Interregional Contacts in the Later Prehistory
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# Relations between Dakhleh Oasis and the Nile Valley in the Mid-Holocene: a discussion

A number of shared traits, notably several artifact types and technological features, point to contact with Nile Valley Neolithic and Predynastic sites by mid-Holocene groups in Dakhleh Oasis, which lies 250 km to the west of the river, in the Egyptian Western Desert. This paper will list the major traits shared by the two areas, and examine the mid-Holocene "Bashendi" sequence within which these traits appear in Dakhleh. Two points are stressed concerning the evidence for contact. One of them is the wide geographical range, from Khartoum to the Delta, of the Nile Valley sites in question. The other is that the shared traits appear in some cases millennia earlier in Dakhleh Oasis than they do within the Nile Valley. It is suggested that the onset of a drying trend at the end of the seventh millennium, detectable in the palaeoenvironmental and archaeological record, may have played a role in the transmission of these traits to the Nile Valley about 6000 bp.

Mid-Holocene Dakhleh, together with other Western Desert localities, shares with Nile Valley sites such general Neolithic traits as the use of pottery and grindstones, as well as domesticated cattle and small stock (McDonald 1991a). As for that other Neolithic trait, a settled life, Dakhleh witnessed episodes of sedentization as early as the ninth millennium (McDonald 1991b), as did Nabta Playa to the south (Wendorf et al. 1984: 422). Concerning artifacts, in both areas, the Nile Valley and the Western Desert, chipped stone industries are macrolithic and predominantly flake-based, although tabular raw material also is used, and the bifacial technique is employed to produce a variety of tools. Tool types and classes shared by the two areas include concave- or hollow-based arrowheads, bifacially-worked knives, planes or tranchets, scrapers made on side-blow flakes, and a variety of notches, denticulates and retouched pieces. Other categories of shared artifacts include polished stone axes or celts (cf. Eiwanger 1988: taf. 58, 59; Petrie 1920: pl. XXVII; Shiner 1968: fig. 46t), beads made of amazonite or green microcline, also reported for Fayum A, the Post-Shamarkian in Nubia, and the Khartoum Neolithic (Arkell & Ucko 1965; Schild et al. 1968),

stone lip-plugs (cf. Arkell 1953), and shell bracelets and shell pendants (cf. Petrie 1920: pl. XXXI; Baumgartel 1960: 77). In addition, Dakhleh has produced clusters of stone circles which may be akin to the flimsy structures found at Merimde in the Delta and on Predynastic sites in Upper Egypt (Hassan 1988).

Two points might be stressed concerning these parallels between Dakhleh and Nile Valley sites. One concerns the broad geographical range of the Nile Valley sites in question. There are, as might be expected, a number of parallels with Neolithic and Predynastic sites in Upper Egypt at roughly the same latitude as Dakhleh, as well as with others to the north, in the Delta and the Fayum. In addition, though, there are a surprising number of parallels with sites in Nubia, and even in the Khartoum area, some 1200 km south of Dakhleh. In the latter case, shared traits include axes, bracelets, shell pendants, stone labrets, and beads of amazonite and agate. The chipped stone industries, while generally different, share planes (Arkell [1953: 28] calls them "combined end- and side-scrapers"), crescents, and an emphasis on the use of quartz (McDonald 1992).

The second point is that these shared traits appear for the most part somewhat earlier in Dakhleh Oasis than they do along the Nile. Predynastic dates from Upper Egypt all fall within the sixth millennium bp or later, the earliest being c. 5800 bp (Hassan 1985). In the Khartoum area, Esh Shaheinab, the Neolithic type site, has yielded a series of sixth millennium dates starting c. 5700 bp, while the earliest Neolithic date from the area so far, c. 6000 bp, comes from Rabak, to the south of Khartoum (Haaland 1987). Only the Fayum Oasis, to the west of the Nile below the Delta, has yielded earlier Neolithic dates of around 6500 bp (Kozlowski & Ginter 1989; Wenke et al. 1988).

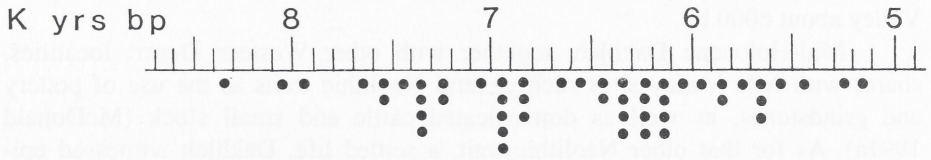


Fig. 1. Distribution by century of 50 radiocarbon dates for the Bashendi cultural unit in Dakhleh Oasis. Dates are uncalibrated but those on eggshell are adjusted for isotopic fractionation.

In Dakhleh Oasis, on the other hand, some of these shared traits can be dated at least a millennium earlier than even the early dates from the Fayum. In Dakhleh, the traits occur on sites of the mid-Holocene "Bashendi" cultural unit, which spans over two millennia starting before 7500 bp (Fig. 1). The Bashendi is divisible into two phases on the basis of site location, subsistence, age, and the traits shared with the Nile Valley.

Bashendi phase A sites (Fig. 2) yield hollow-based arrowheads and a variety of other points, large and small, including tanged, winged, side-notched and bipointed varieties. Also found are larger bifacial items including knives, lip-plugs and similar items carved in barite, and drills used in the manufacture of ostrich eggshell beads. Most phase A sites in Southeastern Dakhleh consist of extensive scatters of hearths and artifacts eroding out of basin floor silts. As for dating, 17 radiocarbon dates fall mostly between 7600 the 6900 bp, and average about 7250 bp. Sites of another sort, groups of stone circles, probable structures, are located on a low ridge to the east of the basin floor sites. The largest of these sites, consisting of at least 200 structures, has yielded a series of dates placing it at the very end of the Bashendi A range, c. 6900 bp. Faunal material from Bashendi A sites, including gazelle, hartebeest, hare, fox, and three sizes of bird, is so far all wild.

Bashendi phase B sites (Fig. 2) yield some arrowheads, but no hollow-based points were recovered, and points in general are much less varied in size and shape than those of phase A. The phase B assemblage includes planes or tranchets, side-blow flakes, often in exotic raw material, crescents, polished axes, amazonite beads, small palettes in ironstone or limestone, and groundstone toggles. Pierced shell pendants, bracelets of conch shell, and worked quartz pebbles and crystals, are found as well. Faunal remains from phase B sites show a heavy reliance on herded cattle and goats. Most phase B sites in Southeastern Dakhleh consist of hearth mounds on the basin edges above the level of the playa silts. Two dozen radiocarbon dates (Fig. 1) indicate that phase B sites are younger than those of phase A, and suggest a span for them of over a millennium starting about 6500 bp. Over half of the dates fall before 6000 bp.

The disparity seen here in the dates between the two regions in question, Dakhleh and Nile Valley, with Dakhleh apparently having priority, suggests that the Western Desert may have been the source, certainly the immediate source, of many of these artifact types, and perhaps also of some of the new subsistence practices and dwelling types. Although at least some of these traits would, as we have seen, already have had a long history in the oasis, it was only around 6000 bp or so, if the dates from Upper Egypt and points south are taken at face value, that they penetrated the Nile Valley.

A partial explanation for this delayed acceptance might lie in an environmental change occurring in the Eastern Sahara at this time (Hassan 1986a). Both palaeoenvironmental and archaeological evidence point to the start of a drying trend, or perhaps an episode of desertification, which interrupted the relatively moist mid-Holocene at the end of the seventh millennium. Thus Bahariya Oasis, 300 km north of Dakhleh, Nabta Playa in Southern Egypt, Selima Oasis in the northern Sudan, and the Oyo Depression to the southwest of Selima, all show signs of deflated playa deposits or lowered lake levels between c. 6300 and 5800 bp (Hassan 1986b; Wendorf & Schild 1980: 96; Ritchie et al. 1985). The drying trend may in fact have been more severe in the Egyptian Western Desert than in

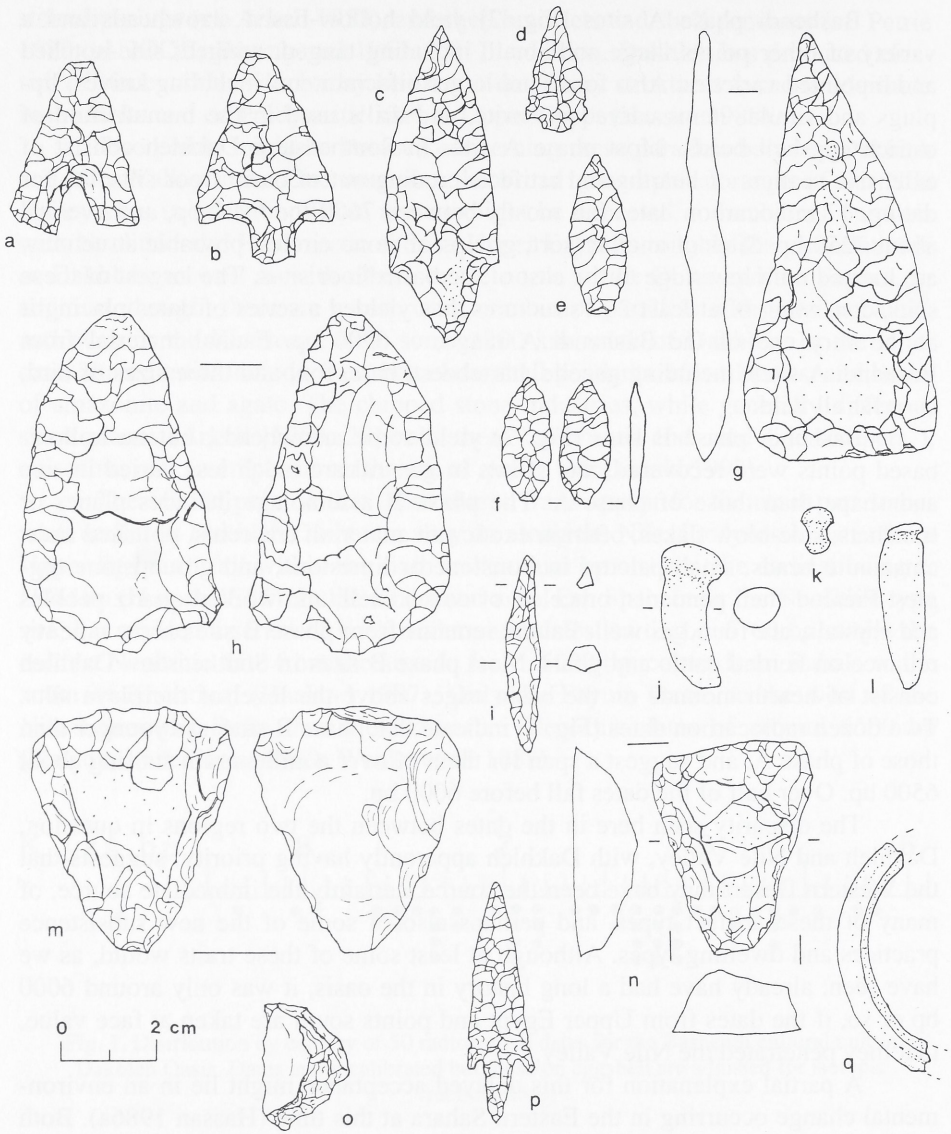


Fig. 2. Dakhleh Bashendi phase A (a-l) and phase B (m-q) artifacts: a-f, arrowheads; g, knife; h, bifacial item; j-l, labrets; m, n, planes; o, crescent; p, arrowhead; q, shell bracelet fragment.

the Sudan (Neumann 1989: 114, 145; S. Kröpelin reports [pers. comm., September 1992] seeing no evidence for increased aridity from numerous sections in the Sudan).

The dry phase is reflected in the archaeological record by gaps or dips occurring c. 6000 bp in radiocarbon curves for several suites of dates from the Western Desert. One list of 37 dates, published by the Combined Prehistoric Expedition, largely for the Nabta-Kiseiba area (Wendorf et al. 1984, fig. 2.33), shows a break before 6000 bp, and only two dates for all of the next millennium. Another suite of 145 dates from sites scattered the width of the desert north to south, shows a dramatic break at 6000 bp, with the only two dates for the next 200 years coming from the relatively well-watered Gilf Kebir in Southwestern Egypt (Kuper 1989, Table 1 and Fig. 2). A similar dip at 6000 bp appears in the list of 50 Bashendi dates from Dakhleh (Fig. 1). This evidence suggests, perhaps not outright depopulation of the Western Desert, but an at least temporarily reduced population largely confined to such well-watered localities as the Gilf Kebir and Dakhleh Oasis. The surplus population, presumably pastoral nomads, some of whom would normally have aggregated in Dakhleh Oasis, may have been forced by the drought to gravitate towards various points in the still relatively lush Nile Valley, bringing with them their herding practices, artifacts and technology.

The indigenes of the Nile Valley, meanwhile, did not face as dramatic a change as those in the desert, but by the mid-Holocene they too were adjusting to a gradual environmental deterioration (McDonald 1992). Through the early Holocene, the Nile river flow had been strong and continuous, with much reduced seasonal fluctuations, and stable channels both on the main Nile and its tributaries from the then better-watered desert (Adamson et al. 1980). These were the conditions in which, for example, the Khartoum area "Mesolithic" hunter-gatherers flourished for millennia, exploiting riverine resources together with plants and animals from the grasslands beside the river, while living in relatively permanent settlements (Caneva & Marks 1990). By the mid-Holocene, however, as Northeastern Africa began to dry out, the modern regime of the Nile was becoming established, putting in jeopardy the long-established "Mesolithic" adaptation. The switch to the Neolithic in the Nile Valley may then have occurred when the pressures created by an influx of refugees from the Sahara, combined with the slow deterioration of the local environment, forced or induced the people of the river valley to add herding and related technologies to their traditional extractive economy.

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