documentary evidence — is, of course, a dangerous exercise, and generally best avoided. When, however, the parallels between historic and prehistoric iconography are so close, as they are between the Eastern Desert rock art and the classic religious motifs from ancient Egypt, it would seem unnecessarily reticent to avoid making obvious linkages. Hence, it is proposed that the petroglyphs share the same, essentially religious character inherent in later Egyptian art; that they allow us a glimpse into the minds of those who created them; and that they demonstrate the great antiquity of many of the core beliefs of ancient Egyptian religion.

Indeed, one of the most remarkable aspects of the Eastern Desert rock art is its strange familiarity: so many of the motifs find echoes in the art of dynastic Egypt's tombs and temples. Yet, as far as can be ascertained, the former pre-date the latter by several thousand years. If this is true, the indigenous, African roots of pharaonic culture can be traced much further back in time than anyone thought. The final chapter of *Genesis* (Ch. 6, 'Cradle of civilisation: rethinking ancient Egyptian origins') looks at these long-term cultural continuities, and at the recent evidence from the *Western* Desert — notably the site of Nabta Playa — for social complexity in the pre-Predynastic era (*c.* 7500–4000 BC). It is becoming increasingly clear that the first moves towards statehood were taken in response to the challenging environment of the savanna, not in the benign surroundings of the Nile Valley. Moreover, the earliest cultural tradition in the Predynastic sequence from the Nile Valley, the Badarian, demonstrates particularly close links with the Eastern Desert and the Red Sea coast. It is tempting to place the rock art, both newly discovered and long known about, in this broader and deeper context: to see it as the product of a people as familiar with the lands beyond the Nile as with the river valley itself. This is the final conclusion of *Genesis of the Pharaohs*, that the ancestors of the pyramid-builders were not settled farmers but wandering herders; or, to put it another way, that ancient Egyptian civilization was not the gift of the Nile, but the gift of the deserts.

Genesis is certainly not intended to be the last word on Egyptian prehistoric rock art. It is far from being even the first word: as the book acknowledges, that distinction belongs to accounts published a century or more ago. But if the work succeeds in bringing a fascinating and hitherto neglected aspect of Egyptian civilization to a wider audience, and in promoting further discussion and study (as epitomized by this review feature), it will have served its purpose.

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Note

1. See, most recently, R. Friedman (ed.), *Egypt and Nubia. Gifts of the Desert*, London, 2002.

Rock Engravings Pose Enduring Problems

Karl W. Butzer

Renewed attention to the significance of rock art in Egypt is to be welcomed. During the heyday of recording, in the 1930s, it was at least implicitly recognized that the animals, humans and symbolic representations such as boats, found provocative analogues among ivory carvings, slate palettes, and decorated pottery of the Predynastic period from the Nile Valley. But in the absence of a viable archaeological record from beyond the desert margins of the Nile floodplain, there was little that could effectively be done to evaluate the rock art, let alone tie it to the origins of Egyptian civilization and state formation. The three great pioneers — Leo Frobenius, Hans Rhotert, and Hans Winkler — probably recognized these limitations, and primarily focused on documentation, with only modest attempts to relate the emerging information to ethnographic categories. Egyptologists by and large ignored the rock art, except for some attention to hieroglyphic inscriptions in the Eastern Desert.

The explosion of archaeological research during the 1960s, in response to the UNESCO appeal at the time of the High Dam Project, also saw a geographical expansion of survey or excavation to most of Egypt. But rock-art research received little serious attention, other than by the Austrian excavations at Seiyala, Nubia, that provided an unusual and plausible linkage of paintings and petroglyphs to archaeology (Bietak & Engelmayer 1963; Butzer & Hansen 1968). Bietak & Engelmayer mention six other overhangs with rock art, on other archaeological conces-

sions in Nubia, that were either not studied or published (Bietak & Engelmayer 1963, 15–16). The site is a complex rock overhang, including an A-Group (Early Dynastic) occupation horizon between layers of bedded eolian sand. One ceiling has a large tableau of paintings, in part two-toned, dominated by longhorn cattle, many with one recurved horn in central Saharan style, and a partly preserved sickle-shaped boat. The paintings include predators but there are also ungrouped engravings of large game animals on the cave walls, one of which is on a loose slab older than the A-Group occupation. While the bulk of the naturalistic paintings should belong to that occupation, there also are more schematic paintings that include six hunters with long bows, as well as elements first known in Roman times: three camel riders and a dromedary. The engravings comprise rough, fully-pecked animals as well as others with skilful, ground-out silhouettes. Both the paintings and engravings at Seiyala are therefore time-transgressive, and may additionally relate to Naqada II, C-Group and late Roman materials in the vicinity. This illustrates the problems of dating and establishing a contemporaneous association of representations, even under the best of circumstances, i.e. with archaeological excavations.

The rock art of the Eastern Desert appears to be limited to Nubia Sandstone, as found at Seiyala. The crystalline rocks of the Red Sea Hills, that form the watershed, are not amenable to engravings, nor are the variable sedimentary rocks nearer to the Red Sea. North of Qena, limestones dominate the country east of the Nile; some of the massive units are suitable for paintings, but none have yet been discovered here. The large sandstone watersheds of Nubia have not been searched except in Nile proximity, where sites are common; given broader valleys, however, cliff faces tend to be littered with talus. The clustering of rock-art sites between the two modern desert roads, east of Guft and Edfu, may therefore be (a) fortuitous and related to lithology and geomorphology, (b) a function of their relative accessibility, both today and in the past, or (c) a product of differential recovery. The absence of visible archaeological sites is frustrating, with Laqeita Wells the exception. At long intervals, most wadi floors are activated from cliff to cliff as broad stream beds, so that any sherds or lithics would be covered by sand and gravel. I have trudged up or down wadis in the Eastern Desert, in part while supervising a PhD dissertation (see Hansen 1966). Sherds or late prehistoric lithics are at a premium.

As much as I like the notion that Nile Valley transhumant herders periodically exploited the desert wadis, the circumscription of rock art, and the absence of sherds or lithics, leaves open the alternative interpretation that expeditions in search of attractive minerals in the Red Sea Hills crisscrossed the area even before official trading missions were sent to the Red Sea and beyond. That does not contradict the ancient presence of indigenous pastoralists, with their largely perishable repertoire of material goods, who would have engraved domesticated animals or game on cliff faces. But some will argue that the boats and other Nilotic symbols were engraved by intrusive people from the Nile Valley, even if occasionally copied by the local population.

The ecological case for productive pastoral activities in the Eastern Desert is not as strong as Wilkinson suggests (pp. 59–60, 104, 115); he argues for (late) summer grazing in response to summer (monsoonal) rains, at the time the Nile floodplain was under water. But all recorded flood events in the Eastern Desert during the twentieth century have come during winter. The only Holocene geological deposit in Egypt for which seasonality can be determined comes from near the Sudanese border, and it shows that wadi and Nile floods were seasonally *out of phase*, with Nile floods eroding parched wadi silts, *c.* 8000 BC (Butzer 1997, 162). At Giza the most spectacular rains and wadi floods in the Egyptian Holocene record melted down or swept away the workmen's settlement on several occasions during Dynasty 4 (Butzer 2001b). But Giza is well within the belt of Mediterranean winter rains; comparable events are not recorded in Upper Egypt, where such a climatic signal should be even stronger if summer rains were responsible. For Nile Valley pastoralists using seasonal pastures in the desert, the proper time would have been in February or March, but much better winter grazing would have been available on the floodplain — unless cultivation was already competing for space with pasture. Plant remains from sheep/goat dung studied from the desert edge at Naqada show that livestock were kept in enclosures and fed wetland plants (Wetterstrom 1993). The implications are surprising: small stock were not using desert pasturage, but cut fodder, suggesting that animals were removed to higher ground during the flood season, and grazed on the floodplain at other times of the year.

Wilkinson (pp. 106, 113) pictures 'large, roaming herds of game', including elephant, giraffe, and perhaps zebra or rhino, in the (Predynastic) Eastern Desert, and even a population of wild cattle, taking advantage of the 'lush grazing'. This is hyperbole.

The last significant wadi flood events on the margins of the Nile Valley in Upper Egypt ended about 6600 BC. In the Red Sea Hills, Tree Shelter and Sodmein Cave, which contain Neolithic materials, last enjoyed a wet spell 5950–5250 BC, also documented by charcoals of a half dozen or so xerophytic trees (Moeyersons *et al.* 1999). At the best of times, the valleys of the Eastern Desert had a low, thorntree and sparse-grass savanna of semi-desert type — much better than the degraded, acacia palimpsests of today, but hardly a habitat for large herds or plentiful pastoralists. Full, contemporary aridity was established in the Eastern Desert by 3600 BC, the environmental chronology not being quite synchronous with that of the Libyan Desert (Butzer 2001a). However, the Nile Valley analogues invoked by Wilkinson are all younger than 4000 BC.

Despite these several shaky assumptions, it is good that Wilkinson has again drawn attention to the rock art. Predynastic Egypt was not boxed in by sterile, forbidding deserts. Desert and floodplain were still open systems, and the petroglyphs do offer the possibility of integrating them. That will, however, require hard, patient and innovative field research (e.g. Butzer *et al.* 1979).

A closing comment. Hans Winkler's recording of petroglyphs is given its proper due, but the thrust of that research is misrepresented by Wilkinson. The German labels given by Winkler (1937) to his five representational groups are not 'exotic' (p. 83), but fairly neutral anthropological descriptors for the period. *Keilstil-Leute* is translated by the incomprehensible 'wedge-shaped people', but the meaning is different: *Keilschrift* refers to Mesopotamian cuneiform writing, so that *Keilstil* means cuneiform-like, in effect vertical, stick-like representations. Similarly *Federschmuck-Leute* is translated 'feather-diadem people' rather than as 'plumed head-dress people'. Wilkinson's inadequate translations become more serious when he implies that *Volk* and *Reich* are 'language redolent of the Nazi ideology' (p. 84), rather than commonplace words for 'people' and 'realm' or 'kingdom'. Wilkinson pushes the Nazi business further, to claim Winkler had a 'preoccupation with the swastika' and that he

> grappled with the implications of racial supremacy, seeking evidence to prove or disprove that the great civilization of ancient Egypt was the creation of enlightened invaders from the 'Aryan' world This obsession would also colour Winkler's interpretation of the most intriguing petroglyphs . . . (pp. 21–2).

All this is psycho-babble, that finds no support in Winkler's writings.

By p. 147 Winkler is credited with a 'radical interpretation' of the 'Eastern Invaders' as 'a "master race" who had come from the east'. I searched in vain for Winkler's use of the term 'master race', which was instead favoured by British author Emery (1961, 39–40). In fact it is Petrie (1939, 3, 7, 77) who has a 'Dynastic Race' coming from Elam (Khuzistan) via the Red Sea to unify Egypt, after 'Eastern Desert Folk' had introduced the Naqada II culture; 'Libyan invasions' arrived with Naqada I pottery, while the Badarian is attributed to a homeland in the Caucasus! This is part of a long-term diffusionist debate, in which Winkler is but a footnote. In fact, Wilkinson's summation (above) belatedly recognizes that Petrie coined the term Dynastic Race. Petrie, together with the anatomists Elliot Stevenson and Douglas Derry, came up with the idea of a civilizing Dynastic Race over a century ago, first spelled out in 1923 (Smith 1923, 92). Derry's strong views were only published much later (Derry 1956). The implicit goal was to champion a non-African origin of Egyptian civilization, hardly a trifling matter today!

It is sad that Wilkinson, who at first acknowledges that Winkler was a Communist sympathizer as well as victimized by the Nazis (pp. 19, 25–6), then proceeds to tar him as beholden to Nazi ideology. The Dynastic Race was very much a British idea.

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A Theory too Far

Dirk Huyge

With *Genesis of the Pharaohs*, Toby Wilkinson has produced a controversial book that has already prompted a scathing critique (Wengrow 2003a). In the introduction to this review feature, Wilkinson has written apologetically about his selective use of sources and the style and tone of his work. I will, therefore, not linger upon those cosmetic aspects. Let us proceed to the very core of the matter.

Egyptian rock art, as any other rock art for that matter, is a potentially inexhaustible source of infor-