

MAN IN INDIA

VOL. 43
NO. 2

APR.-JUNE 1963

A Quarterly Anthropological Journal
Founded in 1921 by Sarat Chandra Roy

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Edited by
Nirmal Kumar Bose

MAN IN INDIA

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ON COMMUNAL SEPARATISM*

NIRMAL KUMAR BOSE

LATELY, I came across a recommendation made by a distinguished anthropologist that something must be done in order to help the Asura tribe of Chotanagpur in continuing their ancient art of iron-smelting. They should not be uprooted violently from their tradition and plunged headlong into a stream of life which is alien to their own culture. Culture change should be gradual and smooth, with no sudden break from their ancient moorings. Otherwise, they will suffer from a 'loss of nerve'.

One can sympathize with the sentiments involved in this recommendation made by a noble anthropologist or 'phil-anthropologist' as the new class of anthropologists is being called. But it has generally been observed that while 'phil-anthropologists' are so much in sympathy with the tribal people and so thoroughly against all who 'come from the plains' in order to exploit the poor tribes, that they tend to overlook the fact that even among tribal communities there may be classes which exploit and others who are exploited, or that among the dwellers of the plains there are also classes which exploit those whom they can among their neighbours. But the 'communal' distinction between the exploited and exploiters made by 'philanthropologists' out of an uncritical

* Presidential address at the annual general meeting of The Anthropological Society held at the Calcutta University on 8 March 1963.

and sentimental appreciation of the facts of the case, is communicated to the tribal folk, because they hold positions of respect or authority, coupled with a genuine sympathy for the latter. Eventually, it encourages the feeling of separatism ; and if we take a long-range view, it leads to a kind of harm which is difficult to overcome.

It is even so with some missionary workers among the tribal population of India. Let us deal with a recent example. Recently, some Christian missionaries in Chotanagpur have turned their attention to the proselytization of members of the Scheduled Castes. Formerly their work was mainly among tribal communities. Tribal converts to Christianity do not seem to appreciate this new concern ; for so long they had learnt to look down upon all Hindus, including the Scheduled Castes, as 'foreigners' in the land of their birth, and thus 'usurpers'. Tribal Christians do not all seem to regard converts from the Hindu castes as their equals.

One of their inner fears seems to be that, if the latter are brought in in large numbers, they might be swamped out of their rights and privileges. Christianity has thus converted some into close kin and kept others away as distant and separate. Far less has Christianity succeeded in making the converts look upon *all men* as brothers, because they are the sons of God.

It is one thing to be taught that all exploited peoples must combine against those who exploit them. But if they are trained into the habit of regarding the whole of one community as 'exploiters' and themselves as the 'exploited', irrespective of class distinctions in the Marxian sense, then a combination between the exploited of various communities becomes impossible if it is needed for the sake of freedom.

Marx tried to combine the exploited against their exploiters irrespective of communal affiliation. But if a feeling of unity is created within one community exclusively by sedulous propaganda, then it leads to a strong feeling of communal separatism which is likely prove a great danger in course of time. When Pakistan came into being, the exploited Hindu and

exploited Muslim peasantry did not from a combination. Muslims had been sedulously inspired to regard all Hindus—or the Hindu 'majority community' in India—as the exploiter, while Muslims, no matter whether rich or poor, were regarded as 'brothers in faith'. And the result was Pakistan.

It will perhaps be even so if the tribal communities are treated in the same manner by those who lead them, or profess sympathy with them in their present degraded condition. Sympathy or fellow-feeling is good, but when sympathy is divorced from wisdom, from a realization of the possible effects of separatism, it leads in the direction in which some of the tribes of NEFA have been already led, or some of the tribal communities of Middle India are proceeding today.

Separatism has dangerous potentialities. But ours is not a plea for the continuance of exploitation. That has to be ended; but by combination among the down-trodden *across* communal boundaries. Those who are acquainted with the methods of organization of non-violent strength made familiar in our country by Mahatma Gandhi need not be told how best to end exploitation by constructive work and militant satyagraha and yet avoid the dangers of communal separatism. That it did not succeed in preventing the ultimate separation of Hindus and Muslims was not due to weaknesses in the method, but in the half-hearted, and often unintelligent, manner in which Gandhian plans were executed.

From this question of separatism let us now proceed to some other questions relating to primitive methods of production prevalent among tribal communities.

The Anthropological Survey of India has for the last two years been conducting a precise estimate of the carrying capacity of land under several rather inefficient systems of production prevalent in different parts of India. Accurate investigation has been carried out among the Juang in a village of Keonjhar in Orissa, where people live mostly by shifting cultivation supplemented by a little wet cultivation. The second area is in northern Chamba in the Himachal Pradesh, where the Gaddi rear flocks of sheep and goats, produce some woollen goods, and also cultivate the lower

valleys far below their pasture grounds. The third area studied so far has been in the extreme south of the Mizo District in Assam in a village in the Kaladan Valley at the foot of the Blue Mountain. The fourth area now being taken up for investigation is inhabited by the Māṛiā Gond in the Abujhmar Plateau in Bastar District, Madhya Pradesh.

Investigation carried out so far has shown that in the particular Juang village, 25 persons can be supported by shifting cultivation in the area available to the villagers, while the actual number residing there, when converted into adult consuming units, is over 60 per sq. mile. This means that the people (a) might be under-nourished, (b) might break off from time to time and form new settlements in areas with more restricted natural resources, or (c) might live here and earn by work in other villages. The pressure on land is intense; and the people have actually been subjected to all three steps outlined above. In the Mizo Hills, on the other hand, the supportable capacity of land where the soil is more friable and rainfall heavier is of the order of 35 per sq. mile; while the actual number residing there is 11 per sq. mile. In the mountains of Chamba, the earning by pastoralism and connected industries bears a proportion of 14 : 9 to that due to agriculture.

The object of the Anthropological Survey of India is to find out in each of these separate cases, the exact nature of the situation and obtain quantitative results for purposes of comparison. If the Survey were called upon to make any recommendation, it will first try to present an accurate picture of the 'patient's' condition before suggesting possible remedies rather than apply a wholesale patent medicine which may appear all right on paper, but may not work at all.

The fact that many of these patent remedies do not work is proved by the evidence of the tribes themselves. In spite of the fact that the Hindu community as a whole stands in exploitative relationship with their tribal neighbours, many tribes wish to become Hindu, or be regarded as a caste with good standing, even when Hinduism is not a proselytizing religion. In spite of the fact that nobody asked the Asura to give

up iron-smelting, the cheapness of factory-produced iron and the public need of preserving jungles from wasteful exploitation by the Asura themselves has forced them to turn away largely from their traditional art. Why should this be prevented, if it is due to the competitive pressure of more efficient forms of production when there is already such a heavy pressure of population upon India's land ?

Moreover, why should the transition from one productive system to another be necessarily a *slow gradual* process ? There may also be swift changes, which are not necessarily bad. The point is that all available human suffering should be avoided, and we have also to make sure that the new system of production is not merely *mechanically* more efficient, but also efficient from the human, social point of view. When Kropotkin recommended the decentralization of industry, he was not trying to preserve inefficiency, but he tried to combine efficiency with the highest opportunities of human growth.

It requires something more than mere sympathy among anthropologists before their recommendations succeed in producing more good than evil. At one time, Swami Vivekananda said that we did not have the right to interfere with the life of women except to the extent of throwing open for them the highest portals of education. Once that was done, it was for women to decide what they were going to do with their own lives. It need not be different in the case of tribal communities. If they are educated like the rest of Indian humanity, and given the very best, then it is for them to decide how much change they desire or do not desire.

Self-rule of the masses, irrespective of communal affiliation, is certainly better than guided philanthropy even if it springs from the best of intentions. One cannot be a substitute for the other.

VILLAGE LEADERSHIP IN NORTH-EAST INDIA

(Assessment and conclusion on case-studies
in six villages)*

P. D. SAIKIA

(*Received on 7 February 1963*)

1. The success of plans and programmes introduced for the economic, social and cultural regeneration of our rural folk, including the people of tribal villages, depends largely on the initiative and sincerity of local leaders. Many of the developmental projects have failed to evoke enthusiasm among the people, some of whom offer resistance directly or indirectly to the execution of the phased programmes. This is obviously for failure on the part of the sponsoring agencies to enlist the goodwill and active co-operation of the leading personalities. Leadership in rural society in general and in tribal society in particular is not confined to the traditional headman of the village, but is definitely shared by the village officers supported by the administrative machinery, as well as by the enlightened section of such a society. At present, there is a psychological rivalry for recognition by all these different categories. In this article, an attempt has been made to find out the importance of the traditional leaders, and the role of the new set of leaders in villages under the impact of recent changes.

2. The data for this Research Project were collected from six villages, one of which is situated in Tripura and the others in Assam. Out of these six villages, three are purely tribal villages, two are non-tribal and the last one has a mixed population of tribals and non-tribals. The following table indicates the location, nature of the population, number of households and the population of each village.

* The analysis is mainly based on field-survey data, collected by the Agro-Economic Research Centre for North-East India, Jorhat, Assam. The writer is thankful to the authorities of the Centre for allowing him to publish this article. The opinions expressed are personal and do not represent the views of the Centre.

TABLE 1

Sl. No.	Name of village	Location		Nature of population	No. of households	No. of population	Year of Survey
		State	Dist.				
		Territory	Sub-division				
1	Kanther Terang	Assam	United Mikir and North Cachar Hills	Tribal (homogeneous)	14	88	1961
2	Betgarh	Assam	Darrang	do.	25	175	1959
3	Kathaliacherra	Tripura	Belonia	do.	61	260	1961
4	Dispur	Assam	Kamrup	Tribal and Non-tribal (heterogeneous)	110	600	1961
5	Chota Haibar	Assam	Nowgong	Non-tribal (heterogeneous)	283	1806	1962
6	Morangaon	Assam	Sibsagar	Non-tribal (homogeneous)	43	272	1961

3. All these villages are, however, not typical villages of this region. The two tribal villages, namely, Kanther Terang and Betgarh, are somewhat representative samples of those areas. The social condition of the village Kathaliacherra is, to a large extent, controlled by external forces. Dispur and Chota Haibar are not representative villages of Assam, but social changes are distinctly noticeable in these villages due to urban impact. Morangaon is a typical village of the Assam plains. As a whole, these villages are experiencing tremendous forces of change. The conclusion arrived at may not be applicable to

all the rural areas of north-eastern India. But as the villages are situated far apart from one another, the data given below will give a broad outline of the pattern of leadership and recent changes in this region.

4. An attempt has been made in these discussions to identify the real leaders of each society. The traditional pattern of leadership is first taken into account. Against the traditional background, attempt is also made to identify the new set of leaders and the position of both the old and new is ascertained. In a few cases, indications are given about the potential leaders from personal observation.

5. In the two purely tribal villages of Kanther Terang and Betgarh, the effect of induced changes and the impact of urban life are not much marked. These two tribal villages are so tradition-bound that the force of change has not affected its hard core. A few outward changes noticed in the villages at the present moment are, by and large, superficial ones. Some of these might one day lead to some permanent and desired change. On the other hand, the tribal welfare colony, Kathaliacherra, reveals the fact that the tribal people are not resistant to change in regard to some of their traditional customs. In this village the traditional structure of administration has been totally replaced by a new one and the villagers without any prejudice and opposition have accepted the new form of administration.

6. In both Kanther Terang and Betgarh, the two traditional chiefs, who are also Government-nominated headmen (*gaonburas*) of the respective villages, are the key figures. Whatever might be the condition, it seems that these two village chiefs will continue to enjoy their status in their lifetime. In these two villages, it is found that only a very few elders are aware of the developmental activities and in general the urge for change and progress is lacking. They are too much confined to their traditional way of life. The villagers are still not much attracted by modern education, though schooling facilities are available in both the villages. Kathaliacherra is changing rapidly and in some respects this village has made marked progress.

7. In recent years, the villagers of Kanther Terang and Betgarh have accepted some cultural traits of the neighbouring people, especially in dress and some items of food and drink. Though very traditional by heart, some of the elderly persons having a little outside contact are found to desire change and progress. An elderly man of Kanther Terang, who went on *Bharat-darshan* tour sponsored by the State Community Development, narrated to the villagers, for days together, the ways in which other parts of India are advancing. From him the villagers got some idea of the outside world. Two other young men of the same village working in Government offices at some petty jobs are somewhat progressive-minded, but one of them has failed to persuade the people to send their children to school. In Betgarh the enlightened young men are appointed as interpreters in the Government offices of NEFA, but they do not appear to have much influence in village affairs. Even the elected member of the *gaon* panchayat has no influence at present; but in future he might assume a position of some importance in the village. Politics, in the real sense of the term, has not entered these villages and the local leaders also do not evince much interest in it. The traditional pattern of leadership or, broadly speaking, society itself is changing very gradually. There is thus no conflict between the enlightened group and the traditional one.

8. In the plains, the tribal village of Dispur with a heterogeneous population changes are distinctly noticeable. The impact of Gauhati town has altered many aspects of the traditional way of life. At present the functions of some traditional leaders have become very much limited and a new set of leaders has emerged to keep pace with modern developmental activities. But the old leaders with the help of the council of elders still settle socio-religious disputes, and only graver charges are referred to the newly sponsored panchayat. The traditional and hereditary village chief, who is also the Government-nominated headman of the village, is recognized by all the villagers and he has created the spirit of social work among them. It is only on account of

his handsome donation of sixty thousand rupees, in cash and kind, that it has been possible to establish a High English School in the village. Whatever might be the motive behind his donation, this has definitely inspired the people towards welfare activities. The new set of leaders include two teachers of the schools, the elected members of the *gaon* panchayat, one Senior Land Surveyor (*Kanongoe*) and a few literate and enlightened persons of the village. These new leaders actively participate in village welfare work and also organize cultural activities. The villagers show their respect to the educated sincere workers, especially some teachers of the schools. Direct domination by the rich is not found in the village. Political leaders from outside have created an urge among the people for important and beneficial social reforms. Leadership based on factions has not emerged, though there are leaders from among both the tribal and non-tribal groups. The relation between the traditional and the new set of leaders is found to be very congenial. Of course, the old leaders of the village complain against the new system of panchayat and some aspects of the new way of life. Anyway, the people in general have taken the changes to be for the better rather than for the worse.

9. In the non-tribal villages of the plains, the changes are very rapid and marked, though quite a considerable section of population is somewhat apathetic and even opposed to them. In both the villages, a few traditional leaders are found to be conservative, and their present roles are somewhat neutral in village life. On the other hand, in both the villages other traditional leaders are found to be actively engaged in the planned developmental activities. Such traditional leaders engaged in the developmental activities are now assuming important positions.

10. The functions of the traditional council of elders have substantially been changed due to the formation of panchayats in recent years. Now both the villages are under the Government-sponsored *gaon* panchayats. The primary function of the council of elders was the settlement of disputes and all the people recognized the council as a

judicial body, though its decisions were generally arbitrary. The Government-sponsored panchayats are elected bodies with control over the executive village-level personnel. Each village is thus linked up with the higher levels of administration through these panchayats. In addition to some judicial functions, these panchayats are also entrusted with the execution of developmental plans.

11. These panchayats are based on democratic principles. But it was complained by one village that rich and influential persons get into it and dominate the affairs. Some of the villagers are also of opinion that the members of the panchayat are interested in power and money and not so much in welfare activities. One even referred to one president of the *anchalik* panchayat as the miniature M. L. A. of the locality. The bright side of it, the villagers said, is that the elected members can be brought down to the original level after one term if they misuse the power vested in them by the people and the Government.

12. The representatives in the Assembly and Parliament generally remain out of touch with the villagers and they cannot look into local village affairs. The hiatus between these representatives and the village people may be filled up by the newly elected members of the panchayat.

13. At present, the nominated headmen or *gaonburas* of both the non-tribal villages perform very little of their allotted function. The remuneration paid to them is also meagre. It seems, they are not very sincere in their duties as they have neither official power nor good remuneration. They do not keep the vital statistics of the village properly, which is expected of them.

14. In one village, the village-level worker of the Community Development Block is found to be assuming a very important position. He is consulted by many villagers in important village affairs. But in another village, the villagers have no faith in the corresponding person. Some of the villagers are of opinion that the money spent in the construction of the quarters for the *gram sevak* could have

been better spent in the construction of the L.P. School, the condition of which is deplorable.

15. In another village the older section of the people said that they had no faith in semi-educated, unemployed persons who pose as leaders and well-wishers. Some even said that they are at the root of all troubles. They are considered to be a burden of the families to which they belong. They do not take up family occupations sincerely, nor are they competent for white-collar jobs. However, some of them are said to have taken an active part in village-level work.

16. Ideal leaders are found in both the villages. It seems that sincerity is well appreciated in rural society. In one village, an old sincere worker is found to be respected by all villagers. It is really fortunate to have a man in a society who has donated a handsome sum for the village L.P. School, though the condition of his own residence is not quite satisfactory. A sincere man is always followed by the rural folk. In Morangaon, a Social Education Organizer has brought about such noteworthy social reforms that they refer to him as a guide and friend even though the officer was transferred to some other place long ago.

17. In the villages under study, educated and enlightened persons command respect from the village folk, and they are increasingly assuming a position of importance. Educated persons and even good school boys are taken as ideals. The enlightened persons engaged in village welfare activities are also given importance, though some of them are looked upon as parasites. One ideal cultivator who won a district prize for good yield of crop is not impressed by modern improved techniques of cultivation. He is of opinion that no one can be more expert in cultivation than the cultivators themselves. He has kept unused the improved types of implements which were given to him under the Community Development Project of that area. From the attitude of such an ideal cultivator it is apparent how difficult it is to induce farmers to adopt improved techniques of cultivation.

18. Women are found to be lagging far behind. In all these villages, there is no educated and enthusiastic woman to guide others. There is no female social worker in any of these villages.

19. In smaller villages, factions are naturally few. Leadership based on groups is noticeable in only one village with a heterogeneous population. In the smaller villages, people are found to be more amenable to co-operation. Leadership based on caste is not found in any of these villages.

20. The foregoing remarks refer to the villages surveyed. Although it is difficult to generalize from the above findings the pattern of leadership for the whole of north-eastern India, it is our impression that in this region, by and large, a similar pattern will be found. If there is a sincere man with initiative, he can inspire and lead the villagers, irrespective of his official or economic position. Even with official authority and a majority of votes at the time of election, a sponsored leader may not be able to inculcate a new outlook among the rural folk if he lack sincerity and ability. In tribal areas, however, the traditional leaders still exercise considerable influence, and in the execution of any economic development they ought to be associated.

PALAEOLITHIC INDUSTRY OF BANKURA, WEST BENGAL

D. SEN

A. K. GHOSH

M. CHATTERJEE

(Received on 11 March 1963)

V BALL (1865) discovered in Bankura one handaxe while carrying out geological investigation. Nearly a hundred years later, the Archaeological Survey of India under V. D. Krishnaswami (1960) started exploration in parts of the district of Bankura along the river Kasai and came across certain palaeolithic, microlithic and neolithic implements.

The district of Bankura is situated at one end of the western extremity of West Bengal. It has an area of 2,621 sq. miles. Its north latitude is between $22^{\circ} 36'$ and $23^{\circ} 38'$ while the east longitude is between $36^{\circ} 36'$ and $37^{\circ} 46'$. In shape it resembles an irregular triangle with its base in the north and north-east and its apex in the south-west. The surrounding districts are Burdwan (N. and N. E.), Hooghly (S. W.), Midnapur (S. and S. W.) and Singhbhum (W.).

The geomorphological aspects of the district present two contrasting features. In the east, around Bishnupur, the country is mostly flat and open, and is formed of alluvial deposits of the Damodar. Certain parts around Sonamukhi and Jaypur have an undulating surface and consist mostly of lateritic soil. The other parts of the district are uneven with rugged hills and rocky outcrops and present a contrast to the plains of West Bengal. The district of Bankura may thus be taken as a connecting link between the plains of West Bengal on the east and the Chotanagpur plateau of Bihar on the west.

Mr. D. Sen is Reader and Mr. A. K. Ghosh is Lecturer and Mrs. M. Chatterjee a former student in the Dept. of Anthropology, Calcutta University. Their personal addresses are 101/A P-Block, New Alipur, Calcutta-33, 224 B. B. Chatterjee Road, Calcutta-42, 49/5 Pathak Para Road, Calcutta-34, respectively.

The most important river is the Dwarakeswar which runs almost through the heart of the district, dividing it into two halves, the northern and the southern. The banks are well defined and are chiefly composed of clay and sand mixed with *kankar*. The Gandheswari is a tributary of the Dwarakeswar. Near Bhutsahar, a small village two miles east of Bankura town, the tributary meets the main river. The river Damodar running N. W. to S. E. forms the N. E. boundary of the district. Its banks are distinct and are mainly covered by alluvium. The river Kumari, flowing from the west, meets the Kasai below Ambikanagar.

The rivers and streams flowing from N. W. to S. E. divide the land into a number of parallel strips and the land-mass exhibits a gently undulating appearance. There are no dead or silted rivers in this district. The rivers, on the whole, have kept to their courses and there has not been any appreciable change.

The rock types characteristic of the area are :

- (a) Hornblende-schist, Gneiss, Granite and Dolerite.
- (b) Sandstones and Shales, Peridotite and Anorthosite.
- (c) Laterite and alluvial deposits.

Igneous, sedimentary and metamorphic rocks belonging to different geological ages are met with in this district. The following geological sequence is found in Bankura :—

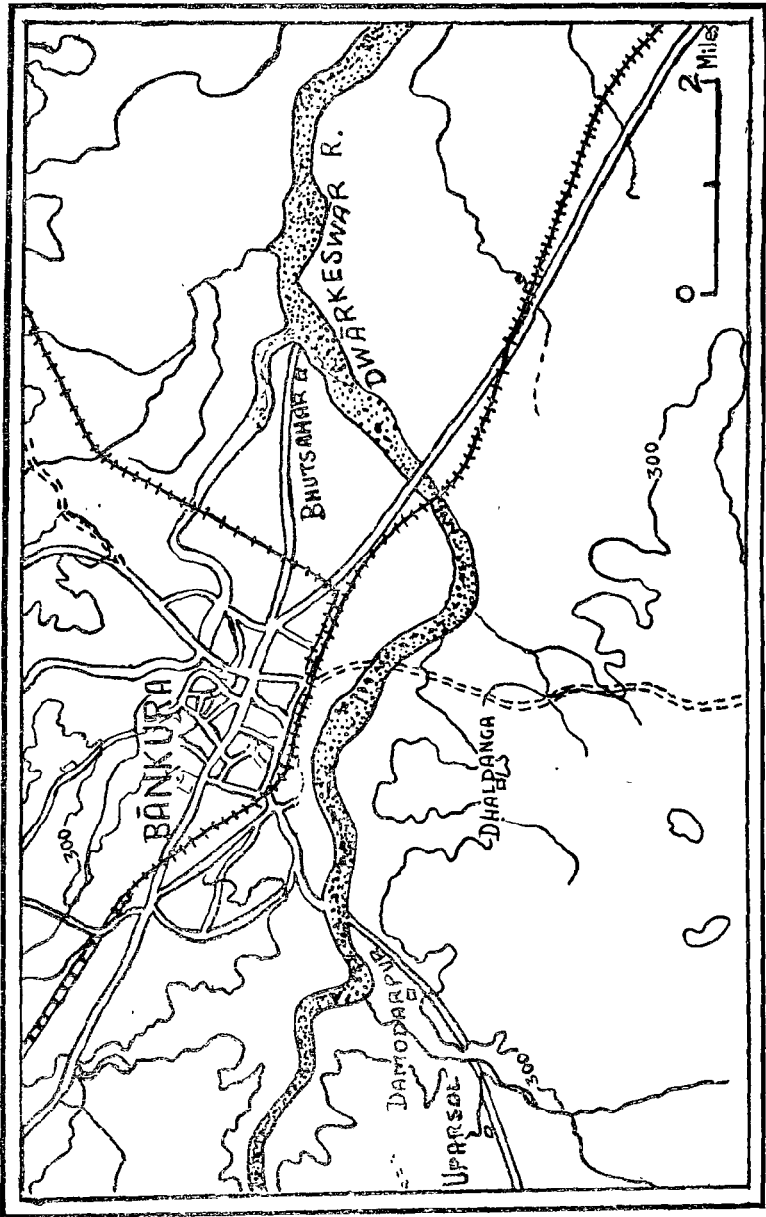
Rock types and local terminology of horizons	Geological age
Alluvial deposits and laterite	Recent, Sub-Recent and Pleistocene
U n c o n f o r m i t y	
Panchet Series Raniganj Series	Sandstone and shale Gondwana
U n c o n f o r m i t y	
Granite, Hornblende-schist, Gneiss, Dolerite, Anorthosite, Peridotite, etc.	Archaean

The major portion of the district presents a rolling appearance, covered by laterite and alluvium. To the east, a vast stretch is occupied by recent alluvium. In the extreme west, there are metamorphic rocks forming a continuation of the Chotanagpur plateau. Occasionally, very coarse-grained granite-pegmatites cross the schistose rocks. Near Bankura town, the rocks are predominantly hornblendic with granite veins. Towards the east, gneisses have a lateritic capping. Towards the west, ferruginous gravels and lateritic clays cover metamorphic gneissose rocks. The most characteristic geological feature of the district is the occurrence of laterite, sand and gravel beds. In places, laterite is found as distinct altered rock covering the bed-rock. But transported laterites are found as loose debris. Locally, nodular laterites are known as *kankar*, while calcareous nodules are known as *ghuting*.

The junction between the oldest Archaean rocks and the younger Gondwana sedimentary rocks is marked by a fault. Raniganj and Panchet Series mentioned in the above geological succession are of the Lower Gondwana group (Permian to Triassic). The Raniganj Series is composed of even-textured grey or greenish sandstones and dark grey shales. Some heavy minerals like garnet, zircon, rutile are found in them. In the eastern part, intrusions of wall-like igneous bodies known as dykes are found which are composed of basic rocks, peridotite and dolerite. The Panchet Series includes green coloured shales with calcareous cemented micaceous sandy shales and feldspathic sandstones.

The places which were explored for artefacts may geographically be grouped into two regions (localities). The first lies in the Dwarakeswar Valley near Bankura town (Map 1) and palaeolithic sites are located in the villages of Aijta, Bhut-sahar, Dhaldanga, Damodarpur, Manjura, Uparsol, Krishnanagar, Nuniabad, Chikchika, etc. The other region lies in the valleys of Kasai and Kumari (Map 2), and palaeolithic sites are located in Ambikanagar, Hatikheda, Chiada, Parasnath, Puddih, Buddih, etc. The confluence of the Kasai and Kumari below Ambikanagar is about twentysix miles south of Bankura town.

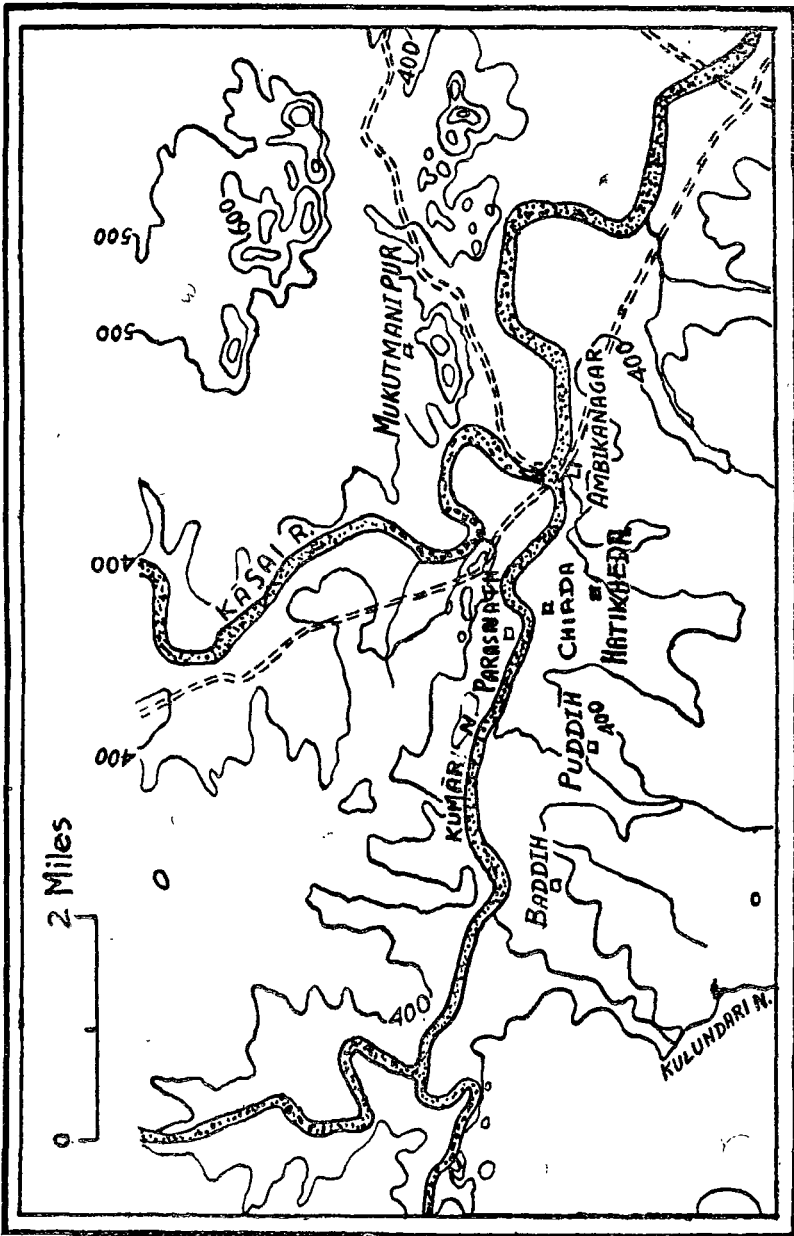
The major part of the field-work was devoted to the first region, particularly the area s. w. of Bankura town. In this



MAP 1. Map showing the Darakeswar Valley near Bankura town with the palaeolithic sites.

area, across the newbridge over the Dwarakeswar, the tract between the third and fourth milestones on the road to Khatra is covered by an extensive sheet of gravels, covering an area of about $1\frac{1}{2}$ sq. miles. The gravel surface extends to the east

up to the nullah, beyond Manjura, and to the west near the fourth milestone. This gravelled surface is undulating and lies between 300' to 350' above sea level. The laterite exposed



MAP 2. Map showing the Kasai-Kumari Valley round Ambikanagar with the palaeolithic sites.

at places below the gravels is detrital. The pebbles are tinged red due to ferric oxide. The laterites at places also occur in the form of chunks and are found scattered in an irregular

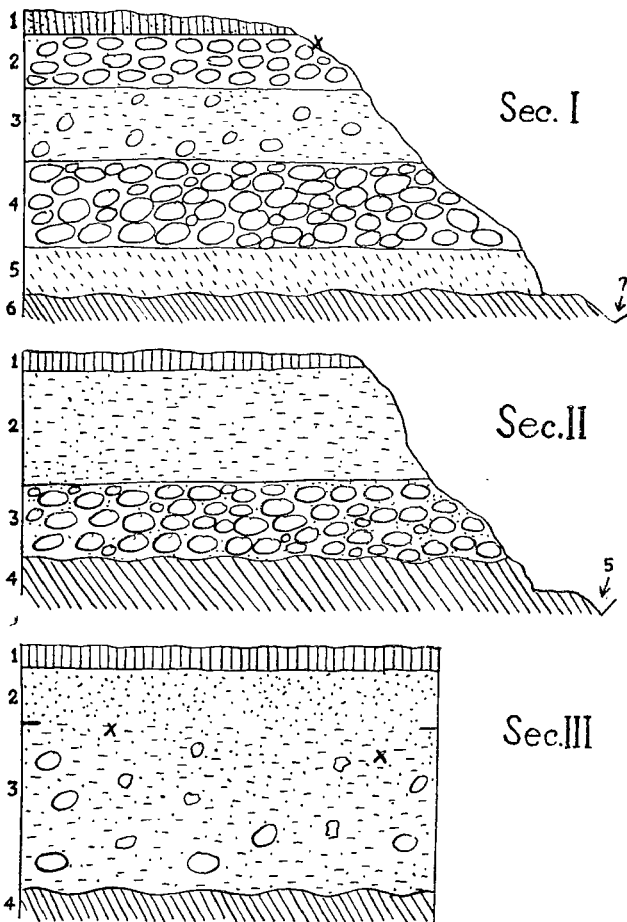
fashion among the gravels. A section (Sec. I below) down a nullah near Manjura revealed a basal deposit of mica-schist (soft white clayey). This deposit is overlain by a bed of white quartzite pebbles which in turn is overlain by loose detrital laterite embedded with reddish gravels. A partly bifacial chopper was recovered from a section of the detrital lateritic gravels.

Some crude pebble tools (mostly choppers) were collected from an old canal site. The canal joins the main river, Dwarakeswar, near the third milestone on the road from Bankura to Khatra. Between Dhaldanga (near the first milestone) and Damodarpur, laterites were observed to be overlain by alluvium. Weathered bed-rock as well as reddish gravels are found to occur here. Evidently the choppers here have cropped out from the lateritic gravels.

In the village of Krishnanagar, three miles S. W. of the Dak Bunglow, on the southern bank of the river Dwarakeswar, a scraper was collected from the flat land, locally known as *gar*. The bed-rock of granite is exposed like small mounds as a result of erosion. Pebbles with laterite were observed at some places. Both the banks of the river are covered by yellowish alluvium. From the village of Uparsol, situated between the fourth and fifth milestones on the new road, two crude choppers were collected. The height of this place is 300'. It is a small area covered with gravels, but it is not so extensive as that found at Damodarpur. Bed-rock, exposed in small pits, is covered by detrital laterite. Near the ninth milestone on the new Bankura-Khatra road, a handaxe was collected from the village of Chikchika. On the same road, at the tenth milestone, in the village of Nuniabad, another handaxe was collected from the surface. Detrital laterite (pebbly) occurs in both the localities.

East of the Dak Bunglow in Bankura town, some places near the junction of the river Gandheswari and Dwarakeswar were explored, but no palaeolithic artefacts were found. The river beds are sandy and the banks are composed of thick alluvial deposits. Granite gneissose rocks are exposed in some places like small mounds.

Summarizing our geological observations relating to the occurrence of tools near Bankura, we find that the tools come



Sec. I—Section on the left bank of Manjura nullah near Damodarpur. 1—Sandy alluvial deposit (6"), 2—Reddish gravels in ferruginous matrix (1'6"), 3—Detrital laterite with gravels (2'), 4—Whitish gravels (2'), 5—White micaaceous clay (1'), 6—Bed rock, 7—Manjura nullah.

Sec. II—Section on the left bank of the Kumari at Parasnath. 1—Alluvial deposit (2'), 2—Lateritic concretions (6'), 3—Gravels with concretionary matrix (4'), 4—Bed rock, 5—River Kumari.

Sec. III—Pit section at Hatikheda. 1—Alluvial deposit (6"), 2—Pisolitic laterite (1'6"), 3—Detrital laterite with gravel and rubbles (4'), 4—Bed rock.

X—Tools.

from the detrital laterite with gravels which overlies at places the bed-rock of schistose granitic gneiss (Archaean) and underlies recent soils.

The second implementiferous region is located in the valleys of the rivers Kasai and Kumari (near their confluence) which is twentysix miles south of Bankura town. Below Ambikanagar, the Kasai from N. W. and the Kumari from the W. meet with one another. Villages near Ambikanagar, like Hatikheda, Parasnath, Buddih, Puddih, etc., are reported to be ancient historical places. Interesting historical remains are found in the village of Parasnath, on the left bank of the Kumari. Here we observed the plinths of temples with stone sculptures belonging to the Jainas, pottery, bricks and beads which prove that it was a place of pilgrimage. But we did not find any Stone Age remains. The river-beds in this place are mostly sandy. Banks are high and composed of thick yellowish alluvial deposits with traces of gravel here and there (Sec. II).

Hatikheda, two miles S. E. of Parasnath, is a very interesting site. A number of handaxes (mainly ovate), unifacial and partly bifacial choppers and a few scrapers were collected from small lateritic pits and from open sites on gravels. The tools collected are reddish brown in colour. Pit-sections are shown below (Sec. III) indicating the actual position of the tools.

Buddih, near Hatikheda, also yielded some tools associated with angular fragments of shales on the high ground. The geological features are the same as in Hatikheda. A few tools were collected from Chiada, a small village near Buddih.

Summing up our geological observations round Ambikanagar, Hatikheda, etc., we find that the bed-rock is overlain by detrital laterite interspersed with rubbles. The implements together with the rubbles are stained red due to contact with laterite. The detrital laterite in its turn is covered by yellowish loamy soil. In some places, particularly near a tank at Buddih and also in the bank of Kumari below Parasnath, a thin layer of gravels in ferruginous matrix was observed under the yellowish loamy soil. But no implements were found from the gravel beds there.

The palaeoliths collected from Bankura proper may be grouped mainly into the following types :

- (a) Choppers on pebble and on core

- (b) Scrapers on core and on flake
- (c) Handaxes on core.

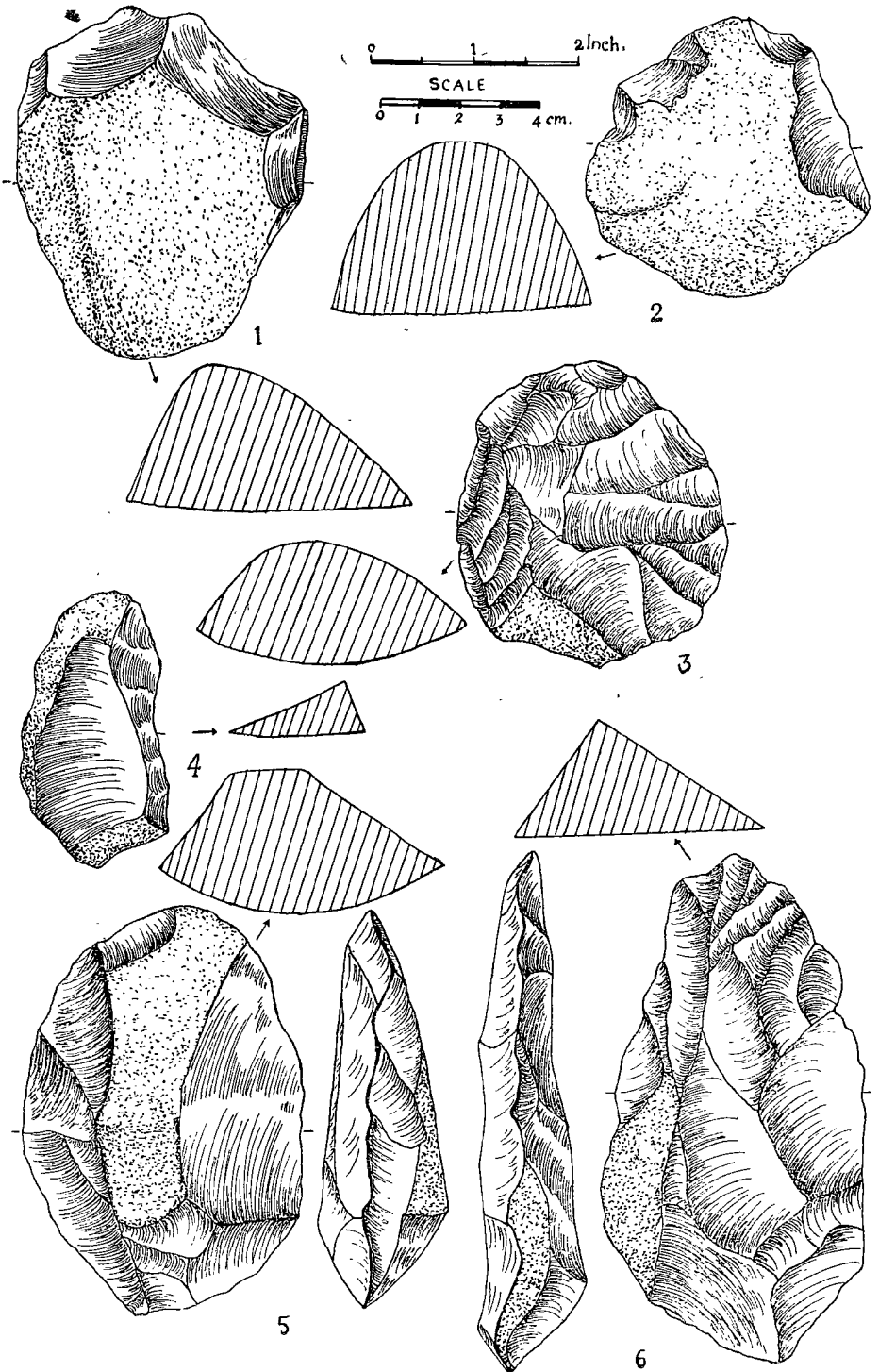
(a) Most of the choppers are made of quartzite while the rest are made of quartz. Some are stained red or have a ferruginous incrustation. They are made on pebble or on core. The workmanship of these tools is very crude and primary in nature. The pebble-choppers have large pebbly cortex at the butt-end, covering both the dorsal and ventral aspects. The working end is generally unifacial and wavy. There are only two partly bifacial pebble-choppers in this collection. Secondary retouch is completely absent. Some round pebble variety is also present in this group. The flakes are directly taken out from the pebble surface. The working edge is only on one side (fig. 1), though in a few choppers the working edge is almost round, covering a large area (fig. 2).

(b) Scrapers are made on quartz or quartzite with lateritic incrustation or reddish-brown stain due to ferruginous contact. They are made on core or on flake. The scrapers are of two types, side and round. The flake-scars are very shallow and primary in nature and are concentrated round the working edge. The round scrapers (fig. 3) have a thin cross-section and the side-scrapers (fig. 4) have a cross-section of lesser breadth.

(c) Handaxes are rather rare. There is only one ovate (fig. 5) and one almond-shaped (fig. 6) type, found from Chiada and Damodarpur respectively. The workmanship of both the specimens recalls the Early Acheulian type. Both the surfaces are covered mainly by primary flake-scars, but secondary workings are noticed towards the working edge which is thin and sharp. The butt-end is thick but the line of butt is continuous with the line of profile.

The other locality is Hatikheda (near Ambikanagar), from where the palaeoliths found include the following types :

- (a) Choppers
- (b) Scrapers
- (c) Handaxes and cleavers.



Figs. 1-6. Palaeoliths from the Darakeswar Valley.

Choppers and handaxes (including cleavers) together comprise the largest number of tools from this locality. The materials used are mainly quartz and quartzite. Like the other locality (Bankura proper) the specimens are reddish-brown in colour due to ferruginous stain.

In choppers, the flakings are mostly primary in nature. Secondary flaking is practically nil. The chopping edge is worked on one side only by the removal of large primary flakes. These tools are very crude both in form and technique. Most of the choppers are on pebble. There are both of unifacial and bifacial types, with unworked pebbly cortex towards the butt-end. A unifacial chopper of squarish form (fig. 7) and round chopper on flake (fig. 8) also occur.

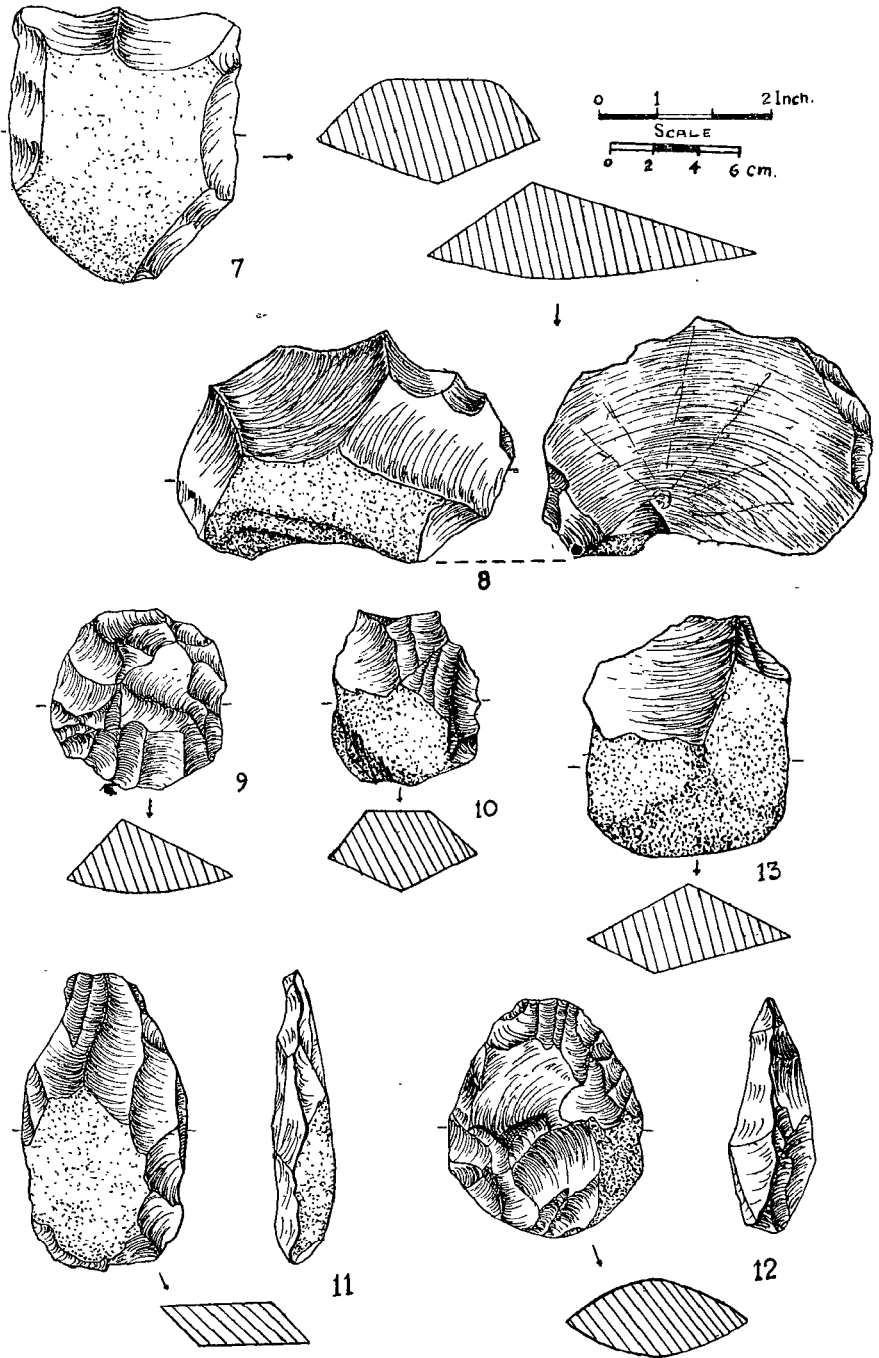
Scrapers are very few in number, but both round and side scrapers are present (figs. 9 and 10). They are made either on core or on flake and have cross-sections from bi-convex to plano-convex.

Handaxes are altogether six in number. They are on core, having a reddish-brown stain. In form, these are peariform (fig. 11) and ovate (fig. 12). They have thick butts and their sides taper to a pointed or rounded cutting end. The butt-end shows original cortex. Flake-scars are present on both the dorsal and ventral surfaces. They are multi-directional in nature. The number of secondary flake-scars is greater than primary flake-scars. One of the handaxes is very flat and cleaver-like in appearance.

There is only one cleaver (excluding the incomplete ones) from this locality. The dorsal surface is provided with long primary flake-scars while the ventral surface is the main flake surface. The cross-section is plano-convex.

The geological sections observed near Bankura town and round Hatikheda in the context of occurrence of palaeoliths have been previously described. The sections reveal a general sequence of alluvium and laterite with gravels (and associated ferruginous soils) underlain by older rocks. The laterites are exposed either on the surface with gravels or are underlain by an alluvial soil cap. At places the laterites have a covering of *murum* or ferruginous soil. It appears that the implements

occur in two horizons within the laterite complex : the earlier one, with choppers from the gravelly laterite, while the



Figs. 7-13. Palaeoliths from Kasai-Kumari Valley.

latter is from the *murum*, yielding bifaces. Both Dunn and Dey (1942), and Sarkar (1960) have observed the alluvium and the laterites as overlying older rocks, and have dated them as Recent and Pleistocene. It thus appears from the field-data at hand that the implementiferous gravelly laterites and *murum* may be placed within the Pleistocene. But this must be confirmed by further geological study in and around Bankura, and particularly the intermediate region between the Dwarakeswar and Kasai. Further exploration in this line may throw light on the problem of the relative age of the chopper industry of Bankura proper and biface industry of Hatikheda.

Geologically, Bankura is considered to be on the fringe of Chotanagpur plateau. In the perspective of culture (of the Old Stone Age) we find a close similarity of tool-types in the adjacent areas of Bankura, viz in Singhbhum (Sen & Ghosh 1960) and Midnapur (Ghosh 1962). Of the work so far done in this region, we can say that this vast region comprises one culture area. It fits well both with the typology and the context of the occurrence of tools. In Singhbhum, a great range in typology, from Early Abbevillian to Late and Advanced Acheulian, has been found, which has not yet been found either in Bankura or in Midnapur. This fact does not prove that these two districts in West Bengal were unhabitated by palaeolithic people. Before any conclusive remark can be made, further work, extensive as well as intensive, is necessary.

If the area for correlation is extended in both the directions (in N. W. and Peninsular India), some interesting features are observed. The pebble choppers have close affinity with these of the Soan (DeTerra 1937). But in the Soan, the pebble tools are integrated with flakes which are not found in Bankura. The Soan is considered to be devoid of biface, and in this respect it does not agree well with Bankura. In the Peninsula, Mayurbhanj (Bose, Sen and Ray) and Madras (Krishnaswami) offer comparable lithic data. The tool-types from Mayurbhanj consist both of choppers and bifaces. Both the industries in Mayurbhanj yielded artefacts from cruder to finer technique and types. So, for the earlier phases, the industries from

Bankura and Mayurbhanj appear to be similar ; or, in other words, they may belong to the same culture-complex.

BIBLIOGRAPHY

- | | | |
|-----------------------------------|------|---|
| Ball, V. | 1865 | Stone implements found in Bengal
<i>Proc. As. Soc. Beng.</i> |
| Bose, N. K., D. Sen, & G. S. Ray, | 1958 | Geological and Cultural Evidence
of the Stone Age in Mayurbhanj,
<i>Man in India</i> , Vol. 38, No. 1. |
| DeTerra, H. & T. T. Patterson, | 1939 | <i>Studies on the Ice Age in India and
Associated Human Cultures</i> , Car-
negie Institution of Washington,
Publication No. 493. |
| Dunn, J. A. & A. K. Dey, | 1942 | The Geology and Petrology of
Eastern Singhbhum, <i>Mem. Geol.
Sur. Ind.</i> , Vol. 69, Pt II. |
| Ghosh, A. K. | 1962 | Discovery of Prehistoric Stone Im-
plements from North-West Midna-
pur, West Bengal, <i>Sci. & Cult.</i> ,
Vol. 28, No. 7. |
| Krishnaswami, V. D. | 1947 | Stone Age in India, <i>Ancient India</i> ,
No. 3. |
| | 1960 | Exploration in Districts Bankura
and Purulia, <i>Ind. Arch.—A. Rev.</i> |
| Sarkar, N. | 1960 | Occurrence of Galena in Gopinath-
pur, Bankura, <i>Qty. Jour. Geol. Min.
Met. Soc. Ind.</i> , Vol. 32, No. 4. |
| Sen, D. & A. K. Ghosh, | 1960 | On the Occurrence of Palaeoliths in
Singhbhum, <i>Man in India</i> , Vol. 40,
No. 3. |

A PRELIMINARY NOTE ON THE ASURA

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(Received on 18 March 1963)

TRADITIONALLY an iron-smelting tribe, the Asura of Netarhat Plateau of Ranchi District, have now taken to cultivation as their economy. As early as 1872, Edward Tuite Dalton described them as 'living almost entirely by iron-smelting'. But in recent years, practically very few of them practise iron-smelting.

In 1872 their total population was 1,578 and in 1,881 it was 1,204. In 1941 the number was 2,024. About the Asura in general, their cultural characteristics and the indigenous process of iron-smelting have been described by Roy (1915, 1917, 1920, 1926), Ruben (1939) and others. Recently, Gates (1962) has published basic data on a few physical measurements of 20 individuals, half of whom were of either sex. He is of opinion that 'Asuras are not now Australoid'. They speak in the Kherwarian language which belongs to the Munda family.

During the month of April 1962, the present writers had the privilege of visiting the Asura country in Netarhat Plateau (3,600' above sea level on an average) of Ranchi District. The paper is intended to describe the somatic characters of the Asura. 56 adults comprising 30 males and 26 females were measured. The subjects were measured mainly at the villages of Sakhwapani, Phulful and Jobhipet.

Measurements were taken according to Martin with Hermann, Richenboch and Sors' anthropometric set. Auricular height was taken by a Schultz's parallalometer.

In Tables 1 to 4 mean value of measurements and indices, standard deviation, coefficient of variation with standard errors for the males and females are given separately.

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TABLE 1

Statistical Constants of Measurement (Male)

Measurements	N.	Mean \pm S. E.	S. D. \pm S. E.	C. V. \pm S. E.
Stature	30	1586.43 \pm 8.06	44.18 \pm 5.70	2.78 \pm 0.36
Head length	30	187.90 \pm 1.15	6.32 \pm 0.82	3.36 \pm 0.48
Minimum frontal breadth	30	102.37 \pm 0.58	3.17 \pm 0.41	3.10 \pm 0.40
Head breadth	30	138.40 \pm 0.66	3.62 \pm 0.47	2.62 \pm 0.34
Bizygomatic breadth	30	131.20 \pm 0.73	4.01 \pm 0.52	3.06 \pm 0.40
Total facial height	30	111.57 \pm 1.25	6.86 \pm 0.89	6.15 \pm 0.79
Upper facial height	29	64.38 \pm 0.78	4.19 \pm 0.55	6.51 \pm 0.85
Nasal height	30	48.40 \pm 0.63	3.46 \pm 0.45	7.15 \pm 0.92
Nasal breadth	30	38.63 \pm 0.38	2.06 \pm 0.27	5.33 \pm 0.69
Head circumference	28	539.32 \pm 2.60	13.76 \pm 1.84	2.55 \pm 0.34
Average auricular height	30	122.12 \pm 0.79	4.33 \pm 0.56	3.55 \pm 0.46
Bigonial breadth	30	94.40 \pm 0.89	4.86 \pm 0.63	5.15 \pm 0.66

TABLE 2

Statistical Constants of Indices (Male)

Indices	N.	Mean \pm S. E.	S. D. \pm S. E.	C. V. \pm S. E.
Cephalic Index	30	73.68 \pm 0.55	3.00 \pm 0.39	4.07 \pm 0.53
Nasal Index	30	80.24 \pm 1.10	6.05 \pm 0.78	7.54 \pm 0.97
Total Facial Index	30	85.14 \pm 1.14	6.22 \pm 0.80	7.31 \pm 0.94
Upper Facial Index	29	49.13 \pm 0.68	3.64 \pm 0.48	7.41 \pm 0.97
Length Auricular-height Index	30	65.07 \pm 0.46	2.50 \pm 0.32	3.84 \pm 0.50
Jugo-Frontal Index	30	78.08 \pm 0.53	2.89 \pm 0.37	3.70 \pm 0.48
Jugo-Mandibular Index	30	71.99 \pm 0.69	3.79 \pm 0.49	5.26 \pm 0.68
Breadth Auricular-height Index	30	88.74 \pm 0.61	3.37 \pm 0.43	3.80 \pm 0.49

TABLE 3

Statistical Constants of Measurements (Female)

Measurements	N.	Mean \pm S. E.	S. D. \pm S. E.	C. V. \pm S. E.
Stature	27	1490.00 \pm 6.67	34.69 \pm 4.72	2.33 \pm 0.32
Head length	27	180.22 \pm 0.82	4.25 \pm 0.58	2.36 \pm 0.32
Head breadth	27	132.63 \pm 0.69	3.61 \pm 0.49	2.72 \pm 0.37
Minimum frontal breadth	27	97.74 \pm 0.67	3.49 \pm 0.47	3.57 \pm 0.49
Bizygomatic breadth	27	124.96 \pm 0.67	3.48 \pm 0.47	2.78 \pm 0.38
Total facial height	27	101.74 \pm 0.87	4.54 \pm 0.62	4.46 \pm 0.61
Upper facial height	26	59.12 \pm 0.57	2.92 \pm 0.40	4.94 \pm 0.69
Nasal height	27	42.26 \pm 0.53	2.78 \pm 0.38	6.58 \pm 0.90
Nasal breadth	27	35.07 \pm 0.55	2.85 \pm 0.39	8.13 \pm 1.11
Head circumference	27	526.67 \pm 2.66	13.85 \pm 1.88	2.63 \pm 0.36
Auricular height (L+R)	26	117.23 \pm 0.97	4.93 \pm 0.68	4.21 \pm 0.58
Bigonial breadth	26	89.12 \pm 0.99	5.05 \pm 0.70	5.67 \pm 0.79

TABLE 4

Statistical Constants of Indices (Female)

Indices	N.	Mean \pm S. E.	S. D. \pm S. E.	C. V. \pm S. E.
Cephalic Index	27	73.61 \pm 0.37	1.91 \pm 0.26	2.59 \pm 0.35
Nasal Index	27	83.45 \pm 1.86	9.65 \pm 1.31	11.56 \pm 1.57
Total Facial Index	27	81.43 \pm 0.80	4.16 \pm 0.57	5.11 \pm 0.70
Upper Facial Index	26	47.31 \pm 0.55	2.81 \pm 0.39	5.94 \pm 0.82
Length Auricular-height Index	26	65.10 \pm 0.49	2.50 \pm 0.35	3.84 \pm 0.53
Jugo-Frontal Index	27	80.01 \pm 1.09	5.65 \pm 0.77	7.06 \pm 0.96
Jugo-Mandibular Index	26	72.17 \pm 1.20	6.14 \pm 0.85	8.51 \pm 1.18
Breadth Auricular-height Index	26	88.57 \pm 0.66	3.39 \pm 0.47	3.83 \pm 0.53

It appears that both males and females are short to below medium 1586.43 ± 8.06 for males and 1490.00 ± 6.67 for females. In head form both the sexes are dolichocephalic, the cephalic index being 73.68 ± 3.55 and 73.61 ± 0.37 for males and females respectively. Gates has given a value of 73.955 ± 3.831 and 74.296 ± 2.456 respectively. In nasal index they are mesorrhinic (80.24 ± 1.10 for males and 83.45 ± 1.86 for females). Gates measured only the breadth of nostrils which is 39.57 ± 2.412 for males and 35.9 ± 4.144 for females. The mean value of nasal breadth of the present series is 33.63 ± 0.38 for males and 35.07 ± 0.55 for females which are above medium according to Schlaginhaufen's (1946) classification. They are mesoprosopic (85.14 ± 1.14 for males and 81.43 ± 0.80 for females). The face is narrow as judged from mean values of jugo-mandibular index (71.99 ± 0.69 for males and 72.17 ± 1.20 for females). In length auricular height index they are hypsi-cephalic and in breadth auricular height index acrocephalic.

TABLE 5
Comparative Data

Author	Tribe	Stature	Hd. L.	Hd. Br.	M. F. B.	Biz. Bd.	U. F. Hr.	N. H.	N. Br.	H. Circ.	Aur. Hr.	Bigo.	G. I.	N. I.	T. F. I.
Roy (1925)	Birhor	—	172.0	130	—	—	—	45	39	—	—	—	74.4	83.0	—
Biswas (1956)	Santal	1593	185.0	137	100.2	180	71	48	37	—	129	92	74.0	80.7	85.4
Risley (1891)	Santal	1614	184.8	140.7	102.1	132.5	—	45.7	40.6	—	1.8.5	—	76.1	88.8	—
Basu (1932-33)	Munda	1587	186	138	—	131	—	48	40	—	120	—	74.3	83.2	84.9
Risley (1891)	Munda	1589	185.9	138.6	101.5	130.7	—	44.7	40.2	—	129.2	—	74.5	89.9	—
"	Bhumij	1592	185.9	139.6	102.3	131.3	—	46.7	40.4	—	125.3	—	75.0	86.5	—
"	Korwa	1595	185.2	137.8	100.7	130.5	—	44	40.7	—	129.3	—	74.4	92.5	—
Present Study	Asura	1586.43	187.0	138.40	102.37	131.20	64.38	48.40	38.63	539.32	122.12	94.40	73.68	80.24	85.14

A comparison of mean values of the males has been instituted with other Kherwari-speakers of the surrounding areas. Table 5 shows that the Asura are shortest of all the tribes compared. In head length they are nearer to Munda, Santal, Bhumij and Korwa whereas in head breadth they agree well with Santal, Munda and Bhumij.

In head form they closely approximate all the groups excepting Santal and Bhumij of Risley which are slightly higher in value.

In nose form the Asura have a comparatively finer nose than most of the other groups except the Santal series of Biswas. The latter series also closely correspond with Asura in total facial index.

REFERENCES

- BASU, P. C. 1932-33 : Racial Affinities of Mundas. *Transactions of the Bose Research Institute*. Vol. VIII, Pp. 211-247.
- BISWAS, P. C. 1956 : *Santals of the Santal Parganas*. Bharatiya Adimjati Sevak Sangha, Delhi. P. 158.
- GATES, R. R. 1962 : The Asura and Bihors of Chota Nagpur. *Indian Anthropology Essays in memory of D. N. Majumdar*, edited by T. N. Madan and Gopala Sarana. Pp. 163-184.
- RISLEY, H. H. 1891 : *Tribes and Castes of Bengal*. Vol. I, Pp. 413-427, 385-398, 308-321, 357-360.
- ROY, S. C. 1915 : A note on some ancient remains of the ancient Asuras in the Ranchi District. *Jr. Bihar and Orissa Res. Soc.*, Vol. I, Pp. 229-53.
- " 1917 : A note on totemism amongst the Asura. *Jr. Bihar and Orissa Res. Soc.*, Vol. III, Pp. 567-71.
- " 1920 : Distribution and nature of Asura sites in Chota Nagpur. *Jr. Bihar and Orissa Res. Soc.*, Vol. VI, Pp. 393, 423, 40 plates.
- " 1925 : *The Bihors*. Appendix III. P. 593. Man in India Office, Ranchi.
- " 1926 : The Asuras—ancient and modern. *Jr. Bihar and Orissa Res. Soc.*, Vol. I, Pp. 147-52.
- RUBEN, W. 1939 : Eisenschmiede und Damonen in Indien. *Inter. Arch. f. Ethnogr.* 37, suppt., XX+306 Pp., 32 plates.
- SCHLAGINHAUFEN, OTTO. 1946 : Die Anthropologie der Eidgenossenschaft. *Anthropologia Helvetica*, Berlin. 21, 237.

SOCIO-ECONOMIC DIFFERENCE IN DISPERSED DWELLING AND COMPACT SETTLEMENT TYPES IN ARID REGIONS

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(Received on 7 April 1963)

Introduction

THE form of settlement of households offers a relatively new and unexplored field of study in the arid zone where a large number of villages have both compact settlement and dispersed dwellings. Such a spatial distribution both influences and is influenced by the social and economic forces, while the physical factors provide the limiting framework under arid conditions. Several writers have indicated the social and economic advantages resulting from the contrasting form of settlement (Whetten 1948; Slocum 1962). Smith (1953) regarded the fragmentation of holdings as the natural outcome of village settlement and observed that while the compact settlement was inferior to the dispersed type of settlement from the point of view of farm management, it was more advantageous from considerations of 'social efficiency'. Terpenning (1931) stated that the village settlement was superior from the point of view of education, mutual aid and social life. Miller (1960) found that dispersed dwellings affect the sense of unity in the village and although there may be physical or territorial unity it was not possible to demarcate clearly the village unit when the dwellings are dispersed. While these studies largely rely on observation

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and interview as tools of data collection for their findings on rural life and economy in dispersed dwelling and compact settlement types, they do not throw light on the *extent* of variation and similarities in them. Such a study is essential for a better understanding of the sociology of settlement types.

Method of study

This paper presents the results of a quantitative study on the demographic features, nature and size of household, occupational structure, ownership of agricultural holdings and livestock and extent of indebtedness of the population living in the two settlement types in a desert village. The investigation was made in the village of Korna which lies at a distance of about 36 miles from Jodhpur. The village has a normal annual rainfall of about 8" which is erratic and unevenly distributed. It is the headquarters of the Village Level Worker and the village Patwari. It has 3 schools and a gram panchayat. There is acute shortage of drinking water once the rain-water tanks have dried up. The land-use in the village shows that approximately six-tenths of the land is under cultivation with *kharif* crops. Vegetation is sparse. The means of communication are very poor, particularly for households living in *dhanis* (dispersed dwellings), although the village core is connected by bus with Jodhpur. Out of 405 households living in the village, 207 live in compact settlements while the rest live in *dhanis* scattered all over the landscape.

Households living in *dhanis* and in the compact settlement were separately enumerated. A simple random sample of 100 households was drawn from each group. From the heads of sample households schedules were filled by field investigators. The data so collected were later tabulated and statistically analysed. The field-work was done in 1962.

Demographic features

Table 1 gives the comparative demographic features in the two settlement types. The data show that the age and sex pyramid of the population living in *dhanis* and the compact

settlement has a broad base indicating the comparative youth of the population. If we assume the dependent age-groups to be children below 15 years and adults 55 years and above, 48.2 per cent of the population in *dhanis* and 46.0 per cent of the population in the compact settlement are in the working age group. There are 944 females per 1,000 males in *dhanis* and 887 females per 1,000 males in the compact settlement. The difference between the proportion of females in the two settlement types is not significant. In both types of settlement the early and universal nature of marriage is clearly brought out. In the earlier part of the reproductive period (15-24 yrs.) when the incidence of maternity is high, about nine-tenths of the women are married. In the later part of the reproductive period (35-44 yrs.), the incidence of widowhood among about one-fifth of the women in the age-group 35-44 years does act as a brake on the number of children borne; but its over-all influence on the rate of growth of population is not likely to be much. The percentage of unmarried males in the age-group 15-24 years is significantly greater in the compact settlement than in *dhanis*, probably due to the higher age of marriage among the castes living there.

Household

The household is the unit of production and consumption. The traditional Indian rural household was joint, but in recent years there has been an increasing tendency towards its disintegration on account of what the male folk regard as the inability of wives to get along together. In both the forms of settlement the difference between the percentages of nuclear and joint households is not significant. The hypothesis that dispersed dwellings have more joint households is not borne out by the data in this study since the difference between the percentages of joint households in the two settlement types is not significant.

TABLE 2

Nature	<i>Nature of household in dhanis and compact settlement</i>	
	Dhanis	Compact settlement
	%	%
Nuclear	42.0	45.0
Joint	58.0	55.0
	100.0	100.0

The distribution of households by size shows that the average number of members per household is 6.62 in the case of households living in *dhanis* and 7.00 in the case of households living in the compact settlement. The difference between the two means is not significant. Thus the nature and size of household in *dhanis* is not significantly different from that in the compact settlement. The composition of households shows the same trend. The difference between the proportions of different relatives of the head of household in the two settlement types is not significant. In both, almost three-fourths of the persons are primary relations. Other more frequent relations are married brothers or married sons with their wives and children.

TABLE 3

Size of household in dhanis and compact settlement

Size	Dhanis	Compact settlement
	%	%
1-3	9.0	12.0
4-6	47.0	32.0
7-9	32.0	38.0
10-12	6.0	8.0
	100.0	100.0

TABLE 4

Relationship with head of household in dhanis and compact settlement

Relationship	Number per 100 households	
	Dhanis	Compact settlement
Head of household :		
Male (unmarried)	2	6
Male (married)	85	89
Male (widowed)	13	5
Wife of head of household	82	89
Son of head of household	173	190
Daughter of head of household	148	123
Male relatives of head of household (other than son)		
Father	—	6
Brother	33	36
Grandson	12	18
Other relatives	12	20
Female relatives of head of household (other than daughter)		
Mother	22	31
Sister	2	2
Daughter-in-law	23	28
Sister-in-law	22	10
Granddaughter	15	19
Other relatives	16	27
Non-relatives	2	1
Total—	662	700

Occupational distribution

The occupational distribution varies. Cultivation is, however, the mainstay of the population in both and is followed by about nine-tenths of the earners as the main occupation. The percentage of earners engaged in sheep and goat rearing is significantly greater in *dhanis* while the percentage of earners engaged in 'other' occupations (shopkeepers, carpenter, blacksmith, teacher, grazier, etc.) is significantly greater in the compact settlement. Subsidiary occupations are followed by 14.6 per cent of the earners in *dhanis* as compared to 23.3 per cent of earners in the compact settlement. The difference is significant. The chief subsidiary occupations followed in *dhanis* are cultivation, raising sheep and goats and casual labour, while those in compact settlement are as carpentry, casual labour, blacksmithy, money-lending, leather-work, oil-pressing, drumming, etc. Since the occupations followed are governed by caste, the difference in occupational distribution follows as a natural corollary to the caste composition in the two forms of settlement. Most of the occupational castes serving the needs of the agriculturists or the needs of the community in socio-religious matters or other spheres have settled in the compact settlement because of functional convenience. Among the major cultivating castes, all the Kalbis and most of the Rajputs and Purohits live in the compact settlement while 90.6 per cent of the Jat households live in *dhanis*. The more heterogeneous caste composition in the compact settlement explains the greater diversity of occupations there.

TABLE 5

Main occupation of earners in dhanis and compact settlement

Main occupation	Dhanis	Compact settlement
	%	%
Cultivation	90.2	88.2
Sheep & goat rearing	5.7	—
Cattle grazing	3.8	1.7
Others	0.3	10.1
	100.0	100.0

TABLE 6

Caste and traditional occupation followed

Caste with traditional occupation	Dhanis				Compact settlement			
	Main occup.	Sub. occup.	Not followed	Total	Main occup.	Sub. occup.	Not followed	Total
<i>Cultivation</i>								
Jat	125	—	—	125	13	—	—	13
Kalbi	—	—	—	—	53	—	—	53
Purohit	3	—	—	3	10	—	—	10
Rajput	10	—	—	10	17	1	1	19
<i>Sheep and goat raising</i>								
Raika	8	19	7	29	—	3	—	3
<i>Serving needs of agriculturists</i>								
Lohar	—	1	—	1	1	—	—	1
Suthar	—	1	2	3	—	7	4	11
<i>Serving needs of community in socio-religious matters</i>								
Brahman	—	—	—	—	—	1	1	2
Sadh	—	—	—	—	—	1	—	1
Sant	—	—	—	—	1	—	—	1
Sau	—	—	—	—	1	—	—	1
<i>Serving other needs</i>								
Beldar	—	2	—	2	—	—	—	—
Bhambi	—	2	—	2	—	2	13	15
Bhil	—	—	21	21	—	—	24	24
Charan	—	—	—	—	—	—	1	1
Cheepa	—	—	—	—	—	1	—	1
Darji	—	—	—	—	—	3	—	3
Dholi	—	—	—	—	—	3	—	3
Daroga	—	—	—	—	4	—	12	16
Ghanchi	—	—	—	—	—	3	—	3
Harijan	—	—	—	—	2	—	—	2
Jatti	—	—	—	—	1	—	—	1
Jattiya	—	—	—	—	—	3	—	3
Kumbhar	—	—	—	—	—	1	—	1
Mahajan	—	—	—	—	8	1	5	14
Nai	—	2	—	2	—	1	—	1
Sonar	—	—	—	—	1	—	—	1
Total	141	27	30	198	112	31	61	204
	(71.2)	(13.6)	(15.2)	(100.0)	(54.4)	(15.0)	(29.6)	(100.0)

Note : 3 Muslims have been excluded.

Certain occupations like cultivation and casual labour can be followed by any caste. There are others which are traditional to certain castes and can be followed only by their members. As Table 6 will show, the adherence to traditional caste occupations is still strong. In both the forms of settlement, a significantly greater percentage of households follow their traditional caste occupations. However, the percentage of households who have given up their traditional caste occupations is significantly greater in the compact settlement than in *dhanis*. In the compact settlement this change has taken place to a greater extent among Bhambis, Darogas and Bhils. The former have given up their caste occupation of tanning and leather-work to rise in social status, while the latter have been affected by the abolition of *jagirdari* as a result of which the Thakurs (feudal landlords) can no longer afford to maintain them as their employees.

Earners and dependants

In rural areas children are initiated fairly early into the family enterprise. Except for a few upper castes like Rajputs and Mahajans, women also share the burden of earning a livelihood, 44.7 per cent of the earners in *dhanis* and 43.4 per cent of the earners in the compact settlement being females. The average number of earners per household living in *dhanis* is 3.69 as compared to 3.48 in the compact settlement. The difference between the two means (0.21) is not significant.

TABLE 7

Number of earners per household in dhanis and compact settlement

No. of earners per household	Dhanis	Compact settlement
	%	%
1—2	33	40
3—4	35	36
5—6	24	19
7—8	7	3
9 and above	1	2
	100	100

Agricultural holdings

The distribution of agricultural holdings by size in the two forms of settlement shows that in the *dhanis* all households have agricultural holdings. Seven per cent of the households living in compact settlement do not have any holding. These are, however, not landless labourers but households with other sources of livelihood, chiefly their caste occupation. The average size of an agricultural holding with a cultivating household living in *dhanis* is 44.4 acres as compared to 42.4 acres with a cultivating household living in the compact settlement. The difference between the two means is not significant. The findings in this study, further, do not conform to the hypothesis that fragmentation of holdings is greater in the case of households living in compact settlement, since the difference in the average number of fragments per agricultural holding with a cultivator living in *dhanis* (5.79) and with a cultivator living in the compact settlement (5.23) is not significant.

TABLE 8

Size of agricultural holding in dhanis and compact settlement

Size (acres)	Dhanis	Compact settlement
	%	%
No holding	—	7.0
< 16 acres	13.0	13.0
16—32 „	22.0	29.0
32—48 „	30.0	23.0
48—64 „	13.0	13.0
64 and above	22.0	15.0
	100.0	100.0

Animal husbandry

The ownership of livestock in the two forms of settlement shows that households in *dhanis* keep a larger number of livestock. The average number of cows, cow young, sheep, goats and camels is significantly greater with a household living in *dhanis*. The reverse is true in case of buffaloes and buffalo young.

TABLE 9

*Number and types of livestock owned***Average number per household**

Type of livestock	Dhanis	Compact settlement	Difference	
Bullocks	2.13	2.20	-0.07	not significant
Cows	3.55	1.88	+1.67	significant
Cow young	2.54	1.29	+1.25	significant
Buffaloes	0.15	0.81	-0.66	significant
Buffalo young	0.07	0.46	-0.39	significant
Sheep	14.84	—	+14.84	significant
Goats	4.44	0.26	+4.18	significant
Camels	0.66	0.20	+4.46	significant
	28.38	7.10		

In the subsistence pattern of farming followed in the village in both the settlement types, production is not geared to the market but to the needs of the family. Only surplus livestock produce is sold. The average sale value of livestock produce per household living in *dhanis* is Rs. 52 as compared to Rs. 19 per household living in the compact settlement. The difference between two means is significant. In *dhanis* the livestock produce sold comprises of ghee, wool and goat hair, while in the compact settlement, the livestock produce sold comprises of only ghee.

TABLE 10

Value of livestock produce sold last year by households living in dhanis and in compact settlement

Value	Dhanis	Compact settlement
	%	%
Nil	50.0	78.0
<Rs. 100	33.0	15.0
100—200	8.0	5.0
200—300	6.0	1.0
300 and above	3.0	1.0
	100.0	100.0

Indebtedness

Households are aware that residence in *dhanis* is economically more advantageous since it enables better care of fields and livestock resulting in higher yields. For instance, 91.0 per cent of the cultivating households in *dhanis* used

manures in their fields as compared to 66.7 per cent of the cultivating households in the compact settlement. It is interesting to note that 37 per cent of the households living in the compact settlement take up temporary residence in their fields during the cultivating season to obtain better economic returns. The comparative economic efficiency of the households in the two settlement types is reflected in the extent of indebtedness among them. The average indebtedness per household in *dhanis* is Rs. 441 as compared to Rs. 883 per household in the compact settlement. If indebtedness is any index of the economic well-being of people, then households in *dhanis* seem to be economically better off. In both cases, however, the chief source of credit is the Mahajan, and loans are taken primarily for meeting socio-religious obligations or daily needs rather than for productive purposes.

TABLE 11

Extent of indebtedness of households living in dhanis and in compact settlements

Indebtedness	Dhanis	Compact settlement
	%	%
Nil	46.0	43.0
<Rs. 500	20.0	18.0
" 500—1,000	17.0	12.0
"1,000—1,500	10.0	10.0
"1,500—2,000	3.0	4.0
"2,000 and above	4.0	13.0
	100.0	100.0

SUMMARY

A study was conducted on the socio-economic differences in dispersed dwelling and compact settlement types in a desert village. The findings are given below :

1. The difference in age and sex distribution in the two settlement types is not significant.

2. The difference in nature, size, and composition of households in the two settlement types is not significant.

3. The difference in average number of earners per household in *dhanis* (3.69) and compact settlement (3.48) is not significant. The caste composition and occupational distribution in the compact settlement is more heterogeneous. Adherence

to traditional caste occupation is still strong, particularly in the case of households living in *dhanis*.

4. The difference in the average size of agricultural holdings and the number of fragments per holding is not significant.

5. Households in *dhanis* have, on the average, a larger number of livestock (28.38) than households living in compact settlement (7.10). Sale value of livestock produce is also greater here.

6. Indebtedness is higher in the case of households living in compact settlement.

REFERENCES

- | | | |
|--------------------------------|------|---|
| Bose, A. B. and S. P. Malhotra | 1961 | The Form of settlement in a desert village, <i>Indian Geographer</i> , Vol. 6, no. 1. |
| Miller, E. J. | 1960 | Village structure in North Kerala. In <i>India's Villages</i> , ed. by M. N. Srinivas, Bombay, Asia Publishing House. |
| Redfield, Robert | 1955 | <i>The Little Community</i> , Chicago : University of Chicago Press. |
| Slocum, Walter L. | 1962 | <i>Agricultural Sociology</i> . New York : Harper. |
| Smith, T. Lyn | 1953 | <i>The Sociology of Rural Life</i> , 3rd edition. New York : Harper. |
| Spate, O. H. K. | 1957 | <i>India and Pakistan—a General and Regional Geography</i> , 2nd edition. London : Methuen. |
| Terpenning, Walter A. | 1931 | <i>Village and Open Country Neighbourhoods</i> . New York : D. Appleton-Century Company. |
| Whetten, Nathan L. | 1948 | <i>Rural Mexico</i> . Chicago : University of Chicago Press. |

TEMPLE ORGANIZATION IN GOA

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(Received by 7 April 1963)

THE Portuguese landed on the western coast of India in the beginning of the 16th century A.D. They captured the island of Goa from Adil Shah in the year 1510, remained in power till 1961, when Goa was absorbed in the Republic of India. This prolonged impact of the Portuguese for over 450 years has had an obvious effect on the social life of the Goanese ; but some of the Hindus succeeded in retaining their religion in tact. The force which guided the Hindus in the days of adversity, was, perhaps, their association with the temples and the deities enshrined therein. In the following pages an attempt has been made to describe briefly the organization of one of these temples, namely, the temple of Shri Shanta Durga.

Temples of Goa

There are several Hindu temples in the territory of Goa ; but the most important and magnificent temples are situated in the districts of Ponda and Bicholim. The two noteworthy temples in Bicholim are the temples at Shirgao and Narora. The Shirgao temple is famous for its annual fair in which the Dhonds (peasant devotees) walk across and over a heap of burning coal of a bonfire with no burn or injury to their feet. The temple of Saptakoteshwar at Narora was built by Shivaji, the founder of the Maratha Empire. This temple is commonly known as the *Tirtha*. The district of Ponda contains the largest and best Hindu temples in Goa. Shri Ramnath, Shri Mahalakshmi and Shri Nagesh temples at Bandora, Shri Kamaksha temple at Siroda, Shri Mahalsa at Mardol, Shri Devakikrishna at Marcela and Shri Ganapati at Chandola are well known in the district. But excelling

them all in merit and magnificence are the temples of Shri Shanta Durga at Queula and the temple of Shri Mangesh situated at Priol ; the two most important deities of the Gaud-Saraswat Brahmans of Goa.

Though none of the above temples has intricate carvings found in temples elsewhere in India, they are for the most part inviting and conspicuous because of the panoramic beauty they are surrounded with. Usually, the temples are built in a cool, shady and secluded place. Every temple has its own fairs and festivals which attract devotees from distant places. All these temples in general have the following eight typical characters :

- (1) K h a m b a (post for lamps)
- (2) T o l l i (sacred tank of sweet water with steps all round)
- (3) S t h a l a (a common ground-plan)
- (4) C h o u k o (central rectangle meant for the priest),
- (5) G a r b h a k u d (the sanctuary where pilgrims perform *pradakshina* or circumambulation)
- (5) G h u d a (dome)
- (7) G a n a (secondary deity placed at the entrance the temple to guard it from evil spirits)
- (8) A g r a s h a l a (residential quarters for pilgrims)

Nothing definite can be said about the age of these temples as they are lost in a maze of curious legends.

Gaud-Saraswats and their deities

As legend has it, Parashuram, the great Brahman sage, conquered the territory of Shurparak by the sea-route. Shurparak is said to have the form of a winnowing fan, 400 *krosas* (1280 kms.) in length and 12 *krosas* (19 kms.) in breadth. Today, this place is known as Konkan. It is said that the sage brought 60 families of Brahmans from Trihotrapur*,

* Incidentally, may it be pointed out here that Trihotrapur may perhaps be a generic word for Tirhut, an administrative division of Bihar and part of Mithila.

a place in Bengal. These Brahmans were called Gaud-Saraswat, because they came from Gaud and first settled on the bank of the Saraswati river. All these Brahmans belonged to ten different *gotras* (clan), namely, Bharadwaj, Kaushik, Vatsa, Kaundilya, Kashyap, Vashishta, Jamdagni, Vishva-mitra, Gautama and Atri. They had their own *Kuldeo* (lineage deity) which they brought with them, and in whose honour they built temples in their settlements. The Brahmans of Kaushik *gotra* who were brought to Goa received a grant of the village of Kardalipur or Kelshi, now Quelossim in the administrative area of Mormugao. The deity, Shri Shanta Durga, installed in that village, belongs to these Brahmans. Similarly, Shri Mangesh is the lineage deity of the Brahmans belonging to Vatsa and Kaundilya *gotra* and the village Kushasthali or Kudthal (now Cortalim in the administrative area of Mormugao) were granted to them. Since that time the members belonging to the lineages of the 'founder Brahmans' continue to adore their *Kuldeo*; and now, they are often referred to by the term *Mahajan* of their deity.

Like all other deities in the Hindu pantheon, the deities of Gaud-Saraswats too have their origin in some fascinating legend. Shri Shanta Durga is believed to have appeared in the course of a violent battle between Siva and Vishnu. The consequences of the battle would have been the destruction of the whole world. Brahma was greatly alarmed at the situation and appeased the goddess Jagadamba, who finally appeared and separated the two fighters. As Jagadamba thus saved the world from destruction, she was called the Mediator of Peace or the Goddess of Peace, Shri Shanta Durga.

About the origin of Shri Mangesh the legend runs as follows. Once Brahma being very proud of his creative power did not pay due respect to Maheswar (Siva). Knowing Brahma's pride, Maheshwar became indignant and started destroying the whole creation of Brahma. Brahma, finding his creation being lost in the fierce anger of Maheswar, become terribly afraid. He hurriedly came down to Mongir or Mongirish Hill near Trihottarpur in the East (Bengal) and stooped down to appease the angry god. Pleased by Brahma's invocation,

Maheshwar stopped the destruction. Brahma installed a *linga* at Mongir Hill which was dedicated by the name of Mangesh.

It is this Mangesh who takes the place of *Kuldeo* of the Brahmans of Trihottarpur belonging to Vatsa and Kaundilya *gotras*.

Another version of the legend about Sri Mangesh is as follows. Once Parvati, wife of Siva, got annoyed with her husband over a game of chess and left her abode in Mount Kailas. Wandering away in the jungle she was attacked by a tiger. And frightened as she was at the sight of the beast she invoked her husband, shouting in terrible affliction : "*Mam Gaurisha trahi*" (Rescue me, O Gaurisha). This tiger was none other than Siva himself in disguise. Siva appeared in his real form and the tiger vanished. The expression *Mam Gaurisha* later gave rise to Mangarish or Mangesh, the names by which Siva is invoked.

The Upheaval

So long as the Maurya, Chalukya and other Hindudynasties ruled our Goa, the Gaud-Saraswats and their descendants found adequate protection. But the trouble arose by the beginning of the 14th century and increased gradually. The Muslims invaded Goa about 1313 A. D. and demolished all Hindu temples which came to their notice. They carried away gold and jewellery from the temple, broke up the image and killed priests who dared to resist them. The whole of Goa was ruined. After the Muslims, the Portuguese set foot on Goa. They proved to be no less than their predecessors, and harrassed the people in a most inhuman way. On the top of it, they wanted to force their religion upon the Hindus or else they were likely to lose their land and life or both. The storm of conversion which rose to a peak by 1541 A. D. swept away all the important Hindu shrines and temples ; and the deities and their devotees went underground. It is during this upheaval that the images of Shri Shanta Durga and Shri Mangesh were brought from their original places to Ponda, which was then in the hand of

Sundherkar, a Hindu Karnatak king belonging to the Lingayat sect. With these deities came those Gaud-Saraswats who were more scrupulous about their religion and who had escaped Portuguese massacre. This is how Ponda became the seat of Hindu deities and a place of refuge for them, although by 1763 A.D. Ponda too was seized by the Portuguese.

The Temple of Shri Shanta Durga

The present temple of Shri Shanta Durga is situated in the picturesque village of Queula, 3 kms. off the main road from Ponda. Following the incursion of the Portuguese the deity was brought here from Quelosim in 1564. For three years or so the devotees found no suitable place to build a temple for the deity as no good omen was visible. At last, one night the deity appeared in a dream before the chief priest and expressed her desire to be installed at a place which was then occupied by the Mahars, an untouchable caste. On the following morning when the head priest reported his dream to the Mahajans of Shri Shanta Durga, the ardent devotees approached the Mahars to vacate the land for the temple at any price that the Mahars might demand. But no amount of persuasion or temptation could move the Mahars. Finally, the Mahars said that they would agree to vacate the land for Shri Shanta Durga on condition that they would be granted the right of entrance into the temple once every year. There was no other choice before the Mahajans as the deity wanted to be installed there. Ultimately they had to yield to this demand. Every year on the 6th day of *Magh Shukla* (January), the Mahars enter the temple with their musical instruments and sing songs in honour of the deity. They return home with *prasad* (rice, coco-nut, flowers and some cash) and a piece of the cloth worn by the deity, which are given to them as a mark of honour by the head priest. Soon after the Mahars leave the place, the temple is cleaned and the deity is purified with the holy water of the Ganges.

The temple of Shri Shanta Durga is comparatively massive in structure and elegant in outline. The betel-nut and coco-nut garden around the temple add beauty to the natural

setting. The temple has a sacred *tolli*, a majestic *khamba* in front, and huge *agrashalas* on either side. In the ground-plan of the temple, besides the *chouko* and the *garbhakud* there is a hall and the side-galleries where non-Hindus can also be accommodated. The image of the temple shows Shri Shanta Durga in the middle and Siva and Vishnu on either side.

Temple servants

Like most of the temples of Goa, the temple of Shri Shanta Durga too has a number of servants who are paid by the management and whose duty is to serve the deity faithfully according to the nature of the job they are entrusted with. Following is the organization of the temple servants of Shri Shanta Durga.

Designation of the servant	No. of persons employed	Function
Abhisheki	2	To adorn the deity with <i>kum kum</i> , flowers garlands etc.
Pujari	4	To bathe, to dress and to worship the deity.
Jotkar	1	To make lighting arrangements inside the temple.
Puranik	1	To recite tales from the <i>Puranas</i> and holy books in honour of the deity.
Haridas	1	To sing <i>kirtan</i> and <i>bhajan</i> in honour of the deity.
Vetradhar or Katkar	1	Shaft-bearer and door-keeper.
Vajantri	17	To play on musical instruments.
Chaughadewale	6	To beat a special kind of drum called <i>chaughada</i> .
Masalchi	2	To bear torches during the processions.
Sipahi	4	To guard the temple.
Kalawantani or Devadasis	10 families	The dancing girls whose job is to dance and to sing in honour of the deity.
Mridangi	1	To play on a particular kind of drum called <i>mridang</i> .
Taldharnare	1	A musician who gives <i>tal</i> on a musical instrument called <i>tabla</i> .
Bhawin	2	She is either a spinster or a widow who devotes her whole time in <i>bhajan-kirtan</i> with a special kind of musical instrument called <i>tambora</i> .
Dewe lawanare	2	To make lighting arrangements outside the main temple.
Jhad lot darnare	4	Sweepers
Sonar	1	Goldsmith
Sutar	1	Carpenter
Lohar	1	Ironsmith
Tanwat	1	Coppersmith.

Besides the above servants of the deity, there is a head priest called Boatji who is in charge of the temple services. He is revered for his direct communion with the deity. He reads the omen from the flowers that droop round the image and communicates the prayers of the devotee to the deity. He belongs to the lineage of the Gaud-Saraswat ; but while other Gaud-Saraswats take fish and flesh, he lives on a strictly vegetarian diet. He is expected to live with utmost purity like a sannyasin, although he is allowed to lead a married life.

Temple festivals

In addition to the daily routine of worship which is followed by invocation through music and dance, there are periodical functions on the 5th day of every fortnight when the deity is taken out in a procession for a palanquin-ride inside the temple premises. Special functions are arranged on *Vaisakh Shukla Panchami*, *Navaratra*, *Dasahara*, *Kojagari* and also on the day of *Banbhojan* around the end of Karttik. The annual function (popularly called *Yatra*), which is the greatest function of the temple, begins on *Magh Shukla Pratipada* (1st day of *Magh Shukla*) and lasts for about six days. During this function, the Mahajans of Shri Shanta Durga make it a point to have a glimpse of the deity at least once ; and for this they come from distant places with their wives and children and join the community feast arranged by them on the 4th day. The biggest congregation is seen on the 5th night when the deity is taken on palanquin-ride and chariot-drive. The ceremony is kept on for the whole night and till then nobody should retire. On the 6th day, the Mahars enter the temple according to the old custom, and the function comes to an end.

During all these functions the rituals are performed according to Brahmanical method. Something may be said here about the vehicle of the deity—her palanquin-ride and chariot-drive. On the occasions when the deity goes for a palanquin ride, a large procession follows her devotedly. The priests, the musicians, the dancing girls, and other temple servants, the Mahajans and the peasant folk follow one another in the proces-

sion. The deity is carried on their shoulders in a silver palanquin. The procession starts after the Devadasis have sung a prayer in honour of the deity. During the ride there several halts called *pene* where the procession rests a while, the Devadasis sing and dance, and again the ride is resumed. On the night of the annual fair, the deity has a chariot-drive too. A huge four-wheeled wooden chariot, about 40 feet high, is pulled by the Mahajans, the temple servants and others who want to be blessed. The head priest and the Swami of Queula monastery, who actually inaugurates this chariot-ride, occupy their places in the chariot along with the deity.

As the proper image of the deity cannot be removed from her seat, four golden replicas have been made for outings. Thus, while one replica of the image is carried in a palanquin, the other remains in the chariot, and the third sits on a *Jharokha* to attend the dance drama programme.

There are two significant points about the movement of the deity : (1) The deity moves in the palanquin or the chariot only during the night and, therefore, all the functions must be over before the day breaks. (2) The deity rides on two different vehicles at a time. Elsewhere in India, the palanquin and the chariot are used separately on separate occasions ; and besides that, the chariot drive is only during the day.

Management of the temple

The temple is managed by an administrative board whose members are chosen from the families of the Mahajans. A Secretary, a Treasurer, and a Mokhtiar are elected once in three years and the President is appointed by the Government. The annual income of the temple is nearly 20,000 rupees which comes from gifts and agricultural produce, The temple also owns some landed property, gold and silver worth several thousands of rupees.

Queula monastery

Not far from the temple of Shri Shanta Durga is the famous Queula monastery which may be discussed here in brief, as we have already seen the Swami of this monastery associated with the chariot-ride of Shri Shanta Durga.

The Gaud-Saraswats of Goa are divided into two sects : the Smartas or Saivites and the Vaishnavites. The prelate of the Saivites, called Swami, has his chief monastery in Queula adjacent to the temple of Shri Shanta Durga. The Swami has to take the vow of celibacy and he forsakes all worldly pleasure. He chooses a young disciple who is to succeed him in prelacy. When he dies his corpse is not cremated but is buried instead, and a *samadhi* is raised on the grave in his honour. He uses the title of Gaudpadacharya and receives the highest honour amongst the people of his sect. During all the functions in the temple of Shri Shanta Durga he is invited and it is he who inaugurates the ceremony of chariot-ride.

The Vaishnavites have two main monasteries : one at Gokarna and the other at Partagale, both within the administrative area of Canacona. The prelate of the Queula monastery uses the title of Saraswati at the end of his name, while that of Partagale calls himself Tirtha.

Observations

1. Almost all the temples of Goa are organized in the pattern observed at Shri Shanta Durga. These temples, as a matter of fact, are not only the places where rituals can be performed and religious fervour satisfied ; but, by and large, they have other functions also. It is through these temples that the Gaud-Saraswats of Goa experience the real warmth of the lineage relationship. Usually, in a large society where caste system exists, the clan or the lineage members do not feel among themselves the actual bond of kinship ; firstly because no direct genealogical relationship can be traced out, and, secondly, in the absence of any material evidence, there remain only a legendary kinship. In Goa, the Mahajans of a temple who form a lineage group, have a temple in common to refer to, a deity in common to worship, a common ritual to perform, and once in a year a community feast to dine together. These behaviours are the manifestations of kinship bondage, and the temple remains all through a symbol. It has been observed that sometimes these temples regulate marriage. The Mahajanas of Shri Shanta Durga prefer to have marriage

alliances with the Mahajans of Sri Mangesh. Thus the temple symbolizes the lineage, vitalizes the kinship bonds and unites its members to live under a common roof.

2. We have seen earlier, that the temples of Goa employ a large number of musicians and dancing girls. The musicians have a special role in the temple activities. In the course of time these temples have proved to be helpful in producing great performers of instrumental as well as vocal music. Today, one of the most celebrated singers of the country comes from the temple of Shri Mangesh. But unfortunately the system is gradually dying away.

3. Lastly, a few words may be said about the towering faith of the Gaud-Saraswats. Reference has already been made of the Portuguese method of conversion which disturbed the whole social life of the Goanese. It disrupted the family, separated sons from parents, brothers from brothers, and sisters from sisters. All this happened under cruel circumstances. One accepted Christianity not because he believed in the gospel of Christ, but because he loved life more than religion. The inevitable result of this method of conversion was that the Portuguese could not strike the hard core of Hindu religion which was deeply rooted in the heart of the converts. There are Brahman Christians and Maratha Christians in the villages of Goa who maintain *tulsi-brindavan* in their houses and who still perform some folk Hindu rituals during birth, marriage, illness and such other occasions. Their women might wear western dress and keep the bobbed style of hair; but many of them have not removed the bangles from their hands. Converted Gaud-Saraswats continue to maintain some relationship with their lineage deity. At the time of marriage, they offer coco-nut, rice and betel-leaves to the deity. During the harvest of new crops, one seer of grain is kept for the deity. This system is called *pad*. On the night of the *yatra* too, many converts attend the functions of their lineage deity. There are many other things which give sufficient evidence of the light maintained by Hindu faith in the hearts of the Christians of Goa. And this is due to the temples which stand as a symbol of faith and solidarity.

ON THE SUBARNABANIKS

JATINDRA MOHAN DATTA

(Received on 9 January 1963)

1. The numbers of Subarnabaniks were tabulated in the censuses of 1872, 1891, 1901, 1911 and 1921. It was not done in 1881 and 1931. In 1941, on account of war emergency, no caste figures were tabulated. Since 1951, it has been the policy of the Government to show the people as 'caste'-less, so no caste figures are now tabulated. The 1921 figures are, therefore, the latest figures, and we give them below in detail.

2. Their numbers in Bengal were as follows :

	1901		1911		1921
	1,05,319		1,09,429		1,17,123
Increase	%	+3.87		+7.03	

Average increase per decade:—5.44% on General Population.

The rate of growth of the Subarnabaniks for Bengal and Bihar and Orissa in 1911¹ was as follows :—

Number in 000's					Increase+or Decrease—%		
1911	1901	1891	1881	1872	1872-1911	1891-1901	1901-1911
129	156	98	—	126	+2.0	+59.1	-17.2

The respective numbers in Bengal and Bihar and Orissa are :—

Bengal		B & O	Decrease in B & O
1901	105	51	
1911	109	20	58 %

We have not been able to find out the earlier figures.

The violent and abrupt decrease by some 60 per cent during 1901-11 and the equally abrupt increase during 1891-1901 makes us suspect that the enumeration in the earlier censuses was not correct; and probably Sonars or goldsmiths were included in the earlier census.

3. Their geographical distribution and sex-proportion, in 1921 by administrative divisions are given below :—

	Male	Female	Females per 1,000 males		Departure from all-Bengal figure
Bengal	59,976	57,147	953		
Burdwan	17,739	18,386	1,036	+	83
Presidency	25,160	22,449	890	-	63
Rajsahi	1,819	1,661	913	-	40
Dacca	7,876	8,002	1,016	+	63
Chittagong	7,312	6,632	907	-	46

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An excess of females over the normal all-Bengal figure indicates that in these regions the Subarnabaniks have or had their homeland. They are relatively migrants elsewhere. 'Traditionally they were settled in Dacca until the days of Ballal Sen, but they are now far more numerous in Calcutta than elsewhere, and the Western Bengal districts hold more of them than those of the Dacca Division'.²

4. We now proceed to give their actual numbers district by district; and calculate their proportion per 1,000. In estimating the latter figures, we have taken only the number of females into consideration in order to eliminate the effect of casual or temporary migration as much as possible.

District	Male	Female	Proportion per 1,000
Burdwan	2,240	2,505	43.8
Birbhum	1,600	1,704	29.8
Bankura	4,341	4,565	79.9
Midnapore	4,141	4,062	71.1
Hooghly	3,627	3,923	68.7
Howrah	1,790	1,627	28.4
24-Parganas	1,877	1,763	30.8
Calcutta	15,712	12,881	225.8
Nadia	2,020	2,082	36.4
Murshidabad	1,582	1,724	30.2
Jessore	2,017	2,168	37.9
Khulna	1,952	1,831	32.0
Rajsahi	483	479	
Dinajpur	153	145	
Jalpaiguri	99	63	
Darjeeling	46	4	
Rangpur	119	74	
Bogra	212	182	
Pabna	612	654	
Malda	95	60	

321.7

392.8

29.1

We have not calculated the district figures, as they are small, and sex-disparity shows the population to be mostly temporary migrants.

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Dacca	3,484	4,004	70.1	} 140.0
Mymensingh	1,068	988	17.3	
Faridpore	2,661	2,773	48.5	
Bakarganj	668	237	4.1	
Tipperah	1,212	960	16.8	} 116.1
Noakhali	1,444	1,454	25.5	
Chittagong	4,533	4,218	73.8	
C. H. Tracts	123			
Cooch-Bihar	7	15		
Tripura	63	2		
				1000.0

5. Mr. W. H. Thompson says:—'The Subarnabaniks, whose name pronounces their occupation to be that of dealers in gold, are in education and perhaps in business ability the most advanced of the mercantile castes of Bengal'.³

The proportion of literate per mille of the several most literate castes of those aged 5 and over is given below:—

Literacy per mille of both sexes, aged 5 and over (1921)	
Vaidya	662
Brahman	484
Kayastha	413
Subarnabanik	383
Gandhabanik	342
Indian Christian	288

Breaking up the figures for males and females separately we give below the proportions:—

	No. of Literates and Literates in English aged 5 and over		Per 10,000	
	Male	Female	Male	Female
Vaidya	822	497	5,130	706
Brahman	729	192	2,792	117
Kayastha	626	175	2,560	141
Subarnabanik	619	127	2,189	94
Gandhabanik	592	61	1,128	36
Indian Christian	336	233	1,535	854

The following account of the Subarnabaniks and their dispersal are given in the *West Bengal Census Report*.⁴

'The Suvarna Banik is the most well-known trading caste in Bengal.

'References to the Subarnabaniks are found in the context of trade and commerce of the fifteenth century in Bengal.

At that period three main centres of their settlement were at Karjananagar near Burdwan, Jessore and Saptagram or Satgaon. Despite their depressed status, they managed to amass big fortunes by engaging in trade and commerce. Thanks to their wealth, the Subarnabaniks had much influence at the courts of Muslim Nawabs who honoured them with such titles as Saha, Mullick, Choudhury and Rai. At this time there was a very rich man and a prominent member of the Subarnabanik community at Karjana called Abjar Chandra Mullick. The Nawab made him the chief treasurer for Bengal, Bihar and Orissa and honoured him with the title of Khan. In 1492 A.D. he arranged for a census and compiled a genealogical history of the Subarnabanik community. It was found that there were than 792 families of Subarnabaniks living at the place which included all the principal families of the community except the Naths.

‘But around 1514 the dispersal of the Subarnaniks of Karjana began. The genealogical history gives the reason as being “a political illness that struck all members of the community without exception” and made them and their families “homeless wanderers in many a land”.

‘Of the 792 families of Karjana, some went over to Saptagram and settled down there. In 1537 A.D. when the 390 families failed to attend the sradh of Abjar Khan, they came to be known as Saptagramya and the 402 families who were living in other places were given the appellation of Rahri.

‘The Rahris lived in the following places: Karjana, Burdwan, Balgana, Kumul, Gangapur, Govindapur, Bammara, Barasthal, Khandagram, Baranda, Mandalgram, Palashan, Saptabriksha (Satgatchia), Bagnan, Mallikpur, Sulpur, Nabagram, Ajhapur, Muktipur, Pachra, Hiranyagram, Betragarh, Osmanpur, Matsar, Singerkon and Kulti.

‘There is no intermarriage between Rahris and Saptagramis.

‘With the expansion of business and commerce, the Subarnabaniks were gradually dispersed all over Bengal. In the 16th century, many of them left Subarnagram and settled down at Hooghly and Gholghat and entered into trade relations with

the Portuguese. A little while afterwards when Subarnagram was systematically sacked and plundered by the Pathans, the impoverished Subarnabaniks left Subarnagrams *en masse* and settled down at various places, such as Hooghly, Gholghat, Bansbati, Sahaganj, Serampore and Chandannagore. Later when the Britishers established their firm hold on Calcutta, many Subarnabaniks of Rahr went over to Dacca or Murshidabad, many to Hooghly and from there to Calcutta to escape the oppression of the Pathan tyrants.

'In many cases the words Subarnabanik and Subarnabanikya were used as synonyms for Subarnabanik. Sometimes again they were called Kanak Kshetri because of the fact that Sanaka, the ancestor of the caste was born in the womb of Kanaka, a daughter of the Vaishyas.

'At present Subarnabaniks are divided into a number of classes and subcastes. The main division is Saptagrami and Rahri. The Rahr is again divided into Uttar or North Rahr and Dakshin or South Rahr. Besides, the Subarnabaniks of Murshidabad call themselves Fateysinhas.'

6. Assuming for the moment that the census of 1492 A.D. was correct, the number of families was about 800, we may obtain the number of families in 1921 by dividing their total number by 5.1—the average number of persons per house or commensal family. The result is that there are 22,966 families. If we assume further that there has been a uniform growth of the Subarnabaniks throughout the 430 years from 1492 to 1921, the rate of growth is 8.15 per cent per decade. This is a very high rate of growth. It may be that each family in 1492 consisted of many more men than 5.1 persons. It was normal for the descendants of the grandfather to live together. We may try to estimate the number of members of such joint families.

The average number of children surviving in each family when the duration of marriage is 33 years and over is :⁵

For all classes	Muslim	Brahman	Vaidya	Kayastha	Other Hindus
4.2	4.0	4.7	5.9	4.5	4.0

Half of these are males, sons. Just as daughters are married

away sons would bring in their wives. So the total is unaffected. The number living in the second generation could be squares of the above figures, *i.e.*,

For all classes	Brahman	Vaidya	Kayastha	Other Hindus
17.6	22.1	34.8	20.2	16.0

As the Subarnabaniks are highly educated now, and had to be so in those early times on account of their commercial and trading avocations, we may take 20 to be the average number of members per family about 1500 A.D.

The strength of the Subarnabaniks would be some $800 \times 20 = 16,000$ in 1492 A.D. Now they are 1,17,000. Assuming a uniform rate of increase during the last four centuries, their decennial rate of increase would be 4.73 per cent.

7. W. H. Moreland in his *India at the Death of Akbar, i.e.* 1600 A.D., estimated the population of India to be 100 million. We have estimated it to have been a little higher, namely, 110 million⁶. The population of India in 1931 was 338 million. The overall rate of increase per decade works out to 3.46 per cent.

Considering the nature of the data and the assumptions made, there is some correspondence between the two rates of growth, 4.73 in the case of the Subarnabaniks, and 3.46 in the case of general population of India. But even then the Subarnabanik figure is 37 percent higher.

We know that in 1770 about one-third of Bengal's population was wiped away by the great famine. In the Burdwan Division, where about one-third of the caste is concentrated. There have been degrowths of population *twice* between 1872 and 1921. Considering the facts, we must hold that their rate of growth has been greater than that of the general mass of population. The higher rate may be due to better nourishment on account of their superior wealth.

REFERENCES

1. *Bengal Census Report 1911*, p. 523.
2. *Bengal Census Report 1921*, p. 359.
3. *Op. Cit.*, p. 359.
4. *West Bengal Census Report, 1951 Part I C*, p. 478.
5. *Bengal Census Report 1931*, p. 166.
6. *Population Bulletin of India, 1959, No. 1*, p. 165.

A TECHNICAL STUDY OF SOME PREHISTORIC POTSHERDS

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(*Received on 12 April 1963*)

POTSHERDS in association with neolithic types of implements have been reported from a number of sites in eastern India, specially from Bihar. Although the typological features of these implements have been dealt with, but no systematic study of the technical features has been undertaken up till now.

In this study, the technical features of two such groups of potsherds found at two places in Bihar have been compared with one another and in turn both have been compared with the features of the present-day pottery of a village close to one of the above mentioned sites.

The samples of prehistoric potsherds were collected from Borda and Bongara within the district of Singhbhum in Bihar. The shortest distance between the two places is roughly 45 miles. In both the places potsherds were found in association with neolithic types of implements, although their genuine stratigraphical relationships have not yet been established. From the published reports (Sen 1950, Ray 1954 and Ray 1956) on the finds of these two places it seems that typologically the implements are similar to one another.

The samples of present-day potsherds were collected from the pottery turned out by the potters of Dumdumi, nearly 5 miles from Bongara.

Out of the four major features of pottery, namely, paste,

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surface finish, decoration and form, we have not taken into account the last two features as the sherds are devoid of any decoration and further they are too fragmentary in nature, which makes it difficult to reconstruct their original form. The characteristics of the other two features have been studied and dealt with systematically.

Technical features of Borda potsherds

I. *Physical properties* :

1. *Thickness* : The average thickness of the sherds (excluding the portions of rim and one conical terracotta anvil) is 1.1 cm.

2. *Colour* : The surface colour of the sherds is brownish with a slight reddish tint. While the colour of the cross-section in all cases is blackish in nature. Thus we find a great difference between the colour of the surface and that of the cross-section.

3. *Hardness* : The average hardness recorded according to Mohs' scale is 3, the range of microhardness being between 126.0—135.0.

4. *Texture* : The texture of the surfaces is comparatively smooth. The paste texture in all the cases is coarse and slightly granular. The coarse texture is mainly due to a fair amount of lateritic and carbon particles present in the paste.

5. *Lustre* : The surfaces are dull and have no lustre.

6. *Porosity* : The sherds of this group of pottery are more or less porous, as can be seen with the help of a pocket lens.

II. *Composition of clay* :

It seems that the clay used in the manufacture of this pottery is ordinary local residual clay mixed with a fair amount of carbon particles, but not with a fair amount of sand (quartz) particles. From this we can infer that the potters used the local clay which is semi-lateritic in nature with the addition of some organic material (probably chopped straw or chaff) as tempering material instead of sand.

III. *Evidences of technique :*

The evidences of pottery-making technique as revealed by the analysis are :

(1) Coarseness of the sherds which is mainly due to the use of ordinary local semi-lateritic soil without proper sieving and kneading.

(2) The low hardness of the sherds as recorded by Mohs' scale indicates that most probably they were fired at a low temperature, and that is also indicated by the presence of a large quantity of carbon particles which should have been totally burnt out if the temperature were high.

(3) Regarding the forming and shaping methods it might be said that the pottery to which these sherds belong are hand-made, as we do not find any sign of the use of wheel, and moreover they are very thick.

(4) The use of a red slip can also be inferred from observation of the freshly broken cross-sections.

Technical features of Bongara potsherds

I. Physical properties :

1. *Thickness* : The average thickness of the sherds (excluding rim portion and a terracotta anvil) is 1.4 cm.

2. *Colour* : The surfaces show a light brownish red colour and the cross-section is blackish and not uniform.

3. *Hardness* : The average hardness recorded from Mohs' scale is 2-3, while micro-hardness varies from 10.2-56.6 and 126.0-135.0.

4. *Texture* : The surface texture as found after cleaning is more or less smooth with slight variation from coarse to medium. The paste texture in all the cases is coarse and full of lateritic and carbonaceous particles.

5. *Lustre* : The surfaces are dull and without any lustre.

6. *Porosity* : The porosity of the sherds can be observed only with the help of a pocket lens.

II. Composition of clay :

On examining the composition, it is observed that in the manufacture of this pottery, ordinary residual clay mixed with some carbon particles has been used. From

this we can infer that the potters used local residual clay which is semi-lateritic in nature with the addition of some organic matter (probably chopped straw or chaff) as tempering material instead of sand.

III. Evidences of technique :

Regarding evidences of the pot-making techniques, the analysis reveals that :

(1) The coarseness of the sherds is mainly due to careless selection of local semi-lateritic soil.

(2) The low hardness (according to Mohs' scale) is due to improper firing in a low temperature. That is also indicated by the presence of carbon particles.

(3) The thickness of sherds reveals that they are hand-made and also there is no sign of turning by wheel.

(4) The use of a red slip can be inferred from the terracotta anvil, whose surface has not been rubbed off, and by specially observing the freshly broken cross-sections of the sherds.

Technical features of Dumdumi potsherds

The results of the analysis of the sherds of pots made by the potters of Dumdumi village are given below. Before the technical analysis of this pottery was undertaken, the process of manufacture from beginning to end was observed thoroughly.

I. Physical properties :

1. *Thickness* : The average thickness of the sherds (excluding rim portion) is 0.44 cm.

2. *Colour* : It is deeper on the outer surfaces and lighter in the cross-sections. The colour is brownish with more reddish tint on outer surfaces. The colour of the cross-section is uniform, indicating even burning.

Theoretically we should expect the difference in between the colours of the outer surface and of the cross-section as we know that this group of potters use a reddish slip to coat the outer surfaces of their pottery.

3. *Hardness*: According to the Mohs' scale of hardness, the average hardness of the potsherds examined is about 5, while the range of microhardness varies from 870.0-1740.0. Only in one case the hardness was 3. On careful examination it was found that it was not well fired, probably at the time of firing it was in such a position that it did not come in proper contact with the fire.

4. *Texture*: As regards the texture of the sherds concerned, we find that, on the whole, the paste texture is fine with one or two particles of sand or laterite of comparatively bigger size than those of the general mass, while the surface texture of all the sherds is smooth and compact with a slight degree of variation.

We have observed that the potters of Dumdumi carefully select and knead their clay after mixing it with fine sand which is mainly responsible for the fineness of the paste texture. Picking of bigger particles is done by means of hand during puddling; while the smoothness of the surface texture has been mainly due to the application of slip.

5. *Lustre*: The slipped surfaces show a certain degree of lustre.

5. *Porosity*: Not conspicuous.

II. *Composition of clay*:

As regards the composition of the clay we find that it is a mixture of properly selected fine residual clay mixed with sand as tempering material. But the lateritic and other particles found mainly in residual soil can still be identified in lesser quantity in the cross-sections of the potsherds.

III. *Evidences of technique*:

Looking for evidences of techniques followed at different stages of manufacture, as left on the sherds, we can infer that:

(1) the fineness of the paste texture is due to the proper selection and kneading of the clay before use. The sherds are fairly hard as found from Mohs' scale; that means they were fired under comparatively higher temperature.

(2) Uniform parallel circular marks in some pottery, specially near their rims, reveal that they were turned on the wheel.

(3) Use of slip can first be surmised from the colour difference between the surface and cross-sections. Its identity can further be judged from the freshly broken cross-sections. And its application was also observed during the process of manufacture.

Comparison and Conclusion

A. *Comparison*: Comparing item by item the characteristics of the above three groups of sherds we find :

I. Physical properties :

1. *Thickness*: The average thicknesses of the Borda and Bongara sherds are practically the same while they are twice as thick as that of modern Dumdumi sherds. We know that the Dumdumi pottery is wheel-made, which is one of the reasons of their thinness. From the curvature of the potsherds of Borda and Bongara, it appears that they are not parts of pottery of bigger size. Therefore their comparatively greater thickness may be attributed to the fact that they are probably hand-made.

2. *Colour*: The surface colours of the three groups of sherds is reddish brown in nature but the colour of the Dumdumi sherds is more reddish than those of the prehistoric potsherds. The colour of the cross-sections of the Dumdumi sherds are uniform and slightly lighter in nature than the surface colours. But the cross-sections of Borda and Bongara sherds is quite different in colour than that of their surface and they are blackish or greyish in nature.

We know from our observation that a reddish slip was used in the case of Dumdumi pottery. So the surface colour of these sherds is more reddish than the colour of the cross-sections. The uniformity as well as the reddish nature of the colour of the cross-sections are mainly due to proper firing of the pottery. So the differences between the colours of the cross-sections and of their surfaces in the Borda and Bongara

sherds may be due to (a) the use of reddish slip and also due to (b) firing at a low temperature. But we have also noticed that the uneven blackish colour of the cross-sections both in the case of Bongara and Borda further suggests uneven firing of the pots at a low temperature. This is not the case with Dumdumi pottery.

3. *Hardness*: From our analysis we find Dumdumi sherds are harder than those of Bongara and Borda. But there is little difference between Borda and Bongara sherds in respect of hardness, as mentioned earlier. As we know that hardness depends to certain extent on firing so we can again assume that the relatively less hard pottery of the prehistoric sites was probably due to firing at a low temperature.

4. *Texture*: The surface texture of Borda and Bongara sherds is less smooth than that of the Dumdumi sherds. But the paste texture of the Borda sherds is comparatively coarse and granular with particles of carbon and laterite. In contrast, the paste texture of Dumdumi sherds is fine with a few lateritic particles of smaller size. The concealment of the coarseness of the surface textures of the prehistoric sherds of both the sites suggests the use of slip.

5. *Lustre*: The sherds of both Borda and Bongara are dull, while the Dumdumi sherds are comparatively more lusturous.

6. *Porosity*: Porosity is conspicuous in prehistoric potteries of both the groups while it is not so in the case of modern Dumdumi sherds.

From the study of the above three characters it seems that the modern potters are more careful in selecting their clay, properly making them free of lateritic and other particles, and adequate kneading and surface manipulations were done during the process of manufacture.

II. *Composition of clay* :

Coming to the two major characters of the prepared clay used, namely, (1) its general characters and (2) the tempering material; we find the use of residual soil in making all the three groups of pottery. But the Dumdumi potters use the residual soil after properly clearing it of bigger particles

and mixing it with sand as tempering material, while the prehistoric potters have also used residual soil without properly freeing it from lateritic particles. They have only used some organic matter as tempering material, which can be surmised from the nature and size of carbon particles present in them. These particles might be the remains of chopped straw or chaff.

The above findings about physical properties as well as the composition of clay are also supported by the evidence of manufacturing technique dealt separately under the three groups of sherds.

B. Conclusion :

From the above study we find that both the prehistoric groups of potters have used the residual soil in turning out their pottery just like the modern potters of one of these areas. But the pottery of those prehistoric groups were hand-made and cruder.

Further we can also say that as the potsherds of the prehistoric sites of Borda and Bongara are very similar to one another and as we know that both the groups have been found in association with similar neolithic types of celts (their genuine stratigraphic association has not yet been established) they may be presumed to be part and parcel of the same culture. This conclusion of course needs further investigation and corroborative evidences.

REFERENCE

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|------------|------|--|
| Sen, D. | 1950 | A Celt site in Singhbhum, <i>Man in India.</i> , vol. XXX, no. 1 |
| Ray, G. S. | 1954 | Microlithic Industry of Bongara, Manbhum, <i>Man in India</i> , Vol. XXXIV, No. 1. |
| Ray, G. S. | 1956 | Implements of Neolithic Type from Bongara-Bhangat in Manbhum, <i>Man in India</i> , Vol. XXXVI, No. 1. |

MISCELLANEOUS NOTES

The Position of the Social Sciences in India*

Organization

The number of universities with M. A./M. Sc. degree courses in Anthropology is eight. There is one university with a diploma course in the subject. The number of universities where Sociology is taught for the M.A. degree is twelve. Four universities have arrangements for post-graduate courses both in Anthropology and Sociology. So that, altogether the number of universities teaching these two subjects comes up to 17. Assuming that they turn out approximately 10 students each year, the annual output is 170.

But the number of professional anthropologists of all grades employed in the universities or in research institutions like the Anthropological Survey of India or the Tribal Research Institutes came up to 166 at the end of 1959.

Among non-teaching institutions we may refer to the Anthropological Survey of India and the four institutes for tribal research work in Ranchi (Bihar), Chhindwara (M.P.), Bhubhaneswar (Orissa) and Calcutta (W.B.)

The number of journals published in Anthropology and Sociology in India is given below :

Anthropology—five, Sociology—four. Besides these, journals like those of Asiatic Society, National Institute, etc., also publish articles on the subject. Several tribal research organizations also publish journals of their own.

The population of India is 430 million. People are divided into several important religious sects. There are more than 2,000 'castes' (separate mating groups) in India only among the Hindus. Fourteen major languages are spoken, so that altogether the social situation is very complex. The number of research workers or teachers in Anthropology or Sociology is very small in comparison with the requirements of the

*Reprinted from *Science and Culture*, vol. 29, pp. 61-73, February, 1963.

country. The work of anthropologists or sociologists is not also very much in demand, with the result that after nearly 40 years (Calcutta University began its M.A./M.Sc. course in Anthropology in 1920) of teaching the total number of professional people in Anthropology alone is, as indicated, only 166 (1959).

Training in research

Social sciences are unlike the physical sciences. New techniques of research are frequently tried by members belonging to different Schools ; and there does not seem to be very much accord or agreement with regard to methods employed.

The personality of the teacher still plays an important part and research techniques are learnt, more or less, by apprenticeship.

Intercommunication

The Indian Science Congress tries to gather professional scientists once every year. The interest taken by seniors in the line seems to have grown progressively feeble. The Science Congress, therefore, often becomes the meeting ground of young scientists who have recently started work in Anthropology.

The Anthropological Survey of India has initiated a scheme of holding summer schools, and one which was held in 1960 and attended by 16 scientists proved to be very fruitful, for there was close and constant communication during a period of nearly ten days.

Intellectual climate

Anthropology in India as well as Sociology has often been beset in the past by two kinds of biases.

During British rule, the universities and agencies like the Anthropological Survey of India were more or less under the financial control of the British Government or the intellectual leadership of British investigators in India. British travellers, missionaries, historians etc., were quite often impressed by differences between castes, classes, regions, and linguistic

communities and these differences were frequently emphasized more than similarities.

Under the stress of this climate two kinds of biases were therefore produced among Indian workers. One group of social scientists tried to emphasize the difference so as to afford a justification for the views of those whom they admired for their power and achievement. On the other hand, there were others who reacted against this subtle domination in the intellectual field, and became nationalistically minded even in their scientific interests. They tried to over-emphasize similarities, sought justification for values which are often overlooked, and produced a contrary picture to that produced by those who believed in the 'superiority' of Western civilization.

Both these intellectual biases were responsible for producing a partially distorted view of Indian society and culture ; only, the distortion was opposite in the two cases.

In a way this was the result of colonialism and of a reaction against it. India has not yet outgrown that condition. It is interesting that before 1947, when India was yet under British rule, the two opposite camps were in conflict with one another. But after 1947, particularly during the last 15 years or so, there is little justification for a predominantly defensive attitude. India seems to have become converted to a progressive country, and it is interesting that there is more of Westernist bias today among social scientists than a nationalist bias. Moreover, there is no markedly noticeable endeavour to rescue the social sciences from subjective distortion.

The colonial character of India's social sciences represented above has produced curious results. There is little inter-communication between social scientists in the 17 universities. Endeavours of the Indian Science Congress or of organizations like the Asiatic Society or the National Institute of Sciences of India have not hitherto been very fruitful in overcoming isolation. There is also little or no exchange of either teachers or of students between the 17 universities of India where either Anthropology or Sociology is taught. An Indian social scientist more often aspires for appreciation from fellow-scientists in foreign universities like either Cambridge or

Chicago or Columbia than of a fellow-scientist in other universities of India.

It is also interesting that when a thesis is to be examined for a doctoral degree in any Indian university in the social sciences, it is almost always the custom to give more value to examiners from universities abroad than to examiners at home. The present writer is not aware of a single instance where a doctoral degree has been given to a candidate by examiners limited to the university to which the candidate belongs.

Many of the 'problems' to which the aspirants for a doctoral degree address themselves are picked up from their reading of literature. When an original observation is made by a 'foreign' scientist, it instantly acquires a new status, and Indian students are more likely to repeat the observation in a new field or in a new area, than to do any original work of their own. Very few workers seem to have the self-confidence to start with observation, on the basis of which they dare either to formulate a line of enquiry of their own, or devise new methods of investigation for securing an answer to the questions which thus arise.

New trends

There is some evidence, although of a rather feeble character, of the beginnings of an objective approach in the social sciences. Objectivity is sometimes equated with counting; but in the social sciences one must know *what* to count before counting can become meaningful.

In 1959-61, a group of 18 young scientists (age grade 25-37) travelled in different parts of India and surveyed certain items of material culture in 313 out of India's total 322 districts. These young anthropologists or geographers have become skilled observers and have now launched upon a new level of observation in connection with caste and popular forms of religion in rural India in order to discover if there is evidence of regional differentiation.

Such undertakings are also in evidence in the work of the Indian Statistical Institute and the Delhi School of Economics

and Politics. It is hoped that as these endeavours to release the social sciences from thralldom of one kind or another grow in volume, they will be able to supplant the colonial atmosphere which still largely dominates the intellectual climate in our country.

Nirmal Kumar Bose

II. Changing Character of Leadership in India*

The question of leadership among the Adivasi communities as well as among rural folk in general has assumed great importance on account of the plans for development which are now in operation in all parts of the country. The question has assumed further importance since the political awakening of 1947.

It will be my purpose in the present paper to indicate in outline the changes in the character of leadership by suitable examples drawn from several fields. On the whole the changes have come about in two directions. The institutions which were responsible for the regulation of peoples' lives have become altered in form. Moreover, where they were once ruled by hereditary chiefs, they are now being progressively subjected to democratic control. In other words, both the form of institutions as well as their operation has been undergoing progressive transformation.

Besides this, another very significant thing has also taken place in relation to both tribal as well as rural life. Under British rule, the functions of the Government were mainly limited to the maintenance of law and order, the collection of rent, and use of part of it for nation-building purposes. A large part of the responsibility of nation-building throughout India was the responsibility of voluntary organizations, private associations, and even of private individuals. But when the

*Presidential address at the Seminar on Leadership in India : Tribal and Rural—August 11th-13th, 1962, sponsored by the Department of Anthropology, Ranchi University, Ranchi, and Council of Social and Cultural Research, Bihar. Reprinted from *The Journal of Social Research*.

State became completely reorganized after independence and set before itself ideals of popular welfare and of socialism in regard to economic relations, the functions of the Government have become very much altered. Instead of stimulating personal or voluntary endeavour in the matter of national reconstruction most of this has become the responsibility of the administration. In other words, public questions have been progressively converted into problems of administration. This has inevitably affected the character of voluntary organizations which used to work as best they could in olden times.

After this general statement, let me proceed to illustrate by means of a number of examples the observations which have been made in the preceding paragraphs.

The Telis of Orissa* are a caste whose traditional occupation is oil-pressing, trade in oil and also small trade in other articles. The caste organization of the Telis of the district of Puri was fairly elaborate, but decentralized. There were small local panchayats ruling over 400 or 500 or more families who resided in a number of neighbouring villages. Leaders were hereditary. But if a hereditary leader proved inefficient and unsatisfactory, he could be replaced by popular vote by some other suitable member belonging generally to the same family. These small rural panchayats took an intimate interest in the lives of the people, regulated relations between men and women, tried to maintain control over expenses or dowry to be given in marriage, the kind of punishment meted out for breach of caste-regulations, and so on.

In such rural surroundings, the decision of one caste panchayat was generally also honoured by panchayats of other castes. There was no inter-caste regional village panchayat; but when a case arose in which several castes were involved, the members of one panchayat would be in session while representatives of other panchayats would be present by delegation.

It appears that about 25 or 30 years ago this caste panchayat had slightly been reduced in importance. After India became independent and some castes were regarded as scheduled and

*Bose, Nirmal Kumar (ed.), *Data on Caste : Orissa*. Anthropological Survey of India, Memoir No. 7. 1960, Calcutta.

others as un-scheduled, some backward and some as progressive, it appears that many castes belonging to the poorer classes became a little more conscious about their differences and 'backwardness' in comparison with other castes. This has often led to movements in two separate directions. Formerly, and even now, among some castes the tendency is to adopt the practices of upper castes and thus try to upgrade themselves in rank. But when his consciousness of separateness is aligned with a growth of political power available on account of adult franchise, and a recognition of the fact that the Government is interested in the welfare of 'backward' classes, an opposite tendency has come into being. Suddenly these caste panchayats, including that of the Telis, have been stimulated into new activity. But this activity follows lines which are markedly in contrast to the range of interests followed by the old panchayats. There is no longer the same interest in intimate problems affecting members living under the panchayats. Claims now made are for better education, for reservation of seats in proportion to numbers of the caste in the services, for extra grants of scholarship, etc. etc.

Naturally, leadership under the previous condition is likely to be very different from leadership under the present condition and it is. Even in the earlier panchayats we see gradually the replacement of hereditary leaders by elected leaders. Some castes in the district of Puri and its neighbourhood have tried completely to replace hereditary leaders by popularly elected leaders. The term was originally for life ; but today, under new conditions of election, the term is only for a restricted period, generally extending from 3 to 5 years. This means that the pattern of organization of political parties has gradually been adopted by social panchayats. Moreover, as demands are becoming more oriented towards administration, as resolutions are taken principally in order to attract the attention of the Government, naturally people who are likely to be effective in promoting those interests or in the execution of these resolutions will be quite different from either hereditary leaders of old or even elected leaders who can be effective at the small village level.

Under prevailing conditions, this is likely to lead to a domination of caste panchayats by political parties. It is highly significant that in one part of Orissa, one of the caste panchayats is dominated by a large number of young men who are also supposed to belong to the Communist Party. The result is that caste panchayats have been gradually blown up, until they are no longer social panchayats but organizations which offer a field of operation to a political party.

It is very interesting that this observation is true not merely in respect of the Communist Party of India but of the Indian National Congress as well or of other political parties. They are taking more and more interest in existing social institutions, often with rather comic results. For instance, in quite a number of places, organizations of a temporary character, but which are in command of fairly large sums of public money, like *Sarbanjanin Pujas*, have become the contesting ground between several political parties for power and control. And that is why it is not strange to find either Congressmen or Communists competing for power in *Saraswati Puja* pandals. The worship of Saraswati has become secularized !

We have tried to indicate one direction in which changes are taking place in the rural sector of India. There is another to which attention should also be drawn. With increasing loss of interest in traditional values or in the function of traditional organizations, in other words, with increasing secularization of life, another feature which is also being progressively emphasized in the life of both rural folk and or of the Adivasi population. India has long been divided and is so divided into a large number of endogamous groups who roughly pursue distinguishable occupations. Marx once predicted that with the progress of money-economy traditional ties would be dissolved until the individual would be liberated from the bonds which regulate his economic and social activities in accordance with past tradition. This has happened to some extent in India ; but in a rather incomplete fashion. Groups as a whole have been released from one set of occupations to another ; but individuals, as such, have not yet, by and large, attained the economic freedom described by Marx.

The amount of freedom attained by different endogamous communities has also been unequal. Thus, for instance, in West Bengal, in 1931, 14 percent of Brahmans were in their hereditary occupation, 86 percent had moved over to non-traditional ones. In contrast, the Bagdi caste of agriculturist and fishermen remained in their traditional occupation to the extent of roughly about 70 percent. On account of this inequality in the erosion of tradition, a very curious thing has happened. When change affects a large number of communities in villages and when interest becomes politically oriented, leadership of a hereditary kind tends to disappear ; and it gradually gravitates into the hands of groups which are a little more advanced in occupation or slightly better placed in regard to economic power than the rest. In simple words, this would mean that power, under the new conditions of change, tends to gravitate into the hands of those who are rich and 'learned' or have 'connections' with high Government officials or influential members of the ruling political party or parties. So much so that, in the district of Darbhanga in June 1962, there was held a marriage market at the village of Sourath in which higher dowries were offered for government servants. Their dowry rose to as much as Rs. 13,000, while a mere B.A. commanded a price of about Rs. 3,500 and one with Sanskrit learning had no chances at all against those educated in English.

This may sound amazing. But there is a note of tragedy or danger also involved in it. In some parts of Bengal, particularly among the caste which was originally Namashudra and which has renamed itself as Namabrahman, the leadership has passed away from the hands of prosperous and socially-minded wise peasants to the hands of lawyers, service people and politicians. What is happening within a particular caste or tribe is also happening when various castes or tribes are taken together. As indicated already, castes are unequally developed today. Leadership in political affairs of the entire community is gradually becoming concentrated in the hand of either a middle class or upper class minority. More often, it is the administration-oriented middle class, rather than the upper

class belonging to the landed aristocracy who have gravitated into positions of social authority.

This may be inevitable ; but it is perhaps necessary to indicate the danger which underlies the concentration of power in the hands of a non-manual-working middle class. We, in Bengal, have already experienced the danger in relation to the growth of East Pakistan. It appears to me personally that the demand for Pakistan was mainly a demand of the rising middle class among Western-educated Muslims of Bengal. In order to strengthen their claim for special consideration and in order to protect themselves from open competition with the Hindu middle class a demand was built up for the formation of a separate sovereign state altogether. The British power in retreat was already there to oblige. In any case, the issues which were raised were connected with the interests of Islam ; but after the State was established there has been very little concern about the promotion of Islam as such. The poor peasantry were employed, and their enormous numbers used as a lever by the upper and middle classes for wresting power on their own behalf. In rural India, including perhaps also tribal India, the same thing is likely to happen if power and leadership gravitate into the hands of a small educated class whose chief economic interest lies in securing Government service of the white-collar variety.

Nobody minds leadership if it is wisely applied. Gandhi once said that he did not want the eradication of the middle or upper classes, only he wanted that the interests of the toilers in the fields and factories should be the main concern of the State. Upper and middle classes could exist, if they succeeded, by 'subservient the interests of the poor'. The interests of the upper classes had to be reduced in tune with the new demands. But if they were not capable of revision, according to Gandhi, they *were to go under*.

I have tried to present before you the nature of the changes which are overtaking rural society in India today, whether caste people or non-caste people are involved. I have also tried to indicate the danger of a drift of leadership into the hands of a class which is primarily interested in its own well-

being. If we know the dangers, we can also plan for a better future. With higher idealism and a wiser guidance, we may succeed in guiding change in rural leadership so that it will serve the interests of the poorest in the land. We must be on our guard against a drift in the wrong direction, which already is in evidence today. The interests of the toilers in the field and factories must become the prime concern of a democratic socialist welfare State, into which India is trying to transform herself.

Nirmal Kumar Bose

III. Marco Polo on the Andaman and Nicobar Islands*

When the traveller leaves Lesser Java and the kingdom of Lambri and sails northwards for about 150 miles, he reaches two islands, one of which is called Nicobar. In this island there is no king, and the people live like beasts. I assure you that they go stark naked, men and women alike, without any covering of any sort. They are idolaters. They have very beautiful cloths or sashes some three fathoms in length, made of silk of every colour. They buy them from passing traders and keep them hung over rails in their houses as a token of wealth and magnificence, just as we keep pearls and precious stones and vessels of gold and silver. They make no use of them whatsoever, but keep them only for show. And whoever has most of them, and of the greatest beauty, is esteemed as the greatest and most honourable. All the forests in this island are of noble trees of great worth : these are red sandal, coconuts (which among us are called Pharaoh's nuts), apples of paradise, cloves, brazil and many other good trees. As there is nothing else worth mentioning, we shall pass on and tell you of the other island, whose name is Andaman.

Andaman is a very big island. The people have no king. They are idolaters and live like wild beasts. Now let me tell you of a race of men well worth describing in our book. You

*Reprinted from *The Travels of Marco Polo*, trans. R.E. Latham, The Penguin Classics edition, 1958. pp. 230-231.

may take it for a fact that all the men of this island have heads like dogs, and teeth and eyes like dogs ; for I assure you that the whole aspect of their faces is that of big mastiffs. They are a very cruel race : whenever they can get hold of a man who is not one of their kind, they devour him. They have abundance of spices of every kind. Their food is rice and milk, and every sort of flesh. They also have coconuts, apples of paradise, and many other fruits different from ours. The island lies in a sea so turbulent and so deep that ships cannot anchor there or sail away from it, because it sweeps them into a gulf from which they can never escape. This is because the sea there is so tempestuous that it is continually eating away the land, scooping out trees at the root and toppling them over and afterwards sweeping them into this gulf. It is truly marvellous how many trees are driven into the gulf without ever coming out again. Hence it happens that ships that enter the gulf are jammed in such a mass of these trees that they cannot move from the spot and so are stuck there for good.

BOOK REVIEWS

Western Psychotherapy and Hindu Sadhana. By Hans Jacobs. Pp. 232 + plates 12. George Allen & Unwin Ltd., London 1961.

In many respects Dr. Jacobs' book is of an outstanding character. As a practising psychiatrist he has had abundant experience of both the Freudian and Jungian methods of analysis, the aim of both of which is to bring about an integration in the personality of the patient.

Dr. Jacobs has also gathered considerable personal experience of the Hindu system of *sadhana*. This has been enriched by the guidance or instruction received from *gurus*. Dr. Jacobs' leanings are towards the technique of *sadhana* as developed particularly by the Tantric schools. He brings a fresh mind to the understanding of the much misunderstood Tantric practices and it is refreshing to find that he does not lose his bearings at any point. The ultimate object of Hindu *sadhana* is the realization of the unity of the individual soul with what has been variously designated as Brahman, God, or the Absolute. Intellectual understanding is not enough because the ultimate realization opens up avenues of experience which lie beyond the range of intellectual perception. There is no reason, however, to discard the methods of Reason even though they belong to what might be called the lower range of experience. Spiritual realization, according to the author, fulfils what is partially attainable through the exercise of Reason.

It is also of great significance that the author came across cases of spiritual experience among several subjects in both Europe and Australia which approximate very closely the findings of India's Yogins. There was no prior knowledge among the Western subjects of either the Indian tradition in general or of the details of Yogic experience. According to him, this is proof of the universal nature of the reality which can be experienced by Yogic discipline.

In course of this penetrating study, Dr. Jacobs incidentally offers comments on modern developments in the civilizations of Europe and of India. They are qualified by a freshness which will be appreciated by the reader who is not carried away by emotional attachment to either of these civilizations.

On the whole the book should be in the hands of psychologists as well as of students of civilization. It is of a different nature

from the writings of Theos Bernard, Paul Brunton or Earnest Wood. There is no special pleading anywhere, and that adds immensely to its value.

Nirmal Kumar Bose

The Excavations at Maheswar and Navdatoli, 1952-53. By H. D. Sankalia, B. Subbarao and S. B. Deo. *The Deccan College Research and the Maharaja Sayajirao University Publication No. 1. Poona-1958-Baroda. Pp. xxvi + 257 + xxviii, plates 152 (plans and sections, line drawings) and 4 maps. Rs. 35.*

The volume under review is a full-fledged report of excavations carried out in 1952-53 at Maheswar and Navdatoli (on the right and left banks of the Narmada respectively) in Nimar District, Gujarat, by a team of workers led by Dr. H. D. Sankalia, the late Dr. S. Subbarao and Sri S. B. Deo. The main object of the excavations was to establish a broad sequence of cultures from the Early Stone Age to the Muslim-Maratha period (early 18th century). The principal criteria of chronology of the two main sites are the Northern Black Polished Ware (N.B.P.) and Red Polished Ware (R.P.W.). The basic datable horizon in the Maheswar sequence is the N.B.P., coins and R.P.W. On the early historical basis, the authors distinguish seven periods in the whole sequence obtained from the excavations. The first two periods belong to the Palaeolithic Age, but those do not fit in with the sequence of later periods starting from the Protohistoric (III) to the Early Historic (IV-VI). The first two periods have rather been scantily dismissed. The reviewer fails to understand how in the Mid-Pleistocene, the river (Narmada) reached its present level and how the first Dry Phase is represented by the Basal Conglomerate and the overlying clay (p. 38). According to the authors, 'when this aggradation stopped we have an evidence of intense activity in the river, indicated by the Second Gravel deposit'. The so-called Middle Stone Age industry is, as the authors observe, located in the Basal Gravels of a 40-foot lower terrace, formed during the Third Dry Phase (?). The geological interpretations of the climatic phenomena are not clear.

The authors must have noticed that the Lower and Upper Narmada groups of deposits are separated by a disconformity. The gravels and clay of these deposits suggest wet and dry phases respectively. The artifactual records of these two groups of deposits appear to be different. Hence both typologically and

stratigraphically, the tools from these geological deposits can not be taken to represent only the 'first cultural phase' (called here Pre-historic I). As the lithic data suggest, there may be more than 'one cultural phase' during this long human period. This method of compounding is rather confusing. In the same way, what is described as Series II (or Middle Stone Age industry), called here Prehistoric II, is an over-simplification of a complex stratigraphical problem. The reviewer feels that this wide periodization and seriation in prehistory may lead students and research workers to wrong chronological premises. The occurrence of *Bos namadicus* in Series II assemblage is a pointer.

The Protohistoric Chalcolithic culture (Period III), which underlies the debris of the Early Historical culture is mainly characterized by painted pottery, blade industry, polished stone-axes, copper and copper-bronze axes, chisels and awls. On the accumulated cultural evidence, the authors suggest that the painted pottery people of the Narmada Valley were influenced by the late Iranian Bronze Age culture. But the radio-carbon dating of the Chalcolithic (Period III) sites precludes the idea of its derivation from Sialk B, which is not older than 1000 B. C. Though the pottery (shape and design) recalls that of Early Iran, it is not possible to speculate on its origin and date unless we have other more dependable evidence, particularly of an ethnic character, (about who the people were) from human skeletal finds. The blade industry of Period III, to which an entire chapter has been devoted with illustrative material, reveals that the mass production of blade started in India as it did among the 'incipient agricultural communities' (of Braidwood) in the Fertile Crescent and continued to flourish right into the Bronze Age. But here in India the problem of dating remains open. The appearance of the blade technique at the transitional stage between the Neolithic and the Bronze Age should be stratigraphically (not typologically) confirmed. Typologically, however, this chapter is very interesting, particularly regarding the technique involved. The pottery of Period III has also been described and illustrated at great length and the chapter is a veritable mine of information. The authors have rightly said that the source or sources of the Chalcolithic cultures are yet unknown. But the suggestion thrown out that they are due to gradual diffusion of influences from Iran and other West Asiatic

regions in the 2nd century B. C. should be substantiated by more tangible data. However, the interesting issues which the authors have raised are worthy of following up as those who are interested in archaeology are eager to know about the chronological position and cultural affinities of the Chalcolithic in India.

The pottery of Periods IV-VII (Early Historic to Muslim-Maratha period) have been described and illustrated in detail. Besides pottery, stone implements, other interesting archaeological objects of different periods unearthed by excavation such as beads, terracotta, metals, glass, objects of bone and ivory, burnt steatite, shell, stone and decorated pieces have been beautifully illustrated and described. The discovery of faience and steatite beads in the Protohistoric period (III) is significant as they have similarities with the Indus Valley sites. The metal objects are worthy of metallurgical analysis by experts, as has been done in the British Isles. This may throw light on their technique and antiquity.

This book, which is a laborious work, has enriched our knowledge of protohistory and early history in India. It contains many interesting archaeological data, which we trust, would stimulate further investigation and research.

D. Sen

Soils for the Archaeologist. By I. W. Cornwall. Pp. 230, 19 text figures. Phoenix House Ltd. London. 1958. 50s.

In recent years archaeology, like other sciences, has developed to a great extent. To achieve important and significant results, archaeology is now more closely linked up with other related sciences, such as geology, geography, pedology, etc. Dr. Cornwall is one of the few environmental archaeologists who has tried to reconstruct the environment of the archaeological sites from pedological data. This new idea is most stimulating. Environment indeed has a great influence on culture (particularly of prehistoric periods, which the author has emphasized). Moreover, archaeological pedology or palaeo-pedology throws some light on the problem of chronology. In his work, the writer has dealt with the archaeological layers of all the prehistoric ages.

The part on 'weathering and soil' does not come within the scope of archaeology in the strict sense. Still it is not irrelevant in the sense that a basic conception of the science of soil (like soil formation, classification of soil, etc.) is essential for archaeologists.

In the third part, Dr. Cornwall has dealt with different methods, both physical and chemical, for soil investigation. In this connexion he has discussed in detail the investigation of soil in all aspects related to archaeology. A substantial part of sedimentary geology and such other branches of science helpful to archaeologists, has been dealt with. The book contains a recent bibliography.

A. K. Ghosh

Prehistoric Indsa (To 1000 B. C.). By *Stuart Piggott*. Pp. 293, 32 figures and 8 plates. *Penguin Books*. Reprinted 1961. 5 Shillings.

Professor Piggott's book is a reprint of the earlier edition. It is perhaps enough to say that this is one of the most comprehensive summaries of prehistoric studies in India. There is much in it which is due to the author's own investigation, and this adds to the interest of the book and prevents it from being a mere summary.

Nirmal Kumar Bose

Pragaitihasic Mahenjodaro (in Bengali). By *Kunja Govinda Goswami*. Second Edition. Pp. 189, plates including one map. 1961. *Calcutta University*. Rs. 5.

The author was associated with the excavation of Mohenjodaro many years ago ; and therefore writes on a subject of which he has personal experience.

In course of thirteen chapters he has given us a fairly full account of the life and times, of archaeological objects of many kinds, and a discussion of the relationship and extension of the Indus Valley civilization in various parts of India and western Asia as well. He has incorporated information on the latest discoveries by Indian and foreign scholars.

The style is popular, and we hope the new edition will be well received by those interested in India's past.

Nirmal Kumar Bose

Report of the Commission for Legislation on Town and Country Planning. *Government of West Bengal*. 248 pp. December 1962. Rs. 7.50.

This report is an exhaustive analysis of local urban problems viewed with reference to parallel situations met with in the experience of Town Country Planning Enactment in the United States and the British Isles.

The first part of the report introduces the urban pattern of West Bengal after the necessary basic facts of the geography,

economy and demography in the province have been enumerated in full detail. From this introduction a discussion is entered upon, in which several salient problems of modern Indian urbanization, particularly the local ones, are brought to the forefront. For unlike any other part of India, West Bengal possesses the Hooghly-side conurbanation of ribbon form and a regional matrix of extraction-cum-industry in the Asansol-Raniganj section.

In the second section several technical aspects of Town Planning Law are arrayed, especially in the rather varied forms in some of the states of India. To clarify some of the shortcomings of these, a detailed account has been furnished in regard to the development of the town-planning movement and its legislation in England. This is in the main for constructive comparison.

With this information, the discussion of the first section is resumed in the third part of the report. It is here that, with an admirable absence of prejudice and with candour, the main theme of the report is rendered. The thesis pleads for a curtailment of a policy of *laissez faire* and postulates that some control should be vested in an autonomous planning body. An unusual departure from normal practice is made here. It is suggested that the planning authority should rest with a Chief Town Planner and Director of Socio-Economic Research. An admission is thereby made of the planning needs in a variable of ever-changing urban milieu and of a development plan which will need revision and correction periodically.

The last section lists in detail the text of recommendations of the Commission, which has obviously been subjected to meticulous examination. These will undoubtedly go a long way to help in the preparation of the legislation of and when it comes to West Bengal.

The only flaw in this elaborate report is the indifferent printing, where several errors make continuous reading sometimes irksome.

Meera Guha

Readings in Cultural Geography. Ed. Philip L. Wagner and Mariam W. Mikessel. University of Chicago Press. 1962. 589 pp.

It is a fact that there is a sad absence of text-books on cultural geography or its related aspects in geography. Therefore this collection of essays is a welcome contribution to this particular field, especially as the topics covered deal with different theories of the subject matter. The

papers which have been culled from various sources have been written by eminent geographers, prehistorians, historians and ethnographers, and some of the theses are the result of a life-time of research leading to the formulation of definite philosophies. The choice of such varied matter has been the task of the editors in whose estimate the subject ranges through a study of culture, culture history, and the ecology and geography of such culture. Hence the presentation of such a wide field of approach in the study of the subject.

There are four sections in the book, the first of which deals with the development of the idea of cultural geography as a subject important in understanding man and the earth. The second and fourth parts deal with the ecological background of culture areas. It is in part three that the more novel interpretations of culture and its diffusion have been presented. This particular section has given the collection its particular value to research workers. As a guide to the different avenues of study, this volume has genuinely achieved the aim of the editors and they are to be congratulated for their achievement. Besides, the discriminate addition of detailed footnotes and further references have increased the worth of the volume.

Meera Guha

The New Brahmans: Five Maharashtrian Families. *Selected and translated by D. D. Karve. University of California Press, 1963. Pp. 303. Rs. 5.50.*

This book is a collection of autobiographical sketches of five famous personalities in Maharashtra. The period covered by the sketches extends from the sixties of the nineteenth century to the beginning of the first World War. It was an age of ferment. Western ideas of liberty, equality and responsible government were agitating the minds of all thinking persons. The rising tide of Indian renaissance was changing the thought-ways of people. Reform movements like those for widow remarriage, education of women etc. were instrumental in bringing about a great deal of social change.

Though Brahmans were the natural leaders of society in traditional India, in Maharashtra they enjoyed unrivalled prestige and power, a legacy of the rule of the Peshwas. The Brahmans were quick in taking advantage of the new English education ever since it was

available, as it was the only way to maintain their supremacy in the new set-up. Instead of sticking to tradition and conservatism, they welcomed change and quickly adapted their life to the requirements of the new age. It is such people who are referred to as the 'New Brahmans' in the book.

It must have been a difficult task for Dr. Karve to make a selection from the large Marathi literature and then translate the pieces. He has been able to make a selection which demonstrates best the changing trends in Indian society and culture in a period of rapid social change. Those who were considered deviants in their day later came to be regarded as leaders of thought and of movements. Marriage with a widow, refusal to pierce the earlobes of male children, wearing the sari in a new style, opposition to injustice irrespective of its source, and modified arranged marriage all tell the tale of grim determination and courage.

The book is important for the social historian as well as for the sociologist. As we read through the narrative we get a clear picture of life in middle class Maratha families, the behavioural patterns between different members of the family, the authority of the father, the great respect in which the teacher was held and the indignities and humiliations heaped upon widows. The student of society can get ample insights into the processes of social change if similar work is done for other parts of India.

Sachchidananda

Human Nature and the Study of Society: The Papers of Robert Redfield, Volume I. Edited by Margaret Park Redfield. Pp. 507. University of Chicago Press, 1962. \$ 10.00.

Robert Redfield was one of those internationally well-known anthropologists who was removed from our midst a few years ago by the cruel hand of death. He gave new dimensions to studies in social anthropology by devoting his labours to a study of simpler societies and later even of complex civilizations. To him we owe a number of theories such as the folk-urban continuum, enunciation of the characteristics of little communities and of peasant societies and cultures. He did not believe in scientific jargon. Simplicity and lucidity are the two great qualities of his writings. Nor did he build up any rigid systems or models which need be defended. He used to look at social phenomena from all

points of view. His basic ideas never changed. As years rolled on he expanded, refined, and made them more profound. The goal towards which he continuously strove was the humanistic insight combined with critical and detached generalizations. This point of view was his greatest contribution to social science.

This compilation of forty-one papers by Redfield is intended to illustrate his ideas on the study of man in society. The papers are grouped in three sections. The first section deals with the methods and principles of anthropology as a social science, the role of fact-finding versus search for laws; concepts; purpose of social sciences and the role of values therein, and the historical study of man. Section two has papers on folk society and civilization mostly dealing with his work in Mexico. The last section presents writings on the question whether there is a common nature shared by all human beings.

The collection includes some writings which have been published in widely scattered sources and some lectures which have not been published before. Students of social science should be grateful to Mrs. Redfield for publishing Professor Redfield's most important papers in a single volume.

Sachchidananda

India's Villages : *Edited by M. N. Srinivas. Pp. 222. Second revised edition 1960. Bombay. Rs. 12.50.*

India is a land of villages and the caste system is the special feature of it. Besides this caste system there are many aboriginals or aboriginal derivatives who form the population of our country. Most of them live in villages with their own pattern of life punctuated by their own beliefs and practices. Due to rapid industrialization or urbanization the face of the villages is in process of rapid change. Various interactions are taking place in which the individual is subjected to various forces of change.

Each village presents a special feature which is correlated with its geography and ethnological setting. Attempts have been made to compile the papers written by several distinguished, professional scholars of India and abroad on specific problems to cover the wide geographical range from 'Himachal Pradesh in the North and Tanjore in the South, Rajasthan in the West and West Bengal in the East'. In writing the introduction of this book Dr. Srinivas

has drawn attention to the special points in each paper. Much fascinating information about rank, status and occupation of the caste and communities, the panchayat system, zemindary system, land tenure system of the areas concerned, interdependence or economic symbiosis of the caste and community groups, various institutions and social groupings, modes of fulfilling the specific group or privileged interests etc. etc. are the subject matter of the book.

This volume is useful to social workers, social scientists, politicians, and planners alike.

P. K. Bhowmik

Village India. Edited by McKim Marriott. 1961. Pp. 276. Rs. 11.50.

The book consists of eight papers each on a village community belonging to different parts of the country. The papers are: The social system of a Mysore village by M. N. Srinivas; The social structure of a Tanjore village by Kathleen Gough; The changing status of a depressed caste by S. Cohn; Interplay among factors of change in a Mysore village by Alan Beals; Notes on an approach to a study in personality formation in a Hindu village in Gujrat by G. Steed; Peasant culture in India and Mexico by Oscar Lewis; Little communities in an indigenous civilization by McKim Marriott; and The world and the world view of the Kota by G. Mandelbaum.

The first paper shows that although there is the horizontal divisions of caste in a multicasite village there are counteracting factors also which bring together families and individuals belonging to different castes within vertical institutions in a village.

In the second paper we are told how a comparatively static feudal economy and co-operation between ranked castes of a Tanjore village changes to a capitalistic economy and becomes subject to forces economic and political of a wider sphere.

The third paper deals with the Chamars of Madhopur village who in the process of change fight for equality, social, political and economic with the higher castes and at the same time adopt the revived elements of culture which the higher castes are discarding.

The interaction of governmental and other external forces over a long period of nearly a century over village Namtale has been traced in the fourth paper to show that factors responsible for change were from outside.

Formation of personality of one particular individual within a particular social structure, the social and personal values as well as the effects of economic and political change on him has been depicted in the fifth paper.

In the sixth paper the social structure of two very different peasant communities, one of India the other of Mexico, are compared and contrasted.

In order to understand the traditional form of Indian social structure one has to study the interrelation between the larger society and the village (which is a local part of it). This forms the theme of the seventh paper.

In the last paper it has been shown how the Kota look at certain aspects of life. The resemblance and differences between the life of the Kota and the other seven communities depicted in the other papers are also discussed.

The social structure of a peasant community within the unit of a village has thus been studied with respect to changes in modern India from various points of view. Although the village has its separate entity, which is still distinct, the institutions and ceremonies cut across geographical boundaries and also vertically across caste lines.

Jyoti Sen

Kariba Studies—The Social Organization of the Gwembe Tonga.
By Elisabeth Colson, Manchester University Press, 1960. Pp, 239, 35 s. net.

The construction of the Kariba dam across the Zambezi in 1955 necessitated the displacement of the Gwembe or Valley-Tonga from the area of inundation and their resettlement elsewhere. These agriculturists eking out a living on the banks of the Zambezi had been cut off by the towering cliffs of the Rhodesian Plateau from European influence and had preserved their traditional way of life. Hence it was decided that a record of their customs should be made before they were uprooted. The survey deals with the environment, economic system, neighbourhood, land and lineage, homestead, household and family, cult of the shades, inheritance, authority and political organization of the polygamous agricultural Gwembe. The chapter on 'The Shades' is central to the understanding of the working of the social

organization and the institutionalized authority of the Valley-Tonga and has been lucidly worked out by the author. The likely effects of the settlement on population and land on economics, on the shades and on political leadership are briefly forecast.

This survey will provide a basis for the future work of the author in the new settlements once the Gwembe have taken fully to their new surroundings. This case study may also prove interesting in that it is a controlled study of social change closely approaching a laboratory study.

P. E.

Essays in the Science of Culture, (In honour of Leslie A. White). Edited by G. E. Dole and R. L. Carneiro, Crowell Co. New York, 1960. Pp. 501, \$ 6.25.

This book is a collection of 26 essays in the broad framework of 'Culture' by some of the old colleagues and students of Leslie A. White presented to him on his 60th birthday and his 30th year of teaching at the University of Michigan. The contributors wanted to express their appreciation for Dr. White's teaching, research and writing on culture, culturology and cultural evolution. In the lengthy foreword, H. E. Barnes gives his personal reminiscences about Dr. White, his training and his life work. Although the essays are in the main on the theme of culture theory, some of them are on archaeology and physical anthropology. Thus a reader should not expect to find in this book a consistent theory worked out, but several independent studies and views on culture and allied topics.

P. E.

History and Traditions of the Tikopia. By Raymond Firth F. B. A. The Polynesian Society (Incorporated), Wellington, New Zealand. 1961. Pp. 203. £ 1. 5. 0.

This volume is expected to provide a sociological analysis of Tikopia traditional tales of island creation, superhuman feats of cultural heroes, and struggles for land and power.

The tales are first presented in a systematic form in their narrative context such as the mechanism of transmitting these tales, the kind of reception given them on specific occasions, the degree of proprietary interest in them, the relation of the tales to social groups, their priority claims, and the value these tales embody for conduct.

The above material is next analysed for its possible historical value with the aid of external criteria of the scanty records of the past European expeditions. This analysis leads to the conclusion that the present Tikopian society is a fusion of a number of elements from a variety of islands mainly Polynesian but probably some Melanesian also.

Then follows the sociological analysis of Tikopia traditions. The tales are said to be relevant primarily, not to the social conditions about which they are told, but to those in which they are told. The author underlines the instrumental value of these traditions in the modern social life of the Tikopia, mainly as a means of validating or claiming political or ritual status. There arises, therefore, no need of treating these tales in the accustomed categories of myth, legend, and folk-lore. The divisive role of the tales and the lack of agreement between the different versions are cleverly attributed by the author not so much to differential memory as to different interests or to the present clash of interests.

This book is a valuable addition to the already extensive Melanesian studies by the author on the Tikopia and it will prove of value as a theoretical guide in the analysis of similar material elsewhere.

P. E.

Rethinking Anthropology. By *E. R. Leach*, University of London. *The Athlone Press*, 1961. Pp. 213. 21 s. net.

Here in a single volume are given some of the important papers published by Dr. Leach in the last 17 years. The volume is named after the opening essay which is an enlarged version of the author's First Malinowski Memorial Lecture at the London School of Economics in 1959.

Dr. Leach expresses great dissatisfaction with the old functionalism of British Social Anthropology which busied itself with the comparative analysis of social structures. This, he thinks, has led to a blind alley of mere topology making and biased ethnocentrism for which he challenges some of his colleagues. In order to break away from this, he insists that instead of comparison an attempt be made at genuine generalization and that social anthropologists occupy themselves with the principles of operation of partial systems rather than with structure of things interconnected. The organizational ideas that are present in any society must be thought

of as constituting a mathematical pattern. Thus, for example, in any system of kinship and marriage what is most important is the logical opposition between unity through incorporation and unity through alliance rather than these relations themselves. Hence one needs to think of these relations which link the children to their parents and the parents to one another as constituting a neighbourhood system similar to a topographical space. His own previous training as an engineer and the influence of Levi Strauss have given Dr. Leach this outlook.

How far he has moved away from his earlier position can be gathered from the essays that follow. In his paper on the Jinghpaw kinship terminology he still applied the biographical approach of Malinowski and like him assumed that age, sex and place of residence form the basis of classification of kinship terms whose complexity can be reduced to a simple, consistent, if somewhat idealistic pattern. He would now much prefer to deal with this material by considering pairs of certain kinship relationships as forming a logical opposition.

In his study of the structural implications of matrilineal cross-cousin marriage the author demonstrates that it is a distortion of actual societies to view this kind of marriages in terms of a simplified model which presents the wife-giving and wife-receiving marriage classes as marrying in circles. Dr. Leach would like that in such studies, account be taken of the whole range of institutional dimensions.

The paper on polyandry, inheritance and definition of marriage shows the inadequacy of defining marriage solely in terms of legitimacy of children born of wedlock. It is here observed that if legitimacy be defined in terms of property rights rather than descent, the Singalese customary unions ought also to be regarded as marriages. The confusion in the varying definitions of marriage seems to arise from the attempt to define an institution from the effects that flow from it rather than from its aims and ends.

The author finally reaffirms his view that in some societies affinal alliance is functionally dissociated from any notion of filiation and the payment of economic dues as an expression of such alliance is not to be understood as a disguised form of double descent as some other are said to do.

The book ends with two short notes on the idea of time.

Those interested in the fundamental theory of social anthropology are sure to find this book most lucid and challenging.

P. E.

The Art of The Stone Age. By H. G. Bandi, H. Breuil, L. Berger, H. Lhote, E. Holm and A. Lommel. (Published in the Series "Art of the World"). Methuen, London, 1961. 42 Shillings. Pp. 249 (plates 60, maps 8, figures 66).

In the 'Introduction' Dr. Bandi points out that the rock-art of the Stone Age alone has been dealt with in this book.

Our knowledge of man's early artistic endeavour has been considerably enlarged by discoveries in Mesopotamia and Egypt belonging to the Upper Palaeolithic period. In this book, Franco-Cantabrian rock-art, the rock-art of the Spanish Levant, Maghreb (Morocco, Algeria and Tunisia), Sahara, South Africa and Australia has been discussed in great detail. Their discovery, distribution, preservation, development, implements and techniques used, classification and motivation have been described in full. The book will prove particularly useful to students of art and anthropologists alike.

A. B. Saran

Estudos Etnograficos. Instituto de Investigacao Cientifica de Angola. Luanda : 1960.

From Luanda in Angola comes a fine volume of ethnographic studies, published by the Institute for Scientific Research in Angola. In the present number (No. 2), of the seven articles, five are in Portuguese, one in German and one in French. However, a commendable feature is that to each article is appended a short summary in three major European languages, usually, French, English and German. The volume is printed in high quality paper and profusely illustrated.

The articles deal respectively with are : (1) Popular tales of the Angolan tribes ; (2) Certain beliefs and rites in connection with the major events in the domestic life of the 'Miseke' population of Luanda ; (3) The Caravans of Angola traders that went as far as Rhodesia and Katanga between the years 1850-1915 ; (4, 5 & 6) The culture of the 'Axiluanda' fishermen of the island of Luanda ; (7) The cult of the serpent among certain tribes of Angola.

La *Kāśikā-vṛtti* (adhyāya I, pāda 1)—2e Partie. par Yutaka Ojihara et Louis Renou—Ecole Française d' Extrême-Orient, Paris 1962.

The first part of this study was published in 1960 and was briefly reviewed here in a previous issue. We need only say that the authors carry on the work (translation and commentary) in the same scholarly fashion.

Abhandlungen und berichte des staatlichen museums für völkerkunde Dresden. Band 21. Akademie-Verlag ; Berlin, 1962.

A publication of the State Museum of Anthropology of Dresden. The articles, several of them illustrated, are mostly in German ; though the present issue contains one in English and one in Spanish. They deal with a wide variety of racial groups, ranging from New Guinea to Canada, and from Peking to South America.

Archiv Orientální 1962 : No. 3. Prague

Numbers 1 and 2 (1962) of this Journal of the Oriental Institute of the Czechoslovak Academy of Sciences were given a brief mention here a few months back. The present number contains, among other articles, a study on 'The Chronology of Ibn Baṭṭūṭa's Travels' by Ivan Hrbek, and one on 'Old Braj Morphology in the Bihārī-Satsai' by Vladimir Miltner ; and concludes with a few substantial book reviews.

A CORRECTION

We are sorry that there has been serious misprint in *Man in India* in Vol. 43, No. 1. The last article should read 'A Note on the Anthropometry of the Bhatra and the Muria (Kondagaon) of Bastar'.

The author's name should also read as 'Hirendra K. Rakshit'. In table 1 on page 57 the mean for UFH should be 63.29 instead of 63.21. We offer our apologies to the author for the errors.

—Editor.