

PALAEOLITHIC CULTURES AND ETHNOGRAPHY OF THE GUNJANA VALLEY, ANDHRA PRADESH

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This paper summarizes investigations on Palaeolithic sites and ethnography in the Gunjana valley, Cuddapah district, carried out between 1976 and 1980. The research formed the basis for my Ph.D. dissertation submitted to Poona University (Raju 1981). Cuddapah district of Southern Andhra Pradesh covers an area of about 15,000 sq. km. It is encircled by the Nallamalai hill ranges to the north, the Palakondas to the south, the Velikondas to the east, and the Erramalais to the west. The district is drained by the rivers Penneru, Papaghni, Cheyyeru and Sagileru and their tributaries (see Fig. 1). The forests of the region are dry deciduous and tropical thorny in nature, and the mean annual rainfall is 750 mm.

My investigations were confined to an intensive exploration of the valley of the river Gunjana, a tributary of the river Cheyyuru in Rajampet taluka of Cuddapah district (see Fig. 2). Previous archaeological investigations (Reddy 1968) in the Cuddapah district had produced stone tool assemblages of four Stone Age periods (see Fig. 1) - Lower Palaeolithic (44 sites), Middle Palaeolithic (20 sites), Upper Palaeolithic (only 1 site), and Mesolithic (4 sites). The evidence for the Upper Palaeolithic was thus scanty. The raw materials used for these assemblages were a coarse to medium-grained quartzite for the Lower Palaeolithic, a fine grained quartzite for the Middle Palaeolithic, and silicious cryptocrystalline rocks like chert, jasper and quartz for the later industries.

My explorations in the Gunjana valley, over an area of about 2,000 sq. km., have brought to light 10 Acheulian, 2 Middle Palaeolithic, and 10 Upper Palaeolithic sites. Lithic artefacts were collected for analysis from a total of 12 sites (see Table 1). An excavation was also carried out at Vodikalu, one of the Upper Palaeolithic habitation sites which has an undisturbed primary occupation deposit.

The Acheulian sites are situated along ephemeral streams and braided runnels 1 to 2 km. away from the main river in a scrub and thorny thicket ecosystem. The Acheulian tool kit consists mainly of handaxes and cleavers, the latter occurring in smaller numbers. The raw material is a coarse to medium-grained quartzite abundantly available in the Cuddapah formations. The tools were bifacially worked by a cylinder hammer technique, and have symmetrical outlines, straight profiles, and biconvex to lenticular cross-sections. The handaxes have an average of 24 flake scars per tool, and the majority are of an ovate shape. Some of the handaxes

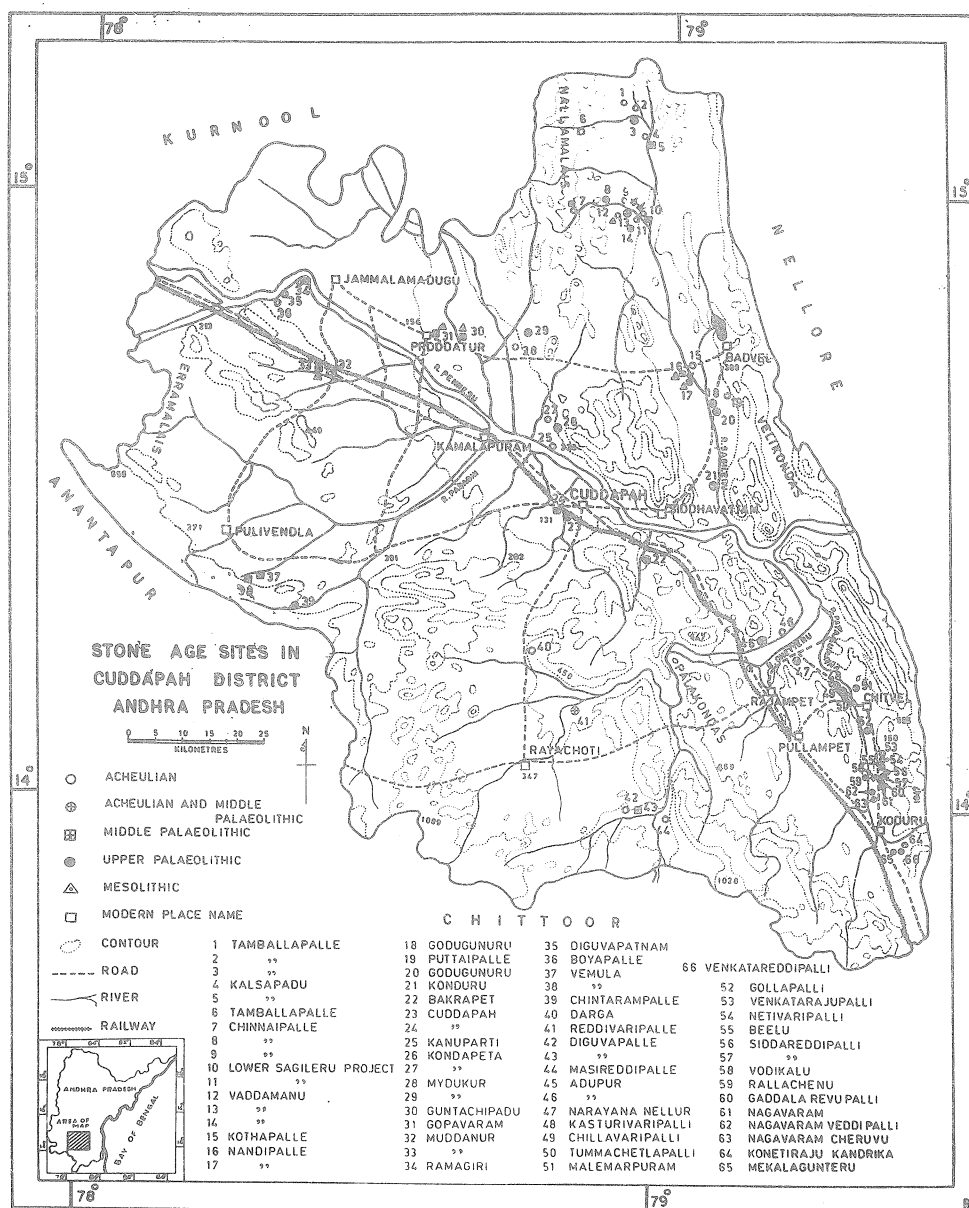


Figure 1. Stone Age Sites in Cuddapah District, Andhra Pradesh.

NUMBER OF ARTEFACTS	
<u>LOWER PALAEOLITHIC</u>	
Netivaripalli	162
Venkataraajupalli	119
Tummachetlapalli	73
Narayananellore	47
Konetirajukandrika	9
Malemarpuram	24
Siddareddipalli	19
<u>MIDDLE PALAEOLITHIC</u>	
Narayananellore	94
Tummachetlapalli	44
<u>UPPER PALAEOLITHIC</u>	
Vodikalu	10,596
Vodikalu excavation	1,439
Beellu	2,183
Rallachenu	2,046

Table 1. Artefact collections from Palaeolithic sites in the Gunjana valley.

with a sharp cutting edge all round the periphery were probably hafted and used as spearheads for hunting. The pointed handaxes were probably used for digging yams, roots and tubers. Handaxes with untrimmed butts were probably used as all-purpose tools, but were certainly not hafted. The symmetrical shapes and very fine workmanship on some of the handaxes seem to suggest aesthetic as well as utilitarian considerations. Technologically, the Acheulian industry of the Gunjana valley is more advanced than the industries of Chirki-Nevasa and Hunsgi, and it may belong to a late Acheulian phase.

Metrical analyses of the handaxes suggest that two distinct Acheulian industries occur in the Gunjana valley. Group 1 occurs at the sites of Venkatarajupalli, Netivaripalli, Siddareddipalli and Konetirajukandrika, all upstream of Chitvel, and is characterized by ovate handaxes with cutting edges all around their peripheries. Group 2 occurs at Tummachetlapalli, Narayananellore, Malemarpuram and Kasturivaripalli, and contains both ovates and pointed implements, many with untrimmed butts.

There are only two Middle Palaeolithic sites in the Gunjana valley, at Tummachetlapalli and Narayananellore. The industry comprises points, scrapers, miniature handaxes, flakes and blades. The tools are made on a fine grained quartzite and are characterized by shallow thin flake scars, step flaking, marginal secondary retouch and sharp edges. The general character of the industry conforms with that of the other Middle Palaeolithic industries of the south-east coastal region of India.

In view of the low artefactual yield these two sites are considered to have been transient camps. Rich Middle Palaeolithic settlements in the neighbouring Sagileru valley (about 60 km. north) and at Rallakalava in the Swarnamukhi valley in Chittor district (about 50 km. south) perhaps served as home bases for these sites.

The evidence for the Upper Palaeolithic is prolific, and comes from ten sites. The industry is based on a blade technology, and consists predominantly of backed blades and scrapers made on fine-grained quartzite and lydianite (Raju, in press). On the basis of radiocarbon dates from Nandipalli in Cuddapah district and other sites in Maharashtra, the age of this culture can be ascribed to between c.20,000 and 10,000 years ago.

The various backed blade variants were probably used in composite tools such as barbed arrowheads, harpoons, slicer knives, and inserts for fish hooks. Various types of scrapers are likely to have been used for processing wood, hide and bone. The predominance of backed points in the Upper Palaeolithic tool kit and their depiction in Mesolithic rock paintings (Mathpal, in press) as elements of arrows and spears imply that the bow and arrow and the spear were the principal hunting weapons.

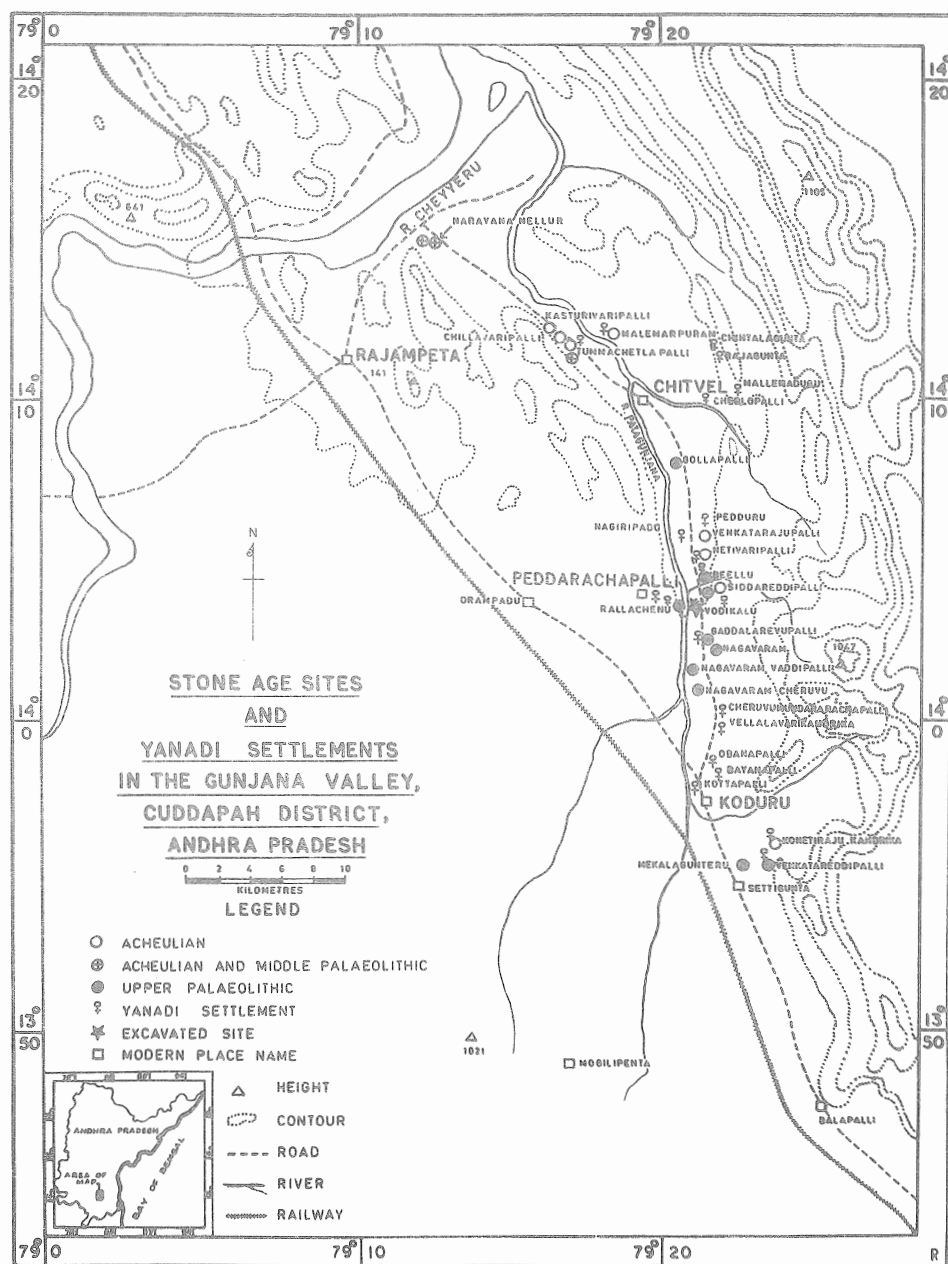


Figure 2. Stone Age Sites and Yanadi Settlements.

The trial excavation at Vodikalu revealed that the archaeological horizon was covered by a fine alluvial loam deposited by a sluggish stream. This covered the cultural materials, which lay exposed on the adjacent land surface, without transporting them. The excavation yielded, along with flaked artefacts, 84 pieces of flat grinding stone slabs, 19 rubbers and 135 split pebbles, all suggesting the processing of vegetable foods on the site. This evidence conforms with that found in surface contexts at Renigunta. These objects provide further evidence that the Mesolithic traditions in which they became more common were rooted in the preceding local Upper Palaeolithic.

The spatial distributions of the artefacts within the site point to specific activity loci, although in the absence of biological remains it is difficult to be precise about the nature of the activities performed. However, the functional attributes of the lithic artefacts suggest that woodworking, hunting, butchering, skinning, and fishing activities were carried out.

Further, the extensive distributions of the artefacts at Vodikallu, Beellu and Rallachenu (up to 3 km. in length) and their high densities (5 to 60 per sq. m.) suggest that these sites may have served as home bases. They are located on alluvial flats overlooking perennial pools in the Gunjana river. This relationship strongly suggests the exploitation of aquatic resources. Moreover, the locations of these sites are such that they never become inundated, even when the Gunjana is at the peak of its monsoonal spate. Also, the absences of base camps in the foothills or interior forests may suggest that these alluvial sites were all-season camps with prolonged occupations.

An analysis of the distribution of the Upper Palaeolithic settlements suggests that at least two served as home bases. These were Venkatareddipalli (with a transient camp at Mekala-gunteru), and Vodikalu. Additional base camps probably existed at Gaddalarevupalli, Nagavaram, Rallachenu and Beellu, and transient camps at Nagavaram Cheruvu, Nagavaram Voddipalli, and Gollapalli. All these camps are well-located with respect to critical resources like water, raw materials for tools, and food.

An attempt to estimate the populations of Vodikalu and neighbouring camps, based on approximate floor areas and the settlement patterns of documented ethnographic populations, suggests that Vodikalu could have supported 190 people divided into six minimum bands, each comprising 5 or 6 nuclear families of 5 members each. Beellu could have supported two minimum bands of six nuclear families each (a total of about 60 people), and Rallachenu could have supported about 30 people - one minimum band with 6 nuclear families. These figures, however, are by their very nature highly speculative.

## THE YANADIS

A study of the way of life of the Yanadi fisher and hunter-gatherer people who inhabit the Gunjana valley today, very often living on the same sites as were occupied by Upper Palaeolithic people, was undertaken with a view to gain an insight into the subsistence and settlement patterns of the Upper Palaeolithic. The Yanadis were until recently pure hunter-gatherers, but now many groups have settled near farming villages where they work as manual labourers or watchmen in the fields of agriculturalists. Traditionally, they lived in bands of 3 to 20 families in rather haphazard settlements of circular huts with conical roofs, made entirely of plant materials. Such huts are still built and are generally 3 to 4 m. in diameter with walls 0.5 to 1.5 m. in height. Entrances are very small (0.95 to 1.10 m. high; 0.70 to 0.95 m. wide) and are closed by doors of leaves and twigs.

The Yanadis have an expert knowledge of their environment. They are intimately familiar with all animals, birds, fish and useful plants in their habitat, and these play important roles in subsistence. Yanadi hunting expeditions consist of 3 to 10 persons, who traverse the forest for up to 20 km. and stay away from their settlements for 3 to 4 days, or even up to 10 days if game is scarce. They erect small temporary huts for shelter in the forest or use caves and rock-shelters when available. After a kill is made, a portion of it is cooked and eaten on the spot, and the rest is sun-dried on rocks and taken back home for later use, together with bones, horns and antlers required for other purposes. Quartz and quartzite flakes are often used for butchering.

The Yanadis hunt at least 14 species of terrestrial game with snares, nets and other methods. The prey includes hares, lizards, squirrels, porcupines, wildcats, rats, bandicoots and langur monkeys. They also catch at least 45 species of fresh water fish by as many as 12 different methods, using fish-traps, weirs, nets, hooks and poisons.

In addition, they can identify 68 species of birds, of which 6 are regularly caught in nets, snares and cages. They consume at least 13 species of yams, wild roots and tubers, 10 leafy greens, and 25 species of edible fruits. They collect 22 other items of minor forest produce, and after using some of these for subsistence they exchange the rest with farmers for grain or cash.

It is interesting to note that the various local names for species in the flora and fauna, and many of their food and medicinal uses, are known only to the Yanadis and not to any of the fully agricultural communities in the region. Their intimate knowledge suggests a long tradition of extensive exploitation. The physical correspondences between the locations of Upper Palaeolithic and

Yanadi settlements are too close to be purely coincidental. Indeed, it seems very likely that the Yanadis are the cultural and biological descendants of the Stone Age hunter-gatherers of the region, who probably lived a lifestyle not very different in terms of the nature of their settlements and their subsistence patterns.

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