# Neolithic Tools from Nepal and Sikkim

By Dr. N. R. Banerjee and Janak Lal Sharma

#### A. Introduction

The evidence of the Neolithic artefacts from Nepal and Sikkim is somewhat larger than that of the palaeoliths. discovered earlier.\* So far only ten tools are known, for three specimens, there is no record of the finds pots of the though it is asserted that from the one from Sikkim, all the rest are from Nepal. In fact, the author's attention was drawn to a mixed collection of six tools which were lying in the stores of the Departof ment Archaeology at Kathmandu, by the reported discovery in the course of planned exploration of a specimen of oval cross-section in whitish grey sandstone in the Dang Valley. Since the possibility of the occurrence and use of such tools from different parts of Nepal had to be conceded, the entire collection was examined by me (N. R. Banerjee) along with one from Sikkim, now in the possession of Shri J. L. Sharma of the Department of Archaeology, and the one from Katukisewar, so kindly lent for my study by its discoverer (1966), Shri Ram Niwas Pandey of the Tribhuvan University, Kathmandu; and yet another discovered by Shri J. L. Sharma in the course of a brief exploration carried out by the Department of Archaeolgy in the Dang Valley (1970)

# B. Description:

The ten specimens are described below:

# Fig. 1

- 1. Made of granitic gneiss, it is in the shape of a chisel, 8.75 cm. long and 2.5 cm. wide at the widest part near the almost straight cutting edge. The tool tapers slightly towards the top, and though the tip is broken, it is 2 cm. broad. The flat chisel is 1 cm. thick. One of the sides of the cutting edge is chamferred. The specimen was carefully ground on all the facets, including the sides, and presents an oblong and flattened cross-section.
- 2. The specimen, an axe, is made of dolerite, and is black in colour. It is 10 cm. in length and 6 cm, broad at its broadest point near the slightly curved cutting edge. Ground and polished to produce multiple surfaces it can be classed under the facetted type. Its cutting edge is slightly curved. The

<sup>\*</sup> N.R. Banerjee, "Discovery of the Remains of Prehistoric Man in Nepal." Ancient Nepal, No. 6, 1969, pp 6-9. We are grateful to Shri S.N. Puri, Member, Geology, of the Indian cooperation Mission, Kathmandu, for the identification of the stones described in this paper.

<sup>‡</sup> See p. 57

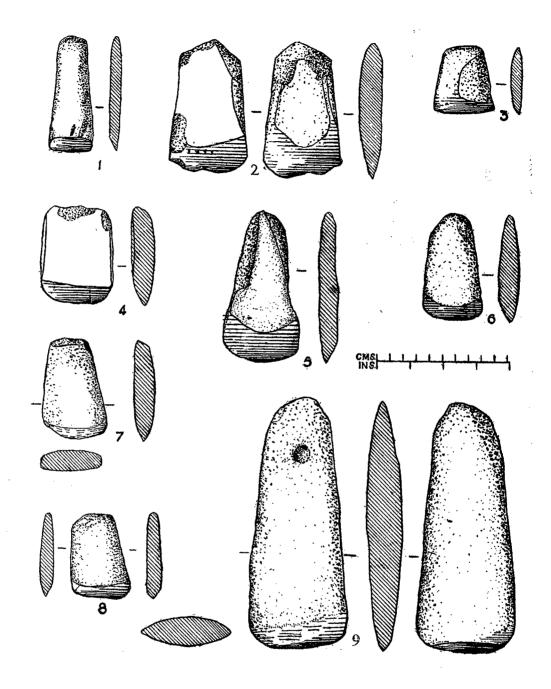


Fig. 1. No. 1 from Sikkim, no 3. from near Mackwanpur, no. 8 from near Budhanilkantha and no. 9 from Dang Deokhuri area. The exact findspots of the rest are not known.

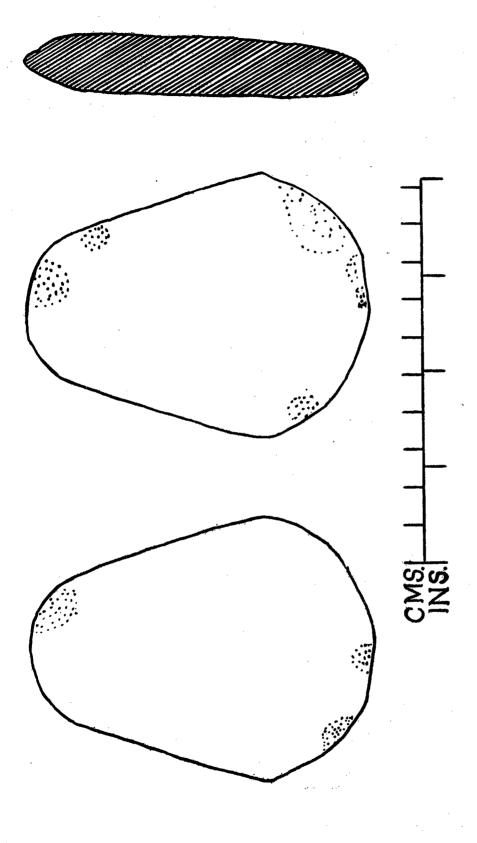


Fig. 2. A neolithic tool from the Dang valley.

the breadth of the butt suggests that it was hafted for use.

3. It is a thin chisel made of slate in the shape of a trapezium, the cutting edge being slightly chamferred on one side. It is 5 cm. in length, 4.5 cm. wide at its lower end and 2.5 cm. at the top, and the maximum thickness of the piece is .75 cm.

It was found in the midst of a cultivated field at Odhare, Ramtek Basti, not very far from Gangtok on the southern slopes of the Himalayan ranges, in Sikkim, corresponding to the midland zone of Nepal's topography.

It is interesting to note that the word Odhare, where the specimen was found, means a cave. It would, therefore, point to the probable existence of such caves, where folks using such polished implements may have once lived in the remote past. Its occurrence in the cultivated field may be attributed in this context to a discard.

The sides are flattened as in the cases of the other chisels, from Nepal.

4. This specimen made of quartzitic sandstone appears to be a celt used for cutting or chopping light wood or soft grass or reeds and plants. It is 7.5 cm. in length, 5.5 cm. broad at its broadest point above the cutting edge. In width it is almost uniform, being rectangular in the outline plan. While the slightly flattened sides and the broad faces are smooth, the cutting edge, which is almost straight, but for the rounded curves at the two lateral ends, is not as smooth. The lack of smoothness may be attributed to the absence of the finishing touch.

It is said to have been collected from a cave near Mackwanpur, which occurs to the south of the Mahabharat Lekh. This specimen can, therefore, be attributed to the Bhitri

Madesh area, as is the specimen from Dang, described below (No. 9).

- 5. It is a flattish axe made of granitic gneiss. It is 11.4 cm. in length and 5.75 cm. in breadth and has a slightly curved cutting edge. Though polished all over, strips at the edges retain original surfaces, slightly sunk and rough.
- 6. The specimen, made of granitic gneiss is comparable to No. 1 in respect of the flattened sides, though the cutting edge is almost straight in the middle and slightly curved at the edge. It is 8 cm. in length and 4.5 cm. at its broadest a little above the cutting edge. At its upper end it is 3 cm. broad, the tip being broken. It is also ground on all the four faces, forming a rectangular cross-section. The cutting edge has been produced by grinding both the faces so that the edge has become almost straight. The edges on the sides too are straight giving it a rectangular cross-section.
- 7. It represents the only specimen from the Kathmandu valley of which the findspot is known. It was picked up by a little girl, Kumari Bhavana Sontakke, a little to the north of Budhanilkantha, in the bed of the Vishnumati. It is black in colour and is made of gneissic granite. It has a sharp, slightly splayed cutting edge and has almost flattened edges giving it a rectangular cross-section.
- 8. This small specimen of celt is made of granitic gneiss, and is reported to have been found in the possession of a resident of Panauti to the east of Banepa. It is 6.4 cm. in length and 4.4 cm. in width at the cutting edge, which is almost straight. Several specimens are reported from Panauti which would, therefore, appear as an area deserving of careful search. It has a straight polished edge giving it a rectangular cross-section. Interes-

tingly, this specimen bears parallel depressions or striations on the flat faces, only a little worn out by the process, apparently caused in the course of cutting by means of a metal wire or saw as in the case of the shouldered axes of Assam. The metal used was probably a variety of alloy steel to give it the required hardness for cutting into granite. would indicate the probable chronology for the comparable assemblage of tools as belonging to the Iron Age, which could be any time between c 1000 and 200 B. C. for a beginning and the early centuries of the Christian era as the upper terminal. The rationale of the use of stone tools in an age of metal would probably be to supplement a rather limited supply of the more utile metal.

9. The longest specimen brought to our notice is one of whitish grey phyllite, with a green core, found by Shri Ram Niwas Pandey† at Katukisewar, near Tulsipur the headquarters town of the Dang Ghorahi district in the Dang Valley within the confines of the Rapti Anchal. It was picked up on the bank of a stream in the course of a regular exploration undertaken by him along with Shri Drona Prasad Rajoria and Shri Chola Raj Sharma in 1966 on behalf of the Department of Culture of the Tribhuvan University.

It can be described to be a text book specimen of a neolithic axe of lenticular cross-section with a broad, almost straight, cutting edge. It is 19 cm. in length and 7.3 cm. at the cutting edge and 4 cm. at the flattish butt.

Though ground all over, there are patches of uneven surfaces owing to the nature of the material. In shape and length it recalls the long and narrow blade of iron used by the womenfolk of the farmers, by fixing a long pole into the hole of the blade in the Kathmandu valley, and suggests a similar use. The cutting edge is slightly chamferred on one side for a breadth of .75 cm.

# Fig no 2

Shri J. L. Sharma picked up a couple of comparable specimens, though very much rolled, amid a scatter of gravels lying along-side the course of a stream called Gwarkhola, about half a mile to the east of the Tarigaon airport in the Dang valley in the Rapti Anchal. Only one of these is described and illustrated below.

Made of gneissic granite, it is 8.8 cm. long, and its almost hemispherically splayed cutting edge has a diameter of 7 cm. Flat on both the sides, the specimen has a rectangular cross-section. The specimen is so rolled as to be of doubtful import. In view of the earlier find of a neolithic axe of oval cross-section in the Dang valley, the probability of the specimen being a tool may perhaps be conceded and in this context it would tentatively imply an admixture in the valley of Dang of tools of the two distinctive types, if not their actual meeting ground. But much larger evidence of unimpeachable character

<sup>†</sup> We are grateful to Shri Pandey for giving us the permission to illustrate and describe his tool in the paper. That the area is likely to prove crucial in the pre-or protohistory of Nepal is clearly indicated by some other doubtful specimens found by Shri Pandey himself and later by Shri J. L. Sharma.

<sup>\*</sup> See pp. 51

must be found before any conclusion is drawn as to the identity of the specimen as a tool as well to the implied admixture of the two typologically distinctive tool shapes in this area.

## C. Conclusion

#### i Distrbution

The limited studies so far have indicated an extensive area stretching from Dang in the intermediate valley (Bhitri Madesh) to the central Himalayan belt in Sikkim as the presently known bounds of the neolithic tools in the region.

### ii Source

Though the bulk of the specimens would compare favourably with the tools of straight and facetted edges of rectangular cross-section, from Assam and North-east India, the presence of the specimen recovered from Katukisewar in the Dang Valley in whitish grey sandstone, which is distinctive different from the rest, would point to a different strain, and would plead for a meeting of the two strains in this region. The evidence of course is too meagre to warrant a hasty conclusion. That the bulk of the tools compare with those from Assam is clear, and tentatively it may be hazarded that the distributional movement into Nepal may have taken place from that direction, on the basis, merely, of typology.

## iii Utility and Function

That these axes may have been used for breaking the larger clods of earth into smaller

ones is indicated by the echo of the ancient practice in the methods of cultivation adopted by the farmers in the terraced hill valleys especially the Jyapus of the Kathmandu valley. These farmers use a large blade with a curved handle for turning the soil. This implement does the basic work of the plough. Womenfolk use a long but thin blade, of almost the size and shape of the stone tool from Katukisewar, Dang, fixed to the end of a long pole for breaking the clods. Both the operations involve considerable bending of the back and are conditioned by the nature of the terraced strips of land available for cultivation, where the oxen or other animals cannot be employed effectively or economically, apart from the troubles, and inconveniences of mobility or manouvreability on narrow ledges.

# iv Chronology

The general similarity to and affinity with the complex of neolithic tools from Assam, and the absence as yet of any find in a stratigraphic context leaves us with typology alone as the determinant factor in respect of chronology. If, therefore, the conceded premise of the directional trend from the north-east should hold good, a stelf point in the time bracket c. 1000-200 B. C. could be stipulated tentatively and provisionally as the chronology of the tools in question.

This is further supported by the marks or striations of cutting with a metallic wire as in the case of the shouldered celts of Assam.