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Site maintenance practices and settlement social organization in Iron Age Karnataka, India: Inferring settlement places and landscape from surface distributions of ceramic assemblage attributes

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ABSTRACT

This paper investigates the spatial organization of social relations in settlement contexts through a quantitative and distributional analysis of surface ceramic attributes from Iron Age Period (1200–300 BC) archaeological sites in Southern India. The results discern variation in depositional contexts across each site, from which I infer a variety of basic settlement activity structures (e.g., site maintenance, trash disposal, residence, animal husbandry, metallurgy, ritual). I use these results, together with further analyses of artifact and feature distributions, to infer a basic suite of places, place-making practices and some of the social relations and organizational structures that produced these historically unique Iron Age settlement landscapes.

Introduction

The South Indian Iron Age (1200–300 BC) was a time of significant social, political and economic change from the preceding Neolithic Period (3000–1200 BC) (Bauer et al., 2007; Brubaker, 2001; Moorti, 1994; Sinopoli et al., 2009; Tripathi, 2001). It is best known from its commemorative/memorial architecture or 'megaliths', which have been the subject of scholarly research for nearly two centuries (Brubaker, 2001; Moorti, 1994). However, only within the last three decades have systematic analyses of the character, content and distribution of these features been mobilized to investigate Iron Age social and political organization (e.g., Brubaker, 2001; Deo, 1985; Moorti, 1994). These analyses document a tremendous amount of variation in the types of monuments, treatment of interred human remains, kind and quantity of grave goods; all of which have been used to argue for socially ranked, yet regionally diverse Iron Age societies (Bauer et al., 2007; Brubaker, 2001; Deo, 1985; Moorti, 1994). Yet little research on Iron Age social organization has examined settlement practices, and those that have are primarily restricted to the analyses of regional scale data (e.g., Abraham, 2003; Bauer, 2007; Morrison et al., 2007; Rajan, 1994, 1997; Sinopoli et al., 2005 are recent examples).

Despite the compelling evidence studies of megaliths and mortuary remains have provided for significant Iron Age social differences research has tended to elide issues involving how social relations were constructed, maintained and articulated; questions which can be at least partially addressed through the investigation of Iron Age settlement places and the social relations of their production. Settlement places and landscapes are the material consequences of social life and as such, their physical remains (i.e., *archaeological landscapes*) constitute scales and forms of data more appropriate for reconstructing the organization and practice of daily life than do mortuary and memorial contexts. Landscapes are at once historical, relational, and multi-scalar in form and practice; they are socio-material fields of action produced by ongoing articulations of social relations, cultural logics and the physical environment (Bauer et al., 2007; Johansen, 2004; Lycett, 2001; Morrison, 2009; Smith, 2003). Framing research on past (or present) social organization within a landscape approach thus enables an understanding of archaeological landscapes as the sedimented, albeit deflated remains of historically contingent, socially produced and organized settlement practices.

In this research I argue for the utility of surface collections in the reconstruction of Iron Age settlement landscapes in northern

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Karnataka, and the value of these patterned data sets in developing an understanding of emerging practices of social difference within a wider field of socio-spatial relationships. Iron Age social relations, those of difference and affiliation, were constructed and maintained through the very same sets of place-making practices that produced socio-historically unique settlement landscapes in northern Karnataka. The basic outline of Iron Age settlement landscape production, its social relations and organization that I infer from this analysis suggests the development of social distinctions mediated by residential, occupational and ritual place-making practice. While this does not necessarily demonstrate the hierarchical social relations argued by some studies of Iron Age mortuary remains it does point to some of the fields of social practice imbricated with landscape production from which ranked social relations may have emerged.

My analysis of this problem begins with a theorization of landscape production within a clear ontology of space, and by linking this to an appropriate epistemological frame for inferring a series of past quotidian places and place-making practices from the patterned distribution of surface archaeological remains at three Iron Age settlement sites. I approach the production of Iron Age settlement places by using a series of analytical techniques developed by archaeologists exploring regional scale archaeological landscapes through siteless or distributional analyses, most notably those employed by Lycett (1995) in his distributional analysis of regional scale landscapes in the Galesteo Basin, New Mexico and by Wandsnider (1996) in her intra-site analyses of site structure at hunter-gatherer camps and settlements across the globe. Building up from distributional analyses of ceramic attributes recorded on surface assemblages from three South Indian archaeological sites I infer a series of quotidian places produced by site maintenance practices within Iron Age settlements. Depositional contexts synthesized from this analysis are employed as comparative units of analysis to explore variation in additional artifact attribute distributions. Proportional differences in ceramic vessel forms, ferrous metal slag and features are then used to infer a basic suite of activity structures at Iron Age settlement places at both inter-site and intra-site scales. The results enable the inference of Iron Age settlement landscapes, their social relations of production and the character of some of the place-making practices these entailed.

The South Indian Iron Age in northern Karnataka

In the closing centuries of the second millennia BC a series of material, socio-economic and political changes began to take hold in various regions of South India that archaeologists have associated with the South India Iron Age (1200–300 BC) (Fig. 1). Once believed to be far more geographically uniform with cultural origins in northern India or farther afield (Banerjee, 1965; Gururaja Rao, 1972; Wheeler, 1948), today the Iron Age is recognized as a series of more localized developments with origins in regional South Indian cultural antecedents, most notably those of the Neolithic Period (2700–1200 BC) (Bauer et al., 2007; Boivin et al., 2001; Brubaker, 2001; Moorti, 1994; Gurukkal and Ragahavara Varier, 1999; Sinopoli et al., 2009). Beginning with Wheeler's (1948) research, the archaeological record of the Iron Age throughout South India has been persistently associated with three categories of material cultural remains: Black-and-Red Ware ceramics (BRW), iron, and megalithic stone monuments. Yet since that time a variety of geographically distinct patterns, particularly those of megaliths and mortuary practices, have emerged demonstrating regional distinctions across the wider South Indian distribution of Iron Age material culture (Brubaker, 2001; Leshnik, 1974; McIntosh, 1985; Moorti, 1994; Selvakumar, 2000; Sundara, 1975). Of the many regions of South India with strong regional traditions in megalithic architecture, northern Karnataka is perhaps one of the best studied (e.g., Allchin, 1954; Bauer et al., 2007; Brubaker, 2001, 2008; Munn, 1935; Nagaraja Rao, 1971, 1981; Sundara, 1975; Sinopoli, 2009; Wheeler, 1948).

The Iron Age economy of northern Karnataka was marked both by a number of significant changes as well as by tenacious continuity from the preceding Neolithic Period (2700–1200 BC) (Bauer et al., 2007). The agro-pastoral economy of the Iron Age maintained a strong emphasis on the raising of domesticated cattle and caprines, the cultivation of several species of both locally domesticated rain-fed millets and pulses as well as non-local species introduced much later such as wheat, barley and rice (Bauer et al., 2007; Bauer, 2007; Fuller, 2003, 2005; Johansen, 2004; Kajale, 1984, 1989). There was also a continuation in the exploitation of a range of wild plant and animal species (Bauer et al., 2007; Bauer, 2007). Rice appears to have gained greater importance during the Iron Age and with it a growing attention to water retention and management (Bauer et al., 2007; Bauer and Morrison, 2008; Kajale, 1984). While direct evidence for water management features remain thinly documented (though see Bauer et al., 2007; Johansen, 2008) the cultivation of northern crops such as wheat, barely and especially rice in semi-arid northern Karnataka would have required the construction and maintenance of these facilities. This shift in crop emphasis may have significantly contributed to strategic changes in the organization of labor and indeed Iron Age social relations in general (Bauer et al., 2007; Morrison, 2009).

Perhaps one of the most profound economic changes associated with the Iron Age was the development of ferrous metallurgical production, i.e., iron and steel (Johansen, 2009; Gullapalli, 2009). Iron is second only to ceramics in terms of the most frequently encountered materials in Iron Age mortuary contexts and is also an important component of excavated settlement contexts (Banerjee, 1965; Leshnik, 1974; Moorti, 1994; Tripathi, 2001). While concentrations of slag are reported from many Iron Age sites in South India the organization of iron production is not well understood as few production facilities have been documented (Johansen, 2009, in preparation; Gullapalli, 2009). This remains an important area of future research for understanding the construction and maintenance of Iron Age social differences.

Scholarly interest in the South Indian Iron Age dates back to the early 19th Century and subsequent research has been dominated by studies of megalithic architectural remains. Not surprisingly, recent research into the social and political organization of Iron Age societies has focused primarily on megaliths to the near exclusion of other classes of data (Bauer et al., 2007; Moorti, 1994). South Indian megaliths are a class of commemorative memorial architecture constructed of locally available stone and earth that are often but by no means always associated with human remains in subsurface burials. Megaliths range considerably in size and form including stone circles, dolmens, menhirs, passage chamber and crack features, avenues, and alignments (Brubaker, 2001; Krishnaswami, 1949; Moorti, 1994; Morrison and Lycett, 1998; Sundara, 1975).[1] Grave goods in megalithic mortuary contexts consist largely of variable amounts of fine ware ceramics, iron implements, copper, bronze and gold objects, beads, stone and terracotta figurines (Allchin and Allchin, 1982; Banerjee, 1965; Brubaker, 2001; Leshnik, 1974; Moorti, 1994; Sundara, 1975). Disparities in the size and design of monuments, number and kind of associated grave goods, and number, sex and condition (e.g., complete, excarnated, cremated) of human remains have served as the primary source for building inferences on the socio-political organization of Iron Age societies (e.g., Brubaker, 2001; Leshnik, 1974; Moorti,

[1] See Brubaker (2001) and Moorti (1994) for excellent summaries of the variation in type and regional distribution of South Indian megaliths.