it). These latter geometrics differ from the grid entoptics in color, pigment, technique, and stratigraphy, and their placement is no accident. This is a single image cluster from 40 m of painted shelter wall dominated by fine-line brushwork and small pulses of geometric rock art. The two traditions co-occur only in this cluster, which has the only unequivocal entoptic imagery at this riverside site. The complex conversation in which they are engaged suggests a mutual recognition of form and probably of content—the type of knowledge characteristic of sustained cultural contact. These images are not negatively appropriative, nor do they propose impermeable identities. Rather, they form part of the essential business of people's positioning and repositioning themselves in evolving social contexts (Ingold 2000). Further, though often skilled, these translations are the work of people with incomplete social information and may have unintended consequences. The accommodations that each rock art tradition makes to the other are key in understanding how people constructed and adjusted their identities. These connections shape our understandings of San-ness and Khoekhoen-ness as identities with distinct core values that nonetheless engaged with each other to create the conditions of possibility for cultural coexistence, innovation, challenge, continuity, and even new cultural formations.

Evidence of the Khoekhoen capacity to respond to cultural contact comes also from a diachronic landscape perspective. The more recent finger paintings at places like Stompiesfontein show elements from a European world alongside geometrics. These "hybrid" images combine elements of San and Khoekhoen heritage in response to and even alliance against a new wave of European contact. Handprints reappear in the record and have been linked to known Khoekhoen herder groups (van Rijssen 1994, Henneberg and Mathers 1994, Manhire 1998). We concur with van Rijssen that "it would seem unlikely that the making of handprints would have been a sudden result of the arrival of the herding people unless the herders themselves were the originators of the imprints" (1994:174). Handprints are virtually absent from Lesotho and KwaZulu-Natal, and the six known

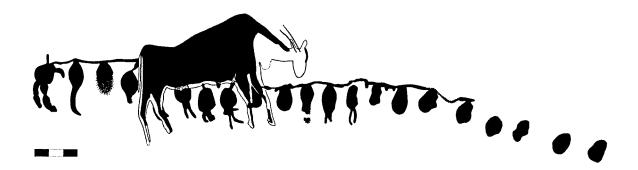


Fig. 11. Red Khoekhoen-inspired San finger dots being transformed into human figures, Free State. Scale bar 30 mm (courtesy of the Rock Art Research Institute).

from the Drakensberg probably belong to a Bantu-speakers' rock art tradition (Pager 1971:337; Anne Solomon, personal communication, August 2001). Given the extent of crossover and alliance between San and Khoekhoen rock arts in the Western Cape, it is not always possible to associate an image such as the handprint exclusively with one group.

It is no coincidence that these mixed images are specific to western South Africa. Researchers are unanimous that foragers and herders lived together here for at least 1,000 years, and identities remain a complex issue (e.g., Humphreys 1998, Morris 2002). Despite this cohabitation, there does seem to have been an emic distinction between San and Khoekhoen. In 1877, Charles Orpen recorded the testimony of Kwa-ha, a man from central South Africa: "I am called Toby: my Bushman name is Kwa-ha. My mother was a Bushwoman, and my father was a Gonah Hottentot [derogatory term for Khoekhoen] named K'uh'akang, living with the Bushmen" (1877:83). This emic distinction suggests why San and Khoekhoen rock arts never fused into a third tradition and indicates that neither tradition was generated by the other.

Conclusion: Implications for Archaeology and Contemporary Khoekhoen and San Identity

Recognizing southern African nonentoptic geometrics as predominantly Khoekhoen-produced confirms an early date for a distinctive and widespread Khoekhoen presence across southern Africa rather than a foragers-withsheep scenario. Rock art differs from other artifacts in being more amenable to the extraction of meaning and intention, at least within our current theoretical understanding of materiality (e.g., Conkey and Hastorf 1990). Much of this meaning pertains to the identity of the maker as individual and, however recalcitrant or idiosyncratic, as group member (e.g., Mitchell 1994, Bright and Bakewell 1995). Rock art is durable and highly visible, ideally suited to displaying and reinforcing notions as well as challenging and nuancing identities. It is capable of transmitting messages with regard to the identity of its makers, and it encourages comment and challenge. The recognition of Khoekhoen rock art opens up a new field of study. So far, our research has focused on demonstrating that van Rijssen (1994), Anderson (1997) and Manhire (1998) were correct in suggesting a Khoekhoen source for certain Western Cape finger paintings. We have expanded this work to provide a fuller description and history of the Khoekhoen rock art tradition. We have not addressed its meaning; this will be the subject of future work.

Frantz Fanon mused that colonial racism was a willful failure to recognize people as people, instead treating them as representative of "ethnic" and "racial" categories (1967). We are acutely aware of the danger of essentialism with regard to the category of "Khoekhoen" (cf. Anderson 1991). At the same time, we would not want to see an endless splintering into politically feeble groupings. Khoekhoen rock art shows that modern Khoekhoen have a heritage that, the violence of apartheid notwithstanding, has its own place in South African history at once distinct from and overlapping with that of the San. Identity is potentially always in flux, but there are moments when it crystallizes into definitive statements. Rock art represents one such statement. Early European colonists' confusion of Khoekhoen and San may be partly excused by the extent to which the two had fused, at least superficially, in the Western Cape after centuries of interaction. In addition, problems of archaeological detection have masked the differences between these two groups and stressed a similarity that is an artifact of European observations over the past 350 years. The most recent phase of this interaction has had an impact on the theories and expectations of archaeological work that seeks to go beyond this period of "historical" record—exactly the cautionary lesson taught by the productive Kalahari revisionist debate. Distinctions and connexions have long been understood by Khoekhoen and San and often surface in modern Khoekhoen-San politics. Archaeologists have too often ignored distinctions for reasons of politically correct revisionism and the privileging of an imagined past over the present. Fortunately, this situation is changing; researchers and activists are forming partnerships with Khoekhoen and San communities in attempts to conduct critically robust yet politically engaged work.



Fig. 12. San and Khoekhoen rock art, Eastern Cape. Scale bar 30 mm (courtesy of the Rock Art Research Institute).

We recognize that the terms "Khoekhoen" and "Bushman"/"San" can be derogatory, but over the past decade they have been reclaimed by people identifying themselves by these terms. These identities can accommodate each other situationally but retain strong and culturally specific core values. The terms allow us to interrogate southern Africa as a "rainbow nation" and apply a different and materially grounded time frame to multiculturalism and cultural relativism. Because southern Africans have been interacting for more than 2,000 years, the distinction between Khoekhoen and San is less apparent today than it was in the past. This has allowed some to challenge the introduction of domestic stock and pottery as the specific contribution of the Khoekhoen to South African history. We reject this challenge. To this package of innovations we add Khoekhoen rock art, a nonentoptic geometric rock art tradition with its own origins and meanings. This tradition is an indicator of a Khoekhoen herder presence that archaeological, ethnographic, linguistic, and genetic research can substantiate. Rock art is both historically specific and capable of wider conversations across time and space. These conversations point to possibilities of personhood beyond race-based definitions and to more situational and performed identities that are grounded in a past that is ever-present.

Comments

CHRISTOPHER CHIPPINDALE

Cambridge University Museum of Archaeology and Anthropology, Downing Street, Cambridge CB2 3DZ, England, and School of Archaeology and Anthropology, Australian National University, Canberra ACT 0200, Australia (cc43@cam.ac.uk). 13 IV 04

This instructive paper usefully illustrates how the distinctive evidence offered by rock art complements other insights; in this it echoes the fine larger-scale syntheses of Keyser and Klassen (2001) and Francis and Loendorf (2002) for the western Plains of North America. In both

southern Africa and North America there is something of a gap between the ethnohistoric evidence, with its patchy coverage and limited historical depth, and the material evidence of archaeology, which has time-depth but seems more reticent when it comes to human identities and attitudes—the more so if the dominant frame of archaeological research is an economic-ecological determinism which does not try to place human perceptions of the world near its centre. Here rock art finds a special opportunity as well as the special difficulties in dating evident in this paper. Much the same conditions clearly apply in much of Australia, where the ethnohistoric record is exceptionally shallow and the stones which alone of material artefacts survive over time in acidic sands are exceptionally hard to interpret. In northern Australia, for example, some of us are persuaded that the story of the Rainbow Serpent and other creator-beings in what has now come conventionally to be called the "Dreaming" can reliably be traced to a certain point in a long and intricate sequence of imagery on the land (Taçon, Wilson, and Chippindale 1996, David 2003) and that that point can be reasonably well placed by such dating as we have for rock art and the chronological indicators in archaeological and ecological sequences (Chippindale and Taçon 1998).

If the potential extends to the many regions—such as the steppe lands of Central Asia—where a rich rock-art record may make a similar approach possible, then it may have wide application. Central to the approach is the "art" of rock art: these are pictures, not words and not artefacts whose form and shape may be largely determined by practical and functional considerations. They are images which express aspects of ancient worlds as their inhabitants knew them to be. And because they are on rock, they are fixed in place: studies of their setting in the landscape and their distribution have a certainty lacking in studies of portable artefacts. We see this on the smallest scale here in the way the red circles are tucked away from easy sight on the ceiling of the Schroda shelter and on the largest scale in the persuasive mapping of the occurrence of geometric rock art across southern Africa. These are "pictures in place" (Chippindale and Nash 2004), having elements in common with other kinds of pictures, elements arising from their fixity in place, and unique aspects due to their combining the two.

New research opportunities are occasion for avoiding repeating old habits and old mistakes, but I think that Smith and Ouzman are too critical of archaeologists' past deficiencies. They criticize quantification and then quantify themselves; they criticize archaeological classification and then classify themselves. I take this as proof that issues of quantification and classification are inescapable for a systematic archaeology. San rock art has distinct regional variants. Two others, those of the Bantu-speaking farmers and of the European settlers, are here reported as being made up of several different traditions (and the most visible rock art today, the spraypainted graffiti which have diffused from Los Angeles to color all the world, is surely one more tradition there, to be set on its own or lumped with another). A third-Korana—has at least two iterations. Therefore these researchers struggle as we all do to find the right categories, facing the usual hard choices about what to lump together and what to split apart. When people and things touch and interact in so many variant ways, can there by any categorization which fully and fairly describes? If there is no category such as "the" Khoekhoen, how can it be possible or useful to identify a category of Khoekhoen rock art? I like the approach here and have confidence in the authors' choices of their categories, but I do not see that they have avoided (or could or should have avoided) these enduring issues of method.

Partly these issues can be addressed by clear language. I think it right to call the tradition reported there "geometric" rather than "abstract." At least for rock art removed from ethnographic insight, there is no useful category of "abstract." We may have pictures that we think we recognize as having the distinctive shape of physical objects—animals, snakes, bird, human beings—and a residual category of pictures that we don't recognize the shape of without knowing whether they are indeed "abstract." And the naturalistic forms we do recognize may not have the meanings of their subjects: a woman wearing blue and with a baby is not just that in Christian imagery, nor is an elephant an elephant in the iconography of contemporary U.S. politics.

Language is another enduring issue here. A useful test of and restraint on the obscuring abstractions of anthropological theorists is to ask if their words are clear to those on the ground, those who know the actual material, whether the people on whose land this rock art now stands or those actually concerned in their own lives with what Khoekhoen identity is today. What do these non-academic colleagues understand by "de-centering the sovereign Cartesian individual" or by "more situational and performed identities"? May we be told in phrases this museum curator and field archaeologist, himself also trapped in a world of anthropological theorists, can understand and therefore learn from?

THOMAS A. DOWSON

School of Art History and Archaeology, University of Manchester, Manchester M13 9PL, England (thomas. dowson@man.ac.uk). 28 IV 04

Smith and Ouzman have produced a compelling case for Khoekhoen authorship of what they term a "geometric tradition" of rock art in southern Africa. As they make clear, they are not the first to make this claim, but they have marshalled a number of lines of evidence from across the subcontinent to produce a more substantial argument than any that has been offered to date. Certainly their thesis provides strikingly plausible accounts for some of the widely noted enigmatic features of southern African rock art.

Although I am persuaded by the general outcome of Smith and Ouzman's argument, there are aspects that require further consideration. For instance, using their "definition" of the geometric tradition I believe that there are examples of the geometric tradition in northcentral Namibia. Also, having long been interested in using rock art to construct local and regional histories of southern African people (Dowson 1994, 1995, 1998b, 2000; see also Kinahan 1991, Yates, Manhire, and Parkington 1994), I feel that there is much scope for discussing this aspect of the paper. But on these points Smith and Ouzman themselves would not claim to have provided a definitive story, and space limitations preclude my dealing with them here. There is one significant point that I should like to use this opportunity to raise: the relationship of the geometric tradition to altered states of consciousness.

Smith and Ouzman's argument for the geometic tradition's not being associated with altered states of consciousness is not as robust as other parts of their paper. While I agree with many of the points they make (for example, that not every geometric need represent an entoptic phenomenon), their position is largely founded on the now slightly outdated neuropsychological model that Lewis-Williams and I developed in the late 1980s and restricts Dronfield's (1996) significant contribution to the art of the European Neolithic. I do not want to argue that the geometric tradition executed by Khoekhoen peoples must be thought of as having been associated with altered states of consciousness unless it can be demonstrated otherwise, but I am not comfortable with the proposition that none of it is associated with any form of ritualized altered state of consciousness either.

From various ethnohistorical accounts we know that interaction between the San and the Khoekhoen was extensive and not superficial. One such account describes what must surely be San shamans performing curing rituals for Khoekhoen people living at the Kat River settlement in what is now the Eastern Cape Province of South Africa (Kay 1833:474–83). Interestingly, not far from the Kat River settlement is the painting reproduced in the paper as figure 12. Smith and Ouzman rightly suggest that the superpositioning of Khoekhoen finger dots on San fine-line paintings is no accident. But, given

the degree of spiritual interaction between San and Khoekhoen peoples and accepting these researchers' interpretation of the significance of that superpositioning, I find it difficult to accept that the Khoekhoen's "repositioning themselves in evolving social contexts" at that place did not involve some intimate engagement with altered states of consciousness. A greater understanding of the diversity of Khoekhoen ritual practice is required before we can dismiss any connection between the geometric tradition and altered states of consciousness.

We should not, however, overlook the potential of the rock art itself to shed some light on the relationship between the geometric imagery and visual hallucinations. I accept that some of the geometric imagery is clearly not in any way associated with altered states of consciousness, but there are some regions where the case for the geometric imagery's deriving from altered states of consciousness is not so easily dismissed. Dronfield (1996) has shown that the entoptic phenomena Lewis-Williams and I outlined in our research on the Upper Palaeolithic art of Europe (Lewis-Williams and Dowson 1988) conflate geometric imagery diagnostic of visual hallucinations with imagery that is not. In a series of papers he has applied this distinction to the geometric art in the Neolithic tombs of Ireland to determine whether the imagery is derived from altered states of consciousness. The images that he has identified as diagnostic of visual hallucinations are in fact present in some regional variants of Smith and Ouzman's geometric tradition. Judging from both published images and my own brief fieldwork, the imagery found in the Richtersveld contains large numbers of geometric patterns that are diagnostic of visual hallucinations. In fact my "sample," collected long before I was aware of the distinction Dronfield later made, is "quantitatively" stronger than the clinical samples he used.

My point is that there are indications that at least some of the Khoekhoen rock art could be directly derived from altered states of consciousness and that Smith and Ouzman have perhaps been too hasty in dismissing this possibility. But I do not want this comment to detract from the welcome contribution these two researchers have made in this paper.

PETER MITCHELL

St. Hugh's College, Oxford University, Oxford OX2 6LE, U.K. (peter.mitchell@sthughs.oxford.ac.uk). 2 I IV 04

This is an ambitious paper with far-reaching implications for southern African archaeology. Its authors are absolutely correct to emphasize the importance of seeking to transcend the constraints of the ethnographic and historical records, and they concisely identify the assumptions involved in recent discussions of the relations between "hunter-gatherers" and "food-producers" in the subcontinent. Also effective is their emphasis on rock art as a deliberately created, situationally specific form of material culture expressive of individual and group

identity. More specifically, I find their identification of geometric rock art with the Khoekhoen largely convincing but should have liked to see this argued more forcefully from links with imagery known in Khoekhoe ethnography (cf. Webley 1997) rather than mostly by the exclusion of other creators and inferences from chronology and distribution. A concern here, which Smith and Ouzman only partially address, is to what extent the beliefs, practices, and arts of different groups of people affected each other: Morris (2002) has recently argued for one well-known geometric rock art site, Driekopseiland, that we should think in terms of a widely shared set of Khoisan beliefs and imagery, a conclusion echoed by Barnard (1992), Prins and Rousseau (1992), and Hoff (1997). More consideration of their arguments and of the possible time depth and significance of these ideological commonalities is needed.

My main concern lies, however, with the inferences Smith and Ouzman draw regarding the southward migration of the Khoekhoen. Several points can be made, beginning with figure 9. Apart from the map's scale, which ignores potentially significant variations in site density and frequency, the main issue here lies with many of the localities where this kind of art is said to exist. No one, to my knowledge, has located anything remotely identifiable as a Stone Age herder site in Mpumalanga, the upper Vaal Valley, the middle section of the Gariep, or much of the mountainous interior of the Eastern and Western Cape Provinces. Where large Khoekhoe herder populations are attested historically, however, in the coastal forelands of the Eastern and Western Cape, figure 9 suggests that the rock art evidence is silent. Of course, this may be an artefact of research, and Bambata pottery from Gauteng (Wadley 1987) and the Waterberg (van der Ryst 1998) could, if it really is of herder manufacture (cf. Huffman 1994), support the authors' argument, but the discrepancy is worrying. Equally so is their discussion of the radiocarbon evidence for early sheep in South Africa. That the earliest AMS-dated specimens come from Namaqualand (Vogel, Plug, and Webley 1997) and the Western Cape (Henshilwood 1996) surely supports a movement of sheep and pottery (which broadly co-occur in the Cape south through Namibia. Basal midfirst-millennium-AD dates for herder pottery in the Seacow Valley concur (Sampson and Vogel 1995). Neither fits well with a (necessarily early) Khoekhoe migration northeast to southwest across the South African interior.

One way forward might be to allow for greater flexibility in the age and hence the associations of the geometric art. Smith and Ouzman's discussion underlines how little we really know about its chronology, a problem common to much of southern African rock art but one that it is vital to address if we are to unscramble its history and relate it more effectively to other components of the archaeological record. With better chronological controls, might we find that the geometric art spread/originated in multidirectional rather than unidirectional ways? Might we also discover that it sometimes occurs in areas where Khoe-speaking people spread but without taking with them a herder lifestyle? And, finally,

might we not also find confirmation, as Sadr (1998) has argued, that the initial dispersal of sheep and ceramics through western South Africa was wholly different from and anterior to the emplacement there of the Khoekhoen themselves? I see nothing in Smith and Ouzman's paper that would exclude this conclusion, which remains, to my mind, eminently defensible from the excavated evidence.

Two final points: First, Ehret's argument for the prior presence of Khoekhoen in the Limpopo Valley some 2,000 years ago depends upon supposed loanwords in southeastern Bantu languages, but his reconstruction of the relevant roots in hypothesized ancestral languages is neither fully published (Borland 1986) nor universally accepted (Argyle 1994–95). Second, while I applaud Smith and Ouzman's search for connections south and north of the Zambezi, care should be taken in assuming that Iron Age populations extensively occupied western Zambia early in the first millennium AD and that this in turn stimulated "an early Khoekhoen migration"; the two dates from Namakala and the anomalously early one from Situmpa (Katanekwa 1978, 1979) are insufficient to support this. My no doubt predictable comments apart, Smith and Ouzman are to be commended on a stimulating and timely paper that should encourage much productive new research.

DAVID MORRIS
Department of Archaeology, McGregor Museum,
Kimberley, South Africa (dmorris@inext.co.za).
26 IV 04

Smith and Ouzman allude, at various points in their paper, to processes of identity construction and performance that are situated and dynamic and in which rock art may be implicated. This is an approach with which I have much sympathy, having elaborated along similar lines in a study of the rock-engraving site of Driekopseiland (Morris 2002). I sought there to advance an anti-essentialist critique of what Inskeep (1971) had earlier characterized as the "either/or" approach to the issue of rock art authorship. Previously, the engravings at that site had been interpreted in the somewhat empiricist mode, various ethnic entities being invoked to match and explain the different engraving styles or aggregates, whereas potentially, I argued, the history in question was much more complex. The affirmation by Smith and Ouzman of a more nuanced perspective is important. But, this said, I find myself at odds with what turns out to be the burden of their argument. Their paper ends up, I suggest, reifying the ethnic distinctiveness of the Khoekhoen relative to San and others, bundling together particular ranges of rock paintings and engravings in a package (with language and other cultural and economic traits) that can be traced, they contend, in a continuum across two millennia. While allowing that identity is "potentially always in flux," they view Khoekhoen rock art (more than other parts of the "package," they urge, because it is "consciously produced and closely concerned with identity") as representing moments when Khoekhoen identity crystallized into "definitive statements." Because of this and because rock art is "one of the most theoretically informed means of reconstruction of lifeways past and present," they argue, the rock art evidence—what is heralded here as a readily distinguishable Khoekhoen herder rock art tradition—becomes "decisive" for resolving the central issue of the revisionist debate (itself reified?).

I have theoretical and empirical misgivings about this conclusion. At a theoretical level I have been concerned to challenge essentialist conceptions of "culture," ethnic group, class, etc., as bounded systems in which "ulterior structure" is reproduced, as E. P. Thompson (1978:46) has put it, by "men [who are] not the makers but the vectors." By approaching the analysis of rock art in these terms, one may be blinded to levels of social and cultural dynamism and fluidity—of contestation and individual agency—which have resulted in what is a quite varied corpus of rock art in Southern Africa. Smith and Ouzman appear to recognize this in one breath but construct a nearly primordialist Khoekhoen identity and rock art tradition in the next. The existence of groups cannot be assumed a priori, not even if "many forager and herder descendants consider separate identities of prime importance." In the present, the articulation and assertion of such identities "from below" (Robins 2001, Waldman 2001, Engelbrecht 2002, Sylvain 2002) in struggles over "authenticity" and access to resources (including traditional leader status) is ironically consequent, in no small measure, upon the fixing of these identities and stereotypes in the colonial era (Humphreys 1998). The "prime importance" given to these labels and attached baggage by descendant communities is what Robins calls "strategic essentialism." Projection of such identities and cultural configurations into the past can be done only be way of analogy and hypothesis—as questions for archaeological and historical enquiry-mindful that the way things are today results from events and circumstances in the past and not the other way around.

At an empirical level, sites in the central interior turn out to be pivotal, given the assertion that "distribution rather than dating is key" in determining authorship. This "works" once it is assumed that all non-entoptic geometric rock art post-dates the appearance of farming, with the remaining question being its association with agriculturists (in the east) or pastoralists (in the west and central interior). Dating, particularly of engravings, remains notoriously difficult, but where some estimates do exist, namely, at Driekopseiland, most of the geometric engravings at the older western end of the site are as weathered as (and hence as old as) the earlier, probably pre-2000 BP, animal engravings (Fock and Fock 1989:142). These may therefore pre-date the hypothesized advent of Khoekhoen pastoralists. Nor, after this, is there evidence for any marked population replacement. Moreover, artifact inventories characteristic of herder sites along the lower Orange River are quite different from those at Driekopseiland. Yet it seems true that geometric rock art sites do increase in frequency in

the last 2,000 years. An alternative to the ethnic explanation at Driekopseiland (Morris 2002) which draws on remarkably consonant ethnography from across the Khoe-San spectrum is that it was a site of ritual intensification (specifically the female rites of passage) in which climate history, changing metaphorical understandings of place, and responses to an increasingly complex social landscape all played a role.

ROBERT J. WALLIS

Richmond the American International University in London, 1 St. Alban's Grove, London W8 5BN, U.K. (robert.wallis@richmond.ac.uk). 26 IV 04

Smith and Ouzman propose that, according to differences in visual appearance and technique (among other factors), Southern African rock engravings and paintings typically identified as San/Bushman("forager")-authored are made up of two distinct rock art traditions: the finebrush paintings and engraved "entoptic" images are ascribed to "foragers" and the finger-painted and roughpecked images to "herders" (Khoekhoen). They interpret this artistic variation in terms of ethnic (San/Khoekhoen) and economic (forager/herder) differences (also problematizing such terminology) and avoid both rigid cultural and economic boundaries between peoples and strict associations between community identities and material culture "signatures." Their paper offers an effective problematizing of "race" in favour of performed identities and introduces rock art—"a Cinderella of archaeological research"-to the Kalahari revisionist debate as a pertinent and promising archaeological resource.

I have two comments on issues raised by this paper. First, a more explicit methodology for classifying entoptic and non-entoptic imagery is required, since the distinction between "rough-pecked (and non-entoptic)" and "engraved entoptic" art is central to their identification of, respectively, "herder" and "forager" art. Second, I am intrigued by the extent to which intercultural visual "conversations" permeate the boundedness of their two perceived artistic traditions/ethnic groups and thus disrupt the significance of their contribution to the debate.

Regarding the first point, clearly not all geometric rock art is "entoptic," yet, although Dronfield's (e.g., 1995) rigorous methodology is cited by Smith and Ouzman, their methodology for distinguishing between entoptic and non-entoptic imagery is unclear. Focus on the identification of entoptic forms, in turn, overlooks the seven "principles of transformation" integral to Lewis-Williams and Dowson's neuropsychological model (1988), which take account of the fluid nature of visual experiences in altered consciousness (also Wallis 2002, 2004). A consequence of this overemphasis on entoptic imagery is the extraction of motifs and entabulation of these as discrete images (fig 5), a simplifying and decontextualizing of imagery which risks homogenizing the differences (Wallis 2003). The suggestion that herder-authored rough-pecked engravings are distinguished from forager engravings by their non-entoptic nature therefore needs to be demonstrated with closer attention to specific panels and regional variability.

Interestingly, a number of herder geometrics (e.g., in figures 2–4) may be ascribed entoptic status if approached in terms of the six entoptic forms and their subjection to one or more of Lewis-Williams and Dowson's principles of transformation. Furthermore, rock art from Driekopseiland and the Richtersveld is cited as displaying a marked juxtaposition of herder and forager art and the predominance of the former, but in both instances classic entoptic images and their subjection to principles of transformation are quite obvious (e.g., Dowson 1992: fig. 46), including in their figure 4, thus contesting their rough-pecked = non-entoptic equation. Sites in central Namibia, where I have been involved in field projects (Wallis 1996), also have rough-pecked engravings, but these are overwhelmingly of animals and their footprints, thus challenging their "rough-pecked geometric" classification for herder art. Smith and Ouzman's association of technique (rough-pecked engravings) with ethnic/economic group (Khoekhoen/herder) is clearly problematic.

Concerning my second point, the juxtaposition of (perceived) herder and forager imagery raises questions of the engagements between these communities. Intimately associated with fine-brush paintings, rough-pecked engravings of lion spoor with five (or more) toes instead of the natural four at Twyfelfontein (e.g., Dowson 1992: 112-14) and other sites in central Namibia might indicate instances of shamanic transformation (Wallis 1996) in what Smith and Ouzman identify as herder art. Perhaps, if we accept their argument, this juxtaposition of paintings and engravings is evidence of a localized central Namibian engagement between foragers and herders. negotiated (and recorded) through visual culture. Building on Dowson's (1995) discussion of Bushman-Bantu interactions, the forager redeployment of herder finger paintings (fig. 11) might indicate that herder art held power (sociopolitical and shamanistic) for foragers. At the same time, the addition of herder geometrics to forager imagery (fig. 12) suggests that otherworld visions were not restricted to forager shamans: arguably, these herder geometrics are classic entoptic images, again disrupting the proposed herder-art = non-entoptic equation. Herders may have been familiar with shamanistic experiences themselves—as is indicated ethnographically (shamanism is not restricted to foragers)—and, as stake-holders in a shamanistic landscape (perhaps in conflict or collaboration with foragers), contributed their own imagery to panels of forager rock art.

Smith and Ouzman's hypothesis that finger-painted and rough-pecked geometric herder rock art is visually distinct from fine-brush paintings and engraved entoptic forager art raises more questions—especially of regional variation and artistic connectivity in light of dynamic herder-forager engagements—than it answers. The authors attend to the distinctiveness of herder/forager and rock art categories, but the "fuzziness" of the boundaries is of equal importance—precisely because this has bearing on the Kalahari debate. If these boundaries are permeable, as I argue, then forager-herder engagements, mobilized in rock art, might offer a more promising resource for developing the debate. Smith and Ouzman's "future work" on meaning, then, should be most fascinating.

EDWIN WILMSEN

Department of Anthropology, University of Texas at Austin, EPS 1.130, Austin, TX 78712, U.S.A. (anaw630@uts.cc.utexas.edu). 8 v 04

This paper should become an important step, at least as far as southern Africa is concerned, in returning the Kalahari debate to its proper focus: reducing the "magical realism" quality of ethnography by "acknowledging the dynamic relationship between time, place, people, and artifacts." The authors reassert the inextricable interdigitation of the existential facets of an ethnographically extracted people's lives with the social formation in which they exist and the historical trajectory that shaped succeeding expressions of their experience. Applying this insight to data derived from extensive archaeological and rock art survey both in the field and in the literature, they make an appealing case for the early presence of KhoeKhoen herders on the subcontinent. This is not a revelation to some of us who have arrived at the same conclusion via other pathways, but Smith and Ouzman bring a fresh perspective that strengthens the argument and broadens it in interesting ways. Whether this precludes a prior or coexisting "'foragers with sheep' scenario" is, however, doubtful, and their claim that it does so is not credible. Their failure in this regard is a common one among ethnographers and archaeologists, few of whom seriously consider what they mean by the terms "ethnic" and "ethnicity." I shall return to this.

First I want to add to Smith and Ouzman's remarks on the Tsodilo Hills paintings. As they note, there are geometrics, apparently finger-painted, among them, but there are also rudimentary human figures, also apparently finger-painted in red, that seem to be similar to those from the Northern Cape shown in their figure 5. Smith and Ouzman are quite correct in saying that these paintings have been "hitherto enigmatic" and that the Tsodilo Hills are "now a key link" in unraveling the history of pastoralism on the subcontinent. Some of the enigma may now be at least partly resolved. The individual hills are today known by the English renditions of names given to them by their current residents, Zhu and Hambukushu, but these names are those of former Khoé-speaking residents. In 1898, the German geographer Siegfried Passarge (Wilmsen 1997), who visited them, identified the main inhabitants of the hills as Khoé-speakers and recorded their names for many landmarks there; a century later, Taylor (2000) recorded many of the same names. Passarge records that Zhu were at the time comparatively recent arrivals displacing Khoé, who then moved to the vicinity of the Okavango Delta and Lake Ngami (see Denbow and Wilmsen n.d.). Today Zhu in Ngamiland and adjacent parts of Namibia form a short, narrow wedge into an otherwise solid band of

Khoé-speakers extending from the Atlantic coast eastward beyond Victoria Falls between 16° and 23° south latitude. Within this wedge, many place-names, not only at Tsodilo, remain Khoé (Wilmsen 1989:334), a fact recognized a century ago by Passarge, who concluded that this must imply comparatively recent movement of Zhu into the area. I (2002) suggest that this movement began in conjunction with the initial penetration of Portuguese-inspired Congo-Luanda trade and extension of intensive slave procurement into the interior, a process that brought Zhu to their present locations in Botswana-Namibia during the seventeenth and eighteenth centuries. Thus, there are grounds for envisioning a Khoé or, better, proto-Khoé—presence of substantial time depth in the area. Because the Khoé languages are closely related to Khoekhoen, Smith and Ouzman's suggestion that speakers of these languages are likely authors of many paintings on the Hills is reasonable.

This is as far as we should go; certainly we should not speak about ethnicity 2,000 years ago, as projecting a current Khoekhoen identity into the past does, without being very clear about what we mean. Ethnicity arises in the exercise of power. Silverman (1976:628) noted this a quarter-century ago: "a group is ethnic only if there are 'outsiders' and if it exists within a wider political field." Ethnic consciousness is a product of contradictions embodied in relations of structured inequality (Comaroff 1987). Thus, ethnic politics is the politics of marginality. Indeed, ethnicity appears to come into being most frequently in instances in which individuals are persuaded of a need to confirm a collective sense of identity in the face of threatening economic, political, or other social forces. Ethnicity, then, is a relational concept, the dialectical nature of which is evident. However embellished by expressive signs or shielded in a cloud of symbolic values, the essence of ethnic existence lies in differential access by self-identified groups to means of production and rights to shares in production returns (Wilmsen 1996). It is unlikely that these conditions were present in precolonial southern Africa. Indeed, Marks (1982:10) concludes that "amongst Africans ethnicity would appear to have been of relatively little significance" even as late as the early nineteenth century. It would be preferable for archaeologists to adopt the practice of linguists and use non-specific forms—in this case, "proto-Khoekhoen"—when speaking of peoples in the unrecorded past.

Reply

BENJAMIN SMITH AND SVEN OUZMAN Gauteng, South Africa. 4 VI 04

We thank the commentators for their considered and constructive comments. We are greatly encouraged by the broad agreement upon our central thesis, that the appearance of geometric rock art in southern Africa marks an early Khoekhoen (or proto-Khoekhoen) presence. A number of important issues are raised in these discussions: issues of past identities and their recognition, archaeological method, and rock art meaning.

Identity in southern Africa is a complex issue, even in the present. The region has been an arena of interaction for at least the past 2,000 years. It is a melting pot in which diverse languages and cosmologies, differing uses of material culture, and varied lifeways have converged and diverged. We therefore share the concern expressed by Morris that the identification of a "Khoekhoen package" could blind one to social and cultural dynamism and fluidity and have sought to expose a particular section of that dynamism and fluidity. For example, we have considered what factors underlie the appearance and evolution of a particular material cultural assemblage (characterized by geometric rock art) over the past 2,000 years, how makers of different rock art assemblages engaged with one another, and how fusions of different rock arts can be linked to historically and socially situated amalgam identities such as that of the Korana.

Morris proposes an "alternative ethnic explanation" for Driekopseiland that emphasizes "ritual intensification," change, and complexity. This does not seem to us an alternative; we would also emphasize these factors in interpreting the geometric rock art at any site. There is a blurring here of meaning with origin. We are concerned here with origins. We have argued that the origins of geometric art lie in the ancient forager (Pygmy) geometric rock art of central Africa and that during the first millennium CE makers of this art migrated southward, thereby introducing a geometric rock art tradition to southern Africa. We tie this movement to a particular ethnographically and linguistically attested migration: that of peoples ancestral to the modern Khoekhoen (who, as Wilmsen argues, would be better termed "proto-Khoekhoen"). While talk of migrations may not be in fashion, the origin of this particular material culture trait is better explained by migration that by any of the processes Morris invokes. For example, how can any set of complex local processes explain the widespread distribution and formal uniformity of the earliest forms of this art? In its later manifestation, where regional and local variations become the norm, we agree with Morris that one should consider the effects of interaction in "an increasingly complex social landscape." We have done this; we have emphasized how the makers of the art evolved new meanings and uses for their art in the context of contact. Morris and Mitchell call for more examples, and this should be a focus of further work. Morris's own example of Driekopseiland is a case in point. But, while such examples of dynamism and fluidity help us to understand the meanings of the locally evolving geometric art form, they do not help us to understand its distribution in bands along the watercourses and sources of southern Africa. Our work does this. The two studies therefore make valuable and complementary contributions.

Mitchell's point that there is a set of Khoe-San beliefs and practices that is widely shared is well taken; beliefs

about huge magical serpents and rain-animals are but two examples. Nonetheless, as Mitchell notes, there are aspects of Khoekhoen ethnography that are distinctive. He urges us to use this ethnography "more forcefully," and we intend to do so, but, as Morris's (2002) work demonstrates, this ethnography has explanatory potential in the realms of use, meaning, and social context rather than origins. We have therefore chosen to use a series of mutually supporting sources of evidence in this paper, among which ethnography is just one.

Chippindale asks how, if there is no clear category of "the Khoekhoen," there can be a category of "Khoekhoen" rock art. We argue that one can clearly identify a category of geometric rock art that appears in southern Africa in the first millennium CE and is strikingly different from the rock art of southern Africa before that time. We explain this new category as an introduction from outside, and we show how it developed, taking on both local and temporal variations. The bulk of our paper is then given over to demonstrating links between this category and a particular and evolving local identity, that of the ancestors of the modern Khoekhoen. It is the strength of this multistranded argument and not the process of classification in itself that gives the category of geometric rock art validity. Geometric art as a category has value because it contributes to our understanding of the southern African past.

Wallis correctly notes that rough-pecked engravings are not exclusively geometric and that in Namibia (and, in fact, other parts of southern Africal there is a fair percentage of forager or "San" rough-pecked engravings. We do not wish to suggest that rough pecking alone is a necessary and sufficient indicator of Khoekhoen authorship. Rather, we stress the need to combine a suite of traits including technique (rough pecking and finger painting), iconography (dominantly geometrics and rudimentary "representational" forms), location (proximity to water sources and courses), site preference (rock shelters with inner cavelike spaces), and pigment type (large-grained ochres and clays). Together, these evidential traits suggest a dominant Khoekhoen ancestral heritage. We say "dominant" because we accept that material culture is not an invariable indicator of fixed identities.

Mitchell observes that our figure 9 is rather too coarsegrained in scale and has suspiciously smooth edges. This map was derived by plotting the 834 geometric-tradition sites identified to date. The site coverage is fairly even, and while this distribution will no doubt be expanded by further research, it cannot contract unless the classification of the geometric tradition is refined. We acknowledge that the Namibian data that we present here are patchy. Dowson's and Wallis's work will be vital in clarifying this matter. Both of their comments suggest the need for a considerable extension of our figure 9 Namibian distribution. Closely linked to this discussion are Mitchell's comments on the plausibility of a Namibian coastal route for some proto-Khoekhoen migrants. He rightly wonders why there is not more geometric rock art in this area. We suggest that more geometric art will indeed be found there. Mpumalanga, where there is geo-

metric rock art but no archaeological evidence of early herders, is an underresearched region, and, to the extent that herders can be discerned from excavated remains, we predict that evidence of them will be found.

Mitchell's concerns about the dating evidence are also legitimate. The data are not as extensive as one would hope. However, the vignettes we have provided from across the region, from Zambia through Limpopo and the central interior to the Western Cape, all point to the same conclusion: the arrival of herder groups in the first millennium CE. Aside from the direct dating evidence, we find it hard to explain the long and complex history of geometric art in a period of less than a millennium, and, as Morris notes, many of the geometric engravings have the worn appearance of considerable age. We do not claim to have resolved the timing of the Khoekhoen migrations—no doubt movements were many and spread over time—but we think that the weight of the evidence favors an earlier migration date. Equally, as noted by Wilmsen, we do not know the extent to which San groups took up herding at this time, but we feel sure that some did. The time of the arrival of the geometric art seems too close to the time of the arrival of evidence of sheep and pottery to be coincidental; we believe that all three were proto-Khoekhoen introductions to the material culture of southern Africa.

Although meaning was largely outside our scope, Dowson and Wallis appropriately criticize our dismissal of the possibility that Khoekhoen art might contain an entoptic component. We accept that such a conclusion is at least premature, but we consider it equally dangerous to assume that just because an art is predominantly geometric it will include entoptics. We are convinced that the greater part of geometric art is nonentoptic. Dowson points to ample ethnographic evidence (see also Gordon 1996) for at least a small entoptic component, especially in contexts of extensive Khoekhoen-San interaction. Such meanings and others remain to be explored, and this is where the broader challenge now lies. With the origins and authorship of the geometric rock art tradition established, we and others can move on to a careful study of meaning. Morris is correct that this must involve an approach other than ethnic essentialism because the fluid nature of proto-Khoekhoen society makes it likely that meanings will be unusually contextual, contested, and changing. Determining which of the ethnographic, historic, and contemporary observations and constructions of Khoekhoen-ness and San-ness to invoke will require the articulation of theory with a broad range of material culture traits. Wilmsen reminds us that others have arrived at the conclusion of an early Khoekhoen presence by "other pathways." A central pillar of our paper is that rock art evidence needs to be combined with these other pathways (archaeological, ethnographic, toponymic, and so on) in order to understand something of the complex and fluid (but not endlessly so) human identities that have been present in southern Africa during the past 2,000 years.

References Cited

- ANDERSON, BENEDICT R. O'G. 1991. Imagined communities: Reflections on the origin and spread of nationalism. New York: Verso.
- ANDERSON, GAVIN. 1997. "Fingers and fine-lines: Paintings and gender identity in the south-western Cape," in Our gendered past: Archaeological studies of gender in southern Africa. Edited by Lyn Wadley, pp. 13-69. Johannesburg: Witwatersrand University Press.
- ARGYLE, JOHN. 1994-95. Khoisan-southern Bantu livestock exchanges: Reinterpreting the linguistic evidence. Azania: Journal of the British Institute in Eastern Africa 29-30:200-201.
- BARHAM, LAWRENCE. 1998. A new geometric painted site from Zambia. Southern African Field Archaeology 7:101-5.
- BARNARD, ALAN. 1992. Hunters and herders of southern Africa: A comparative ethnography of the Khoisan peoples. Cambridge: Cambridge University Press.
- BERGER, JOHN. 1995. Ways of seeing. New York: Viking Press. BERGGREN, ASA, AND IAN HODDER. 2003. Social practice, method, and some problems of field archaeology. American Antiquity 68:421-34.
- BINNEMAN, JOHAN. 1996. Preliminary results from investigations at Kulubele, an Early Iron Age farming settlement in the Great Kei River valley, Eastern Cape. Southern African Field Archaeology 5:28-35.
- BLUNDELL, GEOFFREY, AND EDWARD B. EASTWOOD. 2001. Identifying Y-shapes in the San rock art of the Limpopo-Shashe confluence area: New painted and ethnographic evidence. South African Journal of Science 97:305-8.
- BOLLONG, CHARLES A., C. GARTH SAMPSON, AND ANDREW B. SMITH. 1997. Khoikhoi and Bushman pottery in the Cape Colony: Ethnohistory and Later Stone Age ceramics of the South African interior. Journal of Anthropological Archaeology 16:1-31.
- BORLAND, C. H. 1986. The linguistic reconstruction of prehistoric pastoralist vocabulary. South African Archaeological Society Goodwin Series 5:31–35. [PM]
- BRIGHT, BRENDA J., AND ELIZABETH BAKEWELL. 1995. Looking high and low: Art and cultural identity. Tucson: University of Arizona Press.
- BUTZER, KARL W., GERHARD J. FOCK, LOUIS SCOTT, AND ROBERT STUCKENRATH. 1979. Dating and context of rock engravings in southern Africa. Science 203:1201-14.
- CAMPBELL, ALEC, JAMES DENBOW, AND EDWIN WILMSEN. 1994. "Paintings like engravings: Rock art at Tsodilo," in Contested images: Diversity in southern African rock art. Edited by Thomas A. Dowson and J. David Lewis-Williams, pp. 132-57. Johannesburg: Witwatersrand University Press.
- CHIPPINDALE, CHRISTOHER, AND GEORGE NASH. Editors. 2004. The figured landscapes of rock-art: Looking at pictures in place. Cambridge: Cambridge University Press. [CC]
- CHIPPINDALE, CHRISTOPHER, AND PAUL S. C. TAÇON. 1998. "The many ways of dating Arnhem Land rock-art, north Australia," in The archaeology of rock-art. Edited by Christopher Chippindale and Paul S. C. Taçon, pp. 90-111. Cambridge: Cambridge University Press. [cc]
- CLARK, J. DESMOND. 1958. Schematic art. South African Archaeological Bulletin 13:72-74.
- CLOTTES, JEAN, AND J. DAVID LEWIS-WILLIAMS. 1998. The shamans of prehistory: Trance and magic in the painted caves. New York: Harry N. Abrams.
- COMAROFF, JOHN L. 1987. Of totemism and ethnicity: Consciousness, practice, and the signs of inequality. Ethnos 52: 301-23. [EN]
- CONKEY, MEGAN, AND CHRISTINE HASTORF. Editors. 1990. The uses of style in archaeology. Cambridge: Cambridge University Press.
- COOKE, CRANMER. 1965. Handprints in Southern Rhodesian rock art. South African Archaeological Bulletin 20:46-47.

- DAVID, BRUNO. 2003. Landscapes, rock-art, and the Dreaming: An archaeology of preunderstanding. London: Continuum.
- DEACON, HILARY J., JANETTE DEACON, MARY BROOKER, AND MICHAEL L. WILSON. 1978. The evidence for herding at Boomplaas Cave in the southern Cape, South Africa. South African Archaeological Bulletin 33:39-65.
- DEACON, JANETTE. 1988. The power of place in understanding southern San rock engravings. World Archaeology 20: 129-39.
- DENBOW, JAMES. 1990. Congo to Kalahari: Data and hypothesis about the political economy of the western stream of the Early Iron Age. African Archaeological Review 8:139-76.
- DENBOW, JAMES, AND EDWIN N. WILMSEN. Cattle, copper, and capital: A political economy of southern Africa during the last 2,000 years. MS. [EN]
- DERRICOURT, ROBIN M. 1977. Prehistoric man in the Transkei and Ciskei. Cape Town: Struik.
- DOWSON, THOMAS A. 1989. Dots and dashes: Cracking the entoptic code in Bushman rock paintings. South African Archaeological Society Goodwin Series 6:84-94.
- 1992. The rock engravings of southern Africa. Johannesburg: Witwatersrand University Press.
- -. 1994. Reading art writing history: Rock art and social change in Southern Africa. World Archaeology 25:332-45. [TAD]
- 1995. "Hunter-gatherers, traders, and slaves: The 'Mfecane' impacts on Bushmen, their ritual and art," in The Mfecane aftermath: Reconstructive debates in South Africa's history. Edited by Carolyn Hamilton, pp. 51-70. Johannesburg and Pietermaritzburg: Witwatersrand University Press and Natal University Press. [TAD, RJW]
- . 1998a. Like people in prehistory. World Archaeology 29: 333-43.
- 1998b. "Rain in Bushman belief, politics, and history: The rock art of rain-making in the south-eastern mountains, southern Africa," in Archaeology of rock art. Edited by Paul S. C. Taçon and Christopher Chippindale, pp. 73-89. Cambridge: Cambridge University Press. [TAD]
- 2000. "Painting as politics: Exposing historical processes in hunter-gatherer rock art," in Hunters and gatherers in the modern context: Conflict, resistance, and self-determination. Edited by Megan Biesele, Robert K. Hitchcock, and Peter P. Schweitzer, pp. 413–26. Providence: Berghahn Books. [TAD]
- DOWSON, THOMAS A., GEOFFREY BLUNDELL, AND SI-MON HALL. 1992. Finger paintings in the Harts River valley, Northern Cape Province, South Africa. Southern African Field Archaeology 1:27-32.
- DRONFIELD, JEREMY. 1995. Subjective vision and the source of Irish megalithic art. Antiquity 69:539-49.
- . 1996. The vision thing: Diagnosis of endogenous derivation in abstract arts. CURRENT ANTHROPOLOGY 37:373-91. [TAD]
- EASTWOOD, EDWARD B., AND CATELIJNE CNOOPS. 1999. Results of the Limpopo-Shashe confluence area rock art survey: A quantitative and interpretive study. Unpublished report for the De Beers Fund.
- -. 2001. The north-eastern Venda rock art survey: The Tshipise, Manenzhe, and Folovodhwe hills. Unpublished report for the De Beers Fund.
- EHRET, CHRISTOPHER. 1982. "The first spread of food production to southern Africa," in The archaeological and linguistic reconstruction of African history. Edited by Christopher Ehret and Merrick Posnansky, pp. 158-82. Berkeley: University of California Press.
- . 1998. An African classical age: Eastern and southern Africa in world history, 1000 BC to AD 400. Oxford: James Currey.
- ELKINS, JAMES. 2002. Stories of art. New York: Routledge. ELPHICK, RICHARD. 1985. Khoikhoi and the founding of white South Africa. Johannesburg: Ravan.
- ENGELBRECHT, M. 2002. "The connection between archaeological treasures and the Khoisan people," The dead and their possessions: Repatriation in principles, policy, and practice.

- Edited by C. Fforde, J. Hubert, and P. Turnbull. London: Routledge. [DM]
- FAGAN, BRIAN M., AND FRANCIS L. VAN NOTEN. 1971. The hunter-gatherers of Gwisho. Tervuren: Musée Royal de l'Afrique Central.
- FANON, FRANTZ. 1967. Black skin, white masks. New York: Grove.
- FOCK, GERHARD J. 1969. Non-representational rock art in the Northern Cape. Annals of the Cape Provincial Museums (Natural History) 6:103-36.
- FOCK, GERHARD, L., KARL W. BUTZER, LOUIS SCOTT, AND ROBERT STUCKENRATH. 1980. "Rock engravings and the Later Stone Age, northern Cape Province, South Africa: A multidisciplinary study," in Proceedings of the 8th PanAfrican Congress of Prehistory and Quaternary Studies, Nairobi. Edited by Richard F. Leakey and Bethwell A. Ogot, pp, 311-13. Nairobi: International Louis Leakey Memorial Institute for African Prehistory.
- FOCK, G. J., AND D. M. L. FOCK. 1989. Felsbilder in Südafrika 3: Die Felsbilder im Vaal-Oranje-Becken. Köln: Böhlau Verlag. [DM]
- FRANCIS, JULIE E., AND LAWRENCE L. LOENDORF. 2002. Ancient visions: Petroglyphs and pictographs of the Wind River and Bighorn country, Wyoming and Montana. Salt Lake City: University of Utah Press. [CC]
- GARLAKE, PETER. 1995. The hunter's vision: The prehistoric art of Zimbabwe. Harare: Zimbabwe Publishing House.
- GOODWIN, ASTLEY J. H., AND CLARENS VAN RIET LOWE. 1929. The Stone Age cultures of South Africa. Annals of the South African Museum 27:1–289.
- GORDON, D. 1996. From rituals of rapture to dependence: The political economy of Khoikhoi narcotic consumption, c. 1487–1870. South African Historical Journal 35:62–88.
- HALL, SIMON, AND BENJAMIN W. SMITH. 2000. Empowering places: Rock shelters and ritual control in farmer-forager interactions in the Northern Province. South African Archaeological Society Goodwin Series 8:30–46.
- HELSKOG, KNUT, AND BJORNAR OLSEN. Editors. 1995. Perceiving rock art: Social and political perspectives. Oslo: Novus Forlag.
- HENNEBERG, MACIEJ, AND KATHRYN MATHERS. 1994. Reconstruction of body height, age, and sex from handprints. South African Journal of Science 90:493–96.
- HENSHIL WOOD, CHRIS. 1996. A revised chronology for pastoralism in southernmost Africa: New evidence of sheep at c. 2000 b.p. from Blombos Cave, South Africa. Antiquity 70: 945-49. [PM]
- HOBSBAWM, ERIC, AND TERENCE O. RANGER. 1992. The invention of tradition. Cambridge: Cambridge University Press.
- HOFF, ANSIE. 1997. The Water Snake of the Khoekhoen and /Xam. South African Archaeological Bulletin 42:21-38. [PM]
- HUFFMAN, THOMAS N. 1986. Archaeological evidence and conventional explanations of southern Bantu settlement patterns. Africa 56:280-98.
- . 1994. Toteng pottery and the origins of Bambata. Southern African Field Archaeology 3:3-9.
- HUMPHREYS, ANTHONY J. B. 1976. Note on the southern limits of Iron Age settlement in the northern Cape. South African Archaeological Bulletin 31:54-57.
- 1998. Populations, prehistory, pens, and politics: Some reflections from north of the Orange River. Southern African Field Archaeology 7:20–25.
- INGOLD, TIM. 2000. The perception of the environment: Essays in livelihood, dwelling, and skill. London: Routledge.
- INSKEEP, R. R. 1971. "The future of rock art studies in Southern Africa," Rock paintings of Southern Africa. Edited by M. Schoonraad, pp. 101–4. South African Journal of Science suppl. 2. [DM]
- JERARDINO, ANTONIETA, AND NATALIE SWANEPOEL. 1999. Painted slabs from Steenbokfontein Cave: The oldest known parietal art in southern Africa. CURRENT ANTHROPOL-OGY 40:542-48.

- KATANEKWA, NICHOLAS. 1978. Some Early Iron Age sites from the Machili Valley of south-western Zambia. Azania 13:
- 1979. Namakala and Nanaga sites and the chronology of the Early Iron Age in southern and south-west Zambia. South *African Archaeological Bulletin* 34:120–22.
- KAY, STEPHEN. 1833. Travels and researches in Caffraria. London: John Mason. [TAD]
- KEYSER, JAMES D., AND MICHAEL A. KLASSEN. 2001. Plains Indian rock art. Seattle: University of Washington Press. [cc]
- KINAHAN, JOHN. 1991. Pastoral nomads of the central Namib Desert. Windhoek: New Namibia Books. [TAD]
- 1995. A new archaeological perspective on nomadic pastoralist expansion in south-western Africa. Azania 29-30:
- KUPER, ADAM. 1980. Symbolic dimension of the southern Bantu homestead. Africa 50:8-23.
- LESLIE, MARY. 1989. The Holocene sequence from Uniondale rock shelter in the Eastern Cape. South African Archaeological Bulletin Goodwin Series 6:17–32.
- LEWIS-WILLIAMS, J. DAVID. 1981. Believing and seeing: Symbolic meanings in Southern San rock paintings. London: Academic Press.
- 1988. Reality and non-reality in San rock art: 25th Raymond Dart Lecture. Johannesburg: Witwatersrand University Press for the Institute for the Study of Man in Africa.
- LEWIS-WILLIAMS, J. DAVID, AND GEOFFREY BLUN-DELL. 1997. New light on fingerdots in southern African rock art: Synesthesia, transformation, and technique. South African Journal of Science 93:51-54.
- LEWIS-WILLIAMS, J. DAVID, AND THOMAS A. DOW-SON. 1988. The signs of all times: Entoptic phenomena in Upper Palaeolithic art. CURRENT ANTHROPOLOGY 29:201-38.
- LOUBSER, JOHANNES H. N., AND GORDON LAURENS. 1994. "Depictions of domestic ungulates and shields: Huntergatherer and agro-pastoralists in the Caledon River valley area," in Contested images: Diversity in southern African rock art. Edited by Thomas A. Dowson and J. David Lewis-Williams, pp. 83–118. Johannesburg: Witwatersrand University Press.
- MAGGS, TIM O'C. 1971. Pastoral settlement on the Riet River. South African Archaeological Bulletin 26:37-63.
- . 1995. Neglected rock art: The rock engravings of agriculturist communities in South Africa. South African Archaeological Bulletin 50:132-42.
- MAGGS, TIM O'C., AND GAVIN WHITELAW. 1991. A review of recent archaeological research on food-producing communities in southern Africa. Journal of African History 32:
- MANHIRE, ANTHONY. 1998. The role of handprints in the rock art of the south-western Cape. South African Archaeological Bulletin 53:98-108.
- MARKS, SHULA. 1982. Industrialization and social change: Some thoughts on class formation and political consciousness in South Africa, ca. 1870-1920. Paper presented to the Walter Rodney Seminar, Boston University African Studies Center, Boston, Mass. [EW]
- MARSHACK, ALEXANDER. 1972. Cognitive aspects of Upper Palaeolithic engraving. CURRENT ANTHROPOLOGY 13:445-77.
- MAZEL, ARON D. 1989. People making history: The last ten thousand years of hunter-gatherer communities in the Thukela Basin. Natal Museum Journal of Humanities 1:1–168.
- MAZEL, ARON D., AND ALAN L. WATCHMAN. 1997. Accelerator radiocarbon dating of Natal Drakensberg paintings: Results and implication. Antiquity 71:445-49.
- MITCHELL, PETER, J. 2002. The archaeology of southern Africa. Cambridge: Cambridge University Press.
- MITCHELL W. J. THOMAS. 1994. Picture theory: Essays on verbal and visual representation. Chicago: University of Chicago Press.
- MORRIS, ALAN G. 1992. The skeletons of contact: A study of

- protohistoric burials from the lower Orange River Valley, South Africa. Johannesburg: Witwatersrand University Press.
- MORRIS, DAVID. 1988. Engraved in place and time: A review of variability in the rock art of the Northern Cape and Karoo. South African Archaeological Bulletin 43:109–21.
- . 2003. Driekopseiland and "the rain's magic power": History and landscape in a new interpretation of a Northern Cape rock engraving site. M.A. diss., University of the Western Cape, Bellville, South Africa.
- MURRAY, TIM. Editor. 2001. Encyclopedia of archaeology: History and discoveries. Santa Barbara: ABC Clio.
- NURSE, GEORGE, T., J. S. WEINER, AND TREFOR JEN-KINS. 1985. The peoples of southern Africa and their affinities. Oxford: Oxford University Press.
- ORPEN, CHARLES, S. 1877. A contribution from a Bushman. Orange Free State Monthly Magazine 1:83-85.
- OUZMAN, SVEN. 1998. "Toward a mindscape of landscape: Rock art as expression of world-understanding," in The archaeology of rock art. Edited by Christopher Chippindale and Paul S. C. Taçon, pp. 30–41. Cambridge: Cambridge University
- 1999. "Koeka kakie, hents op bokkor of ik schiet!" Introducing the rock art of the South African Anglo-Boer War, 1899–1902. The Digging Stick 16:1–5.
- 2003. Is audit our object? Archaeology, conservation, sovereignty. Antiquity 77(297). http://antiquity.ac.uk/wac5/ ouzman.html.
- n.d. The magical arts of a raider nation: Central South Africa's Korana rock art. South African Archaeological Bulletin Goodwin Series. In press.
- OUZMAN, SVEN, AND JOHANNES H. N. LOUBSER. 2000. Art of the apocalypse: Southern Africa's Bushmen left the agony of their end time on rock walls. Discovering Archaeology 2:38-45.
- PAGER, HARALD. 1971. Ndedema: A documentation of the rock paintings of the Ndedema Gorge. Graz: Akademische Druck- und Verlagsanstalt.
- PENN, NIGEL. 1986. Pastoralists and pastoralism in the northern Cape frontier zone during the eighteenth century. South African Archaeological Bulletin Goodwin Series 5:62-68.
- PHILLIPSON, DAVID W. 1972. Zambian rock paintings. World Archaeology 3:313–27.
- PRINS, FRANS E., AND SIAN HALL. 1994. Expressions of fertility in the rock art of Bantu-speaking agriculturalists. African Archaeological Review 12:171-203.
- PRINS, FRANS E., AND LLOYD ROUSSEAU. 1992. Magicoreligious interactions, dreams, and ritual transformations: Towards a better understanding of trance experiences among the Khoi. Southern African Field Archaeology 1:33-39. [PM]
- REDINHA, JOSÉ. 1948. As gravuras rupestres do Alto Zambeze. Publicaçoes Culturais 2. Lisbon: Companhia de Diamantes de Angola, Museu do Dondo.
- ROBINS, S. 2001. NGOs, "Bushmen," and double vision: The Khomani San land claim and the cultural politics of "community" and "development" in the Kalahari. Journal of Southern African Studies 27:833-53. [DM]
- ROSS, ROBERT. 1975. The !Kora wars on the Orange River, 1830–1880. Journal of African History 16:561–76.
- RUDNER, IONE. 1982. Khoisan pigments and paints and their relationship to rock paintings. Annals of the South African Museum 87:1-281.
- RUGGLES, CLIVE. 1999. Astronomy in prehistoric Britain and Ireland. New Haven: Yale University Press.
- SADR, KARIM. 1998. The first herders at the Cape of Good Hope. African Archaeological Review 15:101–32.
- 2003. The Neolithic of southern Africa. Journal of African History 44:195–209.
- SAMPSON, C. GARTH. 1972. The Stone Age industries of the Orange River scheme and South Africa. National Museum
- SAMPSON, C. GARTH, AND MARY SAMPSON. 1967. Riversmead shelter: Excavations and analysis. National Museum Memoir 3.

- SAMPSON, C. GARTH, AND JOHN C. VOGEL. 1995. Radiocarbon chronology of Later Stone Age pottery decorations in the upper Seacow Valley. Southern African Field Archaeology 4:84-89. [PM]
- SCARRY, ELAINE. 1994. Resisting representation. New York: Oxford University Press.
- SCHERZ, ERNST-RUDOLPH. 1970. Die Felsbilder in Südwest-Afrika. Vol. 1. Die Gravierungen in Südwest-Afrika ohne den Nordwesten des Landes. Köln: Böhlau Verlag.
- SCHRIRE, CARMEL. Editor. 1984. Past and present in huntergatherer studies. Orlando: Academic Press.
- . 1992. The archaeological identity of hunters and herders at the Cape over the last 2000 years: A critique. South African Archaeological Bulletin 47:62-64.
- 1996. Digging through darkness: Chronicles of an archaeologist. Charlottesville: University Press of Virginia.
- SCHULTZE, LEONHARD. 1928. Zur Kenntnis des Körpers der Hottentotten und Buschmänner. Zoologische und Anthropologische Ergebnisse einer Forschungsreise im Westlichen und Zentralen Südafrika 5:147–227.
- SEALEY, JUDITH, AND ROYDEN YATES. 1994. The chronology of the introduction of pastoralism to the Cape, South Africa. Antiquity 68:58-67.
- SILVERMAN, SYDEL. 1976. Ethnicity as adaptation: Strategies and systems. Reviews in Anthropology 3:626–36. [EW]
- SKOTNES, PIPPA. Editor. 1996. Miscast: Negotiating the presence of Bushmen. Cape Town: University of Cape Town Press.
- SMITH, ANDREW B. 1990. On becoming herders: Khoikhoi and San ethnicity in southern Africa. African Studies 49:51-73. 1997. Hunters on the periphery: The ideology of social hierarchies between Khoi-Khoi and Soaqua. Kronos 24:9-17.
- 1998. Khoesaan orthography. South African Archaeological Bulletin 53:37-38.
- SMITH, ANDREW B., KARIM SADR, JOHN GRIBBLE, AND ROYDEN YATES. 1991. Excavations in the south-western Cape, South Africa, and the archaeological identity of prehistoric hunter-gatherers within the last 2,000 years. South African Archaeological Bulletin 46:71-91.
- SMITH, BENJAMIN W. 1995. Rock art in south-central Africa. Ph.D. diss., Cambridge University, Cambridge, U.K.
- 1997. Zambia's ancient rock art: The paintings of Kasama. Oxford: Nuffield Press for the National Heritage Conservation Commission of Zambia.
- . 2002. Forbidden images: Rock paintings and the Nyau secret society of central Malawi and eastern Zambia. African Archaeological Review 18:187-211.
- SMITH, BENJAMIN W., AND JOHAN A. VAN SCHALK-WYK. 2002. The white camel of the Makgabeng. Journal of African History 43:235-54.
- SOLOMON, ANNE. 1992. Gender, representation, and power in San ethnography and rock art. Journal of Anthropological Archaeology 11:291-329.
- STOW, GEORGE W., AND DOROTHEA BLEEK. 1930. Rock paintings in South Africa from parts of the Eastern Cape and Orange Free State. London: Methuen.
- SYLVAIN, R. 2002. "Land, water, and truth": San identity and global indigenism. American Anthropologist 10:1074-85. [DM]
- TAÇON, PAUL S. C., MEREDITH WILSON, AND CHRIS-TOPHER CHIPPINDALE. 1996. Birth of the Rainbow Serpent in Arnhem Land rock art and oral history. Archaeology in Oceania 31:103-24. [CC]
- TAYLOR, MICHAEL. 2000. Tsodilo Hills place names. MS. [EW] TEN RAA, ERIC. 1974. A record of some pre-historic and some recent Sandawe rock paintings. Tanzania Notes and Records
- THACKERAY, ANNE I. 1983. Dating the rock art of southern Africa. South African Archaeological Bulletin Goodwin Series
- THOMPSON, E. P. 1978. "The poverty of theory, or An orrery of errors," in The poverty of theory and other essays. London: Monthly Review Press. [DM]
- ${\tt TRIGGER, BRUCE \ D. \ 1989.} \ A \ history \ of \ archaeological$ thought. Cambridge: Cambridge University Press.

- VAN DER MERWE, NIKOLAAS, JUDITH SEALEY, AND ROYDEN YATES. 1987. First accelerator carbon-14 date for pigment from a rock painting. South African Journal of Science 83:56-57.
- VAN DER RYST, MARIA. 1998. The Waterberg Plateau in the Northern Province, Republic of South Africa, in the Later Stone Age. British Archaeological Reports International Series 715. [PM]
- VAN RIJSSEN, WILLIAM J. 1994. "Rock art: The question of authorship," in Contested images: Diversity in southern African rock art. Edited by Thomas A. Dowson and J. David Lewis-Williams, pp. 159-75. Johannesburg: Witwatersrand University Press.
- VAN SCHALKWYK, JOHAN A., AND BENJAMIN W. SMITH. 2004. "Insiders and outsiders: Sources for reinterpreting an historical event," in African historical archaeologies. Edited by Andrew Reid and Paul Lane, pp. 325–46. London: Kluwer Academic.
- VINNICOMBE, PATRICIA. 1976. People of the eland: Rock paintings of the Drakensberg Bushmen as a reflection of their life and thought. Pietermaritzburg: Natal University Press.
- VOGEL, JOHN C. 1995. The temporal distribution of radiocarbon dates for the Iron Age of southern Africa. South African Archaeological Bulletin 50:106–9.
- VOGEL, JOHN, INA PLUG, AND LITA WEBLEY. 1997. New dates for the introduction of sheep into South Africa: The evidence from Spoegrivier Cave in Namaqualand. South African Journal of Science 93:246-48.
- VOGEL, JOSEPH O. 1984. An Early Iron Age settlement system in southern Zambia. Azania 19:61-78.
- -. 1987. Iron Age farmers in southwestern Zambia: Some aspects of spatial organisation. African Archaeological Review
- VOGELSANG, RALF. 2002. "Rock art in Kaokoland?" in Tides of the desert. Africa Praehistorica 14. Edited by Jennerstrasse 8, pp. 535-48. Cologne: Heinrich Barth Institute.
- WADLEY, LYN. 1987. Later Stone Age hunters and gatherers of the southern Transvaal: Social and ecological interpretations. British Archaeological Reports International Series 380. [PM]
- . 2001. Who lived in Mauermanshoek shelter, Korannaberg, South Africa? African Archaeological Review 18:153-79.
- WALDMAN, LINDA P. 1989. Watersnakes and women: A study of ritual and ethnicity in Griquatown. Unpublished honours diss., University of the Witwatersrand, Johannesburg, South Africa.
- WALDMAN, P. L. 2001. The Griqua conundrum: Political and socio-cultural identity in the Northern Cape, South Africa. Ph.D. diss., University of the Witwatersrand, Johannesburg, South Africa. [DM]
- WALKER, NICK J. 1983. The significance of an early date for pottery and sheep in Zimbabwe. South African Archaeological Bulletin 38:88-92.
- WALLIS, ROBERT J. 1996. Footprints of the rain: Rock art and shamanic landscapes in the Twyfelfontein Valley, Namibia. M. A. thesis, University of Southampton, Southampton, U. K.
- 2002. The Bwili or "flying tricksters" of Malakula: A critical discussion of recent debates on rock art, ethnography, and shamanisms. Journal of the Royal Anthropological Institute 8:735-60. [RIW]
- . 2003. Review of: Prehistoric rock art in Cumbria: Landscapes and monuments, by Stan Beckensall (Stroud, Gloucestershire: Tempus, 2002). The Prehistoric Society: Book Reviews, June 2003. http://www.ucl.ac.uk/prehistoric/index.html.
- 2004. "Shamanism and art," in Shamanism: An encyclopedia of world beliefs, practices, and culture. Edited by Mariko Walter and Eva Fridman. Santa Barbara: ABC-CLIO. In press. [RJW]
- WEBLEY, LITA. 1990. The use of stone "scrapers" by semi-sedentary pastoralist groups in Namaqualand, South Africa. South African Archaeological Bulletin 45:28-32.
- -. 1997. "Wives and sisters: Changing gender relations

- among Khoe pastoralists in Namaqualand," in Our gendered past: Archaeological studies of gender in southern Africa. Edited by Lyn Wadley, pp. 167-208. Johannesburg: Witwatersrand University Press. [PM]
- WESTPHAL, ERNST O. J. 1963. The linguistic prehistory of
- southern Africa Africa 33:237-64.
 WHITLEY, DAVID. Editor. 2001. Handbook of rock art research. Walnut Creek: AltaMira Press.
- WHITLEY, DAVID, AND HAROLD J. ANNEGARN. 1994. "Cation-ratio dating of rock engravings from Klipfontein, Northern Cape," in Contested images: Diversity in southern African rock art research. Edited by Thomas A. Dowson and J. David Lewis-Williams, pp. 189-97. Johannesburg: Witwatersrand University Press.
- WILMSEN, EDWIN N. 1989. Land filled with flies: A political economy of the Kalahari. Chicago: University of Chicago
- . 1996. "Premises of power in ethnic politics," in The politics of difference: Ethnic premises in a world of power. Edited by E. Wilmsen and P. McAllister, pp. 1-23. Chicago: University of Chicago Press. [EW]
- 1997. The Kalahari ethnographies (1896-1898) of Siegfried Passarge. Köln: Rüdiger Köppe/Gaborone: Botswana Society. [EW]
- . 2002. "For 'trinkets' such as beads: A revalorization of Khoisan labor in southern African history," in African histori-

- cal research: Sources and methods. Edited by Toyin Falola and Christian Jennings. Rochester: University of Rochester Press.
- WILSON, MIKE, L. 1986. The origins of the Khoikhoi and of domestic stock in southern Africa. South African Archaeological Bulletin 41:94-95.
- WOODHOUSE, HERBERT C. 1994. Enigmatic paintings from the Queenstown district. South African Journal of Ethnology
- WRIGHT, JOHN. 1996. Sonqua, Bosjesmans, Bushmen, aba-Thwa: Comments and queries on pre-modern identifications. South African Historical Journal 35:16-29.
- WYLIE, ALISON. 2002. Thinking from things: Essays in the philosophy of archaeology. Berkeley: University of California Press.
- YATES, ROYDEN, ANTHONY MANHIRE, AND JOHN PAR-KINGTON. 1994. "Rock painting and history in the southwestern Cape," in Contested images: Diversity in southern African rock art research. Edited by Thomas A Dowson and David Lewis-Williams, pp. 29-60. Johannesburg: Witwatersrand University Press. [TAD]
- YATES, ROYDEN, JOHN PARKINGTON, AND ANTHONY MANHIRE. 1990. Pictures from the past: A history of the interpretation of rock paintings and engravings of southern Africa. Pietermaritzburg: Centaur Publications.