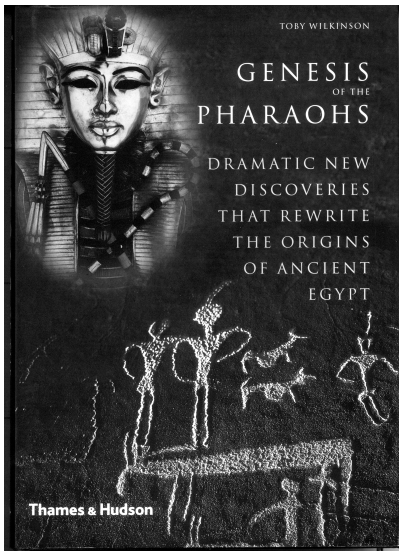
Review Feature

Genesis of the Pharaohs: Dramatic New Discoveries that Rewrite the Origins of Ancient Egypt, by Toby Wilkinson. London: Thames & Hudson, 2003. ISBN 0-500-05122-4 hardback £18.95; 208 pp., 87 ills., 25 in colour



The processes leading to the formation of early state societies remain one of the key topics of archaeological research. Few of these early states are as famous or evocative as that of ancient Egypt, a land of dramatic monuments and terrain, with mysterious and exotic religious practices and a distinctive and exotic iconography. But was Egypt the gift of the Nile, as the Greek historian Herodotus alleged?

In this new book, Toby Wilkinson draws attention to a relatively neglected part of the Egyptian landscape: not the fertile river valley, but the deserts which fringe it to east and west. It is here in the deserts, he argues, that the origins of the Egyptian state are to be found. In recent millennia, the deserts have been hostile environments of rock and sand. Go back before 3000 BC, however, and a rather different picture emerges.

This different picture is of a desert hinterland peopled by nomadic groups who spent part of their year in the Nile valley. It suggests a more mobile view of Egyptian Predynastic society than has usually been supposed. Desert and valley may have functioned together in a classic pattern of complementarity between contrasting environmental zones, with cattle herds perhaps moved from valley floor to desert in step with the cyclical pattern of the seasons.

The specific ingredient which Wilkinson uses to link valley and desert during the fourth millennium BC is rock art. Egyptian rock art has not yet been properly recognized as a rich and important repertoire by specialists in the burgeoning field of rock art as whole. Surveys over more than a century, however, have revealed numerous groups of pecked and engraved images on the desert cliffs and boulders, and recent expeditions (including those by Wilkinson himself) are continually adding to the corpus. The Egyptian desert rock art is generally less well-known than the vivid rock paintings of the central Sahara (such as the famous Tassili frescoes), though it too conveys the image of a greener more habitable landscape.

Wilkinson ties specific motifs found in the desert rock art to iconography from the Nile valley during the fourth millennium and later. Yet the linkages and chronologies remain controversial, along with the central hypothesis. Did the desiccation of the savannas lead to the formation of the Egypt, forcing the scattered pastoralist populations to withdraw to a cultivated Nile valley? Was Egypt the gift of the deserts, not the Nile? In this Review Feature the hypothesis is examined by specialists working in Egypt and Nubia, and the reliability of the supporting evidence is assessed.

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Summary of *Genesis of the Pharaohs*

Toby Wilkinson

Despite the best efforts of scholars over the last hundred years, the origins of ancient Egypt's distinctive civilization remain shrouded in mystery. From Petrie's 'dynastic race' and Winkler's 'eastern invaders' of the early twentieth century, to a post-colonial emphasis on indigenous development, to the re-emergence of diffusionist theories among recent, non-orthodox writers: explanations for the emergence of pharaonic culture have swung between extremes, often without significant new archaeological evidence to inform the discussion.

At the same time, and since the beginnings of Egyptology, our view of ancient Egypt has been moulded, to a large extent, by the ancient Egyptians' own world-view. We have tended to think of the country and its ancient culture as synonymous with the Nile Valley, a narrow strip of green hemmed in on both sides by inhospitable and largely inaccessible desert. Herodotus's famous phrase 'Egypt is the gift of the Nile' has, consciously or unconsciously, influenced the way in which Egyptologists have studied their subject, and the sites chosen for archaeological investigation. Only in the last few years has attention begun to focus on the vast areas of Egypt that lie outside the Nile valley: the Eastern and Western Deserts.[1] As a result, scholars are now beginning to re-assess the conventional view of Egyptian civilization, and the factors involved in its genesis.

Into this dynamic situation comes a substantial body of new material, in the form of rock art from Egypt's Eastern Desert. Of course, the petroglyphs of this region have been known and written about for nearly a century, attracting the attention of explorers and Egyptologists such as Weigall, Winkler, Fuchs, and Červíček, among many others. What is new is the large corpus of images discovered since 1997, and in particular during an expedition of December 2000. It is this previously unpublished and unstudied material that provides the core of *Genesis of the Pharaohs*, a book which seeks to place the petroglyphs in their wider context and, in the process, advance a new model for the environmental and social conditions in which pharaonic civilization first developed.

Before giving a summary of the book, it may be helpful to explain the general style and tone of *Genesis*. It is an unashamedly popular — even populist — work, intended for a broad, lay audience and written 'as an engaging detective story', to use the publishers' blurb. It is very definitely not an academic treatise with copious footnotes and a comprehensive bibliography. Indeed, some scholarly papers and monographs that bear upon particular aspects of the subject have perforce been excluded from the discussion. As befits a popular book that champions a revised view of the past, *Genesis* is confident in tone, eschewing the language of academic reticence. This approach is emphasized by the deliberately provocative subtitle: 'dramatic new discoveries that rewrite the origins of ancient Egypt'. For, above all, *Genesis* is designed to provoke its readerships: the discipline of Egyptology, largely unaccustomed to rock art and its potential; a wider public too often beguiled by brilliantly marketed, New Age, pseudoscience; and, not least, the authorities responsible for preserving Egypt's heritage in all its forms, familiar and unexpected.

Genesis opens with an account of the individuals and expeditions that have brought to light the petroglyphs of Egypt's Eastern Desert (Ch. 1, 'The desert speaks: making the discoveries'). Ever since the Russian scholar Golenischeff travelled along the Wadi Hammamat in 1887, the natural and archaeological wonders of the region have attracted those with an adventurous mindset. Arthur Weigall's explorations from the back of a camel, twenty years later, were the first to make detailed drawings of petroglyphs, the rock images that feature in abundance at many of the key strategic locations in the desert (waterholes, caves, cliff overhangs, narrow defiles). But it was Hans Winkler who really brought these ancient records to scholarly attention, publishing two preliminary volumes of *Rock Drawings* in 1937 and 1938. All subsequent studies of rock art, whether library based or in the field, have drawn heavily on Winkler's research, even if his conclusions — ascribing petroglyphs and the foundation of pharaonic civilization to invaders from the east — are no longer supported by the majority of scholars.

The key question to be answered before embarking on any interpretation of rock art is one of dating. Various scientific methods for dating petroglyphs and pictographs have been trialled, some more successfully than others; but in the case of Egypt, we are fortunate in having an abundance of material for making stylistic comparisons. The decorated pottery, and a unique painted cloth, from Predynastic graves in the Nile Valley constitute a sizeable artistic repertoire from prehistoric Egypt, with which the motifs in the Eastern Desert rock art may be compared. Hence, art-historical techniques,

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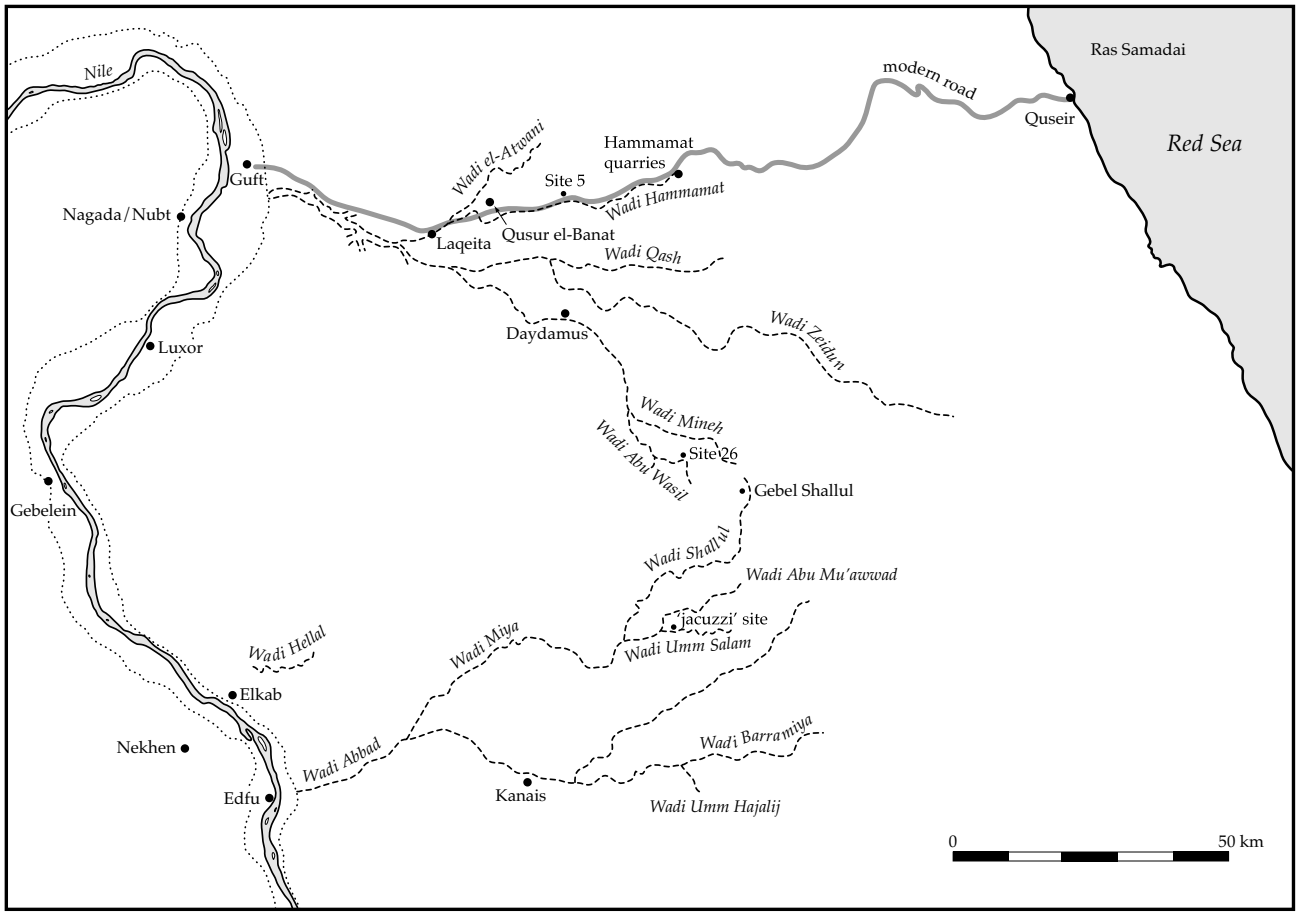

Figure 1. *Egypt's Eastern Desert, showing major wadis and petroglyph sites.*

even with all their drawbacks, still provide the best means for dating the Egyptian petroglyphs (Ch. 2, 'The sands of time: dating the rock art'). Of course, the rock surfaces of the Eastern Desert have been used as canvases for thousands of years. Side by side with prehistoric petroglyphs may be found images from every period of Egyptian history; rock art is still being created today at some of the more accessible sites. The focus of *Genesis*, however, is on the large number of images that bear clear signs — in terms of technique, patination, subject matter and style — of a prehistoric date. In the absence of a clear-cut scientific solution, the dating of rock art will always remain difficult and controversial. But there are clear enough parallels for many of the elements from the Eastern Desert to enable us to proceed, with reasonable confidence, towards a broader interpretation.

The next question to resolve is the identity of the ancient artists, those who were moved to peck images into the rocks of the Eastern Desert (Ch. 3, 'Hunters and herders: unmasking the artists'). Evidence from both of Egypt's prehistoric worlds, savanna and river valley, seems to point to the same conclusion: that the Egyptians of the early fourth millennium BC were not yet fully sedentary agriculturalists, but rather a semi-nomadic people who utilized both ecosystems at their disposal, and who were largely dependent for their subsistence upon animal-herding. Of course, it was not an all-or-nothing approach to agriculture. There are indications at this period of domesticated crops being grown at sites in the Eastern Desert and the Nile Valley; but the balance of evidence, archaeological and iconographic, points towards a pastoral lifestyle for a majority of the population. It seems likely that a decisive move toward agriculture as the predominant mode of subsistence occurred only from the middle of the fourth millennium BC onwards, when the desiccation of the savannas began in earnest and the summer pastures began to disappear. Much more settlement excavation will be needed before this ques-

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Figure 2. *Petroglyphs of boats in the Wadi Barramiya.*

Figure 3. *Petroglyphs of livestock in the Wadi Umm Salam.*

tion can be answered with any certainty; but, from present evidence, it looks as if many of the key developments that eventually gave rise to pharaonic culture took place in a setting, and as part of a lifestyle, radically different from those usually envisaged for Predynastic Egypt.

Based upon this new hypothesis, Chapter 4 ('Before the pharaohs: life in Predynastic Egypt') presents an attempted reconstruction of the world in which the petroglyphs were created. The results of recent excavations and other studies are used to paint a detailed picture of Egypt in *c.* 4000 BC. A literary device is the creation of a fictional character (named Sen, 'brother') through whose eyes the semi-nomadic lifestyle of the cattle-herders is envisaged. In departing the furthest from a conventional academic style, this section of *Genesis* sets out to do something that is rarely attempted in Egyptological books (but which television, with its computer-generated imagery, has embraced, to great effect): to 'humanize' what can otherwise be dry, empirical data, by using it as the basis for a reconstruction that has immediate appeal to the reader/viewer. While the recent upsurge in history-writing, much of it by renowned scholars, champions this approach, it has yet to find broad favour with archaeologists. There is a huge public appetite for imaginative, yet soundly-based, accounts of the ancient world; and it will be interesting to see if Egyptologists and their colleagues in related disciplines respond to the challenge.

From a methodological point of view, perhaps the most controversial argument proposed in *Genesis* is that the petroglyphs, especially those of boats, constitute the earliest iconographic evidence for ancient Egyptian religion, in particular beliefs concerning the afterlife (Ch. 5, 'Ships of the desert: the birth of the Egyptian religion'). Since the earliest religious *texts* from Egypt (the Pyramid Texts) were not written down until *c.* 2300 BC, any attempt to uncover earlier beliefs, for example through analyzing iconography or burial practices, must necessarily be educated guess-work. Extrapolating backwards in time — for example, from religious symbolism of the historic period with its (relatively) clear meaning to strikingly similar images in a prehistoric context, without supporting

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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-

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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.

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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-

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mation regarding past cultures and societies. Providing that it can adequately be dated and/or attributed to specific cultural horizons, rock art can offer information about 'cognitive' aspects of ancient civilizations, such as cosmology, ideology, and religion. *Genesis* deals precisely with these matters. Moreover, it presents a theory for the emergence of Egyptian civilization: it claims that pharaonic culture was directly derived from semi-nomadic animal-herding populations that roamed the Eastern Desert in the early fourth millennium BC (Naqada I period) and even before that, during the Badarian epoch (*c.* 4500–4000 BC and possibly earlier). Let us look at the facts presented to substantiate this.

What about the age of the rock art? In Chapter 2, Wilkinson presents an overview of rock-art dating methods. What he has written is largely outdated. Recent (and partly successful) attempts to obtain radiometric dates for Egyptian petroglyphs are passed over in silence (even though a reference to this work, Huyge 2002, is included in the bibliography). Microerosion analysis, on the other hand, discussed here (p. 56) as a promising new dating technique, is only applicable to erosion-resistant rock types, and definitely not to the soft sedimentary rock (Nubian sandstone) of the Eastern Desert. The comparison between rock art and Predynastic iconography on mobile objects (decorated pottery in particular) is advanced as an innovative approach. It should have been properly acknowledged, however, that this methodological course was already taken by the Englishman Greville I. Chester in 1892 (and by many others after him)! What is worse, there are several serious errors in the book as far as dating is concerned. It is erroneous to state, for instance, that representations of animals like elephant and giraffe necessarily predate 3500 BC because of climate change (p. 61). After all, these animals are a common feature of later Predynastic (Naqada II and III) iconography (and some elephants in Eastern Desert rock art are definitely Greco-Roman in age!). The 'prehistoric' boat presented in plate 13 (and fig. 17) is compared to boats on the Predynastic painted linen cloth from Gebelein. Yet the former is definitely a fully historical boat, most probably of New Kingdom origin (it shows, among other things, a rudder stock with a tiller). On page 10, Wilkinson states that the rock art was carved '3,500 years before the pharaohs built their decorated tombs in the Valley of the Kings'. That situates the petroglyphs around 5000–4500 BC, contemporary with or older than the Badarian culture! Further on in the book (pp. 63–82), the vast majority of the rock art is attributed to the Naqada I period (4000–3600 BC). The evidence produced by Wilkinson for that early age is rather flimsy: the Naqada I vase fragment from Mostagedda (fig. 14) shows a sickle-shaped boat (typologically different from the majority of Eastern Desert boats); the potmark from Naqada (fig. 15) is not clearly a ship (it lacks a stem or a stern); and the motif of a group of skirted women holding hands also occurs in Naqada II iconography (e.g. on a golden knife handle from Gebelein in the Cairo museum). A valid archaeological parallel for an incurved sickle-shaped boat is indeed the representation on a pottery box from El-Amra (fig. 16). This example, which is unique, dates from the Naqada IC period (*c.* 3800–3700 BC) (Stan Hendrickx pers. comm.). It cannot, therefore, be argued that this type of boat is diagnostic of the early part of the fourth millennium BC. Undoubtedly, rock art was produced in the Eastern Desert during Naqada I times (and probably earlier), but it seems that this was the case throughout the whole of the fourth and the early third millennium BC. In fact, the most convincing parallels for the ubiquitous square-hulled boats in the rock art can be found on pottery from the 1st-Dynasty temple complex at Abydos! In other words, it is probably incorrect to state that the bulk of Eastern Desert rock art dates back to the early part of the fourth millennium BC.

What about the identity of the ancient artists? The assertion that the Predynastic population of the Nile Valley was mobile and frequented the Eastern Desert for various reasons is not new. Several authors have written about this before (e.g. Majer 1992; Casini 1998; Wengrow 2001). Somewhat surprisingly, the rock art of the Nile Valley and of the 'lower' desert bordering the valley is less well known than the rock art of the Eastern Desert proper. Notwithstanding certain differences (see below), it seems that this Nile Valley rock art is very similar to the rock art of the Eastern Desert. It was either created by the same people in the course of migrations (mining expeditions, pastoral activities, hunting parties, etc.) or it was the work of different, but evidently related groups of people (Nile Valley dwellers and 'proto-Bedouins', nomads who resided in the desert on a semi-permanent basis). The latter possibility may be preferable, because it accounts for a number of clear differences between the rock art of the Nile Valley and that of the Eastern Desert: focus on different types of boats ('banana-shaped' in the valley *versus* square-hulled and incurved sickle-shaped in the desert); greater emphasis on cattle representations in the Eastern Desert; different types of human figures, divergent rock-art styles, etc. In other words,

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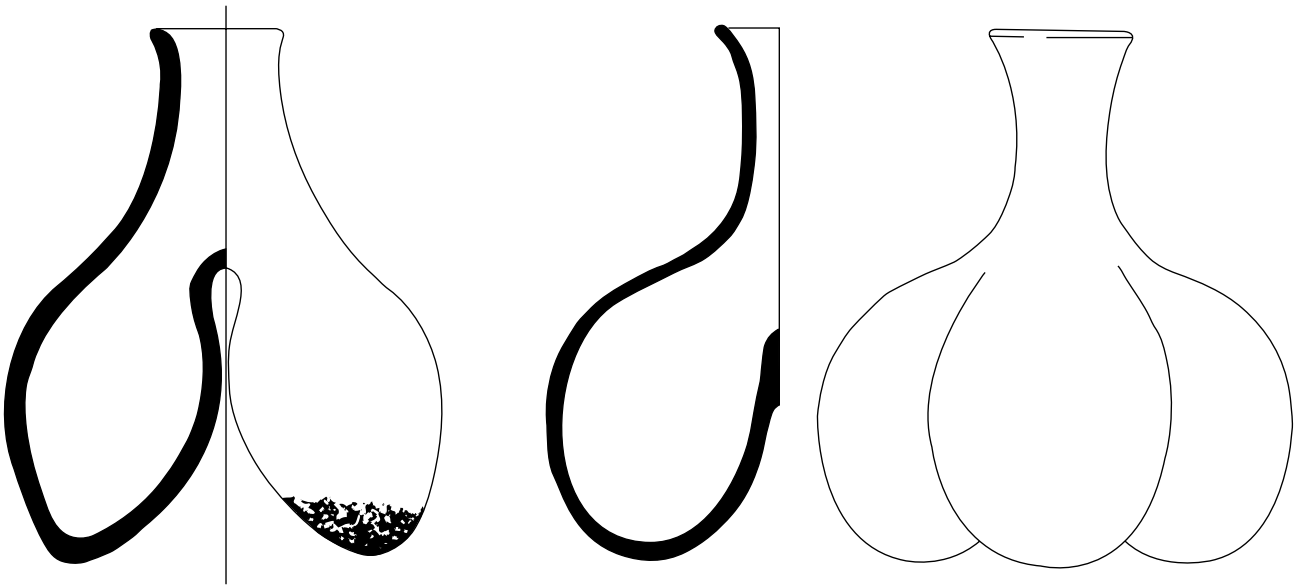

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Figure 4. *Few will doubt that 'cattle cults' must have played an important role in Predynastic Egypt (see e.g. Wengrow 2001; Hendrickx 2002), but the evidence produced by Wilkinson in this respect is often far-fetched and incorrect. On page 99 (fig. 32), for instance, he presents a double bag-shaped vessel from the Naqada II period (1), claiming that the pot was modelled on a pair of bull's testicles. The shape of this pot is supposed to acknowledge the virility and fecundity of the bull. The same type of vessel, however, can also be triple bag-shaped! (2, after Crowfoot Payne 1993, fig. 34, 794.)*

the artists responsible for the bulk of the rock art in the Eastern Desert were not necessarily the same people as those who lived in the Nile Valley, although both groups must have been in regular contact and had intimate knowledge of each other's living environment. It can even be envisaged that there must have been some kind of economic cooperation between the two, for instance, in the field of stone quarrying and seasonal cattle-herding.

What about the content and meaning of the rock art? In Chapter 5, Wilkinson proposes that the petroglyphs, especially those of boats, constitute early iconographic evidence for ancient Egyptian religious beliefs, in particular ideas about the afterlife. This is presented as a controversial approach (see the introduction to this review feature), but it is, in fact, an orthodox idea, already hinted at by Capart (1905) and elaborated upon by, amongst others, Cervicek (1974; 1986), and more recently Huyge (1999; 2002). There is indeed nothing contentious about this. Logic itself dictates that these prehistoric petroglyphs relate to ancient Egyptian religion and I am confident that most Egyptologists, even those of traditional 'stock', will readily acknowledge this. As I have argued elsewhere (Huyge 2002), 'extrapolating backwards in time' (Wilkinson's words) is an entirely admissible hermeneutic procedure for ancient Egyptian rock art. In this respect also, Wilkinson has built on the work of others. While he is probably correct in recognizing an important order–chaos component in the rock art, however, he seems to overemphasize the role of funerary symbolism. After all, if the square-hulled and incurved sickle-shaped boats were essentially funerary in nature as Wilkinson claims, why are they not more common on objects (painted pottery in particular) that actually accompanied the deceased in the afterlife? To date, very few Predynastic burials have been found in the Eastern Desert. No doubt, this area was considered too hostile for human interment. People were by preference buried in the security of the Nile Valley. In other words, an essentially funerary meaning for Eastern Desert rock art does not make a great deal of sense. As I have suggested elsewhere (Huyge 2002), this rock art was not so much inspired by death and funerary concerns, but by life and solar beliefs. New, and in some ways, I believe, contradictory to what he has written elsewhere, is Wilkinson's assertion that the rock art is shamanistic in nature and could even reflect trance-like experiences and altered states

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of consciousness (pp. 137–8). That idea is directly and uncritically derived from recent work on South African rock art and European Palaeolithic art (heavily contested by some, as a matter of fact). There is nothing whatsoever in ancient Egyptian history, however, that even vaguely suggests shamanistic practices. The idea does render the book more 'fashionable', but it definitely distracts from what is known.

In view of what has been said above, what remains standing of Toby Wilkinson's construction? Doubts can be raised about the proposed age, the 'ethnic' attribution, and the primarily funerary meaning of the rock art. Wilkinson has not presented firm proof that the major concepts of ancient Egyptian civilization originated in the Eastern Desert, rather than in the Nile Valley itself. In fact, these ideas are represented in both environments, both in rock art and in other types of iconography, with no temporal primacy for one over the other. Egyptian civilization quite simply was the gift of both valley *and* desert! Wilkinson is to be congratulated for having renewed the broad interest in Egyptian rock art and for having re-opened a discussion, but as far as the relevance (unquestionable, it should be said) of the fascinating body of rock art for the origin of pharaonic civilization is concerned, we have to go back to the drawing board.

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Out of the Desert

Stan Hendrickx

This is a strange and, when considering its title, most disappointing book. Toby Wilkinson promises us 'dramatic new discoveries on the origins of ancient Egypt', which of course makes the reader expect the presentation of a massive quantity of new documents concerning the period involved. This promise, however, is by no means fulfilled. The 'new discoveries' refer to rock-art sites of the Eastern Desert, the large majority of which are already known from the investigations of, principally, Winkler (1937; 1938), Resch (1963; 1967) and Fuchs (1989; 1991). The recent documentation of these sites, and the discovery of a few new ones in which the author participated, is of course a most welcome contribution and indeed allows access to previously unknown material (Rohl 2000; Morrow & Morrow 2002), but hardly enlarges the already known thematic and stylistic diversity of the rock art in this area. This fundamental problem from the very beginning limits the possibilities of the 'dramatic new discoveries' and affects the credibility of the book. It does not, of course, prohibit revolutionary insights although these will have to be the result of new interpretations of already known material. Another basic problem, although with a less fundamental impact, is caused by the fact that the book is written for a broad public. Popularization is definitely a most important aspect of scientific research but should always be backed up by more scholarly publication(s) with full discussion and references. This, however, is not the case and even for those who are well acquainted with Predynastic Egypt, it is on several occasions not obvious to which object or representation the author is referring.

The historical overview of the discovery of the rock art in the Eastern Desert which makes up the first part of the book is very readable although the discoveries made already in 1902 by Green (1909) have been omitted. Perhaps this is because they predate those of Weigall, whose personality and desert exploration is much better known and allow the author to structure the introductory chapter in a more literary manner. Problematic also is the presentation of Winkler as victim of Nazism but at the same time highly interested in its symbol, the swastika. Even if correct (though it is is not corroborated by Winkler's publications) this does not imply that he was attracted by the totalitarian system it represents as Wilkinson supposes.

This, however, is only of marginal importance for the evaluation of the book under discussion. Far more important is the disturbing chronological vagueness throughout the work. The chronological position of the rock art in the Eastern Desert is of fundamental importance for the ideas developed by Wilkinson. The majority of the rock drawings is dated by him to around 4000 BC (and occasionally even earlier), mainly by comparison with White Cross-lined pottery (C-ware), dating to the Naqada I period (*c.* 3900–3700/3600 BC). But he does not take into account that C-ware pottery with elaborate figurative decoration dates to the later phase of this period and even to Naqada IIA, around 3600 BC. Characteristic of the loose way in which chronological matters

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are addressed is the C-bowl decorated with a hippopotamus hunt (p. 64). Contrary to the author's statement this does not come from Mahasna but from a tomb at Abydos from which no other objects are known, neither is information available on the cemetery of which it was part, but the vessel is nevertheless dated by Wilkinson 'about 4000 BC'. The relation between the scene on this bowl and rock art had anyhow already been observed a long time ago by several authors (e.g. Säve-Söderbergh 1953, 17, n.1; Behrmann 1989, ch. 9). Furthermore, the rock-art hunting scenes with dogs are linked to an example on a C-bowl only, despite the fact that similar scenes also occur in more recent contexts (cf. Hendrickx 1992). Yet another example is the decorated box from el-Amra considered by the author the most important document for dating the rock-art boats (pp. 72–3), which comes from a tomb (a 41) belonging to Naqada IC, around 3700 BC. This, however, does not dissuade Wilkinson from accepting the presence of pottery decorated with boats at 4000 BC (p. 133). The link with boats on C-ware is anyhow very weak.

The argument that the representation in rock art of animals such as giraffe and elephant necessarily points to a Naqada I date is also to be reconsidered because both animals can be observed on decorated ivories and other objects dating to the late Naqada II and Naqada III period.

In Wilkinson's opinion the population of about 4000 BC was semi-nomadic, with hunting as an important economic activity. This, however, is not substantiated by the archaeozoological record, while on the other hand the massive evidence for fishing is not taken into consideration. The importance of agriculture is clearly minimalized and as repeated in his summary, Wilkinson considers agriculture only as the predominant mode of subsistence from the middle of the fourth millennium onwards. The role of agriculture is not only obvious from all the archaeobotanical studies, but is also fundamental for the accumulation of wealth and the development of a stratified society for which there is already evidence during Badarian times and which had certainly developed during the Naqada I period. The development of centres of political power and the emergence of royal ideology from the late Naqada I period onwards, as defined by Wilkinson himself previously (Wilkinson 2000) can anyhow not be imagined without agriculture having been the basic economic activity for already quite some time. A seasonal lifestyle in 4000 BC is shown by the Badarian settlement Mahgar Dendera 2 but the information from this site also indicates that people were living very close to the Nile until August–September (Hendrickx *et al.* 2001, 101–2) — almost until the moment when the first work on the fields with the highest location became possible. This leaves little time for large-scale migration of the entire society to the Eastern Desert. Herding was important but there was no reason to take the flocks far into the present desert. The environmental conditions that the herders in Wilkinson's opinion were seeking must obviously also have been found in the wadis and plains much closer to the river.

Wilkinson considers an important part at least of the rock art to be the result of shamanism. For this he presents very little evidence, his arguments being mainly based on superficial interpretation of isolated elements within much more complex representations. By doing so he ignores all recent research on Predynastic iconography as well as on rock art (Huyge 1999; 2002).

In the final chapter the importance of the desert as 'cradle of civilization' is the central point of interest. During recent years the desert indeed has attracted much attention as is shown for example by a colloquium at the British Museum in 1998 (Friedman 2002). Indeed Egypt did not consist of the Nile Valley alone. The interaction between the valley and the desert has always been important but in his urge to stress the importance of the desert, Wilkinson tends to overestimate the cultural importance of Nabta Playa. The comparison of the stone circle at Nabta Playa with Stonehenge and consequent interpretation as a stone calendar is not only grossly exaggerated (the largest Nabta Playa slabs measure 70 cm) but also ignores the fact that recent studies of European megalithic monuments no longer focus on astronomical interpretations (e.g. Burl 2000; 2002). Furthermore, Wilkinson accepts the presence of monumental constructions for deceased rulers and does not miss the opportunity to make a link with pyramid building. The first élite burial is for him to be found at Nabta Playa. And the status of the 'carefully sculpted' enormous sandstone boulder (p. 167) as the earliest monumental sculpture of Egypt is certainly not generally accepted and would have merited a serious discussion. But Nabta Playa and the Western Desert in general are not considered the 'cradle of civilization' Wilkinson is looking for. In his opinion the Western Desert had not yet dried out at the time the Badarian is established in the valley. Hence a move from the desert into the valley was not yet necessary which together with the different life style in the desert excludes the desert cultures from being at the origin of the Badarian. The desert,

however, only becomes inhospitable during the first half of the fifth millennium (cf. Gehlen *et al.* 2002) while C14 dates for the Badarian fall only the period between *c.* 4400–4000. Wilkinson pushes the Badarian back to 5000 BC but this is based on old thermoluminiscence dates which can no longer be considered valid. And since furthermore there is no direct ancestor for the Badarian in the Nile Valley, the Eastern Desert remains the only possibility. Corroboration is sought in the Badarian finds from the Eastern Desert and the contacts with the Red Sea region shown by the presence of seashells in Badarian tombs. At this point Wilkinson's ideas become unclear. Does this mean that the Badarian culture originated in the Eastern Desert and afterwards moved to the Nile Valley? He does not explicitly say it and there is indeed no archaeological evidence, but if not, how can the Eastern Desert become the 'cradle of civilization'? In reality there are already clear connections in the lithic technology between the Nile Valley and both the Eastern and Western desert in the seventh millennium BC (for an overview see Vermeersch 2002). With the exception of Nabta Playa, the Early and Middle Holocene occupation of the Western Desert is not dealt with by Wilkinson. If, however, the origin of the Badarian is to be considered, one cannot ignore the relevance of the lithics from sites on the Abu Muhariq plateau (Gehlen *et al.* 2002; Kindermann 2003), nor the presence of very early examples of black-topped pottery at Dakhlah (Bashendi B: cf. Hope 2002) and the Nabta-Kiseiba area (Late and Final Neolithic: cf. Nelson 2002).

The limited length of this review does not allow mention of a number of errors throughout the book which seem to indicate that it was written in a very short time. As examples can be cited the statement that Black-topped pottery was polished after firing (p. 117), the supposed need of metal tools for working hard stone (p. 119), or the 'neglected' C-bowl (pp. 74–5) which has been discussed or presented in at least four recent publications (Behrmann 1989, Ch. 25c; Hendrickx 1998, 211, fig. 11; Ciałowicz 2001, 154, fig. 16.4; Wolterman 2001–2002).

As regards the information recently published on the rock art of the Eastern Desert, one cannot help but note that the 'amateurs' have managed to produce two valuable contributions to the documentation, albeit it with some weak points, especially in the drawings (Rohl 2000; Morrow & Morrow 2002). The 'professional' Wilkinson, on the other hand, has made a most amateuristic interpretation of it, which in no way meets the standards of his previous publications. And this is not caused by *Genesis of the Pharaohs* being a popular book or by its pompous language, but only by its content.

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Genesis of the Pharaohs: Genesis of the 'Ka' and Crowns?

Timothy Kendall

In his *Genesis of the Pharaohs*, Toby Wilkinson shines new light on the Predynastic by demonstrating that the majority of rock drawings in the Eastern Desert of Upper Egypt date to Naqada I (*c.* 4000–3500 BC). Since the petroglyphs depict wild African fauna, hunters with bows and dogs, and men herding cattle, it is clear that the now nearly lifeless region up to 100 km east of the Nile between Quft and Hierakonpolis was at this time a well-watered, well-populated, game-rich savanna. That the rock artists were not mere isolated pastoralists but also part-time Nile-dwellers is evident because their works commonly include boats. This implies that the artists probably moved from river to range in seasonal cycles. Because of this, and the fact that so many of the drawings echo subjects in later Egyptian art, Wilkinson makes a compelling case that the rock artists were the ancestors of the dynastic Egyptians. His conclusion: the heavy reliance of these people on herding and hunting rather than agriculture suggests that their roots — and indeed the roots of Egyptian civilization — lay not so much along the Nile but in the pre-arid Sahara.

Although *Genesis*, in its first chapter, is written in a somewhat off-putting travel-magazine style, it soon changes voice and becomes a serious re-examination of a prehistoric artistic corpus long known but largely neglected by modern scholars. For the serious reader, the book leaves many questions unanswered, but I found many of its insufficiencies more than filled by Wilkinson's magisterial *Early Dynastic Egypt* (1999). I thus highly recommend that both books be read together. The author deserves high praise for both of them, and we can only hope that *Genesis* is his popular prelude to a new volume called *Predynastic Egypt*.

As one who has never worked extensively ei-

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ther in Egypt or with the Predynastic, I presume I was asked to review *Genesis* because I was identified as someone who might be able to place its conclusions in a wider geographical context that includes the Sudan, where I have worked since 1986. Indeed, as I read the book, two important issues came to mind which the author did not develop, and I thought I would offer my thoughts on these subjects here as addenda to *Genesis*. One is the question of the origin of the royal 'ka' and the other concerns the origin of the red and white crowns.

Wilkinson presents strong evidence that Naqada I was an archetypal representative of the traditional African cattle-culture, a type of society that still exists in a remarkably pure form in the southern Sudan, despite years of civil war. Among Sudanese Nilotes, cattle are raised as symbols of wealth, as the medium for all social transactions (like marriage), and as sources of renewable food (blood and milk). The people rarely kill cattle for meat, which they obtain by hunting wild game. Wilkinson's overview of the evidence for Naqada I transhumance and cattle burial, coupled with his analysis of the rock art, suggests that Egyptian civilization sprang from a society of broadly similar characteristics. Cows with artificially deformed horns, so common among Nilotes today, are often featured in the early rock art of Egypt and Sudan as well as in Egyptian dynastic art (Kendall 1989, 680–88, fig. 1, 9–12). Even the historic Egyptian symbols of royal office — the crook and the flail — recall a time when the king was seen as the chief herdsman of his people.

Wilkinson draws striking parallels between elements of iconography in the rock art and Egyptian art motifs even two thousand years later in date. From this he concludes not only that these motifs must have had common meanings throughout this time span but also that the rock artists were themselves Egyptians. In one case, I think, we can push Wilkinson's thesis even farther. Some of the interrelated motifs of the rock art have meanings that in dynastic art were based on word-play. This not only suggests that the words were the same in the early Predynastic but also that the rock artists spoke Egyptian. This can be demonstrated by the apparent petroglyphic allusions to the word 'ka', one of the primary concepts of ancient Egyptian civilization.

The rock art commonly portrays a male figure with a pair of plumes on his head, sometimes with a visible or erect phallus. This is obviously the god Min, who in dynastic times was the chief deity of Coptos and had major importance to the Eastern Desert nomads and the desert-crossing 'Medja' Nubians as far south as 'Punt' (Gundlach 1980; Giuliani in press).

In the rock art it is not always clear whether the double-plumed figure represents the god or a human leader (*Genesis*, figs. 42, 44, pl. 11). The same ambiguity is present in dynastic times, where we find the king often described or represented as the god (Faulkner 1969, 59, 282, 287–8; Habachi 1963, 51–2). In the historic Min cult the god was often merged with his son Horus (i.e. the king) (Gundlach 1980). This tendency to blur the distinction between god and ruler had to do with the Egyptians' conception of their king as the god's bodily son and living manifestation. At times, god and king were thought to be merged in one physical being (i.e. the king's body), which was called the 'ka' (Bell 1985; 1997). The 'ka' was the king manifested as the god, and vice versa. In Egyptian writing, the 'ka' concept was expressed with a hieroglyph showing a pair of upraised arms (Gardiner 1969, D 28). But the word 'ka', expressed with a bull hieroglyph (Gardiner 1969, E 1, 2), also meant 'bull'. In this case, the word also implied male sexual power and fertility. In historical times both meanings and both spellings formed puns on each other.

A common feature of Nilotic cattle cultures is the intense relationship formed by men with particular bulls or oxen (Kendall 1989, 681 [refs]). These animals are given their owners' names and identities to such an extent that they are conceived as alter-egos of their owners. Each man is known as the 'father' of his bovine pet, and the pet is his 'child' (Kronenberg 1961, 260–61). In the second century BC, Agatharcides recorded that the Trogodytes (descendants of the Medja and ancestors of the modern Sudanese Beja) considered bulls to be their 'fathers' (Burstein 1989, 111). The ancient Egyptians would have said that such animals were the 'kas' ('spirit doubles') of their owners.

As stated above, a Nilote will rarely kill his bovine pet for meat. He will, however, obtain meat for his group by means of hunting expeditions, which he will organize specifically in the name of his favorite beast (Kronenberg 1961, 266–7). This practice makes one think that the hunting scenes depicted in the rock art may have commemorated expeditions held in honour of particular favoured cattle and that the drawings themselves may have been executed as permanent memorials to the animals.

Wilkinson (*Genesis*, p. 101) cites many Predynastic cemeteries in Middle and Upper Egypt in which oxen were specially buried, or buried next to

individual humans. This suggests that close man–cattle relationships of the Nilotic variety existed among the early Egyptians and that these relationships may have influenced the way in which people conceived the relationship between god and king. Since the people depended on cattle for the procreation of the herds, the bull may have been widely regarded as a 'father', as Agatharcides says of the Trogodytes. Probably for this reason, therefore, the bull became the animal totem of Min, the 'father' deity, who may originally have been thought to appear in human form in the person of the living chief or king. Creator and king would have been 'kas' ('spirit doubles') of each other (= upraised arm hieroglyph); just as they were also 'kas' ('bulls').

In Protodynastic art the king can appear as a bull, or he wears a bull's tail. Later, of course, kings were routinely called 'Bull' as part of their names. Frequently in the rock art the 'god' is shown with a bull — either tethering the animal, or riding with it in a boat — and both are accompanied by human figures with their arms upraised. It is difficult not to see this gesture as a form of the 'ka' hieroglyph (Fig. 2 and *Genesis*, figs. 21, 54, 56, pls. 9, 15, 16, 18, 21). To prove this meaning, one need only cite the Kawa inscription of the Kushite king Irikeamanote (late fifth century BC), which describes a parade in which the king follows the bark of Amun as it is carried from the temple. When the king 'held up his arms in joy' (i.e. in the 'ka' gesture), the crowd shouted in unison, 'The son is united with his father' (Eide *et al.* 1996, 413).

The gesture itself may have derived originally from an attempt to imitate with the arms the shape of a favorite bull's artificially trained horns. This would explain the variety of arm positions seen in Predynastic art: arms up with hands in, arms up with hands out, arms down and forming a circle (*Genesis*, 100–101, figs. 34, 56). Here one is reminded of Evans-Pritchard's description of the Nuer (1974, 38): 'When a Nuer mentions an ox, . . . he speaks with enthusiasm, throwing up his arms to show you how its horns are trained . . . In singing and dancing they call out the names of their oxen and hold their arms in imitation of their horns'. Here a man's upraised arms imitate the horns of his pet, so that he becomes like his pet, which among the Egyptians would have made him a 'ka'.

Even if this gesture had such meanings in the rock art, it may well have been connected with mourning (Capel & Markoe 1996, 121–2). The figures holding up their arms most often occur with boats, and, as Wilkinson plausibly suggests (*Genesis*, pp. 148–61), many boat scenes may portray funerals. Perhaps in this context the gesture meant that a deceased chief/king has joined with the god and has become one with him.

In historical Egypt, possessing the 'ka' (i.e. embodying the god) was a prerequisite of royal legitimacy. The rock art suggests that the concept was already developed among the Naqada I rulers. An immediate predecessor of Narmer even bore the name 'Ka' (= upraised arms hieroglyph) (Wilkinson 1999, 57–8).

I turn now to the question of the origin of the red and white crowns. In the Wadi Qash, a branch of the Wadi Hammamat, Wilkinson (*Genesis*, p. 80) cites two rock drawings of men wearing red crowns, which he dates to Naqada I (*c.* 3600 BC). These drawings place the red crown earliest in Upper Egypt, just where we would expect to find the white crown — only the white crown is nowhere to be seen at this time. From this it appears that the red crown was initially associated with Upper Egypt — or at least the Wadi Hammamat — and that the white crown was a later arrival from somewhere else.

Both the red and white crowns have ungainly shapes, hardly natural as head-wear. The red crown was a low cylindrical hat with a high spike-like pillar at the back, from which a rigid, curling element projected forward. The white crown was very tall and conical, and swelled slightly at the peak to form a knob. Neither form has been satisfactorily explained. What ideas lay behind such crowns? Where and how did they originate, and what did they symbolize? Wilkinson's book may offer clues.

The most distinctive aspect of the red crown is its curled element, which has the same shape as the later coiled 'rope' hieroglyph (Gardiner 1969, V 1). One would thus assume that this feature symbolized a rope. This symbol appears again as an element in another hieroglyph, which is the standard of the god Min (Gardiner 1969, O 44). Here the coiled rope appears between a pair of bull horns mounted on the top of an upright post. The combination of motifs — post, bull horns, and rope — seems to evoke the action of tethering a bull, an activity of the Min figure (or his human double) frequently pictured in the rock art (*Genesis*, figs. 37, 38, 39, 41, 52). The early presence of the red crown in the Wadi Hammamat coupled with its morphological similarity to the Min standard may suggest that the crown, and the kingship it represented, emerged in the Eastern Desert out of the Min cult. Its name (*dšrt*: 'the red one') may even suggest a relationship with the desert (*dšrt* 'the red land').

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The Min standard with bull horns (also called 'ka') usually appears in dynastic art erected in front of a very tall, tubular, phallic-shaped shrine, known as the *sḫmt*, before which Min stands (Munro 1983, figs.). This structure, described as a 'primitive tent shrine of the desert', was either conical or spiked at the top and was usually depicted with a doorway or pylon in its lower half, indicating that it was many times the height of a man (Fig. 5:a–c). The shrine was supposed to have housed a bull ('ka') consecrated to Min, and many scenes from dynastic art depict the raising of such shrines by Nubian men with feathers in their hair (Isler 1991, 158 ff.; Giuliani in press). In some scenes we see that the rope of the Min standard, which coils between the bull horns, is actually attached to the base of the spiked top of the *sḫmt* just as the curled 'rope' element of the red crown emerges from the crown's spike (Fig. 5:a, b). In other images, the *sḫmt* appears with a conical rather than spiked summit (Fig. 5:c), and its peak sometimes terminates in a knob (Isler 1991, 161, fig. 7). In such renderings the *sḫmt* has an equally strong resemblance to the white crown. This leads us to consider the possibility that both the red and white crowns may have derived from the Min cult but simulated different forms of the *sḫmt*. (Might the white colour of the 'white crown' [*ḥḏ*] be related to the white colour of the clothing of Min, as it appears in dynastic art?)

Unfortunately, the earliest known depictions of the *sḫmt* in Egyptian art date from the 6th Dynasty, and nothing like a *sḫmt* appears in the rock art. It is hard to imagine, however, that such a distinctive shrine would simply be invented in the late Old Kingdom and inserted into a cult already very old. One suspects that the *sḫmt* may have been there all along but had not been represented.

The origin of the white crown is ambiguous. Its first appearance in Egypt may be a rock drawing in the Wadi Abbad, about 50 km east of Edfu (*Genesis*, p. 192). Here, a figure wearing a tall crown (without knob) appears seated on a Naqada II-style boat, accompanied by a bull and a figure of Min. The image is apparently two or three centuries later than the earliest images of the red crown. The Wadi Abbad, it should be noted, intersects the Nile near El-Kab and Hierakonpolis. These were the cities of Nekhbet and Horus Nekheny, respectively — the deities of the historic white crown kingship. Oddly, in the famous painted tomb of Hierakonpolis, also Naqada II, there is not one representation of a white crown among the numerous images of the ruler. And on the painted textile from Gebelein the ruler seated in the boat wears only a kind of bowler hat (*Genesis*, pl. 12).

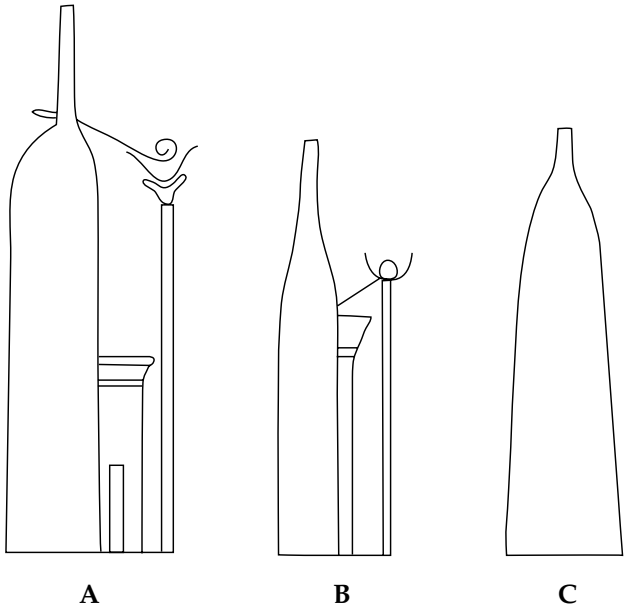

Figure 5. *Varying forms of the* sḫnt *shrine of Min, showing their similarities to the red and white crowns. (After Isler 1991, 160, fig. 6.)*

Ironically, the earliest certain images of the white crown come not from Egypt but from Qustul in Lower Nubia, about 300 km up-river from Hierakonpolis. These images occur on two incense burners of uniquely Nubian type, which depict kings seated in archaic high-prowed boats wearing abnormally tall crowns with knobs, accompanied by bulls and Horus falcons (Williams 1980; 1986, pls. 33, 34). They date to about 3300 BC. The same crown then appears not long afterwards in Egypt: on an unprovenienced ivory knife handle in the Metropolitian Museum and, later still, on the Scorpion mace head and Narmer palette (Wilkinson 1999, 194–5). The evidence can be interpreted several ways: a) the white crown was exclusively Egyptian, and it is Egyptian kings who are represented on the Qustul incense burners; b) the white crown was used simultaneously by competing rulers in Upper Egypt and Lower Nubia; or c) the white crown was first used in Nubia and spread northwards. It was obviously associated with riverine kingship (kings in boats), bulls (the Min cult) and the god Horus.

The white crown is usually assumed to be a homegrown Egyptian symbol — badge of the kings of the emergent Upper Egyptian state. They obviously pushed the red-crown wearers into Lower Egypt before the advent of the dynastic era. We need at least to consider the possibility, however, that the white crown might have had a Nubian origin and

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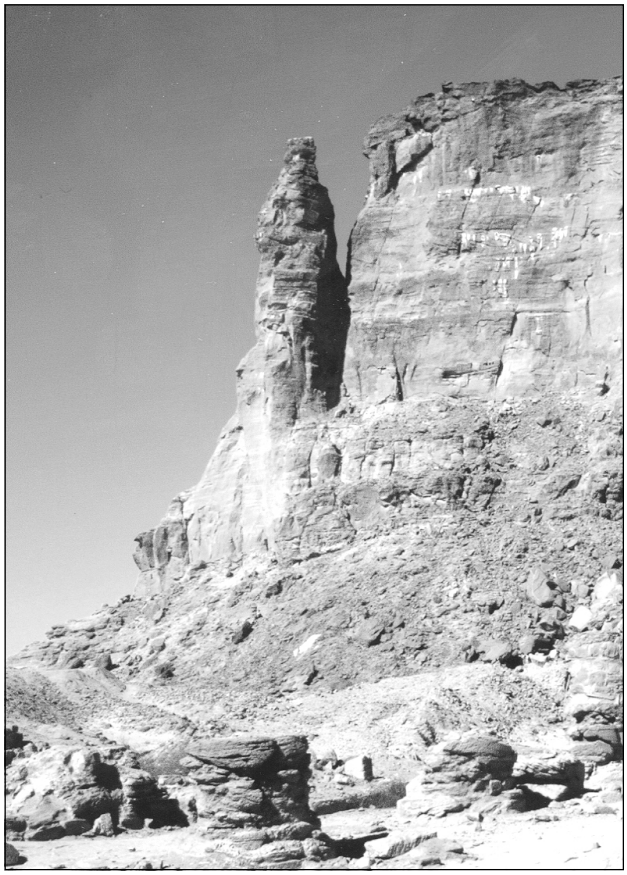

Figure 6. *View of the pinnacle on Jebel Barkal.*

was simply adopted by the kings of Dynasties 0–1 to promote their claims to the territory that adjoined their kingdom to the south, up to and beyond the First Cataract. When they conquered the A-Group rulers of Qustul, they may simply have adopted their crown, just as they adopted the red crown to legitimize their claims to the north. This may explain why Ta-Seti (Lower Nubia), from the beginning of dynastic history, was Egypt's first nome (Baines & Malek 1986, 15).

It may seem surprising, but there is a strong ancient tradition linking the white crown to *Upper* Nubia. In the first century BC, Diodorus Siculus (3.2.1–3.6) wrote that at the beginning of time the Egyptians and Nubians ('Aithiopians') were one people and that Osiris (i.e. their first king) came from 'Aithiopia' and colonized Egypt after it was created by the out-flowing Nile. This, he states, explains why Nubian and Egyptian customs are similar and why the kings of both countries wear 'tall pointed felt hats ending in a knob' (Eide *et al.* 1996, 645).

This story can be traced back to the early 18th Dynasty, when the Thutmosid pharaohs established their southern cultic frontier at Jebel Barkal, near the Fourth Cataract. This mountain is distinguished by a 75 m high pinnacle, in whose natural shape the Egyptians saw the vague features of a gigantic figure (i.e. Osiris) as well as a rearing uraeus (Nekhbet of el-Kab), both wearing the white crown (Fig. 6). Because they also recognized the rock as an erect phallus, they believed they had discovered here the original mound of Creation — a Nubian Heliopolis and Karnak — and the birthplace and residence of the primeval ithyphallic Amun (= Min). Since the mountain lay in the extreme south, they identified its god as the source of the inundation and fertility. Since it was the perceived home of the southern uraeus (a southern el-Kab), they also believed it was the birthplace of the white crown. They thus built here an important coronation complex and *Pr-wr* (temple of Nekhbet) (Kendall 1997, 168–70; 2002; 2004). They simultaneously built Luxor ('Southern Sanctuary') as a Theban manifestation of Jebel Barkal in order to honour the same god and to perform the same coronations locally (Pamminger 1992; Kendall 2004).

At the end of the New Kingdom the Amun priesthood at Thebes took away the right of the kings to rule the South. I am presently investigating a hypothesis that this may have been due to the fact that the pharaohs had lost control of Jebel Barkal and had allowed Nubia to become detached from Upper Egypt. The priesthood only willingly restored the white crown to a ruling family in the eighth century BC, when they recognized the Nubian kings of Kush as heirs to the imperial pharaohs by virtue of their renewed control of Jebel Barkal and their ability to reunite it with Karnak. Like the New Kingdom pharaohs, the 25th-Dynasty kings believed that through their control of Jebel Barkal they were heirs to the 'kingship of Re'. It was this belief that drove the Egyptianizing Meroitic state in the Sudan for the next thousand years.

The Jebel Barkal pinnacle is the largest free-standing monolith in the Nile Valley, and to superstitious ancient man its impact on the senses and imagination would have been enormous. When the Egyptians laid eyes on it in the early 18th Dynasty, they thought they had rediscovered the source of the white crown and the home of their first kings. Was this merely contrived history, or was this belief based on some genuine, possibly ancient Nubian tradition? Surely the Nubians who greeted the Egyptians must have venerated this rock in similar ways, if ethnological parallels can be applied. Many modern animist peoples of the Sudan typically worship large phallic-shaped stones and identify them simultane-

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ously with ancestors and totemic animals and consider them sources of fertility (Bell 1936; Bolton 1936).

Morkot (2000, 55, 68) has shown that some Upper and Lower Nubian kings, independent of the pharaohs, were wearing the white crown at the time of the 11th–17th Dynasties. Is it possible that this practice, usually described as 'emulating the pharaohs', might actually be a native tradition going back to Qustul? The problem is that we have almost no pre-Egyptian Nubian representational art — or texts. However, a recently discovered Egyptian text from the tomb of Sobeknakht, governor of el-Kab in the late 17th Dynasty, recounts a massive Nubian invasion of Egypt as far north as el-Kab, apparently by the king of Kerma. Might this have been launched to extend that potentate's 'white crown' control over Upper Egypt (Davies 2003)? Is it a coincidence that the territory over which Huy, Viceroy of Kush, later claimed administrative control extended from el-Kab to Jebel Barkal (Davies & Gardiner 1926, 11)?

A prehistoric Sudanese origin for the white crown may sound preposterous, but is it beyond possibility? The most important point made by Wilkinson in *Genesis* is that the climate in Upper Egypt was much wetter in the early fourth millennium BC. This implies that the farther south one went, the rainfall would have been greater, and the deserts more habitable. Greater rainfall would have meant higher inundations and better seasonal navigation of the Nile. Recent studies indicate that the great wadis of the northern Sudan were all major Nile tributaries at this time (see, for example, Keding in press; Fuller 1998). Communication would have been easier between north and south, which probably accounts for the striking cultural uniformity between Egypt and Nubia at this time (Wilkinson 1999, 176; Wengrow 2003b, 126–35). The similarity of style between the rock drawings of Upper Egypt and northern Sudan implies wide-ranging pastoralist peoples of similar backgrounds (Chittick 1962; Allard-Huard 1993; Paner 2003, 19, pl. 12), who probably all worshipped some form of Min (a god venerated, according to later Egyptian texts, from Upper Egypt to 'Punt.'). Would it be so difficult to imagine that in the late fifth or early fourth millennium BC local herdsmen venerated the Jebel Barkal pinnacle was worshipped by surrounding herders both as a god's phallus and as a divine ancestor in stone wearing a strange, very tall pointed headdress? If so, wouldn't the leaders of these peoples have adopted a similar crown to show their descent from him? If the crown symbolized the god's phallus, then the wearers of the crown would have been perceived as the bearers of the god's fertility wherever they went. And if some of them roamed far north from Jebel Barkal — into Lower Nubia — with their herds (see Castiglioni & Castiglioni 2003, pl. XXXI), wouldn't they have continued to worship the god in his tall *sḫmt* shrine, which duplicated the form of the mountain's deified monolith? From there these symbols could have easily passed to the earliest rulers of Egypt.

If it seems improbable that an Egyptian crown would have its prehistoric origins in the Sudan, would it not be just as improbable to find there that an ancient Egyptian royal emblem had survived to modern times as a symbol of high political office? Visiting the Khalifa's House Museum in Omdurman in January 2004, I saw a glass case containing some of the possessions of the Mahdi's successor, the Khalifa Abdullahi el-Taishi (died 1899), who would have known nothing of the pharaohs. There, together with his Qur'ans, was his wooden staff: a classic *was* scepter!

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Minimalist Art

Ian Shaw

In 1999 Toby Wilkinson produced the definitive work on Early Dynastic Egypt. This provided a much-needed presentation of the current state of research on this crucial phase in Egyptian history, using the archaeological and textual data from the late Predynastic period and the first few dynasties to shed light on the origins of the pharaonic state (Wilkinson 1999). In *Genesis of the Pharaohs* he is again dealing with the emergence of early Egypt, but this time viewing it through the analysis of prehistoric rock art, thus taking the search for the Egyptians' origins further back in time.

It's probably best to deal with the question of the book's title first. Wilkinson is perhaps being somewhat disingenuous when he says that his subtitle to *Genesis* ('dramatic discoveries that rewrite the origins of ancient Egypt') is intended to be 'deliberately

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provocative'. Surely this kind of subtitle is usually there to sell more books, and in this light I couldn't help noticing his reference, in Chapter 1, to 'fringe writers . . . cashing in on the New Age fascination with cosmology'. Toby Wilkinson is a solid academic and clearly no Hancock or Bauval, but the title and subtitle of this book sound dangerously like the esoteric end of 'archaeological' publishing, and the subtitle in particular sets him a task that the contents of the book itself were always going to have difficulty matching.

The structure of the book is logical enough, broadly asking six questions: (1) Who has found and studied Egyptian rock art so far? (2) How can we date the rock art? (3) Who made the rock art? (4) What was the cultural background of the makers of Egyptian rock art? (5) What might the rock art tell us about early Egyptian religion? (6) What does the rock art tell us about the origins of the Egyptian culture of the pharaonic period? Within each of these sections, however, the degree of relevance of the discussion varies enormously. Do we really need the long pen-portrait of life in Predynastic Egypt that takes up most of Chapter 4? Why does this chapter also include the short story about a fictional prehistoric hunter/artist called Sen, which adds little to the picture and includes its fair share of clichés?

The first section of Chapter 1 (The Desert Speaks) is a rather too brief account of previous work on rock art of the Eastern and Western Deserts. If ever a book was crying out for more detailed discussion of the author's predecessors in the field, then this is it. I realize that all researchers are embedded in their social and political contexts, but rather than hearing about the death of Hans Winkler's wife or his reactions to Nazism, I would rather have seen a lot more discussion and analysis of precisely what petroglyphs he found and where. There are one or two later sections in which Winkler reappears, but his evidence surely deserves more than the ten or so pages devoted to his work. Too much of this chapter is taken up with an over-leisurely description of Wilkinson's reaction to the desert, and the rock-art expeditions with which he was involved in 2000 and 2001.

As with so much of Egyptological study, the publication and interpretation of Egyptian rock carvings has historically largely taken place in a state of relative independence from the rest of the burgeoning global subject of rock art. In Chippindale and Taçon's *The Archaeology of Rock-art* numerous different geographical areas are discussed, from South Africa and Australia to North America and Europe, but none from Egypt or anywhere else in North Africa are included (Chippindale & Taçon 1998), despite the fact that Egyptologists have published literally hundreds of papers on the topic. The same situation prevails in most other general books on rock art; the rich Egyptian and Nubian material being largely ignored by most non-Egyptological researchers. The situation is hardly improved in *Genesis*. When Wilkinson says, on p. 137, 'let us broaden our view for a moment' and begins to talk about non-Egyptian rock art, he really does mean a moment, and by the bottom of the same page we are back in the Wadi Abu Wasil in Egypt, hardly any the wiser for our very brief excursion into Lascaux and the Arnhem Land. He cites works on non-Egyptian rock art in the bibliography (p. 203), but in the text, apart from some references to dating techniques in Chapter 2, and a few half-hearted comments on possible shamans and altered states of consciousness in Chapter 5 (with virtually no actual arguments to back up these suggestions apart from basic hunches and analogies drawn from motifs on Predynastic painted pottery and in much later art of the pharaonic period), he effortlessly prolongs Egypt's isolationism in international rock-art studies.

Wilkinson's book is not only narrow in the sense that it draws little inspiration from the huge amount of comparable research outside northeast Africa, it is even narrow with respect to the Egyptian data that it includes. Egyptian and Nubian petroglyphs may be considered to differ in certain respects but they still share a sufficient number of common traits that it seems odd to make no reference to the Nubian data (see, for instance, Resch 1967, which is cited in Wilkinson's bibliography on p. 201). The Second Cataract rock art documented by Pontus Hellstrom (1970), for instance, can hardly be so cavalierly ignored.

Three areas in Egypt itself have been particularly fruitful for rock art in recent years: Hierakonpolis, Elkab and el-Hosh, where Renée Friedman and Dirk Huyge respectively have documented many newly identified examples of Predynastic and pharaonic petroglyphs. There is, however, no reference to these in the text of *Genesis* (apart from two of Huyge's publications in the bibliography of Chapter 1, but no mention of him or his data in the text). On p. 55, Wilkinson briefly discusses the radiocarbon dating of rock art, concluding that 'In a few parts of the world, such as Texas, it has been used successfully'. He then implies that it has never been used productively on Egyptian rock art, despite the fact that Huyge has radiocarbon-dated carbon-bearing patinated deposits adhering to the petroglyphs at

el-Hosh, assigning them a date at least as early as the mid-seventh millennium BP (this information actually being the main thrust of one of the Huyge publications cited in Wilkinson's bibliography!). In addition, Hobbs & Goodman (1995) have radiocarbon-dated leopard-hunting scenes on a plateau in the northern part of the Eastern Desert to *c.* 5000 BP.

Another very productive pair of researchers in the last decade have been John and Deborah Darnell, whose surveys of the southern part of the Western Desert, between Luxor and Aswan, have revealed large numbers of collections of petroglyphs and inscriptions. These include, most recently, the so-called 'Scorpion tableau' at Gebel Tjauti, which appears to be a record of late Predynastic (Naqada IId/IIIa) state-sponsored forays into the Sahara (but may also be a reference to the early unification of the Egyptian state). Both the Darnells's work and Friedman's petroglyphs at Locality Hk64 in Hierakonpolis include associated archaeological deposits that are potentially highly relevant to the question of petroglyph dating. Granted, the Darnells' work has not yet been fully published, but preliminary reports have appeared (Darnell & Darnell 2002; Darnell 2002). In the case of Friedman and Huyge, several articles can be easily found in various journals and edited volumes (Friedman 1997; Huyge 1998; Huyge *et al.* 2001). Nevertheless, Wilkinson makes barely any reference to this material, choosing to concentrate primarily on the petroglyphs of Wadi Hammamat, Wadi Barramiya and a few other key sites in the Eastern Desert. It seems particularly odd that Wilkinson makes so little use of either the older or more recent data from the Western Desert when he himself points out (p. 148) that a major flaw in David Rohl's theories about the Eastern Desert rock art is that he doesn't take into account similar iconography in the Western Desert.

In a somewhat self-justifying appendix to *Material Culture and Text*, Christopher Tilley's idiosyncratic post-structuralist study of rock carvings in northern Sweden, the author concludes that his aim has been 'to show you not a painting of a prehistoric social landscape with the carvings positioned in it, but more a painting of different ways of painting this landscape which the reader is then to paint' (Tilley 1991, 183). At the end of Toby Wilkinson's *Genesis* I was left with the opposite feeling, that this 'landscape' had been very much painted in a very specific and minimalist way, and that the reader was being fed one particular, amorphous interpretation of the art with very little justification and few indications that other possibilities might exist, apart from the long-discredited ideas of some earlier researchers. Contrast this approach with Dirk Huyge's recent paper on various subtle strategies for categorizing, dating and interpreting Egyptian rock art at Elkab, in which he points out that 'The intimate relationship between the rock drawings and the ancient *Weltanschauung* of which the Elkab petroglyphs seem to bear evidence can therefore be generalized only hypothetically for the whole of the ancient Egyptian rock art tradition' (Huyge 2002, 204).

If the purpose of *Genesis* was to demonstrate that the study of Egyptian rock art can change our perception of the origins of the Egyptian civilization then it achieves this aim, but there is a definite sense that much more could have been done. There seems to me to be too much material here (in a relatively short book) that is only tangential and/or distantly relevant to the study of prehistoric rock art. In addition, it is not always made sufficiently clear which petroglyphs were discovered by Winkler, by Gerald Fuchs, and by other researchers, including Wilkinson and his colleagues in 2000 and 2001 (a point which is directly relevant to the claim of 'dramatic new discoveries' in the subtitle). I accept that the book is clearly aimed at a popular audience, but it still does far too little to delineate and explore the central data. We are left waiting for a well-argued, reasonably comprehensive book on Egyptian prehistoric rock art that really takes the evidence by the scruff of its neck. Ideally I would like to see someone produce a book on the analysis and interpretation of Egyptian rock art without any of the distractions presented by a popular audience.

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Reply

Toby Wilkinson

The discipline of Egyptology owes a real debt of gratitude to the five distinguished colleagues who have taken the time and trouble to respond in such considered detail to the arguments and challenges laid out in *Genesis of the Pharaohs*. The contributions

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to this review feature exemplify the kind of critical, yet measured, engagement with new hypotheses that lies at the heart of academic enquiry, and without which knowledge cannot advance.

It is in this spirit of continuing debate that I offer a response to some particular points raised by the other contributors. Dirk Huyge questions the appropriateness of boat images as evidence for dating the petroglyphs. It is certainly the case that comparable motifs from prehistoric contexts in the Nile Valley are extremely scarce. It should be stressed, however, that the art-historical evidence for dating the Eastern Desert rock art is by no means confined to images of this one type. There are also striking parallels between the petroglyphs and objects from the Nile Valley in the depiction of human figures (especially those wearing frond-like headdresses) and animals. The dating evidence needs to be assessed in its totality.

Huyge's important observations about the differences in style and content between the petroglyphs of the Nile Valley/low desert and the high desert hint at precisely the kind of more detailed study that needs to be carried out if our understanding of ancient Egyptian rock art is to move forward. His preference for interpreting the petroglyphs in the context of solar beliefs seems distinctly unlikely, however, given that solar religion makes a relatively late appearance in ancient Egypt (certainly by comparison with afterlife and stellar beliefs), and does not emerge as an important — far less, a dominant — strand of Egyptian theology until the 3rd Dynasty (*c.* 2600 BC) at the earliest.

Stan Hendrickx is a little dismissive of the hundreds of new rock-art sites discovered in the last few years; they certainly number more than 'a few', and do indeed add to 'the already known thematic and stylistic diversity of the rock art in this area'. Nevertheless, Hendrickx's review brings many significant insights to the study of Egyptian rock art; it also emphasizes that new work on the role of the deserts in Egyptian prehistory is emerging all the time. Indeed, many of the references included in this and other reviews were only published after *Genesis of the Pharaohs* had gone to press; this is particularly true of the fascinating new discoveries made by Darnell and Darnell in the Western Desert. The recent appearance of so much new data highlights the vibrancy of this particular area of Egyptological research, but also raises the question of whether there is ever an opportune moment to publish a preliminary discussion of a newly emerging topic!

Both Hendrickx and Karl Butzer question the suggestion that Hans Winkler showed an apparent interest in the swastika and other similar motifs. Indeed, this theory finds no evidence in Winkler's *published* writings; but it is immediately striking to the reader who consults his as yet unpublished expedition notebooks, held by the Egypt Exploration Society in London. Winkler is a colossal figure in the field of Egyptian rock-art studies, and his reputation should on no account be impugned; nonetheless, the fact that his private preoccupations — as reflected in his notebooks — seem so at odds with his published work surely merits discussion, not least because it has a bearing on the social, cultural and political context in which his pioneering work on Egyptian petroglyphs was undertaken.

In conclusion, it is indeed gratifying that *Genesis* has prompted a long-overdue discussion of ancient Egyptian rock art and its significance for the origins of pharaonic civilization. It is earnestly to be hoped that the thoughtful contributions to this review feature will herald the beginning of a new, wider debate on these important questions. This contributor, for one, hopes that the debate can be conducted in a language accessible to a broad readership. (Shaw's quote from Huyge (2002, 204) unfortunately exemplifies the self-consciously academic and inaccessible style in which so many monographs are still written, a style which stands in the way of disseminating new knowledge to a wide audience, surely one of the key responsibilities of publicly-funded academics.)

With that caveat in mind, few would disagree with Shaw in his wish 'to see someone produce a book on the analysis and interpretation of Egyptian rock art without any of the distractions presented by a popular audience'. Any volunteers?

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References

Allard-Huard, L., 1993. *Nil-Sahara dialogues rupestres*. France: privately printed.

Baines, J. & J. Malek, 1986. *Atlas of Ancient Egypt*. Oxford: Phaidon.

Behrmann, A., 1989. *Das Nilpferd in der Vorstellungswelt der Alten Ägypter*, Teil I: *Katalog*. (Europaïsche Hochschulschriften, Reihe XXXVIII, Archäologie, Bd. 22.) Frankfurt am Main: Peter Lang.

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Bell, G., 1936. Notes: Nuba fertility stones. *Sudan Notes and Records* 19, 314–16.

Bell, L., 1985. Luxor temple and the cult of the Royal *Ka*. *Journal of Near Eastern Studies* 44, 251–94.

Bell, L., 1997. The New Kingdom 'divine' temple: the Example of Luxor, in *Temples of Ancient Egypt*, ed. B.E. Shafer. Ithaca (NY): Cornell University Press, 127–84.

Bietak, M. & R. Engelmayer, 1963. *Eine frühdynastische Abri-Siedlung mit Felsbildern aus Sayala-Nubien.* (Phil.-Hist. Kl., Denkschriften 82.) Vienna: Osterreichische Akademie der Wissenschaften.

Bolton, A.C.R., 1936. The Dubab and Nuba of Jebel Daier. *Sudan Notes and Records* 19, 92–108.

Burl, A., 2000. *The Stone Circles of Britain, Ireland and Brittany.* 2nd rev. edition. New Haven (CT): Yale University Press.

Burl, A., 2002. *Prehistoric Avebury.* 2nd rev. edition. New Haven (CT): Yale University Press.

Burstein, S.M. (trans. & ed.), 1989. *Agatharcides of Cnidus: On the Erythraean Sea*. London: Hakluyt Society.

Butzer, K.W., 1997. Late Quaternary problems of the Egyptian Nile: stratigraphy, environments, prehistory. *Paléorient* 232(2), 151–73.

Butzer, K.W., 2001a. Desert environments, in *The Oxford Encyclopedia of Ancient Egypt*, vol. 1, ed. D.B. Redford. Oxford: Oxford University Press, 385–9.

Butzer, K.W., 2001b. When the desert was in flood … Environmental history of the Giza Plateau. *Aeragram* (*Newsletter of the Ancient Egypt Research Association*) 5(1), 3–5.

Butzer, K.W. & C.L. Hansen, 1968. *Desert and River in Nubia.* Madison (WI): University of Wisconsin Press, 316–23.

Butzer, K.W., G.J. Fock, L. Scott & R. Stuckenrath, 1979. Dating and context of rock engravings in southern Africa. *Science* 203, 1201–14.

Capart, J., 1905. *Primitive Art in Egypt*. London: H. Grevel & Co.

Capel, A.K. & G. Markoe (eds.), 1996. *Mistress of the House, Mistress of Heaven: Women in Ancient Egypt*. Cincinnati (OH): Cincinnati Art Museum.

Casini, M., 1998. Research prospects in the Eastern Desert. *Annales du Service des Antiquités de l'Egypte* 73, 45–8.

Castiglioni A. & A. Castiglioni, 2003. Pharaonic inscriptions along the Eastern Desert routes in Sudan. *Sudan & Nubia* 7, 47–51, pls. XXXVIII–XXXI.

Cervicek, P., 1974. *Felsbilder des Nord-Etbai, Oberägyptens und Unternubiens.* Wiesbaden: Franz Steiner Verlag.

Cervicek, P., 1986. *Rock Pictures of Upper Egypt and Nubia*. Roma: Herder.

Chippindale, C. & P. Taçon, 1998. *The Archaeology of Rock Art.* Cambridge: Cambridge University Press.

Chittick, N., 1962. Notes: rock engravings at Sabu. *Kush* X, 328–32.

Ciałowicz, K.M., 2001. *La naissance d'un royaume. L'Égypte dès la période prédynastique à la fin de la I^ere^ dynastie*. Kraków: Uniwersytet Jagielloński Instytut Archeologii.

Crowfoot Payne, J., 1993. *Catalogue of the Predynastic Egyptian Collection in the Ashmolean Museum*. Oxford: Clarendon Press.

Darnell, J.C., 2002. *Theban Desert Road Survey in the Egyptian Western Desert* I. Chicago (IL): Oriental Institute Publications, 10–18.

Darnell, J.C. & D. Darnell, 2002. Opening the narrow doors of the desert: discoveries of the Theban Desert Road Survey, in Friedman (ed.), 132–55.

Davies, N. de G. & A.H. Gardiner, 1926. *The Tomb of Huy, Viceroy of Nubia in the Reign of Tut'ankhamun (no. 40).* (Theban Tomb Series, Fourth Memoire.) London: Egypt Exploration Society.

Davies, V., 2003. Sobeknakht's hidden treasure. *British Museum Magazine* 46 (Summer), 18–19.

Derry, D.E., 1956. The dynastic race in Egypt. *Journal of Egyptian Archaeology 42*, 80–85.

Eide, T., T. Hägg, R.H. Pierce & L. Török (eds.), 1996. *Fontes Historiae Nubiorum: Textual Sources for the History of the Middle Nile Region between the Eighth Century BC and the Sixth Century AD, II: From the Mid-Fifth to the First Century BC.* Bergen: University of Bergen.

Emery, W.B., 1961. *Archaic Egypt*. Harmondsworth: Penguin.

Evans-Pritchard, E.E., 1974. *The Nuer.* New York (NY) & Oxford: Oxford University Press.

Faulkner, R.O., 1969. *The Egyptian Pyramid Texts.* Warminster: Aris & Phillips.

Friedman, R., 1997. Hierakonpolis: a new look at an old site. *Egyptian Archaeology* 11, 12–14.

Friedman, R. (ed.), 2002. *Egypt and Nubia: Gifts of the Desert*. London: British Museum Publications.

Fuchs, G., 1989. Rock engravings in the Wadi el-Barramiya, Eastern Desert of Egypt. *African Archaeological Review* 7, 127–53.

Fuchs, G., 1991. Petroglyphs in the Eastern Desert of Egypt: new finds in the Wadi el-Barramiya. *Sahara* 4, 59–70.

Fuller, D.Q., 1998. Palaeoecology of the Wadi Muqaddam: a preliminary report on the significance of the plant and animal remains. *Sudan & Nubia* 2, 52–60.

Gardiner, A., 1969. *Egyptian Grammar*. Oxford: Oxford University Press.

Gehlen, B., K. Kindermann, J. Linstädter & H. Riemer, 2002. The Holocene occupation of the eastern Sahara: regional chronologies and supra-regional developments in four areas of the absolute desert, in *Tides of the Desert – Gezeiten der Wüste. Contributions to the Archaeology and Environmental History of Africa in Honour of Rudolph Kuper,* eds. Jennerstrasse 8. (Africa Praehistorica 14.) Cologne: Heinrich Barth Institut, 85–116.

Giuliani, S., in press. Some cultural aspects of the *Medja* of the Eastern Desert, in *Nubian Studies 1998: Proceedings of the Ninth International Conference of Nubian Studies, Boston, August 20–26, 1998*, ed. T. Kendall.

Green, F.W., 1909. Notes on some inscriptions in the Etbai District I–II. *Proceedings of the Society for Biblical Archaeology* 31, 247–54, 319–23.

Gundlach, R., 1980. Min, in *Lexikon der Ägyptologie* IV, eds.

W. Helck & W. Westendorf. (Lieferung 1.) Wiesbaden: Harrassowitz, 136–40.

Habachi, L., 1963. King Nebhepetre Mentuotpe: his monuments, place in history, deification, and unusual representations in the form of Gods. *Mitteilungen des Deutches Archäologishes Gesellschaft, Abteilung Kairo* 19, 16–52, pls. IV–XIV.

Hansen, C.L., 1966. Pediment landscapes at Arminna West, Egyptian Nubia, and at el-Faliq, Red Sea Hills. Unpublished PhD dissertation, University of Wisconsin, Madison.

Hellstrom, P., 1970. *The Rock Drawings.* Stockholm: Laäromedelsförlagen/Svenska Bokförlaget & New York: Africana Publishing Corporation.

Hendrickx, S., 1992. Une scène de chasse dans le désert sur le vase prédynastique Bruxelles, M.R.A.H. E.2631. *Chronique d'Égypte* 67, 5–27.

Hendrickx, S., 1998. Peaux d'animaux comme symboles prédynastiques: à propos de quelques représentations sur les vases *White Cross-Lined*. *Chronique d'Égypte* 73, 203–30.

Hendrickx, S., 2002. Bovines in Egyptian Predynastic and Early Dynastic iconography, in *Droughts, Food and Culture: Ecological Change and Food Security in Africa's Later Prehistory*, ed. F.A. Hassan. London: Kluwer Academic/Plenum Publishers, 275–318.

Hendrickx, S., B. Midant-Reynes & W. Van Neer, 2001. *Mahgar Dendera 2 (Haute Égypte), un site d'occupation Badarien.* (Egyptian Prehistory Monographs 3.) Leuven: Leuven University Press.

Hobbs, J.J. & S.M. Goodman, 1995. Leopard-hunting scenes in dated rock paintings from the northern Eastern Desert of Egypt. *Sahara* 7, 7–16.

Hope, C.A., 2002. Early and Mid-Holocene ceramics from the Dakhleh oasis: traditions and influences, in Friedman (ed.), 39–61.

Huyge, D., 1998. Hilltops, silts and petroglyphs: the fish hunters of El-Hosh (Upper Egypt). *Bulletin des Musées royaux d'Art et d'Histoire* 69, 97–113.

Huyge, D., 1999. Bearers of the sun. *Discovering Archaeology* 1(1), 48–58.

Huyge, D., 2002. Cosmology, ideology and personal religious practice in ancient Egyptian rock art, in Friedman (ed.), 192–206.

Huyge, D., A. Watchman, M. De Dapper & E. Marchi, 2001. Dating Egypt's oldest 'art': AMS ^{14}C age determinations of rock varnishes covering petroglyphs at el-Hosh (Upper Egypt). *Antiquity* 75, 68–72.

Isler, M., 1991. The gnomon in Egyptian antiquity. *Journal of the American Research Center in Egypt* 28, 155–85.

Keding, B., in press. The Yellow Nile — settlement shifts in the Wadi Howar region (Sudanese Eastern Sahara) and adjacent areas from between the sixth to the first millennium BC, in *Nubian Studies 1998: Proceedings of the Ninth International Conference of Nubian Studies, Boston, August 20–26, 1998,* ed. T. Kendall.

Kendall, T., 1989. Ethnoarchaeology in Meroitic studies, in *Meroitica 10: Studia Meroitica 1984*, eds. S. Donadoni & S. Wenig. Berlin: Akademie Verlag, 625–745.

Kendall, T. (ed.), 1997. Kings of the sacred mountain: Napata and the Kushite twenty-fifth dynasty of Egypt, in *Sudan: Ancient Kingdoms of the Nile*, ed. D. Wildung. New York (NY): Flammarion, 161–71.

Kendall, T.K., 2002. *Napatan Temples: a Case Study from Gebel Barkal. The Mythological Nubian Origin of Egyptian Kingship and the Formation of the Napatan State*. Tenth International Conference of Nubian Studies. Rome, September 9–14, 2002 (Privately distributed).

Kendall, T., forthcoming 2004. Gebel Barkal und das antike Napata. *Antike Welt*.

Kindermann, K., 2003. Djara: prehistoric links between the desert and the Nile, in *Egyptology at the Dawn of the Twenty-first Century. Proceedings of the Eighth International Congress of Egyptologists. Cairo, 2000*, vol. 1: *Archaeology,* eds. Z. Hawass & L. Pinch Brock. Cairo: American University in Cairo Press, 272–9.

Kronenberg, A., 1961. The Longarim favorite beast. *Kush* IX, 258–77.

Majer, J., 1992. The Eastern Desert and Egyptian prehistory, in *The Followers of Horus. Studies Dedicated to Michael Allen Hoffman*, eds. R. Friedman & B. Adams. (Oxbow Monograph 20.) Oxford: Oxbow Books, 227–34.

Moeyersons, J., P.M. Vermeersch, H. Beckman & P. van Peer, 1999. Holocene environmental changes in the Gebel Umm Hamad, Eastern Desert, Egypt. *Geomorphology* 26, 299–312.

Morkot, R.G., 2000. *The Black Pharaohs: Egypt's Nubian Rulers*. London: Rubicon Press.

Morrow, M. & T. Morrow (eds.), 2002. *Desert RATS. Rock Art Topographical Survey in Egypt's Eastern Desert. Site Catalogue*. London: Bloomsbury Summer School, University College.

Munro, I., 1983. *Das Zeit-Heiligtum des Min. Münchner Ägyptologische Studien 41*. Münich: Deutscher Kunstverlag.

Nelson, K. & Associates, 2002. *Holocene Settlement of the Egyptian Sahara*, vol. 2: *The Pottery of Nabta Playa.* New York (NY): Kluwer Academic Press.

Pamminger, P., 1992. Amun und Luxor – Der Widder und das Kultbild. *Beiträge zur Sudanforschung* 5, 93–140.

Paner, H., 2003. Archaeological survey on the right bank of the Nile between Kareima and Abu Hamed: a brief overview. *Sudan & Nubia* 7, 15–20.

Petrie, W.M.F., 1920. *Prehistoric Egypt.* London: Quaritch.

Petrie, W.M.F., 1939. *The Making of Egypt*. London: Quaritch.

Resch, W.F.E., 1963. Neue Felsbilderfunde in der ägyptischen Ostwüste. *Zeitschrift für Ethnologie* 88, 86–97.

Resch, W.F.E., 1967. *Die Felsbilder Nubiens. Eine Dokumentation der ostägyptischen und nubischen Petroglyphen*. (Monographien und Dokumentationen: Die Afrikanischen Felsbilder 131.) Graz: Akademische Druck- u. Verlagsanstalt.

Rohl, D.M. (ed.), 2000. *The Followers of Horus: Eastern Desert*

Survey Report, vol. 1. Abingdon: Institute for the Study of Interdisciplinary Sciences.

Säve-Söderbergh, T., 1953. *On Egyptian Representations of Hippopotamus Hunting as a Religious Motive*. (Horae Soederblomianae 3.) Uppsala: Appelbergs Boktryckeri.

Smith, G.E., 1923. *The Ancient Egyptians and the Origins of Civilization.* London: Allen & Unwin.

Tilley, C., 1991. *Material Culture and Text: the Art of Ambiguity.* London: Routledge.

Vermeersch, P.M., 2002. The Egyptian Nile Valley during the Early Holocene, in *Tides of the Desert: Gezeiten der Wüste. Contributions to the Archaeology and Environmental History of Africa in Honour of Rudolph Kuper,* eds. Jennerstrasse 8. (Africa Praehistorica 14.) Cologne: Heinrich Barth Institut, 27–49.

Wengrow, D., 2001. Rethinking 'cattle cults' in early Egypt: towards a prehistoric perspective on the Narmer palette. *Cambridge Archaeological Journal* 11(1), 91–104.

Wengrow, D., 2003a. On desert origins for the ancient Egyptians. *Antiquity* 77, 597–601.

Wengrow, D., 2003b. Landscapes of knowledge, idioms of power: the African foundations of Egyptian civilization reconsidered, in *Ancient Egypt in Africa*, eds. D. O'Connor & A. Reid. London: UCL Press, 121–35.

Wetterstrom, W., 1993. Foraging and farming in Egypt: the transition from hunting and gathering to horticulture in the Nile valley, in *The Archaeology of Africa: Food, Metals and Towns,* eds. T. Shaw, P. Sinclair, A. Bassey, A. Okpoko. London: Routledge, 165–226.

Wilkinson, T.A.H., 1999. *Early Dynastic Egypt.* London: Routledge.

Wilkinson, T.A.H., 2000. Political unification: towards a reconstruction. *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 56, 377–95.

Williams, B.B., 1980. The lost pharaohs of Nubia. *Archaeology* 33, 12–21.

Williams, B.B., 1986. *Excavations between Abu Simbel and the Sudan Frontier…*, part I: *The A-Group Royal Cemetery at Qustul: Cemetery L.* (University of Chicago OINE, vol. III.) Chicago (IL): University of Chicago.

Winkler, H.A., 1937. *Völker und Völkerbewegungen im vorgeschichtlichen Oberaegypten im Lichte neuer Felsbilder*. Stuttgart: Kohlhammer.

Winkler, H.A., 1938. *Rock Drawings of Southern Upper Egypt. I. Sir Robert Mond Desert Expedition.* (Egypt Exploration Society 26.) London: Egypt Exploration Society.

Winkler, H.A., 1939. *Rock Drawings of Southern Upper Egypt. II. Sir Robert Mond Desert Expedition.* (Egypt Exploration Society 27.) London: Egypt Exploration Society.

Wolterman, C., 2001–2002. C-Ware Cairo dish CG 2076 and D-ware flamingos: prehistoric theriomorphic allusions to solar myth. *Jaarbericht 'Ex Oriente Lux'* 37, 5–30.

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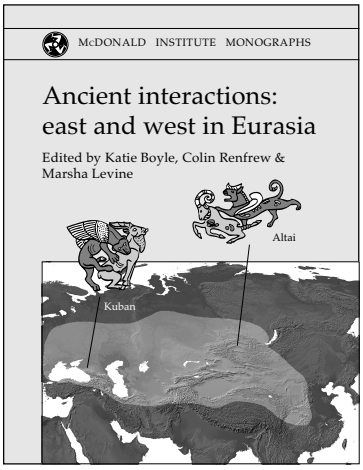

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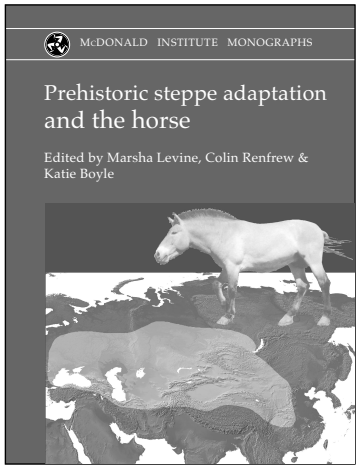

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