In the footsteps of Ananda Coomaraswamy: Veralugasmankada and the archaeology and oral history of traditional iron smelting in Sri Lanka

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ABSTRACT: Two well-preserved, bellows-driven, shaft furnaces are representative of a traditional, village-based iron-smelting technology that survived into the early 20th century. The excavation data is one component of the record of this technology, which is supplemented by the illustrated eye-witness account by Ananda Coomaraswamy, and also by more recent interviews with the last local inhabitants with first-hand experience and memory of the process itself and the craftsmen involved. These strands of evidence are brought together to give a near-complete description of a bloomery process that has parallels on several continents and the potential to informs the interpretation of many less-complete records.

Introduction

It is not often in archaeometallurgy that the convergence of documentary, ethnographic and archaeological records allows the near-complete description of an obsolete technology. This is, however, the case for the traditional village iron-smelting technology of Sri Lanka. The soundness of the account is underpinned by the knowledge that all three records derive from the same geographical location. While the data presented is strongly location-specific, the process being described—iron smelting in a small, bellows-driven shaft furnace—is ubiquitous on several continents and therefore has the potential to inform the interpretation of many other less complete records.

This paper focuses on the archaeological excavation of two village smelting furnaces but draws extensively on ethnographic and documentary data to 'flesh out' the account with real characters and give it a human context. The individuals featured here are among the last people in the world to smelt iron by traditional methods.

Ananda Coomaraswamy and the iron-workers of Balangoda District

Anyone with an interest in the ethnography of iron outside of Africa is likely to have read the eye-witness accounts of traditional iron smelting and crucible steel manufacturing in Sri Lanka, recorded in the early 20th century by Ananda Coomaraswamy (1956). The detail, clarity and insight of the accounts, enhanced by drawings and several photographs (Figs 3–5), could only be the work of someone aware of the significance of the then near-moribund processes in the context of contemporary European interest in Asian technology, crafts and resources. This vision is characteristic of the polymath Coomaraswamy, who became the first keeper of Indian Arts at the Museum of Fine Arts, Boston and was one of South Asia's best-known philosopher-art historians. The accounts derive from the period 1902—1906 when Coomaraswamy was Chief Mineralogist of the Ceylon Mineralogical Survey. In this role his fieldwork took him to Balangoda on the southern flanks of the central highlands (Fig 1). Coomaraswamy knew that traditional iron smelting and steel-making were still active in the area and appears to have sought out the places where