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MAN IN INDIA

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THE SOCIAL STRUCTURE OF THE HILL JUANG: A PRE'CIS

CHARLES McDougal, (Received on 4 June 1963)

Introduction

THIS study is based on fifteen months of field research done in 1960-61 among the Hill Juang tribe of Keonjhar District, Orissa, facilitated by a Predoctoral Research Training Fellowship granted by the Social Science Research Council, New York. Its purpose is to provide a description and analysis of Juang social structure by focusing on the role of the institution of the men's house and the grouping of persons associated with it.

Men's houses or community houses are found under a variety of conditions in many parts of the world. They have been the subject of considerable interest in social anthropology, but few systematic studies of these institutions within the total structural framework of the societies in which they occur have been made.

Background

Juang belongs to the Munda group of languages. The Munda-speaking tribes are commonly supposed to represent part of an ancient racial stratum in India. Although the Juang share certain general traits with the other Munda-speakers, their closest cultural affinities are with the neighbouring Hill Bhuiya tribe, today lacking an indigenous language.

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Under the rule of the State of Keonjhar the region inhabited by the Juang was loosely administered, with the result that they were left to settle their own internal affairs with little interference. Nevertheless, the State played an important role in crystallizing the rights to land exercised by Juang villages.

The Hill Juang live in small, compact villages, each possessing an exclusive territory of exploitation, in the uplands of western Keonjhar, a tableland cut by V-shaped valleys containing little level bottomland. For subsistence depend primarily on the shifting cultivation of hill-slope fields, utilizing slash-and-burn techniques. The chief crops are rice, sesamum, millets, and pulses. Productivity is very low; to a considerable degree the Juang depend on the gathering of wild food products to supplement cultivation. Because resources are uniformly distributed throughout the region, with little variation in climatic and other natural factors, there is no necessity for interdependence among different Juang villages for purposes of subsistence. Nevertheless, there is evidence that the Juang have carried on external trade with the regional market for a considerable period, bartering non-subsistence crops for rice and procuring a few goods not available in their internal economy.

Social Structure

There are two territorial units, the village and the pirh, a grouping of villages used for administrative purposes by the State, which also plays a limited role in the traditional Juang judicial system. The Juang are divided into named, exogamous claus based on agnatic descent. A clau or clau segment forms the core of each village, which consists of (1) a local descent group composed of a co-residential aggregation of males of at least three generations, together with their unmarried sisters and daughters, and (2) inmarrying female spouses. The local descent group is segmented into a number of smaller agnatic groups larger than the family, but these lack clear-cut structural definition.

The village is the critical unit in Juang society. The largest corporate group and the only land-owning unit, it

controls access to all resources by its members and regulates the annual cycle of subsistence activities. In relation to one another, Juang villages are economically self-sufficient, ritually self-contained, and politically autonomous. Nevertheless, by virtue of their agnatic structure, local communities are necessarily dependent on other groups for the acquisition of spouses. Relations between villages are of two types: (1) those of clanship and extended clanship, precluding intermarriage, and (2) those of marriage exchange.

The extended family is the ideal. There is general conformity with the rule of patrilocal residence; a man begins married life as a subordinate member his father's family. Nevertheless, there is a low empirical incidence of extended families-small, nuclear families are the predominant type. A man's sons do not normally marry until relatively late in his life; shortly after his death they invariably form separate families. Moreover, there is a strong tendency for married sons to separate from the family and establish independence during his life-time. This is related to a number of factors: the desire of men to achieve full adult status, denied subordinate family members; tensions in the domestic relations between the family's component conjugal units; conflict between the generations and the weak structure of authority relations; and a lack of economic incentives which might serve to integrate the family in spite of these centrifugal forces—the family does not own land, exercising only usufructuary rights, and all property is divisible.

The kinship structure of the village is a larger replica of that of the extended family, characterized by the same opposition and conflict beween the generations. Interpersonal relations of agnatic kinship do not provide a basis for an effective system of authority between members of adjacent generations. These relations do not create a network of solidary bonds integrating the different families of the village.

Ties of clanship with other villages likewise are not a focus for strong, co-operative relations. The most important bonds between different villages are those of intermarriage, although these relations are subject to considerable strain. The Juang marriage system is one of classificatory sister exchange; each village maintains relatively continuous marriage alliances with a small number of local units. In any particular generation most of the village marriages will be with these groups, but the remainder among a wide range of other groups. Affinal bonds, rather than those of consanguinity, are emphasized in interpersonal relations between members of intermarrying communities; nevertheless, there is almost no regular co-operation on the basis of these relations and communication is limited.

The role structure which groups males who participate in the use of the men's house, as well as females who are excluded from it, is defined as an age system. It is not an age-group system in the classic sense; such a structure contains a series of hierarchically arranged age grades through which social age-mates progressively pass as co-members of an organized group. In the Juang system the various statuses or positions in the hierarchy are defined not only by age, but in some cases by other criteria—marital status and status in the family. They do, however, constitute a single, unified structure. Persons move from position to position on individual rather than on a group basis; nevertheless, at any given time, mutually exclusive groups of persons, exercising different sets of rights and obligations, occupy the various status-levels in the hierarchy. Age-homogeneity is a strong focus for solidarity. The division between the sexes is an integral part of the system; the different types of relationships between males and females at various levels in the hierarchy provide a basis for the allocation of different rights and prerogatives in the community. The age system and the kinship system are not independent structures, but are closely related at certain points: some positions in the age-hierarchy are determined by those in the family. The rights and obligations associated with group membership in the age system do not normally conflict with those contingent on kinship roles, but rather supplement and for certain purposes supercede them.

Children below the age of ten years are not formally differentiated as to sex and lack rights and obligations in the system. There are three important levels in the structure:

(1) the unmarried boys and girls, (2) the young and middle-aged family heads and their wives, and (3) the old-aged family heads—or ritual elders—and their wives. Married men who are subordinate family members, and their wives, have an ambiguous status; they are denied the prerogatives of full adult status and continue to be grouped with the unmarried youths for some purposes. They have no special rights and obligations and as a group do not form an integral part of the structure.

Different rights and obligations are allocated to each of the other three groups, taking account of the sexual dichotomy. With a few exceptions corporate activities are monopolized by males. The men's house, with its associated shrine, is the symbol of village unity. The unmarried boys and girls are structurally equated in many respects with the group of old-age family heads and their wives, and are conceived of as having a similar ritual status. Entrance into both these groups is defined by age; in both cases there is an initiation ceremony for males. Ritual functions in the community are divided between the boys and the ritual elders. The young and middle-aged family heads and their wives have a different ritual status. This group of males controls political functions. Although entrance into the group is based on status in the family rather than age, there is a formal age distinction between the young and middle-aged family heads; in practice the latter tend to monopolize political power.

At the level of interpersonal relations, persons of superordinate groups do not exercise effective authority over those belonging to subordinate units; the council of family heads as a group exercises authority over any individual or other groups.

The unmarried boys and girls are organized as a miniature replica of the larger village unit. They have regular duties to the community which they perform under the supervision of their 'sponsor', a young family head elected by them, who acts as an intermediary between their group and the council of family heads. The boys and girls are collectively responsible to the latter body for the acts or omissions of any member of their group; punishment, inflicted on a group basis, involves

temporary loss of privilege and the payment of compensation to the community.

The Organization of Directional Activity

In this section the importance of the age system for participation in, and regulation of activities in the various institutional spheres of the society—social, economic, ritual, and political—is examined. Different tasks are allocated to the various groups in the age-hierarchy.

Dancing visits and other types of formal courtship between the unmarried boys and girls of intermarrying villages are characterized by group joking behaviour of a highly stereotyped and competitive nature. Marriage by 'capture', the most frequent form, is associated with the dancing visit. The marriage ceremony, in which all critical relationships are given expression, is the most formalized situation which occurs in Juang society. Each age-group of either village has an indispensable role in the ceremony. Group competition takes place between the males and females of the groom's village; there is also a formal contest with drums between the males of the villages of the bride and groom.

The family is the primary unit of economic production, distribution, and consumption, but the village is also an important economic unit. New plots of land are allocated annually by the village for the use of families. The village regularly cultivates a communal field, using the produce for its common fund. It also provides a communal labour force for use by individual families. Most of the economic activities of the village are duplicated by those of the unmarried boys and girls. There are no full time economic specialists in Juang society.

A series of annual ceremonies is performed by the ritual elders, but the unmarried boys and girls have important responsibilities in connection with them. These ritual events, held independently by each village, serve to regulate and co-ordinate the seasonal cycle of economic production, distribution, and consumption by the families of the community. There is a system of economic redistribution associated with them, by means of which all important group relations within

the village and certain relations between members of different communities are given formal expression. Persons from other villages attend the ceremonies and participate in the festivities, which include dancing, feasting, and drinking. These, together with marriage ceremonies, are the occasions when the greater amount of communication takes place between persons belonging to separate communities.

The family heads of the village are vested with joint political authority and responsibility. Decisions are reached and policy made by means of group discussions in which informal leadership among the middle-aged family heads plays a vital part. Responsibility for the implementation of decisions is normally allocated in terms of the age system. council of family heads also acts as a judicial body; all serious offences are treated as crimes against the community and require group action. Representative family heads, including the informal leaders, of different villages form a special judicial unit at the pirh level, treating crimes of incest and adultery between certain categories of relatives.

Conclusions

In Juang society relationships are defined by the criteria of locality, kinship, and age (sex). The kinship system provides two co-residential, corporate units, the family and the local descent group—the core of a village—both of which are based agnatic descent and patrilocal residence. The kinship structure of the extended family is duplicated in larger form by the village. Although large, extended families are the ideal, small families of the nuclear type are the empirical norm. The local descent group is segmented into small agnatic descent groups, but these exhibit a low degree of solidarity.

Domestic relations, and interpersonal relations of agnatic kinship generally, foster centrifugal forces; an emphasis on individualism, divergent interests among close agnates, a negative disposition toward the acceptance of authority in interpersonal relations which are formally structured in terms of superordination and subordination, and a high degree of opposition and conflict between adjacent generations.

Because relations of agnatic kinship are not a strong focus

for solidarity over time, there must be some alternative integrative mechanism at the village level, if the local community is to be a solidary unit characterized by stability and continuity. This is provided by the men's symbolizing village unity, and the grouping of persons associated with it. Differentiated social tasks, each of which is considered necessary for the continued welfare of the village, are allocated to the various age-groups. Specialization in the various institutional spheres of the society is based on the age system-group roles, not individual roles are the basis for specialization. All important activities are organized and regulated in terms of the age system. At the level of group relations it provides an effective system of authority. There is also provision for socializing the younger members of the community, the unmarried boys and girls, for participation in collective activities directed toward common goals, and for the acceptance of collective responsibility and the acquisition of common values, as co-members of a corporate group larger than the family. Age-homogeneity is a basis for the development of solidary bonds linking members of different families.

The village is a highly self-sufficient economic, ritual, and political unit in relation to other Juang villages, but it is necessarily exogamous. The establishment and maintenance of solidary relations between different villages, upon which the integration of the larger society depends, centre on intermarriage. The network of interpersonal relations of affinity and kinship resulting from intermarriage does not provide an adequate integrative mechanism at the level of inter-village relations. Each village emphasizes its internal solidarity; relations between villages are characterized by latent hostility. Group relations between intermarrying villages are structured in terms of the age system. They are conceived of as similar to joking relations and perform the same function. On occasions of group interaction, formal expression is given to both the disjunctive and the conjunctive aspects of the relation between different communities: interdependence and continuity in the relationship are emphasized, while at the same time a channelized release for aggression is provided.

THE GADDI OF CHAMBA

SARADINDU BOSE

(Received on 19 March 1963)

Introduction

TWO classes of Gaddi are found in north-western India, namely, the Muslim Gaddi who live generally in the plains of Punjab and western U. P. and the Hill Gaddi living mostly in the Kangra District of Punjab and the Chamba District of Himachal Pradesh. The latter dwell mainly in the valleys of the Beas in Kangra and the Ravi in Chamba. But their chief area of concentration is in the Ravi valley, particularly in the Bharmour Sub-Tahsil.

Gaddi villages are generally located between 4,000 ft. and 9,000 ft. above sea level. These people are considered to be seminomadic as they migrate to the plains of Punjab in winter and return to fixed villages in summer. Some people, particularly men, also migrate to Lāhul and other higher parts of the Himalayan range in summer for grazing their sheep and goats. They have their own villages and agricultural fields which are used on return in summer. In the lower valleys, some people do not migrate to the plains of Punjab during winter, but they form a minority in comparison with those who do.

This valley of the Ravi which is inhabited by the Gaddi is enclosed on the south by the lofty Dhaula Dhar, on the north by the Pirpanjal or Pangi Range, on the east by an extension of the Dhaula Dhar which ultimately meets the Pirpanjal near Rohtang Pass. The valley extends towards the west via Chamba town. To the north of Pirpanjal lies the drier Lāhul and Pangi area which is beyond the reach of the monsoon. On the other side of Dhaula

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Dhar lies the Beas valley. The river Ravi in this section flows in an east-west direction.

The snowy ranges of the Pirpanjal and Dhaula Dhar contain numerous peaks and glaciers. Glaciers cover a considerable portion of the territory. The lower valley is also very rugged, with occasional gorges and ravines which effectively isolate the country from other regions.

Climate is also influenced by physiography. Blocked on three sides by lofty ranges with a minimum height of over 13,000 ft., this area receives comparatively less rainfall than the neighbouring territories. The only opening for the monsoon clouds is along the valley in the western side. So the monsoon current becomes feebler and feebler as it approaches the higher valleys.

The author's investigation regarding the mode of living of the Gaddi was mainly confined to the Budli valley, a very important tributary of the Ravi. On the Budli lies Bharmour, a small town and headquarters of the Bharmour Sub-Tahsil of Chamba District. The river basin is enclosed by two arms of the Pirpanjal. The northern wall of the basin is the circular arc of the Pirpanjal. The spur originating near Kugti Pass on the Pirpanjal runs initially north-south and forms the eastern boundary of the basin. It then turns near Kailash Peak and runs as Manimahesh Range in a direction s. s. e. to n. n. w. and approaches very close to the Budli nullah. Another arm from the other end of the Pirpanjal runs n. e. to s. w., and similarly approaches the river. The Budli passes through a deep gorge between these two spurs before joining the Ravi.

The major axis of the basin running east-west is about 30 miles and the minor axis running north-south is about 16 miles. The Budli roughly follows the major axis. The valley above the gorge is fairly wide up to Harsar, a stretch of about 17 miles. From Harsar up to Dharol, a distance of about 5 miles, it again cuts its way through a deep gorge. It is then widened and finally disappears in the glacier. The river has signs of incision at some places.

The terrain north of the Budli consists of several ridges and valleys aligned in a N. N. E.—s. s. w. direction. The middle and western part of this section is comparatively more rugged. Flat land and gentle slope is relatively absent, and it offers little scope for pasturing or agriculture. In many places along these tributary valleys lie a series of steps, sometimes up to four in number. In the eastern sector, the head-streams of the Budli have an east-west trend, generally higher in elevation but containing more gentle slopes.

The terrain south of the Budli has ridges and valleys running in various directions. The general height of this sector is comparatively low. The proportion of flat land and gentle slope is relatively greater than in the northern counterpart. A peculiar feature of most of the tributaries is they have asymmetrical valleys, the being steeper than the left. Lower valleys are generally steeper than the higher valleys and afford less opportunity for pasturing and agriculture. The gentle slopes of the higher valleys and hill tops are terraced in suitable spots for cultivation. These slopes are also suitable for pasturing. In general the contour of about 12,000 ft. demarcates the upper level of pasturing. Naturally, almost half of the terrain is unused. Vegetation consisting mainly of fir, pine and spruce covers a considerable area, particularly in the region south of the Budli. In some places where the network of small streamlets is very close, vegetation is dense. The northern part has remarkably less vegetation.

In winter the glaciers and snow-fields extend down to 11,000 ft. and 7,000 ft. respectively. Streams of snow descend down the slope of the hills cutting narrow and shallow channels through forests. In summer, after the melting of snow, these parallel ribbon-like channels covered with loose boulders, form a characteristic feature and divide the forest into longitudinal strips.

Rugged topography and varied climate have forced the people of this valley to be hardy. Agriculture, though practised in this rugged country, cannot meet the needs of the people.

So, side by side with agriculture, they carry on pasturing which ultimately forces them to be semi-nomadic.

During summer in the month of May-June they cultivate land around their summer home in the upper valley. After summer crops have been sown and the winter crop harvested, some of the people migrate towards Lāhul with their flocks of sheep and goats. During monsoon these shepherds move from place to place in the dry Chandra-Bhaga valley in search of pasturage along the borders of the snow-line. They occasionally move up to Bara Lacha Pass near the border of Ladak at a height of about 16,500 ft. Before entering this dry region they have to cross the mighty Pirpanjal or Pangi Range through the snow-covered passes of Kugti, Chobu, Kalicho, Sach, etc., all of which are at an elevation of over 15,000 ft.

Again, after monsoon they return home and, in the meantime, summer crops are harvested in the month of September-October by another section of the community. Winter crops like kank (buck-wheat) and barley are again sown, and after that the whole village including sheep and goats migrate towards the lower plain during November. For five months from November to March they pass their days in the plains of Punjab and depend on either pasturing and production of woollen goods or working as hired labourers.

Settlement and House Type

The settlement pattern along the valley is controlled by physiography. Though the general pattern is compact as in Bharmour town yet there are variations. Dispersed settlements are observed where the valley is wide. Farmers prefer to live scattered in the neighbourhood of their fields. This is specially true of the region around Bharmour.

Bharmour is one of the oldest settlements in Chamba. It is situated on a wide amphitheatre of glaciated origin, the upper extension of which merges into the Manimahesh Range.

Once Bharmour was the capital of Chamba. There is an

interesting myth connected with the beginning of the settlement. It is said that Mt. Kailash, which is two days' march from Bharmour, is the residence of the god Siva. The only person who lived in Bharmour was the god Brahma. One day Siva, while proceeding towards Kailash needed rest for a night at Bharmour. He was accompanied by 84 disciples. Brahma permitted him to halt only in the lower flat tract of the present village. Siva stayed there for the night with his 84 disciples and next morning left the place. The spot occupied by Siva is now the site of a large Siva temple and also the spots occupied by his 84 disciples are sites of the other 84 small temples encircling the main temple. Hence Bharmour was also known as Chaurasia or 'Land of 84' temples.

The temples are several centuries old. The temple region has at its back the old palace of the kings. Everywhere along the valleys or glaciers where shepherds go for grazing, there are shrines of Siva. The Gaddi regard themselves as sons of Siva. Before taking any risk or commencing a difficult journey they take the name of Siva and if possible make offerings at the temple.

On the other bank of the river Budli, opposite Bharmour, there are villages which grew up in a linear form along a hill-top.

Isolated settlements are also observed high up on the mountain sides in the north of the Budli. During summer the ground is covered by snow which melts and runs down in the form of temporary streams till about May. Then they dry up. Farmers use these river beds and also narrow banks by terracing them for cultivation. As suitable plots of this nature are scattered here and there, isolated settlements or homesteads are developed in their neighbourhood.

Higher villages like Kugti or Harsar offer typical examples of compact settlement. Houses are constructed very close to the fields. In Kugti village, where the field is long and wide, some three houses have been constructed at the other end of the field. This is known as Dharol, and it is nearly five miles away from Kugti itself, although it is considered to be part of the latter village.

of the Gaddi The houses are almost throughout the region. Two or three-storied buildings with a balcony and a courtyard in front is common. The ground floor accommodates animals like cattle, churu, sheep and goats. The first and second floors are used for living. Cooking is done, specially in the higher villages, in the bed-room. one side of the oven there lies a large wooden box for keeping food and utensils. Pine log and plank, earth and cowdung, rock and slate slabs are the building materials. Several posts of pine are set in the form of a square in the ground, and the inside is filled with rocks and mud and this forms something comparable to concrete columns. Beams are then set between two adjacent pillars. The framework of the house is made in this way and then walls are built by filling the space between beams with blocks of stone, plastered with mud. Wooden planks are fitted for flooring. Lastly, the roofs are thatched with tiles of slate.

In higher regions like Kugti, slate is not common, so wooden tiles are used instead. These planks are fitted side by side on a wooden frame. Again, over each joint of two planks another wooden plank is fitted for protection against percolation of either rain-water or snow. The roofs are generally formed of two thatches, but in big houses there may be four slopes. Wooden planks are also used for thatching in some higher villages in the Chamoli District in U. P., as in Niti which is inhabited by the Marcha.

Dress and Ornaments

The woollen clothing which the Gaddi wear are all made by themselves. They spin and weave and also sew without outside aid. Raw wool is first of all cleaned and then yarn is made by two processes. The first one is with the help of a spinning wheel, and the second is with the help of a spinning whorl. Finer yarn is produced by the second method. There are handlooms in every village for weaving

woollen cloth. Dresses are produced wholly from these homemade fabrics.

Men wear wollen caps or topi, long shirts called choga, and a very loose-fitting cotton shirt imported from the plains. The shirt is generally worn under the choga. The choga is tied round the waist by means of a dark brown woollen rope of ½" diameter called dora. Sometimes it is as long as 40 yards and weighs two seers. The use of dora is traditional among the Gaddi, both for men and women. The use of this is probably related to pasturing and to the hazards of the mountains.

It is also noted throughout the Indo-Tibetan border or Tibet, where extreme climate prevails, that at least a warm cloth is wrapped by every one round the waist. Cold generally brings about hill diarrhoea. Therefore, a broad and warm waist-band is widely used throughout the Himalayas.

Some Gaddis use trousers or pyjamas and also a turban or pagri instead of a woollen cap. These are generally imported from the plains. Shoes are of the nagra type and imported from Chamba. Men carry a runka, a piece of iron used as a strike-a-light. A thin bark of a tree known as bhujju is used as tinder while producing fire. Other important items which are carried by the Gaddi are iron knife or chakku, money bag or bojlu, a small leather pouch for tobacco or boghli, a big sickle known as drat and a huqqa which is also called narel or kaloo according to its size-

Men use ornaments, specially during festivals. Earrings known as nanti are made of gold and generally weigh up to 2 tolas per pair; others use silver bands round their waist, finger rings, necklaces etc., specially during festivals.

Women wear a different type of dress. Over the head a cotton dupatta called ghundoo is used, the cloth being imported from the plains. A cotton shirt or kurti is used under the woollen choga which reaches down to the ankle. This choga is a local product and known as launchri. Dora is almost compulsory for women also.

In winter or occasionally at other times, they use pyjamas known as suthan. Shoes known as muchri are distinguished

from the nagra of males by means of their decoration. Ornaments are used extensively by Gaddi women. Some ornaments like chaunk in the head, baloo and laung or nosering, made of gold, are only used by married women. Others like jinjiri, made of silver, for the forehead, dodmala of silver, chandrahar of silver, kapurmala of stone from Lāhul, are also used by women. Toka, gojroo and kangnoo made of silver are tied round the waist. Panjebs are used on the great toe. Finger rings of gold are also used.

Other important items which women possess are *khisru*, a leather money bag, *drat*, an iron sickle. Occasionally, during festivals they use *chaddars* or veils of variegated colours.

Pasturing

The Gaddi do not produce enough food from their fields. They have therefore to depend on other occupations, of which pasturing comes first. Pasturing has been the traditional occupation for them for many generations. The wealth of a Gaddi is measured by the number of sheep he possesses. The term dhan, which means wealth, is also used for sheep.

A few years ago when Chamba was a State under its rajah, the whole forest region and pasturing grounds were leased out to a few individuals by auction. suitable spots over the dhars or hill ranges were selected for seasonal pasturing, and shepherds used to take permits for grazing their flocks for a couple of months by paying a tax to the lease-holder. The same system has been continued by the present Government. The entire pasturing ground is now included under a forest range. Forest guards collect taxes for each sheep and goat at the rate of 5 nP. per sheep and 12 nP. per goat for one pasturing season. The rate for goats is higher as they destroy the forest more than sheep. But this higher taxation is compensated for by the heavier weight of the goat. In Lahul, the seasonal tax is almost double that in Chamba, and is of the order of 12 nP. for sheep and 25 nP. for goats. In the opinion of the

shepherds, the comparatively cooler temperature and drier weather of Lahul helps in a greater growth of both meat and wool. Pasturing is therefore profitable in spite of high taxes.

Generally a grazier has to pay taxes twice a year, one for summer pasturing in Chamba or in Lahul and the other for winter pasturing in the plains. On the approach of winter they come down to the plains of Punjab and remain there for a couple of months.

Three types of fields are favoured for pasturing:

- (1) Almost flat land on either side of a river basin or the amphitheatre-like basin of the previous neve zone or flat terraces similar to the bugials of Garhwal. The centre of this pasturing ground is known as got in Chamba and thach in Lahul. This is the site for the shepherds to rest and from where they can keep a watch on sheep grazing in the land surrounding the got.
- (2) Fixed old moraines of the glaciers where grass seasonally grows in summer. In Garhwal this type of ground is known as kharak.
- (3) Scree or fan: The slope of talus cones formed by the deposition of screes. Here only old and fixed slopes covered by grass are used for pasturing.

Among these three types of land, the got belongs to class one. Due to flatness, the vegetation grows best here. Lāhul, several thaches or small huts have been constructed for rest. But as Chamba is comparatively warm no shelter or hut is felt necessary by the shepherds. Only, they build a small circular enclosure for keeping the lambs and kids within at night.

The second type or old moraines with a very gentle slope comes next in order of importance, as growth of vegetation is less in consequence of the rocky soil.

Talus slopes are composed predominantly of rocks and soil is relatively thin. The slope is steeper and goes even up to 50°. Here it is not possible for shepherds even to sit down comfortably, but occasionally they go there to bring back sheep which move up to these spots in search of grass.

In the lower reaches of the valleys, conditions are different

as open spaces for pasturing are scarce. Here either forests or even agricultural fields, when lying fallow, are used for pasturing. In the plains of Punjab, pasturing is allowed either in privately owned land or land held by the Government. It is said that in the past, when there was not much pressure on land, private landlords used to invite shepherds to graze their flocks in their land free of charge. This enabled them to secure valuable manure. Sometimes, landlords used even to offer food to the shepherds for this purpose. But now the scene has changed and rent is charged by private landowners as well.

There is no limit to the total number of sheep and goats owned by an individual or family. There are families which possess over 700 or 800 heads, while there are also families which own nothing. The latter have to work as hired servants specially during winter, when they migrate to the plains. On the contrary, those who possess a fairly large number of sheep employ servants to graze and keep watch over their flocks.

Usually the sheep of 3 or 4 families make one grazing unit, and one member from each of these families together make a grazier's unit. A grazier's unit is composed of a minimum of two shepherds and a grazing unit is of 400 sheep or goats. Roughly, one shepherd is needed for every two hundred sheep.

For better grazing and special attention, the flock is divided into groups. To graze 1,200 sheep or goats, a team of 6 shepherds divide their work in the following manner, though they always move jointly. The first two broad divisions are for goat and sheep. Each group is then subdivided into three in the following way: (a) lamb or kid, (b) pregnant, and (c) grown-up non-pregnant sheep or goat. These divisions are found to be practically very useful, as different kinds of attention are needed by each section. On separation into groups, the sheep are directed to different types of grazing fields. The subdivisions are maintained by the dogs during march or during grazing. Dogs are very useful companions of both men and animals. It is very interesting to see how, by way of pretence of biting, a dog drives each

individual group to one side, the other to another side. These dogs also guide the sheep in the right direction, which they do on hearing the whistle of their master. These pasturing areas of Chamba are also infested by Himalayan bears. Dogs remain alert in order to protect the flocks against bears, specially at night. The dogs are very faithful to their charge and attack bears fearlessly. The shepherds occasionally have to leave their flocks temporarily, when the dogs become specially alert. Then if any man or an animal comes near the sheep or articles left by the shepherd, they may even charge.

Feeding of the sheep is not completed by mere grazing. In addition, each animal must be provided with 2 pounds of salt every year in order to maintain health.

Food for the shepherds, if they are not owners, is supplied by the owner who employs them on a seasonal contract. Their usual diet consists of flat bread or *chapati* made of maize-flour and *chutney* made of *amlu* leaves found mainly in the higher regions below the snow-line, and goat's milk. Meat is also eaten, but usually when a sheep is injured accidentally or a sacrifice is made before a deity in a temple. Sheep are never killed merely for the sake of meat. Roughly, two pounds of maize and two pounds of milk are consumed daily by a Gaddi shepherd.

One who employs a shepherd for a season of six months, has to supply the following articles:

- (a) Maize at the rate of 2 pounds per day with some salt and chillies. It may be given either in cash or in kind. Milk obtained from the goats generally goes to the shepherd.
- (b) One pair of shoes.
- (c) Two sheep.
- (d) Wages at two rupees per month.
- (e) One blanket.

The return from the sheep and goats is manifold.

(1) When grown up it can be sold for meat, specially in markets in the plains.

- (2) Raw wool extracted from the sheep is also sold in the market.
- (3) Products of wool like blanket, carpet, etc.
- (4) Manuring the field from their dung.
- (5) Shoes and ropes from the hair of goats. Hair of the goat has no commercial value. But it is used in other ways. Ropes are made from it, for carrying articles in the back and shoes reaching up to the knee are made entirely of goat hair. These shoes are well adapted for marching on snow-covered ground.

Wool is shorn from sheep thrice in a year. The influence of climate and altitude is clearly marked on the growth of wool during different seasons. Soon after the end of winter sheep are sheared in the months of March-April, and the production on the average is 4 oz. per sheep. This is done in the plains of Punjab. Then they return to their Himalayan villages. This journey is made in about a month. Then they stay in their villages for a couple of months. Before they proceed on the final journey, about the month of July towards the highest pasturing ground, wool is cut for the second time. The average production is about 11 oz. per sheep. Finally, on the completion of grazing in regions bordering the snow-fields, they return to their villages. Before winter migration to the plains, wool is cut for the third time and the production is about 17 oz. It may be noted from the above, that the growth of wool is maximum on their return from the highest grazing grounds.

Not only are woollen products offered for sale but raw wool is also sold. The latter is sold at the rate of Rs. 3 per pound. The price of goat is higher than that of a sheep and sometimes even double, as a goat is heavier than a sheep. The value of a grown-up sheep is about Rs. 25, the value of a goat is about Rs. 40.

It is difficult to assess accurately the rate of reproduction of sheep or goats per year. But, according to the statement of villagers and an analysis of several censuses, it is estimated that the rate of production of goats is higher than that of sheep. It is said that if a person keeps 400 sheep, he can sell 40 sheep in a year without reducing the strength of his flock. In the case of goat the corresponding figure is said to be 70.

An approximate income and expenditure from sheep and goats is estimated, based on our observation and also statements of village people.

Before entering into calculation, a census of two villages is given below:

Name of the village	No. of families owning sheep and goats	No. of Sheep	No. of Goats	No. of Lamb	No. of Kid
Upli Kugti	20	1256	559	282	196
Jhikli Kugti	26	2331	1231	37 6	370

The following is the yearly expenditure incurred on 400 sheep under different heads:—

(1)	Tw	o hired labourers (shepherds)	Amount	Value in rupees	
	(á)	Their ration @ one seer of maize per day	18 mds. 10 seer	292,00	nР.
	(b)	Salt, chilli, oil etc.		24.00	,,
	(c)	Four sheep @ Rs. 25 per sheep	-	100.00	3-7
	(d)	Two pairs of shoes		16.00	,,
	(e)	Two blankets and two sets of woollen dress	_	96.00	,,
	(f)	Remuneration @ Rs. 2 per month per head		48.00	,,
(2)	Sal	t for sheep @ 1 seer per sheep	10 mds.	100.00	,,
(3)	Tax	k @ 25 nP. per sheep		100.00	,,
		Total expenditure on 400 sheep	=	776.00	,,

The following are the sources and value of income from 400 sheep per year:—

	Sources of income	Amount	Value in rupees
(1)	Selling of sheep @ Rs. 25 per sheep	40	1,000.00 nP.
(2)	Wool @ one seer per sheep	10 mds.	2,400.00 ,,
	Total income	=	3,400.00 ,,

Thus the net profit with 400 sheep is Rs. 2,624, that is roughly Rs. 6.56 per sheep per year.

The following is a similar estimate on 400 goats:—

	Heads of expenditure	Value in rupee
(1)	Two shepherds (same as on sheep)	576.00
(2)	Salt for goat do	100.00
(3)	Tax (double of taxation over sheep)	200.00
	Total expenditure	876.00

Income

Sale of 70 goats @ Rs. 40

2,800.00

Thus the net profit on 400 goats is Rs. 1,924.00, that is, Rs. 4.8 per goat per year.

Agriculture

Agriculture is practised along the valleys up to a height of about 10,500 ft. The main crops produced, are job (barley), kank (buck-wheat), makkhi (maize), bhraize (millet), cheena (Panicum miliaceum)* a species of millet which is cooked like rice, siul, etc. A type of pulse known as mash (Phaseolus radiatus)* is also widely grown. Among vegetables, bean, potato, cabbage, etc. are important. Rangan (Dolichos sinensis)* the seed of bean is very popular all over the valley and even in Chamba town.

Among cereals, barley and buck-wheat are winter crops; maize, bhraize, cheena, siul, etc., are summer crops. The most important summer crop is maize, grown throughout the valley excepting in a limited area of high altitude. In this high tract, maize is replaced by bhraize, the other summer crop.

The duration of cultivation of any crop varies with altitude, and naturally crops ripen earlier in the lower region. In the lower region, sowing takes place at a later date and crops are harvested at a comparatively early date. So the duration of crops in the field becomes higher with the increase of altitude.

^{*} Farmers of India-Vol. I. Indian Council of Agricultural Research, pp. 171.

Though several varieties of crops are grown, yet there is some diversity in the agricultural pattern within the valley itself. This is in response to limitations imported by altitude. In the lower valley of the Ravi a number of crops are grown. The varieties of crops gradually decreases with altitude, ultimately being reduced to two, namely, kank and bhraize. The gradual lengthening of the period of growth with increase of height has its effect on number of crops raised from the field in a certain period. Generally, a field is devoted alternately to summer and winter crop in rotation, and the land is kept fallow for several months between winter harvest and the next summer sowing so as to allow for the regeneration of soil.

In a year summer crop is sown in late May and it is harvested in September. After harvesting, winter crops are cultivated on the same field, and these are harvested in late June. Then it is kept fallow for about 10 to 11 months before giving it to summer crop again. Thus the same field gives two crops of different types in two years, though it is kept fallow for a couple of months. To overcome any difficulty, usually, each family has at least two separate plots, one for summer and the other for winter crop in a year. Next year the crop order is reversed.

But at high altitudes the period of growth is considerably lengthened so that two crops cannot be grown in the same field in two years as in the valley below. The same buckwheat whose period of growth is less than 11 months in the lower region up to Bharmour, is harvested in Dalotu (Kugti) after about 13 months of standing in the field. The following will give an idea of crop rotation in this region. The summer crop remains in the field from May-June to September for about 4 months. From September October to June-July for about 11 months the field is left fallow. From late July to September next year, a period of 13 months, the field is given to winter crops. The field lies follow for the uext 8 months before the sowing of summer crop again in May-June. Thus, in three years a field produces two crops, one summer and one winter crop. In order to have a winter crop and a summer

crop in the same year, each family has to possess three separate plots, one lying fallow, one producing a summer crop and the other a winter crop

The growth and the production is also affected by the change of altitude. At about 1,000 ft. below Bharmour (7,000') the maize plant attains a height of 6 to 7 ft., the average size of the cobs heing 5 in. In Kugti (9,000') its growth is remarkably stunted, the height of the plant being 5 to $5\frac{1}{2}$ ft. and the size of maize being 3 to $3\frac{1}{2}$ in. Maize is not cultivated above this village.

Method of Cultivation

Ploughing is done by men only with the help of cattle. In some high villages like Kugti, chungroo ¹, a cross-bred of yak and cow, is employed instead of oxen. Ploughing with the chungroo requires an additional person who goides the animal in the proper direction by pulling a long rope, tied to the nose of the animal. This system is also in vogue in other high Himalayan valleys such as in Pithoragarh District, U. P.³

After the first ploughing, seeds are broadcast in the field. A second ploughing is necessary to cover the seeds with earth. Breaking of lumps of soil is done with the help of a hand-axe. Two sizes of axes are in use. The bigger one is used for breaking of soil lumps and smaller one for weeding the field. The last item is levelling the ground with a wooden ladder driven by a bullock or a chungroo.

A small rock hut, locally called *tapri*, is constructed in the field in case the field is not visible from the village. The farmer sits on guard there against wild animals, among which the bear is the most notorious. It is said that a good percentage of crop, sometimes amounting to 25%, is either consumed or destroyed by wild animals. It is a common

⁽¹⁾ Chungroo has got several names in different parts of Himalaya. In Lahul it is called Churu. In Garhwal, Chamoli or Pithoragarh District it is called Zibbu. Probably Tibetans also call it Zibbu.

⁽²⁾ Pant. S. D., Social Economy of the Himalayas, pp. 44.

practice that as the maize matures in the rainy season, some member of each family stays in the *tapri* throughout the night in spite of the severity of winter.

Summer crops, mainly maize, are sown in May and after that the winter crops are harvested. Harvesting is generally completed before the onset of the monsoon. Women help men in harvesting. In the higher valleys, the harvesting of winter crop is delayed even up to July-August.

Survey of a Village

Jhikli Kugti (8,500'-10,250') is the last and almost highest village in this valley. This village was selected for special study because it is the highest village where both pastoralism and agriculture go side by side. Facts and figures were obtained which helped in a better understanding of the whole region. The people of Jhikli Kugti are more dependent on pasturing than on agriculture.

$oldsymbol{A}$ griculture

In Kugti the important crops in order of production are kank, bhraize, barley, maize and chinia. Higher tracts are restricted to kank (winter) and bhraize (summer); and these two crops are rotated on the same field, and two crops one summer and one winter crop are harvested from a field in three years as described earlier. In the lower region within the village similar crop rotation takes place, but the crops differ in nature. In this area, maize or chinia replaces bhraize as summer crop and barley replaces kank as a winter crop. Usually chinia and maize, two summer crops, may be grown alternately in the same field, but not in the same year. Thus chinia and maize have a rotation among themselves.

Types of Land

Some cultivated fields are terraced beautifully. Some are not however terraced, but are formed of sloping fields bordered

on the downward side by a rock wall. This wall serves as a boundary and also resists soil erosion.

According to productivity, cultivated fields are mainly of three types: (a) Awwal or class I fields are flat, terraced, with a fairly deep soil cover and no rocky outcrop. The hill-top of Dalotu, in the south-east of the village, forms the highest field of this class and comprises almost all of the awwal land of this village. (b) Dom or class II fields which are not perfectly terraced and naturally not flat everywhere. These fields have a comparatively thin soil cover with some rocky outcrop. (c) Brani Som or class III fields which have a high slope and a fairly large number of boulders lying within the field. The lower boundary of the field is marked by a rocky wall as stated above.

The latter two types of land are in the lower hill-slopes of the valleys. This classification is mainly based on productivity and has little connection with the nature of crops grown in the field. Most of the crops can be grown on any type of land. For this village almost all the awwal land is devoted to bhraize and kank and others to maize and barley or chinia and barley in rotation.

The taxes on fields according to type are as follows:

Type of Land	Tax per Bigha
Awwa1	.34 nP.
Dom	.23 ,,
Brani Som	.11 ,,
Banjar Kadim	.04 ,,
Banjar Jidir	·04 ,,

Banjar—Poor and unirrigated land in high hills.

Brani—Rainfed land (un-irrigated), from Farmers of India—Vol. I.

Agricultural Table of Jhikli Kugti Village

CROP PRODUCED

		Bhraize	ıize	Kank	ok	Ваг	Barley	Maize or Chinia		Crop	Average
Type of land	Area in acres	Rate of produc- tion per acre	Total produe- tion	Rate of produc- tion per acre	Total produc- tion	Rate of produc- tion per acre	Rate of Total produc- produc- tion per tion	Average rate of production per acre	Total produc- tion	produced producin tion per 3 years year	produc- tion per year
Awwal	29.62	20 mds	592,40 mds	20 mds	592.43 mds					1184.80 amds	1184.80 394.93 mds mds
Dom	32.47					15 mds	487.05 mds	487.05 mds 6.5 mds 211.06 mds 884.04 282.70 mds mds	11.06 mds	834.04 2 mds	82.70 mds
Brani Som	57.52					10 mds	575.20 mds	575.20 mds 4.5 mds 258.84 mds 698'11 mds278.01 mds	58.84 mds(398.11 mds2	278.01 mds
Type of land	Gair Mumkin	Forest	Drakht	Charan	Banjar Kadim	Banjar Jidir	Total area	Total a	average pı	Total average production 905.64 mds	905.64 mds
Area in acres	40.72	743.47	729.76	7.59	43.94	.28	1685,37				

Uncultivated fields are classed as follows:

- (1) Gair Mumkin—is formed of streams, roads, settlements, etc.
- (2) Forest-which is under Government control.
- (3) Drakht—semi-forest region and only composed of boulders and bush where cultivation is not possible.
- (4) Charan-fallow, but in which pasturing can be done.
- (5) Banjar Kadim—generally fallow but during acute pressure it can be cultivated for a year.
- (6) Banjar Jidir-after three years fallowing one year's cultivation may be done.

Population

The population which totals 423 is formed of 74 families, out of which 60 belong to the Gaddi Brahman caste, the rest being of lower caste. The male population is higher than the female.

Twentysix families possess sheep and goats, the rest are dependent on agriculture and other occupations, such as hired labour. Those with none or a small number of sheep and goats have in general more land for agriculture. Of course this does not indicate that a sheep-owner has no land. A few wealthy families possess both sufficient land for agriculture and sheep and goats for grazing. The grazing of animal stock is mainly carried on by employing hired shepherds whereas cultivation in mainly done by members of the family. Two families are engaged in crafts, one in brass-work (like huqqa-making), one in blacksmithery (agricultural implements). These families have little or no land for cultivation. Each family contributes a fixed yearly quota of grains and wool for their maintenance. In exchange, the blacksmith supplies the necessary implements and repairs those which are out of order. Likewise, the brass-worker supplies mainly huqqas. There are five Government officials, namely, Chowkidar, Kaviraj (medical man), Schoolmaster, Forest-guard and Patwari. Of these five people, only the Chowkidar is a local man who also carries on cultivation in his spare time. The remaining four have nothing to do with the village economy and are entirely dependent on emoluments received from the Government.

Census of Jhikli Kugti

Age groups	Bra	hman	Lowe	er Caste	Total Population
	Male	Female	Male	Female	
Up to 12	52	53	7	16	128
12 to 50	81	81	33	27	222
Over 50	42	16	10	5	73
Total	175	150	50	48	423

Economy

The village economy is mainly based on three occupations, namely, (1) pastoralism, (2) agriculture, and (3) hired labour. Of these, pastoralism comes first and agriculture comes next in order of importance. To gain a comparative idea of the importance of pastoralism and agriculture, a simple calculation has been made in the following manner.

Assuming a member under 12 years of age as a half-unit in correspondence with their half rate of food consumption, the total unit of population comes to 359. Five government officials are independent of village economy and they have been excluded from the total population for purposes of calculation of the carrying capacity of land. The 359 units of population share the food produced in the village. daily rate of food consumption of the village comes to 6.44 mds. taking the rate of consumption per unit of population as 11 pounds. The average annual food production of the village is 905.64 mds. Thus the value of food produced in the village is 139 days' or roughly 4½ months' of food for the villagers. Thus they have to buy food for the remaining 71 months. Usually they buy food for 5 months @ Rs. 16 per md. in the plains when they reside there and for 2½ months @ Rs. 21 (Govt. controlled price in Bharmour) in the mountains. In the plains, they purchase vegetables and other subsidiary food-stuff, whereas in the mountains they grow it in the fields bordering the house. Thus, though wheat

is sold @ Rs. 16 per md. in the plains, the equivalent value towards purchasing food-stuff comes to more or less the same as that in the mountains.

Hence, money required to purchase food for the village for $7\frac{1}{2}$ months amounts to Rs. 30,667; the total food consumption of the same period being 1460.35 mds.

In determining the net income of the village from sheep and goats, it is assumed that the payment to the shepherds comes directly or indirectly from sheep and goats which they graze. Hence, for calculating the net income of the village from sheep and goats, salt consumed by animal stock and taxation for their grazing, should go under the head of expenditure. Other expenditure, e.g. the dresses and the remuneration of the shepherds is not taken under the head of expenditure.

Total units of sheep = 2,519. Total units of goat = 1,416. Income per unit of sheep and goat is Rs. 8 and Rs. 6.25 respectively.

Total earning from the sheep of the village = Rs. 20,152. Total earning from goats of the village = Rs. 8,850. Total income = Rs. 29,002 or roughly Rs. 29,000.

If we convert the total income in terms of food, the combined figure for sheep and goats amounts to 213 days or 7 months of food.

Comparing this value with that of agriculture it is observed that the importance of the two economies is in the proportion of 9:14. This shows that grazing is much more important than agriculture.

In addition to this, they buy clothes, ornaments and spend money, not in a thrifty manner, during festivals and marriages. The excess of money required by them is provided by their seasonal service in the plains of Punjab as hired labourer where they are able to secure job.

On the whole, these people maintain a fairly good standard of living in comparison with other mountain tribes of India.

Conclusion

There is further scope for studying Himalayan pasturing. If investigation is extended to other villages, in different situations and heights, a complete picture of mountain pasturing can be obtained. A calculation of the carrying capacity of the pasturing ground, which varies in different parts according to environment, can also be made after further study.

In Chamba, people of the higher villages are mainly engaged in pasturing and then in agriculture and service. But in other parts of the high Himalayas where there was scope for trade between India and Tibet, people were engaged in this trade, and also in some types of cottage industries like the production of woollen goods. From the present year, trade with Tibet has been suspended. Due to the suspension of trade with Tibet, the economy of the border people has been disturbed. It would be interesting to find out how far this suspension of trade has affected their economy and also how they have adjusted themselves to changed conditions.

ADMINISTRATION OF JAGANNATH TEMPLE IN THE 18th CENTURY

NITYANANDA PARNAIK

(Received on 26 May 1963)

THE Gajapati rulers of Orissa were in authority of the Jagannath temple at Puri before 1568 A. D. But when Orissa lost its independence during the reign of Gajapati Mukunda Deva (1551-1568 A. D.) the rulers had to submit to the suzerainty of the conquerors. The administration of the Jagannath temple also changed hands, sometimes resting with the new rulers, while at times the Gajapati ruler was treated as the superintendent of the temple.

The cases quoted below relate to the types of punishment given by Gajapati Vira Kesari Deva (1737-1793 A. D.) for offences of lying and of the stealing of temple property or consecrated food from the kitchen. Of all the Gajapati kings, Vira Kesari Deva reigned for a long period, for about 51 years, under the suzerainty of the Marathas. His relation with the Marathas was cordial on the whole. The Marathas were staunch Hindus and gave grants of land to the Jagannath temple and also to some monasteries in Puri.

Vira Kesari was able to manage the temple and its internal economy, control the priests, officers and servants with ability. He conducted the affairs of the temple according to ancient and established usage.

The letters sent by Gajapati Vira Kesari Deva from his palace in Khurda to the Supervisor (*Parichha*) of the temple and other subordinate officials are translated below.

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Letter No. 1

SHRI PURUSHOTTAMA'S GREAT TEMPLE

Sri Vira Kesari Deva, 9th regnal year (Anka), Taurus, 20th day.

Acknowledge the receipt of the letter from *Parichha* of the Western Gate. The Ghatuara in charge of swimming the deity in water and Rama Mahapatra, the holder of the Flat Umbrella, beat a man with the handle of the umbrella and by so doing broke the handle into two pieces. Why did he use the handle of the umbrella for beating? He is to be blamed. When the Great God (*Sri Thahura*—here refers to the King as God) will come to Puri, punishment will be meted out to the accused.

Letter No. 2

SRI PURUSHOTTAMA'S GREAT TEMPLE

Sri Vira Kesari Deva, 14th regnal year, Scorpio, 10th day.

The following temple functionaries of the category of cook (suara) in charge of the King's endowed share of food gifts (kotha bhoga)-Bika Mahanti, Badu Laichhana Mahasuara and Baban Mahasuara, watchman Narana Mahasuara, while they were on duty, kept hidden 7 pieces of cakes prepared for offering to the Deity in an earthen cover (tetauni), and finished the midday offerings. Narana Mahasuara came and closed the doors. There was 11 hours of day left before sunset when his son Baban Mahasuara came and opened the door and did his work. He then reported that there was a shortage of 9 cakes. This matter was placed before the Abbot Astagrasi Gosain (who looks to the performance of ritual services at the temple). The functionaries on duty said that as the cakes had been improperly cooked, so they had been thrown into the oven. Required quantities of food materials were given and they were used in preparing the consecrated food.

Narana Mahasuara, son of Paramananda Mahasuara remains boycotted (basanda). The watchman Dania Mahasuara is also boycotted.

Letter No. 3

SRI PURUSHOTTAMA'S GREAT TEMPLE

Sri Vira Kesari Deva, 25th regnal year, Cancer, 12th day. This is in respect of offences committed by the temple functionaries.

The oven in the temple kitchen of Rama Mishra's monastery was dirty. All the food materials supplied for the preparation of consecrated food were stolen and Krupasindhu Panda (a functionary of the *Dhopakhal* category) and Madhab Panda (a functionary of the *Angarua* category—one who cleanses the ovens) also were guilty of negligence of duty. Collect a fine of 40 kahanas (1 kahana = 1280 cowries) from each of them.

Letter No. 4

Sri Vira Kesari Deva, 34 regnal year, Aquarius, 12th day. The order of Gajapati Vira Kesari is submitted below.

The Astrologer reported the case of theft of the head ornament. He said that Krushna Pasupalaka had stolen it.

I asked Krushna Pasupalaka to undergo an ordeal by holding a hot ball (uanda) in his hand. He held it, but it did not fall down. So I order that you give him cloth and sandal from the temple and restore him in the service of Garabadu.

Case No. 5

Vira Kesari Deva, 4th regnal year, Capricornus, 17th day. (The last case which follows is not a letter from the King but an agreement reached by a group of temple functionaries of the *Pharaka* category regarding the distribution of largesse among co-parceners and in case of violation of agreement by any co-sharer as to what sort of punishment should be meted out to the transgressor.)

The agreement belongs to Vira Kesari Deva's reign. It is as follows:

The Abbot, Paramahansa Astagrasi Gosain, helped a group of the temple functionaries of the *Pharaka* confederacy (Nijoga) to come to an agreement among themselves regarding

the distribution of receipts from pilgrims. The agreement is as follows:

'When the pilgrims will come we all of the Pharaka confederacy will sit down and choose one according to our consent and put him as a guide in charge of the pilgrims, and whatever we earn from this we will share and enjoy. When the Khandayat comes for a view of God (darsana), likewise whatever Paiks (militia of the State) donate to our confederacy and whatever our patrons (jajamanas) and also Bengali Paikars donate when they come for a visit of the God; whatever we receive from Jagamohan estate (Jagamohan is a building inside the temple where the pilgrims offer their presents) and from the Lion's Gate and whatever presents we receive from our pilgrims; whatever income we obtain from all these sources, whether it is gain or loss, we will distribute it equally among all the members now forming our confederacy. In case there is any amount to be paid we all will pay that sum in equal proportion.

Here we eleven of the *Pharaka* confederacy put our signatures below:

Lava Muduli, Rath Muduli, Anama Muduli, Govinda Muduli, Hadu Muduli, Nilai Muduli, Phula Muduli, Rama Muduli, Chakala Muduli, Madhab Muduli, Bihari Daraga.

Whoever among us acts against what has been stated above, shall be fined 100 kucha (1 kucha = 320 tolas) of ghee and this will be donated to kotha bhoga. He will also be boycotted from the temple. We are agreeable to all this,'

CASTE, CRAFT AND CHANGE

BAIDYANATH SARASWATI

(Received on 12 June 1963)

In the following pages an attempt has been made to examine the role of the caste system in relation to crafts. Certain technological problems which have arisen today with particular reference to pottery in India have also been dealt with.

The Cradle of Crafts

Craftmen have always occupied an essential and important position in our society. Almost all over the country we find craftsmen and peasants closely integrated by a system of economic and ritual interdependence. Let us take the example of POTTERS and their relationship with other Hindu castes.

Peasants depend upon POTTERS not only for the supply of pottery, but also for assistance in various rituals. In South India, the services of POTTERS are required in connection with marriage ceremonies. In other ceremonies too, such as Parubandha, Agnishtoma, Vajapeya, Garbhadhana, etc. (on which occasion a goat is sacrificed) POTTERS are appointed by Brahmans. In many places in South Canara and also in Konkan, POTTERS are employed to perform a funeral rite called Kumbhar-kriva. Tamilian POTTERS sometimes officiate as priests in Pidari and Ayanar temples. Telugu POTTERS used to be cooks in the service of the ancient kings of Telengana. In various parts of northern, western and eastern India, the POTTER'S wheel is worshipped, at least by Brahmans and Vaishyas, during their marriage ceremony. central India, pigs are sacrificed to a deity called Bhainsasur, who is the protector of crops. The Sungaria POTTERS sacrifice pigs on behalf of the Gond and other peasants.

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Earthen vessels are required not only for ordinary purposes, but also for ceremonial use when silver or gold vessels are not employed.

South Indian Brahmans require a large number painted earthenware at the time of marriage. worshipped daily in the marriage ceremonies Patnulkerans. The ceremonial breaking of water-pots at the graveside prevails among the Odde, Toreya. Paraiya and many other castes in South India. In many places in Rajasthan, on the 8th day of Chait (1st half), women pay a ceremonial visit to a POTTER'S house and return with pitchers on their heads to perform a ceremony called basora. for marriage ceremonies women bring eleven to fourteen pitchers from a POTTER'S house for the performance of certain rituals. In Gujarat, POTTERS must supply a perforated vessel called garba to unmarried girls who perform a dance known by In Jammu, POTTERS prepare a phallic image of Siva or Sivalinga of clay for Brahmans. In Uttar Pradesh, POTTERS mould unbaked clay figures of Siri Devi and Ganesh for their clients. In Bihar, the POTTER'S wife presents earthen elephants, lamps and painted pitchers to their clients on various ritual and ceremonial occasions like Chhat, Diwali, initiation (Upanayan) and marriage ceremonies. Potters prepare clay figures of horses, lions, Malin, etc. which comprise the assembly of Salhesh, a deity of the Dusadh caste in northern Bihar. Oriya POTTERS also prepare painted clay figures of the Bengali Babu, Rajamma and Veyyi Kannalu Ammavaruthe deities worshipped by the fisher-folk. Special types of ceremonial earthenware are required all over the country both by the rich and the poor.

Besides ritual relationship with various castes, POTTERS are bound by a system of barter with all the peasant castes to whom they supply pottery for domestic and ceremonial use and receive in exchange grains once or twice a year during harvest. It is obligatory on the part of the client to feed his POTTER and give presents to him during ceremonial occasions in his house. Jajmani, Karha, Atta or Potala are some of the terms by which this system is known in different parts of India.

There are various legends regarding the origin of the POTTER'S craft, which show the importance of this profession. Some of the POTTERS of South India claim descent from a mythological ancestor, Kulalan, who was the son of Brahma. Kulalan prayed to Brahma to be allowed like him to create and destroy; and so Brahma made him a POTTER. Another legend, prevalent in parts of eastern India, says that in the Krita Yuga or Golden Age, when the necessity of ceremonial pots was felt at the time of Siva's marriage with the daughter of Himavanta, a Brahman, Kulalaka by name, was ordered to make pots. Certain tools were required for the moulding of pots, Kulalaka prayed for them, and Vishnu gave his discus or Sudarshan Chakra to be used as a wheel, the mountain of Mandar was fixed as the pivot, the Adikurma (the Tortoise) was the scraper and the cloud was used for the water-tub. It is said that in Vedic times ceremonial pots used to be made by Brahman priests themselves.

Thus the above description reveals the importance of the craft in the Hindu social system, both from the material as well as the ritual point of view. Normally this should have placed the craftsmen on a higher social level than what they enjoy at present. Even among artisan castes, certain hierarchical distinctions are made.

Division among Craft-groups

In each craft-group there are endogamous subdivisions based on territorial or technological considerations. Territorial subdivisions refer to the place of ancestral origin. Technological or occupational subdivisions are related with the craft. For our immediate requirement, let us examine in brief the last two subdivisions with reference to the POTTER caste in India.

The colour and texture of the pot, the method of throwing or moulding, the technique of beating and firing and polishing, painting or adding raised designs, are some of the technical points on which a large number of POTTER castes are divided. Distinctions are also made by means of simple things like the use of pack-animals and the preparation of bricks and tiles.

Sometimes these sub-groups are named after the peculiarity of their work. In Central India, the Hathagarhiya (hath, hand; garhna, to build or make) POTTERS are those who mould their vessels only by hand. The Kurere use a stone disk for making pots and Chakere employ a wheel for throwing. The Goria (from gorá, fair) potters are those who make white or red pots only and refrain from making black ones. Pattani POTTERS of Gujarat classify themselves according to the type of work they do. Intowal (from inta, brick) make bricks, Khatgarias make tiles, Kulhariwala make kulhars, Wariowala make a special type of pots for storing butter and oil, Otiyas are toy-makers and Mantiwala (from mati, earth) are agricul-The POTTERS of Rajasthan are divided into tural labourers. two broad occupational groups, namely, Khetere (from khet, agricultural field) who are agriculturists and Mathere or Matere the pot-makers. In northern India, the sub-castes among POTTERS are largely occupational. The Bardiya (from balad, oxen) use oxen in their work, while the Gadhere (from gadha, donkey) employ donkeys. The Hatheria (from hath, hand) make pots by hand instead of with a wheel, and the Intpaz make bricks. The Kujagars or Kasagars are those who make beautiful terracottas, smoking-pipes and other artistic objects in pottery.

Thus it appears that among craftsmen, several sub-groups were formed on account of specialization of technique or on account of some point of difference like the use of particular animals for transport. Each caste jealously guards its rights in the trade.

The secrets of the trade are confined sometimes within the family group. For instance, the POTTERS of Chunar (U. P.) do not allow their daughter to learn the technique of glazing pots. Obviously, this sort of professional secretiveness leads occasionally to unfortunate results. The skill of craftsmen sometimes dies with them.

Occupational Mobility

There are numerous evidences to show that occupational rigidity has not always been followed strictly even in the remote past. The rigidity of occupation was perhaps maintained in the beginning for some time, but later on it was subjected to change. And the greatest merit of the Hindu social system lies in this possibility of adaptation.

When we consider occupational mobility, we have to examine how it applies to various groups of craftsmen. Craftsmen are different from peasants because of certain skills they possess. The members of a craft-group have the advantage of receiving suitable training in their respective crafts under ideal family conditions. A POTTER'S son can throw on the wheel more conveniently and skilfully than anybody else. Certain crafts like shoe-making or tanning are regarded as unclean. Only a cobbler can make a shoe, because the work has been entrusted to his caste for generations, and he is not only skilful but also devoted to this craft. Under these circumstances, when we find technological principles governed by caste rules, we have to be very careful in bringing about changes in the field of crafts.

The Present Need

The growth of population among craftsmen, the technological backwardness of their tools and manufacture, the problem of marketing and changing values in the professions are some of the problems which confront our artisans in the present machine age. Such problems naturally lead us to a series of pressing questions which ought to be answered. If we take the craft of pottery, we have several crucial questions to ask ourselves. Should village POTTERS stop their work on account of the introduction of metal and porcelain wares? Should the POTTERS cease to trust their tools with the introduction of modern electrical equipments? Should POTTERS seek jobs in factories, hospitals or schools with the opening of varied opportunities in such establishments? And if we give an answer in the affirmative, the future of handicraft is doomed. If we want to check the pressure on land, if we want to preserve the precious arts of our country, and if we want to utilize the skill of a large number of artisans, we have to reply in the negative. We have to restore confidence among those who have lost it. We have to find ways and means to support them in the face of present-day competition. And for this there is need of a careful approach to the problem of handicrafts. Sometimes, when the approach is hasty and in disregard of cultural factors, the result is disappointing and unhappy. Let me cite a few examples from my field experience.

The Government as well as some private agencies have opened a large number of training centres in villages where POTTERS are trained in their craft. It is a very useful project which deserves all admiration. But it has been observed at many of these centres that the trainees are mostly taught to make such things as have hardly a local market at all. For instance, in one of the centres in the Punjab, it was found that the trainees were being taught to make clay figures of Venus. Such highly artistic and drawing-room pottery can hardly find a place in any village home. Therefore, the trainces return home at the end of their course utterly disappointed, and they revert to the old tradition and do not practise what they learn. The object of the training thus does not meet their needs. therefore, required that the POTTERS should be trained in accordance with their own tradition and a consideration given to local requirements and taste.

A training centre at Nohar (Rajasthan) met with failure because the teacher did not appreciate the local cultural factors involved. Soon after the establishment of the centre, when the instructor started teaching the method of moulding clay figures, he found his trainees restless. One day all of them disappeared and never returned. After a few months, when I visited these POTTERS they told me that moulding of figures is against their religion and therefore they stopped sending their children to the training centre. The POTTERS of Nohar are Muslims.

Obviously nothing can be done in this case except producing such pottery as can be appreciated from the utilitarian as well

as from the artistic point of view. When I visited a POTTER'S house in a place in Maharashtra, they received me coldly as they were highly dissatisfied with governmental schemes. They told me later on that the Development Department had encouraged and aided a non-POTTER community in organizing a brick-making society, whereas it should have been entrusted to POTTERS instead.

But there are instances where the approach has been successful and potters have been benefited. One or two cases may be referred to here. A training centre at Paouta (Himachal Pradesh) started producing a large number of glazed toys under the guidance of an experienceed and intelligent man, a Sardar named Ram Singh. These toys were cheap, attractive and comparatively durable. Glazed tea-pots, cups and saucers and plates of different sizes were also made on a large scale. The motifs and the paintings were in conformity with local interest and taste. Soon these goods found a pressing demand in even remote villages until they captured the market. At Jammu, one Desh Raj started glazing all the earthenwares which were ordinarily prepared for domestic use. Though glazing on red clay has not been very successful in big factories, Desh Raj has shown that if the ordinary red-clay wares can be glazed it may have a good market in the villages. His customers found the glazed wares durable and good for keeping food for a longer time. Desh Raj is not able to cope with the demand of his glazed earthenware at the present moment.

In conclusion, a few words may be said about the introduction of improved tools. We have to see not only to the cost of the tools, but also their adjustment to the conditions and comfort of the worker. For instance, a 'table-wheel' is not likely to be popular among the POTTERS of India as they are not used to such posture of sitting. An improved tool can be adopted only when it is cheap, easily available and adaptable, locally repairable, simple to operate and comfortable to work with.

CULTURE SEQUENCE IN RAJASTHAN

Adris Banerji

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GEOGRAPHICALLY and culturally, Rajasthan is divided into two parts by a natural barrier—the Aravallis, which separates the semi-arid Western Rajasthan from the comparatively more humid and fertile region on the south and east. The present physiographic features of Rajasthan became permanent in the Cainozoic Age.

It is not known with certainty what were the climatic conditions in Rajasthan during the several glaciations and interglaciations.

M. N. Deshpande found choppers, cleavers, flakes and handaxes in the beds of the Berach and Gambhira in Chitorgarh and other places.1 Bichore and Parsoli nulla yielded handaxes etc. S. R. Rao picked up a few implements at Haripura, Rathajna; and Sigoh near Nimabhera supplied a decent assemblage of tools. Tajpura on the Dhangadman on the Pipla-ka-nulla supplied cleavers and pebble tools.2 The earliest of them are the products of Clactonian technique⁸ and later ones Levallois method of working: while the best and later handaxes are distinguished by Acheulean technique. Cleavers belong to this age, and both are generally classified as Madras handaxes from the area in which they were first found. Explorations were continued in the following years when the cliff on the left bank of the Chamli was excavated. This place is near Badoli in Chitorgarh District. The other places explored were Sonita, Bhainsrorgarh and Navghat, all in the same district. An attempt was also made to establish a sequence between the so-called Sohan or pebble tools and Madrasian handaxe

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industries. He concluded that South Rajasthan was the region where the Sohan and Madrasian handaxe industries both met. What is more, the sequence of Gujarat is also found in Rajasthan. It is clear therefore that finds of Old Stone Age tools in south-eastern Rajasthan have generally proved to be a mixed assemblage of pebble and flake tools like those originally found in the Sohan valley of Rawalpindi District and of handaxes found in the old Madras Presidency. This is not peculiar to Rajasthan, but is also the case with the Singrauli basin in Mirzapur District, and between Vijapur and Pedhamli in Gujarat.

There is however a great division between tools found in S. E. Rajasthan and Western Rajasthan. The assemblages and sites discussed above belong exclusively to southern Rajasthan, but are tools belonging to Series I of H. D. Sankalia. The explorations of V. N. Misra⁴ show that in those days Marumada or Marusthali or Marava or western Rajasthan was passing through a pluvial period, and forests in all probability abounded. Flint or flint-like jasper, fossil wood and rhyolite were the raw materials at man's disposal. The tools were for cutting, scraping and piercing. The Old Stone Age men were probably supplanted by farmers, who had a blade culture and a highly developed ceramic industry. No neoliths have so far been found in Rajasthan.

In proto-historic times, which dawned somewhere in c. 2000 B. C., we find a variety of cultures, which staggers us by the complex problems they raise. The date is hypothetical, because, the results of Carbon 14 dating are awaited. Pre-Harappan culture distinguished by ochre-washed ware has been traced by A. Ghosh at Nohr and Sothi, in the Bhadra District of Rajasthan. Formerly this culture was considered to be post-Harappan.⁵ Then we have the celebrated Harappan culture and its successors. We have therefore the following list:

- I. Pre-Harappan
- II. Harappan
- III- Post Harappan

- (i) Painted Grey ware
- (ii) Grey ware
- (iii) Black on Red ware
- (iv) Black and Red ware
- (v) Black on Cream slipped ware

Our knowledge about Pre-Harappan and Post-Harappan cultures in the Sarasvati and Drishadvati valleys, where Stein declared that no Harappan remains were traceable, 6 is chiefly due to the labours of A. Ghosh and his assistants. It has been customary to assume that the great urban civilization of the Indus valley had its moorings in the Baluchi hills. But recent excavations of B. B. Lal and B. K. Thapar have established that Kalibanga can claim some share in its origin. Since the reports of Ghosh, Lal and Thapar are unpublished, it is not possible to discuss the points in detail. explorations carried out in 1950-51, 1951-52 and 1952-53 resulted in the find of more than 100 sites, very rich on account of the original character and variety of cultural remains. than 40 sites containing the remains of Harappa culture, including the fortified type site of Kalibanga were explored. In fact, all the traits of the complex Harappa culture, including their important features, are met with in the deserted ruins of small townships and villages on the banks of the twin rivers Sarasvati and Drishadvati, proving homogeneity of the culture in its eastern periphery.

The next group of sites yielded Grey Ware, either painted or otherwise, associated with a Red Ware impressed with designs. Twenty sites of this culture were traced in the Sarasvati valley and one on the banks of the Drishdavati. The most interesting, however, is the identification of a new culture of the Yaudheya-Kushana period, named after the type site in Hanumangarh District, as Rangmahal Culture. The Rang mahal pottery is also a red ware, and is both of painted and unpainted varieties. The colours are black or rarely crimson. The place has since been excavated by a Swedish expedition led by Dr. (Mrs) Hannah Rydh, whose published report is a monument of industry and scientific care. Painted Grey Ware

has also been found at Bairat by B. B. Lal, K. N. Dikshit at Jodhpura on the right bank of the Sabi in Jaipur District, and Bijwa in Alwar District. But this ceramic has not been found in western or S. E. Rajasthan. The Aravallis seem to have prevented their diffusion. One single plain sherd at Gilund in Udaipur District was probably an import, like Red Polished Ware at Hurra in Bhilwara. It possibly reached the ancient Matsya country (Jaipur and Alwar districts) from Harivana or Kurukshettra (Rohtak, Karnal, Hissar, Gurgaon and Delhi districts). Within the municipal limits of Delhi and New Delhi it has been found at Tilpat aud Purana Qilla. B. B. Lal has found Painted Grey Ware at Bhadasa, Malab and Gohana in Gurgaon District. This was one of the most widely spread cultures, a direct successor of Harappa, at least, at Rupar, Bara and Salaura. Its farthest limit in the east is Vaisali in Muzaffarpur District. Attempts have been made to identify this ware with the Aryans. B. B. Lal has correctly pointed out that 'The evidence suggesting association of P. G. Ware with Aryans is mainly of a circumstantial kind and until positive and linguistic proof is obtained, the equation must be regarded as provisional'.9 In the present state of our knowledge the P.G. Ware people were the only known heirs and successors of the Harappa empire in the valley of the Sarasvati, Drishadvati, Satadru or Sutlej, Yamuna and the Ganga. Early Aryans, according to Vedic tradition, were intimately associated with the first of these river valleys before they crossed the Karnal Gap and occupied the Kuru-Panchala, Antarvedi and Vatsa countries.

It appears that by the 3rd millenium B. C., western Rajasthan had become desiccated; but in the valleys of the Drishadvati and Sarasvati, the twin rivers were still flowing, and bore on their wide bosom one of the parent streams that originated the Harappa culture, as finds at Sothi, Nohar and Kalibanga suggest. At a still later date, say c. 2700 B. C., Harappa farmers and agriculturists colonized this area, doomed to desolation. They reached S. W. Punjab till they were overthrown by foreigners from the west and north-west, one of whom were undoubtedly the P. G. Ware people who reached

the area when the Harappa culture was in decline.10 analysis indicates the same possibility at Mohenjodaro. During this time most probably S. E. Rajasthan, by which is meant Banswara, Dungarpur, Udaipur, Chitorgarh, Tonk, Bhilwara, Bundi, Kota and Jhalawar districts, had a tropical climate, possibly even forests and were inhabited by small agricultural communities. In this cul de sac (i.e. Mewar) thrived one of the principal cultures affiliated to painted ceramic tradition, whose epicentre was not merely the Chambal Valley, but also its tributaries the Gambira, Banas and Berach. They lived in houses of sun-dried bricks or as at Ahar, mud mortar on rubble foundations. They seem to have had wide commercial contacts, as influences of pottery from eastern and northern Iran pointed out by H. D. Sankalia, indicate.11 That it was the capital of a thriving people of some importance is deducible from the fact that Ahar was rebuilt 15 times in proto-historic times.12 Whether it was due to enemy action or natural calamities requires clarification.

That the (iii) Black on Red Ware (BOR) and (iv) Black and Red (BR) are the representatives of two powerful cultural groups has already been hinted. Since both of them have been found associated with one another, it is better to discuss them together. In S. E. Rajasthan the wares par excellence are BR and BOR. The last mentioned ware was distinguished by black designs painted on a red surface. In this respect, Harappa ware too is Black on Red. This ceramic tradition indeed did not die out with the end of the proto-historic age but survived as Raugmahal (painted) ware as excavations at Bhinmal show. They had wide distribution in western and northern India. The first site which yielded BR was Rangpur in Jhalawar District. Though the subsequent detailed excavations might have transformed our assesment and character of Rangpur Culture, they do not in any way belittle the pioneer efforts of M. S. Vats when studies in proto-historic ceramics were in their infancy, and Indologists were ignorant of Black and Red Culture. The other sites in which they have been subsequently found are Lothal 'A' and 'B', Timbarva, Somnath, Amra, etc. BR occurs in the III Phase at Somnath. This phase is divisible into four sub-periods in which NBP occurs in the second. In Malwa, BOR occurred in the earliest period at Mahesvara and Navdatoli associated with Black on Cream slipped pottery and bronze celts.

In Maharashtra, Bahal, Tekwada, Prakas, Jorwe, Kolhapur and Nevasa in the Pravara basin have yielded this pottery. At Nevasa the earliest chalcolithic phase ascribed to c. 1500 B. C.—1000 B. C., 18 contained pottery of fine fabric which was turned on the wheel. The surface as 'matt red' and painted in black. In Period IV, which was occupied after the site had lain deserted for a long time, BR occurs in the Iron Age. 14 The BOR of Nevasa, according to the excavator, was of Jorwe fabric 15 with greater variety of types.

In North India, Ujjain is another site where the sequence of Mahesvara-Navdatoli is found repeated. The dating of the sequence at the site was made bp N. R. Banerji, on the basis of NBP. In the earliest phase ascribed to c. 700-500 B. C., BR has been found with iron. Rupar in Ambala District has yielded BR. Ukhlina in Meerut District has supplied BR, associated with Post-Harappan pottery along with terracottas. At Kanauj a few sherds of BR have been found by K. N. Sinha. The Jayaswal Research Institute has found these at Sonpur in Gaya District. Evidence was so long not available about the archaeology of the deltaic region except generalizations by Dr. R. C. Majumdar. 16 But BR has now been found Chandraketugarh in Mauryan levels with NBP in Period II. In Rajasthan the first site to yield BR with designs painted in white both on the exterior and interior, as well as either exterior or interior, is Ahar.17 They have also been found in various sites in Udaipur, Chitorgarh, Bhilwara and Tonk districts. But in some of these sites BOR is definitely associated with microliths, in others microliths are absent.18 Gilund supplied a 'Dish on stand' of BOR. The area of distribution of BR therefore is very vast and it is closely followed by BOR.

But a very significant point which has cropped up is, that except the inverted method of firing, there is very little common between the BR of various places, as far as fabric, form,

shape and colours are concerned. S. R. Rao states that Black and Red ware found at Lothal 'A' and 'B' differs in surface treatment and colouring from those found in S. E. Rajasthan. I have examined the Rupar specimens in New Delhi; and found that the bowl is totally different from Ahar or other BR found in Rajasthan, as far as fabric, design, form and even colouring are concerned. Even the position of Black and Red differs. Amongst the sites explored by K. N. Puri, the same difference has been observed at Kumaria in Bhilwara District. The so-called Black and Red Ware are divisible into two groups, (i) those bearing painted designs in white on black slip and (ii) those which are plain. Associated are burnished buff ware, coarse grey ware and a plain red ware etc. Banthali, in Tonk District, has plain Red ware, Grey and BR with pinkish buff exterior and black interior.

Black and Cream slipped ware in the opinion of the present writer had its epicentre in Malwa, since it has been found in the earliest level in the Mahesvara-Navdatoli excavations, by The Deccan College Post Graduate Research Institute and Baroda University. The late B. Subba Rao was of opinion that they were reminiscent of Sialk in Iran. Associated ware was BR. B. B. Lal has found a few sherds while excavating Gilund which seem to be exotic at the place. The exact chronological position of this ware in the archaeology of Rajasthan has yet to be determined.

The ceramic sequence of Rajasthan between the decline of the proto-historic culture and dawn of the historical age is not well known, since 32 feet or accumulation at Ahar failed to yield any PG Ware or NBP. The same is the case in Gilund in Udaipur District. It is evident that the Painted Grey ware and BR and BOR culture might possibly have been contemporeneous. Lastly Mauryan cohorts could not occupy S. E. Rajasthan.²⁰ The exacavation conducted at Nagari by K. V. Soundararajan is likely to be conclusive by either confirming or negativing the above conclusion. The establishment of the Mauryan empire and later on occupation of nuclear areas of the Punjab by Indo-Greeks led to the migration of the republican tribes of Vāhika, Madra countries, to Rajasthan.

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ANTHROPO-GEOGRAPHICAL STUDY OF THE SETTLEMENT PATTERN OF A DESERT VILLAGE

A. B. Bose

S. P. MALHOTRA

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Introduction

THE influence of cultural factors on the residential pattern of households has been widely observed. Urban sociologists have used the concept of natural area to describe the tendency among people with the same cultural background to live in close proximity to one (Zorbaugh 1926, Green 1932, Hatt 1946, Gist and Halbert 1948, Shevsky and Williams 1949). Geographers have studied the community space relations of regions (Dickinson 1947). Anthropologists and sociologists in their study of village communities have referred to the existence of castesegregation in residential areas (Mayer 1960, Lewis 1948, Mukerjee 1951). Earlier studies in the Central Arid Zone Research Institute, Jodhpur, on the forms of settlement in desert areas (Bose et al. 1961, 1963) indicated the strong influence of caste and suggested the need for further research on the spatial aspects of rural life and the relationship between caste, kinship and forms of settlement of households. The present paper is the outcome of such a study.

The Setting

(a) Physical characteristics

Village Korna (25° 12′ 30″ N. and 72° 35′ 55″ E.) is in Pachpadra Tehsil of district Barmer. It is located about 36 miles south-west of Jodhpur on the Jodhpur-Shergarh road. The normal annual rainfall is about 8 in., but this is extremely

variable and erratic and occurs mostly in summer. The climate is characterized by extremes of temperature. The mean maximum temperature during May (hottest month) is about 106°F. and the mean minimum temperature during January (coldest month) is about 48°F. The wind velocity is very high from May to September and varies from 9 to 13 miles an hour. The water table varies from 150 ft. to 200 ft. The general relief is flat. Low dunes and a few outcrops of rock and hills break the monotony of the landscape. The vegetation is sparse.

(b) Land use

The village is spread over an area of 18, 581. 6 acres. The land use data show that forests, hills and usar land occupy hardly 4 per cent. of the total area. Approximately 9 per cent. of the area is under permanent pasture and grazing

TABLE 1

Land use in Korna (1961-62)

				Area (acres)	Percentage
1.	Uncul	tivated			
	(A)	Uncult	tivable		
	\ /	(a)	Forests	185.4	1.0
		(b)	Hills and rocks	431.8	2,3
		(c)	Usar land and land unfit for		
		• •	cultivation	98.1	0,6
		(d)	Land put to non-agriculture	110.0	2.4
			use	442.6	2.4
		(e)	Permanent pasture and grazing land	1,659.8	8.9
			grazing land		
				2,817.7	15.2
	(B)	Cultiv	able		
	(a)	Unoccu	ipied governmental land		
	(-/		Banjar	12.4	
		(iì)	Fallow	70.6	
				00.0	0.4
	<i>(</i> • \	- 10	4 6 14 5	83.0	0.4
	(b)		t for cultivation	108.6	
			Banjar Fallow	5,609.8	
		(ii)	Fallow		
				5,718.4	30.8
II.	Cultiv	ated		,	
		(i)	Un-irrigated	9,962.5	53.6

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but the pressure of livestock is still high. There are 206 cattle units per 100 acres of permanent pasture and other grazing land. Out of 442.6 acres of land put to non-agricultural use, 61.0 acres were classified as abadi or residential area, 53.0 acres as dhani or dispersed dwellings, 145.6 acres as roads, 110.2 acres as tanks, and 72.8 acres as land put to miscellaneous use like dharamshala, threshing floor, cremation ground, well, etc. All the cultivated land in the village is un-irrigated, 53.6 per cent. of the land was cultivated in 1961-62 while 30.2 per cent. was left by the cultivators as fallow. In other words, 84.4 per cent. of the land has already been allocated for cultivation. thus, little scope for extending the area under it any further. On examining the relationship between different forms of land use as indicated on the map it is evident that forest and grazing lands, water sources, cremation grounds and settlements are adjacent to one another. Dispersed dwellings usually form clusters and are not altogether scattered and isolated. Threshing floors are near compact settlements.

(c) Water sources

There are four wells in the village, but the water in three is brackish. Only the well at Chandrai has water of an intermediate quality. In most of the settlements water is available for nearly about four months in the year from tanks. But during summer (April to June), long distances have to be traversed for getting water. 35.1 per cent. of the families have to traverese 3 miles or more (each way), 56.5 per cent. have to traverse 1-3 miles, while only 8.4 per cent. have to traverse a shorter distance. Thus the procurement of water consumes a large amount of time and energy of the inhabitants. Apart from wells and tanks, which are community water resources and managed jointly by the village community, some households have private arrangements for storing water. These are of two types, namely, taankas and taankaliyas. The former collect rain water from the catchment while the latter are used for storing water brought in carts or camel back from tanks or wells.

(d) Community facilities

The community facilities in the village consist of 3 schools, co-operative societies, a piao (place for drinking water), a post office, a gram panchayat, a patwarkhana (office of the village revenue official) and a phatak (cattle pound). Of the three schools, two are run by the Government and one is private. The first two are located in two compact residential areas in the village, namely, Village Core and Mool ki dhani. private school is run by the Mahajans for teaching mahajani or the method of carrying on the business of Mahajans. Attendance in the schools has shown a rapid rise (114 students now), but it is reduced during the cultivating season. Students attending school come from households living in the proximity. For instance, out of 114 students on the rolls in the school at the Village Core, 94 (82.5 per cent.) are from the Village Core while the rest are from adjoining villages where there are no schools. Similarly, most of the students in the school at Mool ki dhani come from adjacent residential areas.

The gram panchayat ghar was built two years ago, the expenses being met partly by aid from the Government and partly by contributions from the community. With the introduction of democratic decentralization which seeks to transfer new powers to the people's elected representatives and make them take initiative in developmental activities it was hoped that this community institution will vibrate with life. Factionalism in the village has, however, made this body virtually ineffective. At present one of the three rooms is occupied by the gram sevak (village level worker) and the other is used for postal work. Meetings are held at irregular intervals and initiative in developmental activities is totally lacking.

There are three co-operative societies, namely, Agricultual Multipurpose Co-operative Society, Leather Tanning and Production Co-operative Society and Village Service Co-operative Society. All these are located in the Village Core. They are, however, virtually inoperative.

A piao was constructed about seven years ago by a Mahajan (trader-cum-money-lender). It is on the Jodhpur-

Shergarh road near the bus stand. Adjacent to it a pucca taanka has been built to store rain water for use in the piao. The villagers, particularly Rajput and Mahajan, occasionally bring water from the village tank in carts or camel back and fill the taanka.

The panchayat has constructed a phatak or cattle pound for livestock which stray into the fields of farmers and damage standing crops. Fines realized constitute a source of income.

There are two temples in the Village Core. Only high castes are permitted to worship there. Agricultural land has been allotted to the temples, the produce from which goes to the priest. There are numerous thaans (shrines) in the village. These shrines are believed to be responsive to the prayers of villagers for granting relief from specific ailments or for fulfilling their desires. On appropriate occasions prayers are offered, kathas and kirtans held, and rites and ceremonies performed. While there are some shrines where prayers are offered exclusively by upper castes, there are others where there is no discrimination. In actual practice, however, certain shrines are more popular with some lineages and claus than with others.

There are numerous chhattris or cenotaphs in the village. These have been built to commemorate the valorous deeds of Rajputs who fell in battle or women who committed sati (burnt on the funeral pyre of their husbands). Offerings are made at the cenotaphs by the descendants on appropriate occasions. In some cenotaphs (Bhomiya ki chhatri, for instance) people offer prayers, as it is believed that thereby they will meet with success in their errand.

Cremation grounds are located near tanks. It is interesting to note that segregation is observed even here. There are separate places for the cremation of the dead belonging to higher and lower castes.

There are several common threshing floors in the village. During Jagirdari times, when land was cultivated by sharecroppers (the Jagirdar claiming one-fifth to one-seventh of the agricultural products), the harvested crops were brought to the threshing floor and shares were distributed there. The practice has continued even now, and most households use the common threshing floors on account of help and co-operation that each receives from other cultivators using the floor.

There are no common meeting places or chaupals where people assemble regularly and discuss various questions of interest. Most households have a jhupa, padwa or some other structure for receiving visitors. People assemble more frequently in the homes of influential members of the kin group or of leaders. Shops and houses of occupational castes, particularly the Suthar and the Lohar, are other places where people meet. But this is an incidental meeting among people drawn from different castes and is thus of far less social significance.

A few structures in the village are now in ruins. One of them is an imposing temple which was being constructed by the Mahajans but was abandoned before completion on account of some dispute with the Jagirdar. The Mahajans left the village and even today the descendants do not drink water here since they regard the place as inauspicious. The other dilapidated structure is a dharamshala built for passers-by about sixty years ago by a forefather of the present Jagirdar. When the direction of the road was changed, the dharamshala lost its importance and is now in a ruined state.

Like most villages in western Rajasthan, Korna too has a chabutra or raised platform where Mahajans and other villagers daily cast grains to feed pigeons.

History of Settlement

The foundation of the village (formerly Bhairopur) is said to have been laid on a different site more than 900 years ago by a Rajput. The present compact settlement in the Village Core, however, grew up only 160 years ago. The choice of the site at the base of a hill about 600 yards to the west of the older site was made from considerations of defence. At the new site the village was re-named Korna.

There are now six compact settlements in the village, namely, the Village Core, Opji ki dhani, Mool ki dhani, Palaapra, Chandrai and Pariharon ki dhani. Of these, the Village Core,

Mool ki dhani, Palaapra and Pariharon ki dhani have also got dhanis on the fringes of compact settlements. The settlements Opji ki dhani, Mool ki dhani, and Pariharon ki dhani have the word dhani affixed to them because when the first settlers arrived here they set up isolated dwellings. Subsequently, as the number of households increased through immigration or natural multiplication, compact settlements developed. Palaapra and Moomriaro ka bas are said to be the oldest settlements, much older than the settlement in the present Village Core. The other settlements and dispersed dwellings have been built within the last hundred and fifty years. Palaapra and Opji ki dhani have been named after the first settlers, while Mool ki dhani and Chandrai have been named after women who lived there (the husbands of these women had come to live there with their affines). The other settlements have been named after the gotra or clan of the households which predominantly reside therein.

Growth of Population

The data on the growth of population in the village available for the last eight decades shows great fluctuations during the earlier period. From 1921 onwards, however, there has been a steady increase. In the absence of birth and death statistics it is difficult to weigh with precision the relative importance of different factors. It seems that the earlier fluctuations and even the decline were caused by mortality from famines and epidemics, frequent mention of which is found in the earlier administration reports. Within the last hundred and fifty years or so there has been

TABLE 2 Growth of population in Korna

Year	Population	Variation
1891	1,586	*****
1901	960	626
1911	1,025	+ 65
1921	952	— 73
1931	1,301	+349
1941	1,504	+203
1951	1,618	+114
1961	2,246	+628

negligible in-migration since the cultivated land in the village has already reached saturation point. With improved medical facilities and means of communication, the death-rate has decreased, resulting in a higher growth of population in the last decade (38.8 per cent).

Factors Influencing Settlement

The present pattern of spatial distribution of households in the village is largely a part of social heritage, and the choice of place of settlement was made by the ancestors who first migrated here. The reasons for the formation of compact settlements and of *dhanis* were investigated. These are given in the following table. The responses (multiple) relate to the ancestors of 39 lineages in the Village Core, 42 lineages in other compact settlements and 52 lineages in dispersed dwellings. They migrated to the village at different periods. The data show that availability of land and the possibility of better

TABLE 3

Causes of settlement in dhanis and compact areas

current in the state of the sta												
Causes	Dhanis	Co	Total									
		Village core	Other settlements									
	%	%	%	%								
Land available for cultivation	67.3	15.4	66.7	51.9								
Better agriculture through constant supervision	63.5	_	_	24.8								
Better scope for animal husbandry	9.6	2.6		4.5								
Better scope for vocations other than		4										
agriculture and animal husbandry	11.5	41.0	14.3	21.8								
Relatives living there	42.3	12.8	42.8	33.8								
For rendering service to Jagirdar	1.9	41.0	_	12.8								
Compact settlement in												
accordance with tradition		7,7	19.0	8.8								
Miscellaneous	7.7	5.1	7.1	6.8								

agriculture were the two important factors which induced people to settle in *dhanis* or even in the other compact settlements from where the cultivated lands lay near by. There was no pressure from the Jagirdar for living in compact settlement in the Village Core. He gave protection to the cultivators who felt secure even when they settled away from the *abadi*. There were, besides, no physical factors with definite advantages in favour of settling at a central place. There is, for instance, no

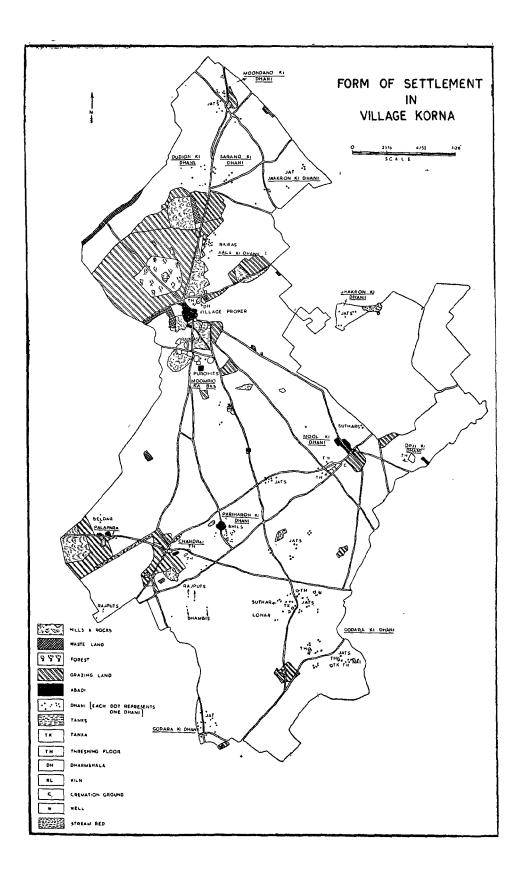
sweet water well in the Village Core. As such, dispersed settlements enabled the utilization of water from tanks which lie near all of them. Most of the occupational castes settled in the Village Core because it is convenient for them to serve their jajmans (patrons) if they live in a central place. Some of them came at the instance of the Jagirdar to meet the needs of certain occupational castes. In the dhanis, households belonging to the occupational castes arrived much later since they followed their jajmans. An important sociological factor influencing the type of settlement is kinship tie. Individuals were drawn to the settlement by the presence of maternal uncles (13.5 per cent.), relations-in-law (18.8 per cent.) and agnates (1.5 per cent.).

Most of the ancestors who migrated to this village were drawn from nearby places. An important reason for this restricted spatial mobility was the poor development of means of communication due to which people did not get news beyond a few miles about the existence of conditions favourable for settlement. A second important reason was the residence

TABLE 4 Distance from which the original settlers came

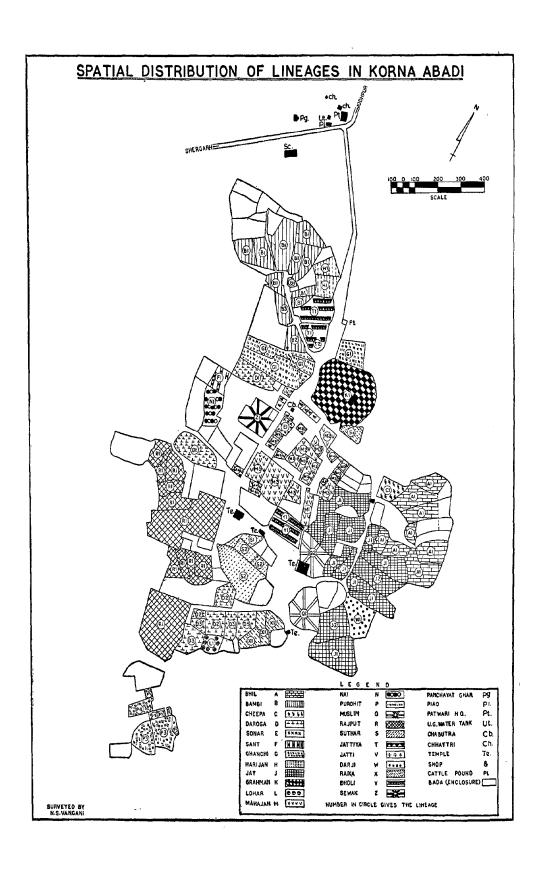
	Dhanis	Cor	Total	
Distance (in miles)		Village core	Other settlements	
	%	%	%	%
<10	50.0	33.3	2 5.6	37.6
11-20	19.3	54.8	20.5	30.9
21-30	11.5	9.5	7.7	9,8
31-40	1.9	_	2.6	1.5
41 and above	15.4	2.4	38.5	18.1
No informatio	n 1.9	_	5.1	2.2
	100.0	100.0	100.0	100 0

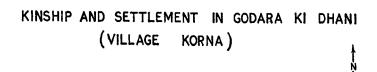
of kin, both affinal, agnatic and uterine, within a short In several cases the migrant families were from the distance. same village. Thus there were 9 migrant families (Kalbi mainly) from Jhanwar (distance 16 miles), 8 (Rajput and their

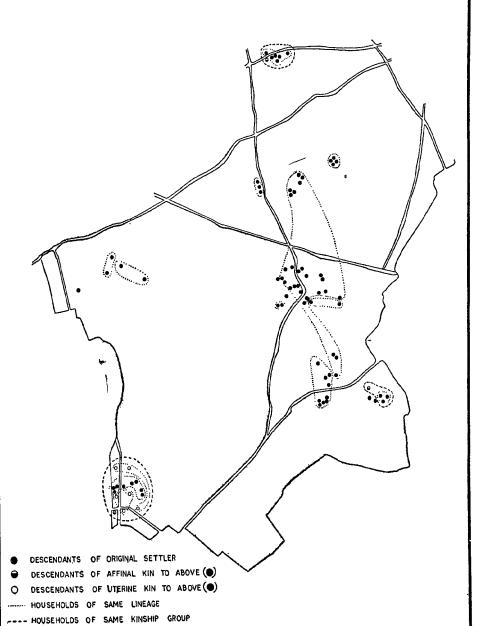


e 5 Caste composition of households living in compact settlements and dhanis

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	Total		-	17	45	۸.	1	-10	2	9	~	m	7	27	1	*	3	- -	4	100	2	,	÷.	36	26			1	1	1	,	405
	Jhanker- on kt dhant												,	97																		16
	Sarno k1 dheni							-			-						1					-										11
	Meomri- aro-ka bas										-	,											(2								3
	Godera kt dheni			2							,			27							-	-			c	x					7	85
11.8	Moondan k1 dhan1	~~ ~ ~ ~ ~ ~ ~ ~												Ž							-											18
and ana	Dudio k1 dhani										-			×																		8
Tements	Asla ki dhani					-1	-			-															4							14
in compact settlements and duants	Pariharon ki dhani	Compact Trand		-	18		-		-	-	-		-	-		-				-	1		7			5	- 1				-	5 22
Tu Cu	Chandra1	tnand		-					4	1						-	9	7	-								-					7
	Palaapra	Compact Dhani		-	11 3		-			•		9		-		-1	-															11 3
	Mool1 k1 dhan1	Compact Dhant		- -	2	-	-		-				-	1 1			129										1			Н	3	38 3
	Opji ki dhani	Compact Dhani			2		-	-									י או		-			-			-	-		-	-		-	2
	Village core	Compact Unant		4	6	2	-	1	S	16	۳.	3	2	12		3			1	14	6	7			3 15	ı		[1	8	126 15
	,			Ghemhi	5h47	Brahmin	Charan	Cheepa	Da. 11	Daroga	Dho I	Chanch1	Harlian	Jat	Satti	Jattiva	Kalbi	Kumbhar	Lohar	Mahalan	Muslim	Nai	PO	Puroh1t	Raika	Ra 1 put	Sadh	Sant	Sau	Soner	Suthar	Total
		1	-	- 0	ง๋ ๓	4	2	မ်	7	00	σ	5	1	2	c	14	15	16.	17.	18.	19	င္လ	21.	225	23	4	25	8	2	88	6	







kamin) from Hotwala (distance 60 miles), 8 (Jat, Raika, Nai) from Agolai (distance 6 miles), 5 (Rajput) from Khera (distance 6 miles), 5 (Kalbi) from Dobi (distance 16 miles), and 4 (Jat, Darji and Nai) from Gowalanda (distance 6 miles). From the other villages the in-migration was lesser in quantity. All the in-migration from these villages did not take place at the same time, nor were all the families bound by agnatic ties even when they belonged to the same caste.

Caste and Kinship Composition

The present form of settlement shows a strong tendency among people belonging to the same caste and gotra to live in clusters. Even the original settlers, when building their houses, chose sites in close proximity to those of their own caste. This was prompted by considerations of social relationship, and permitted social intercourse with members of one's caste or a caste of equivalent rank in the hierarchy. As the data in Table 5 will show, residential segregation according to caste groups exists both in compact settlements and in dhanis. In smaller settlements like Palaapra, households living in compact settlement and in dhanis form constellations of the same caste group. The map of the abadi shows clearly segregation by caste. The most advantageous sites have been occupied by the Rajputs. The Darogas, whose traditional occupation was to serve the Rajputs, live near their former masters. Occupational castes and cultivating castes live both near the centre and the periphery. Among inferior castes, Bhambis and Harijans live in the outskirts, but Dholis are near the centre.

The present settlement of households can also be viewed in terms of kinship composition which may be stated as follows. There are, in the first instance, single households unrelated to others, whether by marriage, adoption or descent. Examples of such households in the village are to be found among Brahman, Sewak, Nai, Lohar, Jatti and Sonar households. Secondly, there are households bound by agnatic ties and linked with other households through uterine or affinal relationship. Thirdly, there are households related to each

other by agnatic ties traceable up to the sixth generation from the founding ancestor. There are several such lineages in the village, particularly among the Jat, Kalbi and Raika. Lastly, there are cases in which different lineages have been linked with one another through affinal or uterine ties. For instance, among Jats a number of marriages have been solemnized with households in different settlements within the village. In a few cases, the households are related by affinal ties in other villages, but often there are parallel affinal relationships within the village itself.

To study the extent to which proximity of settlement is related to kinship ties among them, the position of households was mapped in the abadi area in the Village Core and also in Godara ki dhani so that both the settlement types are represented. The maps show that in both there is clustering not only by caste but also by lineage, since in the patrilineal structure of society, agnatic ties have much greater influence on the proximity of settlement. Again, there is greater residential proximity among more immediate agnates. Uterine kin and affines influence the pattern of settlement of households when they come to live with their maternal uncles or relations-in-law and settle near by. In course of time, affines and uterine kin have their own lineage groups. Thus each kin groups which settlement has one or more extended dominate the settlement population and influence the pattern of social, economic and political life of the village.

SUMMARY

The findings in this study may be summarized as follows:

(i) The village has both compact settlements (207 households) and dispersed dwellings (198 households). The pattern of land use shows that 15.2 per cent. of the village area is uncultivable. In 1961-62, 53.6 per cent. was cultivated while 30.2 per cent. was treated as fallow. Forest, grazing lands, water sources, cremation grounds and settlements are adjacent to one another. There is acute scarcity of water.

- (ii) The present population of the village is 405 households. Within the last hundred and fifty years or so there has been negligible in-migration. The growth of population during 1951-61 has been 38.8 per cent.
- (iii) Availability of land and the possibility of better agriculture were two important factors influencing the form of settlement. Other factors were kinship ties, the protection given to farmers even when they settled on their lands, influence of tradition, and the desire of the Jagirdar. Most of the migrants to the village came from near-by places.
- (iv) The present form of settlement shows clustering not only by caste and gotra but also by lineages, since in the patrilineal structure of society agnatic ties have much greater influence on the proximity of settlement.
- (v) Uterine kin and affines influence the pattern of settlement only when individuals come to live with their maternal uncles or relations-in-law and settle nearby. In course of time they have their own lineage groups. Thus each settlement has one or more kin groups.

ACKNOWLEDGEMENT

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BOOK REVIEWS

History and Culture of Bengal. By A. K. Sur. Chakravarti Chatterjee & Co., Ltd., Calcutta. 1963. Pp. 231. Rs. 7.

The present book covers a period of over two thousand years in the history of Bengal. To compress this within the compass of less than 250 pages is itself no mean achievement.

The author has consistently tried to prove that Bengal was laid under the influence of numerous cultures. The Austric peoples left a substantial contribution in the early growth of Bengal's civilization. Jainism, Buddhism and the creed of the Ajivika Sect also played a great part in moulding the religious thought and practices of the people even after they came more directly under the influence of Brahmanism. The Tantras exercised a strong influence, and the Tantras were shared by Buddhists and non-Buddhists alike. In later times Bengal also developed a special school of sculpture, which left its impress on parts of the neighbouring provinces.

In some respects the author feels in accord with the ideas once sponsored by Haraprasad Sastri with regard to the individuality of Bengali civilization. He has taken great pains to adduce proofs of this from various elements of cultural history gleaned with care over a long span of historical time. The book closes with an account of social, religious and literary developments during modern times. This has been summarized with ability.

We are sure the book will be received well by a growing circle of readers who are interested as much in political history as in the rise and fall of civilizations.

Nirmal Kumar Bose

Gorkhas—The Story of The Gurkhas of Nepal. By Lt. General Sir Francis Tuker. Constable & Co., London. P. 319. 45 shillings net.

Lt. General Sir Francis Tuker writes about Nepal and the Gurkhas on the basis of intimate personal knowledge and of extensive reading. He presents the tangled political history of the country from early times to the present day when popular

forces have arisen in a land so long dominated by feudal lords. The part played by various elements of the population like the Thakur, Newar, Gurkha, Kiranti, etc. has been ably delineated. The role played by different personalities in recent times has also been described in detail.

It is apparent that the soldier-author still believes in carrying the White Man's Burden. He feels happy when a ruler of Nepal goes on pilgrimage 'from the barbaric social and political climate of Kathmandu into the most modern and highly civilized community of the day' (England). Over Nepal 'broods all the evil spirits that the Brahman mind could conjure from the depths' (p. 139). He feels wretched when he witnesses the rise of popular For, 'no good, only harm has yet to come of the attempt forces. to lather foreign democracy over feudal Nepal...It is a thousand pity that its careless, gallant highlanders should be required to share in this fate'. These are the highlanders (and their Ranas) who have heroically and nobly served the interests of the British Crown, which are evidently identical with those of Civilization. 'Civilization is poorer if democracy strips itself of generous and noble people' (p. 270).

In anthropology one expects a person to try and rise above personal sympathies in order to gain an objective view of phenomena as far as that is possible. Therefore, the only lesson which an anthropologist can draw from Lt. General Tuker's labours is how not to write a book when one does not feel oneself in sympathy with an alien civilization. When one fails to appreciate the pains and strivings of a people, it is better to keep quiet rather than fatten one's vanity by ruminating over the smallnesses of others. And smallnesses do not belong to one community alone.

Nirmal Kumar Bose

The Evolution of Theistic Sects in Ancient India. By Sudhakar Chattopadhyaya, M. A., Ph. D. Progressive Publishers, Calcutta. 1962. Pp. 205 + xv. Rs. 12.50.

In the present book Dr. Chattopadhyaya has dealt with the origin and development of the various sects in ancient India. The period convered is from the earliest times to the age of Sankaracharya.

The book is divided into three broad sections, namely, the Age of Formation, the Age of the Scytho-Kushanas and the Age of Early Trantricism. Within each of these chronological sections, the author has dealt with the Saivas, the Vaishnavas and minor sects like the Saktas and Sauras. Practically all available material with reference to these sects have been utilized; and one has to admire the critical discrimination displayed with reference to the assessment of each piece of evidence.

The author has taken pains to show how the various theistic cults incorporated from time to time elements of foreign origin. Sometimes the source was Dravidian or tribal; sometimes the elements were furnished by contacts with countries across the Himalayan border towards the north-west. Although it is undoubted that elements were thus added in order to enrich the content of Brahmanical theology and rituals, yet one should not overlook the fact that the former were recast in accordance with the genius of Brahmanism in a large number of cases. One has to explain the causes of this dominant character of Brahmanism in order to understand more fully the federation of cults which evolved under the popular name of Hinduism.

It has appeared to the reveiwer that discussion along these lines has sometimes been rather brief. There is no suggestion that the conclusions are wrong; but a fuller discussion might have proved more helpful in several cases. One may be pardoned if one guesses that this has been partly due to the demands of economy in size and cost. But sometimes it is better to be more scholarly and less economical.

We are sure this authentic account of a fascinating aspect of Indian civilization will prove welcome to scholars in India and abroad.

Nirmal Kumar Bose

Rigveda-Samhita. Bengali translation. By Romesh C. Dutt. (Original edition 1885 A.D.) Reprint 1963. Jnana-Bharati, Calcutta. Pp. 61+633. Rs. 40.00.

The present edition of Romesh C. Dutt's Bengali translation of the Rigveda will be warmly welcomed by lovers of Bengali literature. Dutt's translation has long been out of print and the present editors, namely, Debi Prasad Chattopadhyaya and Moni Chakravarti have reprinted the book with the addition of a number of useful essays.

Professor Suniti Kumar Chatterjee's critical account of modern researches on the Aryans and his comparison of Vedic literature with similar religious literatures from other parts of the world provides a mine of information. The editors themselves have furnished a lucid introduction to Vedic literature in general. Professor Sashibhushan Dasgupta has presented an essay on the literary achieve- ments of Romesh Ch. Dutt, while Shri Prabodhram Chakravarti has prepared a biblography of the latter's works.

What is remarkable in Dutt's translation is the accuracy, objectivity and rationalism which he brought to bear upon the task of interpreting the Vedas. Professor Suniti Kumar Chatterjee recommends the same critical, rational outlook and has quoted a remarkable passage from the writings of Mahamahopadhyaya Haraprasad Sastri in which the latter has displayed a freedom from bias which is all the more remarkable because it comes from an ardent Brahman.

In the account of Vedic literature, the editors have drawn comparisons between the magical ideas current in many parts of the Vedas with similar ideas and practices in vogue among the indigenous populations all over the world. In this, they have followed the lead of Professor Winternitz. An anthropologist may perhaps be permitted to point out that in an attempt to understand an alien culture it is not always enough to trace some ideas to their origin; it often becomes equally necessary to pursue those ideas and rituals in their changing functions. A house may be built for one perpose and then used for many other purposes.

The Vedic period itself was not of short duration; and one can venture to suggest that the meanings of words and rituals may have also become altered in course of time. They could not have remained constant as at origin, as the migration of the Vedic people and their growing wealth after coming into contact with other agricultural populations must have brought about fundamental changes in their life. These, naturally, would have led to giving new meanings to ancient words and rituals, and finding new significances for them. It will be therefore good if a study of the historical development of Vedic thought is taken up by future scholars.

And to this end, the present edition of a very reliable transla-

tion will naturally contribute to a large measure. Our congralulations are due to the editors on account of the painstaking work which they have undertaken. They have done an excellent job.

Nirmal Kumar Bose

From History to Prehistory at Nevasa (1951-1956). By H. D. Sankalia, S. B. Deo, Z. D. Ansari and S. Ehrhart. Department of Archaeology and Ancient Indian History. Deccan College, University of Poona Publication No. 1. Poona 1960. xxxv+549, 213 figures (including plans and maps). Rs. 60.

A number of Chalcolithic sites were discovered by M. N. Deshpande in the valleys of the Godavari and Pravara rivers. Subsequently, the Deccan School discovered sites ranging from the Palaeolithic to Muslim-Maratha periods. This in itself is a noteworthy achievement.

In the first chapter of the book, Dr. Sankalia presents a historical outline of bygone peoples which impresses us, unfortunately, as conjectural to a large extent. The report also presents plans, sketches, photographs etc. and concordance of layers which are of substantial value.

Several methods of dating have been employed, including the C-14 test. But in dealing with the Early and Middle Palaeolithic periods there seems to be a little uncertainty. Thus, although an in situ fossil of Bos namadicus Falconer has been discovered, the stratum has been relegated to the Upper Pleistocene. It is, however, generally agreed that Bos namadicus Falconer belongs to the Middle Pleistocene. Index fossils are perhaps a more dependable guide than several other kinds of evidence.

The culture sequence at Nevasa also shows some apparently weak points. Thus, on page 76, it has been stated that pebbles were not used for manufacturing tools. Yet on page 82 of the same chapter handaxes of pebbles are taken to comprise a class by themselves. Moreover, how can a single tool be a hammer-stone and chopping-tool at the same time?

In regard to the sequence of terraces as described in Appendix VI the position does not seem to be thoroughly convincing. Sankalia states that the second aggradation resulted in silt deposits and the last aggradation is denoted by loose gravels

including kankar. Perhaps a more detailed analysis of the sedimentary deposits is called for than is in evidence.

The culture sequence at Nevasa is an important effort at reconstruction and it will inspire new work in the same direction. Excavations in Andhra and Karnatak might throw new light on the problem of culture-movement. One only hopes that the work in Nevasa and the neighbourhood will be carried out in greater detail.

A. K. Ghosh

India: The Country and Its Traditions. By Jean Filliozat. Prentice Hall Inc., Englewood Cliffs, N. J. 1962, Pp. 276. \$15.00.

In this book the author attempts a stupendous task. India is a land of wide diversities. Its teeming millions live in villages and cities which in point of time embrace many centuries. The diversities in language, culture, religion and wealth are many. But inspite of all this, there is also an abiding unity. There is a conflict between the past and the changing present. How far the past would yield is yet to be shown. Our life-ways and thought-ways are still profoundly influenced by the past. Peace and gentleness are the twin symbols of our national character. Co-existence is deeply embedded in our life. It is basic to Indian thinking. It has grown out of a general spirit of tolerance of different faiths, different cultures and different patterns of behaviour. Among political philosophies, we have been able to develop the three-fold concepts of nationalism, democracy and socialism. While in other countries each of these concepts has led to upheavals and wrought havoc, India has been upholding them successfully against heavy odds.

The book is mainly intended for the foreign reader, but for an average Indian it is also interesting. In a small compass it gives a picture of the country, its life and its traditions. The wealth of illustrations adds to the value of the book. The getup, printing and photographs leave nothing to be desired.

There are a few inaccuracies which are obvious to any well-informed reader. Some of these may be due to an inadequate understanding of the social situation. On page 67, it is said that the attitude of devotion to husband led in its degenerate form to the sacrifice of sati. The fact is the other way round. When

devotion to the husband reached such heights that it was impossible for her to live after his death, she became a sati. The act itself was regarded a highly virtuous act.

On page 86, with reference to Banaras and other holy cities it is said that the old and the sick retire there to die so that their ashes may be scattered over a sacred river. The ultimate objective is to go to heaven by dying in a city like Banaras. Dealing with the position of women in India in page 66, the author makes an atrocious statement to the effect that women act as domestic servants to their husbands and even to their children. In most societies women look after the household and the children and the fact that they serve them with love can by no stretch of imagination lead to the position taken by the author.

The Tulsidas Ramayan is said to have been written in the 15th century, which is wrong. The Ramayan was written one century later. The author cannot appreciate why there are so many charitable institutions in the country in spite of the Hindu attitude to abandon the unfortunate man to his wretched state. He has only to look up Hindu tradition with regard to the merit attached to charity.

Two spelling mistakes of famous names may be pointed out. They are Dadabhai Naorozji (p. 195) and Ramanujan (p. 199).

Inspite of these blemishes, this is an important, valuable and attractive publication.

Sachchidananda

L'Archeologie de Delta du Mekong, par Louis Malleret. Tome III: La Culture du Fou-nan. Paris, 1962. Ecole Française d'Extreme-Orient.

This is the 3rd part of Louis Malleret's extensive reporting on the archaeology of the Mekong Delta (former Cochin-China, now South Viet-Nam). Like parts I and II (reviewed here earlier), the present Tome III is composed of two volumes: the first one (500 pages) gives a detailed description of the archaeological finds in the Mekong Delta and the conclusions arrived at. The second volume consists of over one hundred pages of photographs (some in colour) of hundreds of objects: jewellery, precious stones, utensils, coins, skulls, etc. witnessing to the ancient past of this region.

As we noted in the review of the previous part, there is ample evidence of the deep influence of Indian culture in the old civilization of the Mekong Delta. Up to the 8th century A. D. Fou nan (southern part of South Viet-Nam) must have been a centre where sea and land routes converged and where different cultures met, and whence they spread. This relatively high civilization somehow perished—in what cataclysm is not clear yet.

F. E.

Social Science, An Introduction to the Study of Society. By Elgin F. Hunt. Second Edition, 1961. New York, The Macmillan Company, Pp. ix + 887.

Nowadays there is no dearth of introductory manuals of sociology. The market is almost flooded with them, especially with books coming from USA. It seems to be a custom that the sociology department of every American University brings out its own textbook. But the pity is that most of these books are prohibitively expensive for Indian purses; the book in question costs no less than 8.50 dollars.

Hunt's book then, is one of these textbooks, not better, not worse than the others, but not likely to dominate the field as the books of MacIver or Bottomore have done or are still doing. It has the characteristics of books of its kind: perfect printing and presentation, impeccable language, well-chosen illustrations and even jokes, good references for further study at the end of each chapter. Hunt has the added advantage that he avoids the intricate sociological jargon that one finds at times in other books of sociology. But all this does not hide the weak philosophical substructure of the sociology it propounds, and which is also a characteristic defect of many American sociology manuals.

Hunt's book gives a nearly perfect introduction to a study of Society, but the pity is that it is the American society, and with that our Indian students are not much helped. We need Indian sociology manuals, but the time is perhaps not yet ripe for such solid books which can compare favourably with their foreign counterparts. At present too many of the books written by Indian sociologists use a western framework and fill it in with undigested Indian illustrations and examples. The best way to study Indian society at present is to proceed with the analysis

of case-studies on Indian social conditions, some of which are very good.

Hunt's book is an example of what we may expect from our own sociologists in a matter of 5 or 10 years.

M. V. d. B.

Readings on Race. Edited by Stanley M. Garn. Published by Charles C. Thomas. Springfield, Illinois U. S. A. 1960. Pp. viii + 281 + 14 illustrations. \$6.75.

Altogether seventeen original papers by nineteen distinguished authorities have been included in this volume. The contributors bring out the bearing of genetical mechanisms on the past and present of human races. In this collection physicians, physiologists, population geneticists, serologists and biochemists have joined with physical anthropologists to give a new insight into the races and people of the world.

Coon, Garm and Birdsell described a system of thirty local races in 1950. In the same year Boyd described a system of six geographical races and later extended it to thirteen in 1958. It is evident from the two papers included in chapter II that despite inevitable differences in conceptualization and approach the two systems are drawing closer to one another.

In the chapter on Evolution and Race, Garn draws two main conclusions, namely, human races are subject to evolutionary change and, secondly, the particular traits by which races distinguish themselves are subject to natural selection. How the strength of the different races varied with technological advance has been dealt with by Hulse. Three technological revolutions, namely, agricultural, industrial and one in sanitation and medicine are said to be responsible for the present population sizes. It has been argued that climate plays an important role in bringing about racial differentiation in man. Robert discusses basal metabolism (defined as the minimal heat production of the body when it is at rest), body weight, race and climate.

The ecological significance of the results has been discussed and some genetic influence suggested. Weiner indicates the functional basis of the nasal index—climate relationship. Baker discusses the biological adaptation of man to hot deserts. Using an experimentally developed model for resistance to desert temperature

stress, it has been shown that a linear, acclimatized man with brunette skin and low body fat would be the best suited individual for work under hot desert conditions. It means that man has to some extent been genetically adapted to the conditions found in a hot desert. Physiological regulations and the origin of human types have been discussed by Wilder. Livingstone describes the mechanism of disease-selection and race with special reference to sickle-cell gene distribution in West Africa. Glass and others analyse the causes of variations in blood groups and other gene frequencies in small populations. In dealing with natural selection and human polymorphism, the main conclusion drawn by Allison is that heterosis is an important mechanism maintaining variability in populations of sexually reproducing and normally out-breeding species.

On the whole, the compilation reflects the advances made in the field since 1950.

S. P. Gupta

Hor Bapla Puthi — (Part I)—A Santal Marriage Book. By Stephen H. Murmu, Published by the Benagaria Mission Press. 1961. Rs. 4.

The book is a contemporary record of a very important social custom, namely, marriage, in the life cycle of a Santal couple and their society by an author who belongs to the same community. The first reference to marriage customs of the Santal is found in Mare Hapramko reak' puthi as related by Kolean. But the author of this book has toured extensively throughout the Santal Parganas and recorded faithfully what he has seen and heard. Naturally it has more reliability as a record of facts in the mid-twentieth century.

Marriage is one of the most important events in the life of Santals. They live in the lap of Nature, see how birds in the woodlands live in *juri* or couple and feel how romantic and natural it is to live in two's. The impelling force that brings the two together is love; and this is solemnised in marriage or bapla. The romance of the young is endorsed by parents and society. But there are circumstances which do not foster such ideal and desirable marriages.

But Society on the whole endorses the silken tie of love,

although some of these marriages may not be to the liking of the parents. Thus we find there are varieties in the form of marriage in Santal society. The author has described in detail all these forms. There are eleven forms of marriage, namely, Sadai bapla, Galaeti bapla, Tunki dipil bapla, Sangha bapla, Jawae kirinok bapla, Hiram Cetan bapla, Or ader bapla, Nir bolak bapla, Iputut bapla Apangir bapla, Kundal napam bapla.

On analysis it is clear that the rituals and ceremonies in certain marriages are simple and expenses low and in some others simpler still and cheaper. It will be an unfortunate thing if, due to the impact of contact with neighbouring societies, customs are changed and made more costly and less simple. The peace reigning in Santal society will then disappear. Judged from that angle, this book is an invaluable record of marriage customs of Mare Disom. Similar survey records of marriage customs of Hor bapla in Orissa and Bengal may be attempted by the author in order to complete his opus. This book will thus be a source book to be followed for correct traditions in future. Here lies its value.

The language of the book is current simple Santali, easier than the cryptic difficult Santali of the Mare Hapramko reak' puthi.

It is hoped that the companion volumes of this book which the author has promised to publish later will be equally illuminating and authoritative.

A. C. Banerji

Land and People of Tribal Bihar. By Narmadeshwar Prasad, assisted by R. O. Dhan, B.B. Varma, S. Prasad, T. R. Sharma, W. H. Ansari. and H. Mohan. Bihar Tribal Research Institute, Government of Bihar, Ranchi, 1961. Rs. 15.00.

The book is divided into four parts. The first part presents a geographical, linguistic and cultural picture of tribal India. Here an effort is also made to present the general problems of Indian tribes. The second part describes the material and human resources of tribal Bihar, i.e. Chota Nagpur and Santal Parganas. In the third part, a separate descriptive account of twenty-eight tribes of Bihar has been given.

The last part presents a general treatment of tribal organization, in which the racial composition, economic and social organization,

religion, education, and languages of the tribes are dealt with. There is a special note on tribes in transition.

As most of the materials are obtained from published sources it will serve as a useful book of reference.

B. Minz

Impact of Industrialisation on Bihar Tribes. By Narmadeswar Prasad & Arun Sahay. Bihar Tribal Research Institute, Ranchi Govt. of Bihar. 1961. Rs. 3.

This is a report on the impact of industrialization on the tribals working in four industrial localities, namely, Hatia, Noamundi Jamshedpur and Khunti. The report has been prepared after preliminary investigation carried out in these places. It gives some idea regarding some of the changes occurring in tribal life. But any one interested in the deeper effects of industrialization on tribal values would find the report somewhat superficial. The book is unfortunately marred by printing mistakes.

B. Minz

Bharatiya Samaj-men Janajatigan. By Narmadeshwar Prasad assisted by the Research Officers of the Bihar Tribal Research Institute, Govt. of Bihar. Ranchi. 1961. Rs. 3.

The present book written in Hindi is a description of the tribes of India with particular reference to Bihar. It presents a picture of the most obvious and important aspects of tribal culture, such as village organization, social organization, economic organization, political organization, religion, etc. Some of the important tribal problems have also been enumerated and remedies suggested.

Eut anyone who is already acquainted with tribal life would certainly expect that a book published by a Research Institute should be of a higher standard. One easily discovers that the book has been prepared without thorough investigation. This becomes obvious from page 25 (3rd paragraph) where it has been said that Bhengra is one of the Oraon clans. I am afraid it is one of the Munda clans. On the same page, the statement that the offices of the Mahato and the Pahan among the Oraon are hereditary does not seem to be correct. The office of the Mahato may be hereditary, but that of the Pahan is not, because in most Oraon villages the Pahan is elected after every three years.

Indians of North America. By Harold E. Driver. The University of Chicago Press, Chicago. 1961. Pp. xviii + 668. 25 plates, 38 maps and 44 figures. \$10.95.

In the first chapter on the origin of the Indians, the author has given the most plausible and convincing arguments how, about fifteen to twenty thousand years ago, the first infiltrators reached Alaska from north-east Asia through the Bering Straits. explains the mongoloid racial element in the American Indian tribes. In the second chapter he has divided North America into fourteen major culture-areas, namely, the Arctic, Sub-Arctic North-West Coast, Plateau, Plains, Prairies, East, California, Great Basin, Baja California, Oasis, North-East Maxico, Meso-In the chapters that follow America, and Circum-Carribean. he has described subsistence patterns, housing and architecture, clothing and crafts, education, religion, magic and medicine, art and music, exchange, trade and transportation, property and inheritance, marriage and the family, government and social control, personality and culture.

The maps, 38 in number, are very useful in understanding the cultural life of the Indians of North America.

It is one of the best books on the Indians of North America and should serve as a model for Indian anthropologists engaged in tribal research.

A. B. Sarma

The Confucian Persuasion. Edited by F. W. Wright. Pp. 390. Stanford University Press, California. 1960. \$ 8.50.

The Confucian Persuasion, a collection of eleven very critical and thought-provoking essays, is the result of the 1957 and 1958 conferences on Chinese thought sponsored by the Association for Asian Studies.

Unlike Hinduism, Buddhism, Christianity and Mohammedanism, Confucianism is not overburdened by metaphysical and supernatural theories. It is a moral system based on practicality. Its chief strength lies in its flexibility and adaptability.

Out of 390 pages, 63 pages have been devoted to critical notes, while an informative introduction has been presented by the editor at the beginning of the volume.

The Cambridge Ancient History Fascicles. Edited by I. E. S. Edwards, C. J. Gadd and N. G. L. Hammond. Cambridge University Press, 1962.

The eleven published fascicles in the Cambridge Ancient History series are on Chronology, the Cities of Babylonia, the Old Kingdom in Egypt, Anatolia, the Middle Kingdom in Egypt, Troy, Egypt from the Death of Ammonemes III to Sequence II, Egypt: Internal Affairs from Tuthmosis I to the Death of Amennophis III, Greek Settlement in the Eastern Aegean and Asia Minor, and the Religion and Mythology of the Greeks.

The standard of scholarship is naturally of a high order.

S. N. Sinha

History and Philosophy of Science. By L. W. H. Hull. Pp. 327 + xii. Longmans Green and Co., London. 1959. 25s.

The present book is a commendable attempt at bringing home to the layman the essential features of scientific development from the time of the Egyptian and Babylonian civilizations to the present day. It is divided into ten chapters, namely, Early Science, The Athenians, The Alexandrians, The Middle Ages, Celestial Geometry, Celestial Mechanics, Changes of Outlook and Method, Other Developments in the 16th and 17th Centuries, The 19th Century and Evolution, and Epilogue: 20th Century Trends. It traces the development of all branches of science with the exception of medicine and engineering, and avoids the use of technical language as far as practicable.

With growing specialization in the field of knowledge, the danger of mutual unitelligibility is on the increase. The gap between science on the one hand and arts and philosophy on the other threatens to become wider and wider. But in recent years a large amount of literature for popularzing Science and making the common man conversant with its findings and far-reaching philosophical implications has been published. The present book is a valuable addition to such literature.

Dineswar Prasad

First Report 1962. Calcutta Metropolitan Planning Organisation. Calcutta. Pp. 80. Rs. 12.50.

Calcutta's physical problems have, for a fairly long time, arrived at a state of acute emergency, and the efforts of West

Bengal to set up a planning body to tackle with the problems has been a welcome measure, long overdue. The Calcutta Metropolitan Planning Organisation came into being in 1961 and began functioning as a full-fledged unit in February 1962. The report under review presents a summary of the work that has been accomplished in course of one year.

Calcutta, being the economic focus of eastern India, practically serves a hinterland stretching from Assam to Uttar Pradesh, Madhya Pradesh and Orissa. Such an extensive sphere of economic influence naturally has contributed to the size and importance of the city and port, and to its position as a focus of employment. The result has been a phenomenal rise of population and congestion, aggravated further by refugee influx after the Partition. These aspects have led experts to try and prepare a comprehensive development plan, covering a metropolitan district of roughly 400 square miles, which is the ribbon-like conurbation on either side of the Hooghly river from Kalyani to Uluberia. The magnitude of the task in hand can be very well appreciated.

The plan has been projected for a date two and a half decades from now and apparently has been phased into an immediate emergency plan and a long-term plan. A year of investigation by a team of foreign consultants and local experts has resolved the immediate problems into the following four:

- (1) Salvaging Calcutta's economy by the construction of a new port at Haldia, a decision which was taken some time ago by the Port Commission. The planning of the town connected with the activities of the proposed port have been entrusted to the C. M. P. O.
- (2) Relieving congestion in the trans-Hooghly traffic by building a bridge, a mile south of the present Howrah Bridge, and later on another in the north. Though this is not mentioned, the riverside jetties of the Port Commission will have to be abandoned when the bridge is built.
- (3) Increasing the water supply by the construction of largediameter tube-wells in several zones of the conurbation.
- (4) Relieving housing congestion in the city by an experiment of combined work-cum-living centre in Maniktala, which will include bustee rehousing, middle-income and low-income housing.

It will be economical if the suggestion of private investment in the venture can be carried out in practice.

It seems that although several research projects are under way, the more direct day-to-day problems of living in the city itself have not been given the priority that seems to be their due. Clearly, the main development plan hinges on an improvement of the overall economy; and it is hoped that this would eventually finance the services rendered by means of revenue exactions.

It is thus obvious that the C. M. P. O. feels that any immediate improvement of the city is difficult of achievement unless the overall economy of the region is also replanned. This means revolution rather than reform. Are we then to understand that no substantial improvement is possible in the city under present conditions? At least this seems to be the idea underlying the present report. The duties assigned to the C. M. P. O. are moreover limited in certain respects; they are here to probe and recommend only, and are not responsible for implementation.

The public have yet to understand the full implications of a developmental plan. For planning, whether urban or regional, is still a new concept in India. From this point of view the First Report of the C. M. P. O. with its maps, diagrams, sketches, plans and photographs, will perhaps serve the useful purpose of educating the public in the right direction.

Meera Guha

The Asur. By K. K. Leuva, Pp. xviii + 234. 1963. Adimjati Sevak Sangh, New Delhi, Rs. 17'50 nP.

It is a readable and an informative piece of work by one who has spent considerable time among the tribals of Chotanagpur. The information and materials in each chapter are well supported and illustrated by photos and statistical data. One of the most outstanding features of this book appears in the last chapter. It deals with the future of the tribal people in general and that of the Asur in particular. The author has made an attempt to propound a theory about tribal integration with the bigger cultural groups. In this process of integration the author suggests that due respect for tribal culture be given and tribal traits—honesty, truthfulness, hardworking, and joyful living—be preserved at all costs. He maintains

that education is one of the most effective means of assimilation or integration of the tribals with the non-tribals. Here he strongly supports the idea of education through the mother tongue even among the tribal people. For the welfare of the Asur it is suggested that an all-round programme related to Asur agriculture, their use of forest product, and their iron smelting, be planned. Without a total approach no effective welfare work can be done.

The descriptive part of the material and social life of the Asur is well taken care of in the book. The minute details show that the author has taken adequate pains to gather the necessary materials for the book. There are, however, certain details which need further research and clarification. One such point is the Asur's relation to the Munda and the Vedic Asuras. The author has tried his best to make a strong case for Asurs' relation to the Vedic Asuras. His negative arguments to disprove their relation to the Munda does not convince the reader. He concludes that the Asur were taken as the enemies by the Munda and there was fight between the Munda and the Asur. And so the final conclusion is that the Asur were not related to the Munda. Fighting cannot be a deciding factor in this case. Fights used to take place in the past even within the same tribe. The blood test, language relation and the racial traits do not completely disprove the Asur relation to the Munda.

There are some factual mistakes in the book. On page 20, the author gives the impression that the Munda and the Oraon welcome Christianity and the Asur have always opposed missionary activities. Some individuals might have done so but very fact that in Dumarpat the Asur accepted Christianity disproves this contention. have been described as thatched with straw homes because they could not get the tiles. This is partly true, because most of the Oraons have tiled roofs. The Sardars have been described as the political leaders of the Munda only. Historical facts prove that the Sardars were the political leaders of and from amongst the Oraon also. Tribal terms have not been carefully used and interpreted. The meaning of Kurukh as the 'Sons of God' is questionable. The term Panchayat used for the traditional tribal political unit at the village level is misleading. The usual term is Panch. Some totemic terms among the Asurs are purely Oraon. Either the informent might have forgotten his own language or the author did not care to find the Asur term for the same.

The non-Governmental welfare body, the Adimjati Seva Mandal, has been praised for its work among the Asur. I am not against it. But the author should be fair enough to give at least some credit to other bodies working among the Asurs for what little they have done. The Roman Catholic Church is one of such bodies. No definite word of appreciation for it is found in the book. true that the author praises the missionary identification with the tribals. It is recorded that the tribals accept the missionary and resist the Govt. officers. The author tries to state that the principle of identification is most basic for welfare work. he does not give a deeper idea of the principle because he tends to make excuses for the Govt. servants on the plea that they have too many responsibilities to shoulder, and that they do get too short a period of time to do the heavy job. Further, the idea of raising up the tribals to the level of the non-tribals itself suggests a sort of superiority on the part of the non-tribals. Identification with the tribals in the missionary sense means much more than to have sympathy and fellow feelings with the tribal people. It means to live, to be and to die with the tribals if need be.

- Inspite of the above weaknesses the book is commendable and the author deserves appreciation and praise.

N. Minz

Himalayan Polandry: Structure, Functionining and Culture Change A Field-Study of Jaonasar-Bawar. By D. N. Majumdar, Asia Publishing. House, Bombay, 1962.

The Khasas of Jaunsar-Bawar (in Dehra Dun District of U. P.) are a polyandrous people. Professor D. N. Majumdar carried out a special study of their way of life in 1937. After the inception of the Community Development Programme among these people in 1953, the Research Programme Committee of the Planning Commission extended its assistance towards carrying out a survey in the region. Intensive investigations were carried out in three selected villages, Lohari, Baila and Lakta-moudag. The present volume depicts the result of this survey.

It has been divided into three parts. The first part describes the past and the present state of Jaunsar-Bawar. The second part gives a clear picture of the traditional culture pattern of the Khasas in terms of their socio-economic structure, as well as the ways of life and concepts of values. The third part analyses the impact of the C. D. Programme on the Khasa way of life.

In this part the author has tried to assess the progress of the C. D. programme by citing concrete cases which have been encountered while carrying out the survey.

This book contributes valuable material for the anthropologist as well as for the general reader.

B. Minz

West African Religion. By Geoffrey Parrinder, 1961 (Second Edition) Pp. xvi + 203 including bibliography and index. London The Epworth Press. 25 s. net.

The present book by Geoffrey Parrinder is a valuable contribution on West African religion. It was first published in 1949 and has how been completely revised. It has a foreword by Dr. Edwin Smith, the late Editor of Africa.

Dr. Parrinder's book does not claim to cover all West African people. But he selects only one important group which includes the Akan, Ewe, Yoruba, Ibo and kindred peoples. They are culturally among the least advanced of the Negroes.

In the beginning while explaining the nature of West African religion, the author says that neither a term like 'primitive culture' nor 'primitive fetishism' can be applied to West African religion. He adds,. "There is no doubt that in many parts of West Africa, as in other lands, souls or spirits are believed to inhabit what the Scientist would call "inanimate" objects, and so they are "animists" in that sense. But it goes beyond this, for the spirits are not merely local souls. Some are found in many places and have a highly developed and widespread worship (p. 10). Dr. Parrinder describes the West African religion as polytheism and makes a four fold classification: a supreme god, the chief divinities, the cult of human but divinized ancestors of the clan, and charms and amulets.

The book has other important chapters on temples and worship, priests and devotees, training of priests and devotees in a

convent, ancestral cults, secret societies and totems and taboos, Dr. Parrinder concludes his study by making a brief appraisal of the changes brought in the West African religion through the agencies of Christianity and Islam. He points out certain significant trends of interaction between indigenous and alien religious beliefs and practices. This section is particularly thought provoking, and may be of help to anthropologists working in a parallel field in India.

K. N. Sahay

Profiles in Ethnology, By Elman R. Service. Pp. xv + 495 including glossary and index. New York, Evanstou and London, Harper & Row. 1963. \$ 6.50.

The present work of Dr. Elman R. Service of the University of Michigan aims primarily at providing a sample of widely differing kinds of culture. It is a revised edition of his book A Profile of Primitive Culture published in the year 1950. Besides dropping the original title as the term primitive has become pejorative in ordinary usage; new descriptive materials specially in the shape of two chapters on 'The Copper Eskimo' (Chapter IV) and 'The Zulu of South Africa' (Chapter XIV) have been added. The chapter on the Copper Eskimo replaces the original chapter on the Canadian Eskimo because the origins were too generalized to be consonant with the others', while the chapter on the Zulu is a fresh addition. New descriptive passages have been also added to many of the other chapters which mostly consist of recent information on the relation of these societies to the modern world. However, the most significant change which appears in this edition is the organization of the chapters representing different societies according to the different evolutionary levels or stages. This is accompanied by a preface containing explanation of the evolutionary classification. Different types of non-industralized societies have been arranged under five levels of cultural complexity, namely, bands, tribes, chiefdoms, primitive states, and modern folk societies. Within each group, geographic variety and historical differences have been further noted. All these changes have immensely improved the book.

Fossil Men, By Marcellian Boule and Henry V. Vallois. The Dryden Press, New York, 1957. Pp xxv + 535; 298 figures and illustrations.

This is an English translation of the fourth edition of the famous French Book Les Home Fossiles.

The book begins with a historical summary of mans' existence on earth in prehistoric times, which the author has divided into first, second and third phase. The relation of early man, living primates and fossil monkeys and the problem of tertitary man have been discussed in detail. In the following chapters we find a discussion on the status of Pithecanthropus and Sinanthropus. The geographical distribution of the fossil finds of Asia, Oceania, Africa and America have been described and their status in human phylogeny have been analysed in separate chapters.

In the concluding chapter, Vallois puts forward his arguments in favour of India and Africa as the birth-place of mankind.

A. B. Saran