

The successful ‘recipe’ for a long-lasting tradition: Nubian ceramic assemblages from Sai Island (northern Sudan) from prehistory to the New Kingdom

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Sai Island, in the Nile in northern Sudan, has a series of settlement sites spanning the entire period from the eighth millennium BC through to the Eighteenth Dynasty of the Egyptian New Kingdom. This long sequence provides an excellent opportunity to study continuity and discontinuity in long-term pottery traditions. Ceramics from the varying cultural phases of the occupation reflect changing dynamics between broader regional social identities, notably Kerma to the south and Egypt to the north. Combining studies of petrography with trace element composition and chaîne opératoire analysis, the authors present the first diachronic study of ceramic manufacture throughout the extended cultural history of Nubia, highlighting the varying manifestations of change and continuity.

Keywords: Sudan, Nubia, ceramics, manufacture, continuity, *chaîne opératoire*, petrography, instrumental neutron activation analysis (INAA)

SELECTED ARCHAEOLOGICAL SITES ON SAI ISLAND

Our comparative study included ceramic assemblages from the following sites:

Site 8-B-10C: Located on the eastern side of the island, it lies above a terrace of a palaeochannel of the Nile. The settlement includes two occupational levels with hut floors and postholes dating to the Khartoum Variant period. Radiocarbon dates gave ages between 4840–4930 and 4945–5040 cal BC for the upper level, and between 7205–7450 and 7550–7580 cal BC for the lower level (Garcea *et al.* 2016).

Site 8-B-76: It is located in the south-western part of the island, at the border of the early Holocene fluvial terraces. The excavation unearthed a superimposition of Khartoum Variant levels, radiocarbon dated between 6260–6390 and 7550–7580 cal BC, and Abkan levels, dated from 3715–3895 to 5465–5485 cal BC (Garcea *et al.* 2016).

Sites 8-52A and 8-B-10A: They are located in the northern and the south-eastern parts of the island, respectively. Site 8-B-52A includes >93 pits used as silos during the Pre-Kerma period for wild and domestic grains and fruit seeds and was radiocarbon dated between about 2836–2496 and 3696–3637 cal BC (Geus 1998, 2004; Hildebrand 2006–2007; Hildebrand & Schilling 2016). Site 8-B-10A is a habitation site with Pre-Kerma pottery, radiocarbon dated between 1882–1748 and 1861–1659 cal BC (Hildebrand & Schilling 2016).

The New Kingdom Town: The fortified Pharaonic town of the second millennium BC was built on the eastern bank of the island in the New Kingdom (Budka & Doyen 2013; Doyen 2014; Budka 2015). At present, the sequence of the beginning of Egyptian occupation on Sai is still hard to reconstruct. It is clear that the Pharaonic settlement was built in stages—three main phases of occupation can be reconstructed covering the period from the early Eighteenth Dynasty up to Ramesside times (Budka & Doyen 2013; Budka 2015). The Nubian pottery included in this paper dates from the Eighteenth Dynasty only and comes from two areas within the town enclosure. SAV1 North is a sector with several phases of domestic architecture and a number of storage facilities (Budka & Doyen 2013). SAV1 East yielded a large-size administrative building of the mid Eighteenth Dynasty and some earlier remains (Budka 2014).

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