MAN IN INDIA

VOL. 43
NO. 1 JAN.-MARCH 1963

A Quarterly Anthropological Journal
Founded in 1921 by Sarat Chandra Roy

CONTENTS

Edited by

Nirmal Kumar Bose

MAN IN INDIA

PUBLICATIONS

Works
of
Sarat Chandra Roy

1. The Mundas and their Country
2. The Oraons of Chota Nagpur
3. Oraon Religion and Customs
4. The Kharias, 2 vols.
5. The Birhors
6. The Hill Bhuiyas

N. C. Sarkar
Manager, Man in India Office,
18 Church Road, Ranchi, S. E. Ry.
Bihar, India.

NOTICE

Subscribers whose dues are in arrears are requested kindly to remit their arrears and current subscription to the Manager, Man in India, 18 Church Road, Ranchi, Bihar, India, so that continuity of service may be maintained. Publications meant for exchange must be sent to the office of the journal at Ranchi.

MAN IN INDIA

VOL. 43 } JAN.-MARCH 1963 { NO. 1

SOME SOCIAL TENSIONS IN INDIA

NIRMAL KUMAR BOSE

Introduction

I am grateful for the opportunity which has been given to me for placing some of my views on social tensions in our country. One can wholly agree with Sri Jai Prakash Narayan when he says that our study should be limited to the present, and our approach should also be practical. When a social scientist is faced by a problem like rivalry between castes or language-groups, his aim should be to discover the underlying causes, and then, if possible, to suggest suitable remedies. Let us, however, remember that one who is good at diagnosis may or may not be equally good as a physician.

Review of Last Seminar

Some important observations were made by participants during the April Session of the symposium on caste-tensions. Prof. Gorakhnath Sinha said, for instance, that 'much of our own caste and interprovincial tensions can be traced to the struggle among the many for the limited openings for earning livelihood'. Dr. G. P. Sinha also indicated that caste tensions are to be viewed as group-tensions, arising, among other

Address delivered at Patna on 2 November 1962 at the Anugrahanarayan Institute of Social Studies and Community Development.

reasons, out of 'struggle for the appropriation of limited economic opportunities, specially of employment'. Both these views are more or less in consonance with the findings of our revered Ex-President, Babu Rajendra Prasad, as recorded in a report on the Bengali-Bihari question in 1939. He said, 'It is not possible.....to ignore the fact that the demand for creation of separate provinces based largely on a desire to secure larger share in public services and other facilities offered by a popular national administration is becoming more and more insistent, and hitherto backward communities and groups are coming up in education and demanding their fair share in them. It is neither possible nor wise to ignore these demands and it must be recognized that in regard to services and like matters the people of a province have a certain claim which cannot be overlooked.' [1]

Dr. B. Ganguly has also indicated in his paper that there is keen competition for political power among castes who are numerically dominant in particular areas. Dr. B. P. Sinha and Shri Satyananda Das's studies in Monghyr have clearly shown how antipathy towards particular persons and loyalty to one's own caste operated in course of by-elections.

Prof. Narmadeshwar Prasad's analysis goes down deeper. He has tried to unravel the root causes of the persistence of the caste system ; and has arrived at the conclusion that it arises from the persistence of a myth or superstition on account of which many people refuse to subject questions of social life to rational examination.

Comprehensive programmes were also suggested during the April Session for empirical enquiry. I am not aware if they have been given effect to. But one will certainly agree that it would be worth while to study the question objectively. For it is our firm belief that the scientific method should be employed in the solution of social ills as they are employed today in the cure of physical ills.

Besides suggestions about diagnosis, important remedial measures were also recommended during the last session. Some expressed the opinion that tensions would tend to disappear under a rapidly expanding economy. Others

rightly laid emphasis on education ; for gains due to technological co-operation have to be consolidated by corresponding changes brought about in the minds of men. The first creates conditions for the latter ; but educational processes can be neglected only at one's peril. One hundred years of effort to set India free, or fifteen years of joint endeavour in the building of a Welfare State, have not yet succeeded in welding us firmly into one nation.

It is refreshing that attention was also drawn to the need of a new form of idealism. Sarvodaya promises to be an ideal of the required kind ; and the hope was also expressed that, if rightly practised, tensions would tend to disappear under its influence.

A Diagnosis

Concretely, let me now try to describe two programmes of work undertaken by the Anthropological Survey of India which have something to do with the question of national integration. On the one hand, the Survey has initiated a study of caste, province by province. The States of Bengal, Orissa and portions of Madras, Andhra Pradesh, and Mysore have been partly surveyed, while the report on Orissa has recently been published. The second is connected with the nature, distribution and location of group-tensions. Investigation has already been carried out in Assam ; while this will now be extended to Bengal and Orissa, Gujarat and Maharashtra, Andhra Pradesh and Madras.

Some rather interesting results have already been obtained. A few of these are fairly obvious, and well known to our leaders, experienced in public life.

Almost every one is aware of the historical fact that the productive organization has been affected unequally in different parts of the country in modern times. Portions of Bengal and Bihar show a larger measure of change than, say, Madhya Pradesh or Assam ; although the latter have also not remained static. Secondly, those who have been drawn into the vortex of this change have sometimes been recruited not from among local residents but from other States. Thus, the tea-gardens of

Assam are manned by residents from Bihar, while the industries of Bihar have drawn in labourers and technicians from almost every part of India.

The influence of such economic change on society has been unequal (i) in different States, and (ii) among different classes and communities living within each State.

After independence, a desire of modernizing themselves has grown among residents of all language-States. And this has set in motion an unequal movement among distinguishable classes or communities. There is now not merely *a competition for jobs* between one local community and another, between inhabitants of one State and another, but there is evident a more important *competition for power.* It is of great interest that, with the advent of adult franchise, every distinguishable community is anxious somehow to step into a position of power ; or become, at least, identified with a power-group.

To take one example from the Anthropological Survey's investigation, Telis in Orissa were formerly divided into several endogamous sections, some high and some low. Now there is an attempt at sweeping aside these differences in order to build up a united front. Formerly, Teli panchayats were limited to small regions. Now there is a dream of forming a Teli union on an all-India level, strengthened by the recommendation of intermarriage across State and linguistic boundaries.[2]

The observation which I wish to make here is that *under adult franchise, when power is likely to come by virtue of numbers,* there is an attempt among many communities of consolidating their position by emphasizing the unity of caste. Let us suppose our democracy were based not upon adult franchise, but upon trade-unions, or something like municipal organizations. If it were broad-based at the bottom, and if it depended on indirect election higher up, my guess is, there would have been less of caste consciousness spilling over into the political field than is in evidence today. Let us not forget that separate electorate granted to Muslims was instrumental in widening the cleavage between Hindu and Muslim ; and it was designed to be so.

There can be a democracy in which the benefits of adult franchise are assured, and it is not allowed to stimulate casteism as it does in our present backward, unreformed social state. It is not beyond the genius of our political leaders to devise constitutional means which would promote democracy and suppress separatism.

My observation that provincial or caste tensions arise from competition for power does not, in any way, negate the observations already made by Dr. Gorakhnath Prashad or Dr. G. P. Sinha. It only supplements them.

Location of Antipathy

Let me now describe some of the results of the Anthropological Survey's second line of enquiry. S. Panchbhai, who is a Senior Research Fellow in Psychology in the Survey, has lately tried to locate the distribution of antipathy among various social classes in the State of Assam. This was done by analysing stereotypes of speakers of non-Assamese languages prevalent among speakers of Assamese and vice versa. The investigation covered more than a thousand subjects including educated and uneducated, students and professional men, peasants and the Panda community of the Kamakshya temple of Gauhati.

It is very interesting that although the peasantry of Assam is threatened by competition of immigrant Bengali-speaking Muslims from East Pakistan, the feeling of hostility is not very acute. It appears that, prior to independence, such Bengali peasants were considered welcome, as they worked hard and helped in developing the land. By and large, the commerce and trade of Assam, as well as her tea-plantations, are mostly in the possession of non-Assamese speaking Marwaris, and in former times, of the British. Feeling against them does not seem to be either acute or widespread.

On the other hand, the feeling of antipathy appeared to be strongest against speakers of the Bengali language among one section of educated young men and one section of the upper leadership. It is highly interesting that none of these particular groups is threatened by actual or potential

competition by those whom they denounce. For Provincial Autonomy has protected 'sons of the soil' from open competition for nearly twenty years. Antipathy is thus not directly capable of correlation with competitiveness, but with other socio-cultural causes.

I wish to make an observation based on personal experience, namely, that those among whom antipathy is sharply focussed show some very interesting characteristics. This is also the class which

(*i*) takes an intense pride in the ancient glories of Assam
(*ii*) tries to promote a revival of *real* Assamese culture
(*iii*) is interested earnestly in social reform
(*iv*) is eager to make concessions to tribal or other minority groups in Assam, provided they owe allegiance exclusively to Assam. Thus they hope to weld the Assamese into one strong 'national' community, speaking one common 'national' language.

In other words, the desire for forging a nationhood in Assam seems to be coupled with an antipathy against those who seem to deny the right of Assam to be treated as a separate nationality. The Bengalis of Sylhet, or those who insist that the fourteen languages enumerated in the Constitution have an equal right to exist in any State of India, are an actual or potential threat to the growth of this Assamese 'nationalism'.

Recommendations, Therapeutic and Academical

Pesonally, I am in favour of overcoming social tensions such as Hindu-Muslim, Bihari-Bengali, Gujarati-Maharashtrian by a comprehensive scheme of economic and political, development in which India is treated as one single unit and in which the aim is to establish both economic and social equality. This can be coupled with the promotion of regional, cultural proliferation, each of which should be encouraged to extend its influence all over India. Kerala's dances have now become part of India's tradition. So can Tulsidas's *Ramayana* if its beauty can be spread by Hindi scholars through translation in all the other major languages of India.

But my purpose at the moment is not to recommend therapeutical measures. I am just now interested in observing the fate of caste and similar tensions under *other conditions* of economic, political and educational reconstruction than those in operation now.

The hopeful sign in the growing consciousness of caste or language is that everywhere there is an urgency of *sinking* internal differences so that a particular caste or a particular linguistic State may eventually become more reformed and unified in power. In so far as this is so, in so far as this new loyalty leads to a necessary wiping out of smaller differences within, it is welcome. It can be regarded as a 'progressive' measure.

But the point is, if the growth is unrestrained, then the feeling of separate nationality may prove a peril to the growth of Indian nationalism. Personally, I have felt that one need not work directly against provincialism or casteism. It is much more important to allow them to grow and grow until they achieve their limited constructive purpose, and are then reduced to useless, unnecessary ideals. It is much more important, at the same time, to allow unities to develop in other spheres in a constructive manner, so that the smaller loyalties may progressively wither away.

There is a unity which grows under the threat of aggression. But a better one is perhaps attainable in the pursuit of a common constructive purpose.

Here, I would end with a recommendation to fellow sociologists working in Bihar. Let us all engage, either directly or indirectly, in actively building up small unities at the village or municipal level. They should emphasize in action commonnesses of civic or economic interest which cut across caste or language barriers. Let us, at the same time, try to destroy the hierarchy of occupations which forms one of the pillars of the caste system. Gandhi once tried to uplift the status of the Chamar (LEATHER WORKER) and the Bhangi (SWEEPER) by recruiting volunteers from the so-called 'high' castes to these noble and necessary occupations. He also recommended that wages should be the

same for the doctor, lawyer and sweeper. His hope was that once we succeeded in breaking the superstition and myth of 'high' and 'low' occupations, and in weakening its hereditary character, caste was bound to melt away. During the last stages of his 'pilgrimage' in Noakhali, he also recommended that intercaste and inter-religious marriages should be regarded as necessary pieces of social reform.

If those who are pragmatically interested in social research engage in constructive social experiments, as part of their scientific investigation, we may begin to gather new data on how social tensions operate under other conditions of occupation or the influence of new social and educational ideals. I am of opinion that caste tensions have become accentuated by adult franchise just as Hindu-Muslim tensions were accentuated as a result of separate electorate. I am therefore also hopeful that the tensions are likely to manifest themselves differently under other experimental conditions.

If they are actually modified even to some extent, we may hope to exercise greater control over them in future so that a newer and healthier human society may eventually be established in India.

REFERENCES

Bose, N. K. *Studies in Gandhism*, 1962, p. 213.

Bose, N. K. (Ed.) *Data on Caste : Orissa*, 1960, pp, 64-69, 76-77.

SPATIAL ASPECTS OF RURAL LIVING

A. B. Bose

Mohan Lal Sen

(*Received on 24 September 1962*)

Introduction

THE necessity of studying the spatial distribution of population has increasingly been stressed by different writers. Geographers, urban sociologists and ecologists have depicted the distribution of social characteristics by 'natural areas' or regions and laid emphasis on the importance of relating the study of human activities to the geographical region. While Galpin (1915) pioneered studies on the spatial aspects of rural living which were developed and refined by later rural sociologists, Burgess (1927), Park (1925) and Mc Kenzie (1933) initiated studies on the spatial pattern of the urban community. Redfield (1955) described how community life was influenced by the form of settlement. Studies on the Indian village community by Baden Powell (1896), Dube (1956), Mayer (1960) and Lewis (1958) gave brief accounts of the growth of the village and the cultural aspects of the distribution of households in the village settlement, but made little or no reference to the economic aspects. In the present paper an attempt has been made to show both the sociological and the economic aspects of rural living in relation to the village settlement. It is based on a study made in a village situated at a distance of about seven miles from Jodhpur. At first a complete enumeration was made of all the households living in the village and a sample of hundred households drawn by the method of random sampling. A schedule was administered on the heads of sample households. Information was also obtained through interviews with persons in different walks of life. The *abadi* area

Dr. A. B. Bose is Sociologist *cum* Economist in the Human Factor Studies Division in the Central Arid Zone Research Institute, Jodhpur. Mr. Mohan Lal Sen is Technical Assistant in the Division.

in the village core was surveyed to show the pattern of land-use. Relevant secondary data pertaining to the village were also collected. These were later analysed to obtain a picture of the spatial aspects of the distribution of social and economic characteristics.

Distribution of Households

No authentic record is available about the growth of village of Pal. But the residents believe that the village has been in existence for more than a thousand years. The residential area of the village was formerly at a different site which the villagers now call *Purana Kheda*. In evidence, they show the remains of some structures and pottery which are believed to have been used by the people who originally lived there. There are some stone inscriptions here, eight hundred years old, but they do not conclusively prove anything. There is also a well which is now not in use. The structure on the well with stone reservoirs for collecting water suggests its use in the past for cattle and human beings. There are two versions relating to the shifting of the settlement from here to the present site. One version states that a marriage party passing through the place was murdered at night over some dispute with the Jagirdar. Since then the villagers regard the area as a haunted place. The other version is that about two hundred years ago the village was the scene of conflict between the rulers of Jodhpur and Nagaur over the grant of Pal to a Dholi. A part of the settlement was destroyed and people started regarding it as an inauspicious and haunted site.

In the past there was no scarcity of land. Families interested in cultivation started establishing themselves by obtaining land as share-croppers from the Jagirdar. Some of the families were granted free land in return of services rendered to the Jagirdar. At that time also the village had its complement of castes performing specialized functions, thus ensuring the self-sufficiency of the village unit. In course of time the number of families increased as the descendants

of the first family which settled there multiplied, or as more families began to settle down for cultivation, since land was freely available. Today the village has about three hundred households. Table 1 shows the growth of population in Pal over several decades.

TABLE 1

Growth of population in Pal

Year	Population	Variation
1891	1,169	—
1901	1,023	−146
1911	985	− 38
1921	805	−180
1931	1,090	+285
1941	1,244	+154
1951	1,304	+ 60
1961	1,951	+647

The population of the village gradually declined up to 1921. In the absence of figures giving the extent of migration, birth and death, it is difficult to state the extent of variation due to each of these causes. It seems probable, however, that death due to famine and disease must have had a large part to play, there being frequent mention of these in the earlier administration reports. Even in the State as a whole, 1921 had the lowest population of all the decades. The steady rise in population from 1931 onwards may be attributed to the fall in death-rate as a result of improved medical facilities and means of communication.

The village has at present both a compact settlement as well as scattered homesteads. Junavo ki dhani and Raikon ki dhani are at a distance of about two miles from the village core ; Thorio ki dhani is at a distance of about one and a half miles while Binjario ki dhani is at a distance of about a mile, Table 2 gives the caste and distribution of households in the village core and other clusters. The different clusters are inhabited almost exclusively by members of a single caste group, the exception being the *abadi* which is a conglo-

meration of different castes. The names of the clusters are suggestive of the caste group which predominantly resides therein. Thus, Thori and Binjara are sub-castes of Jats. Most of the households living in the different clusters have

TABLE 2

Caste and spatial distribution of households

Caste	Village core	Thorio ki dhani	Junavo ki dhani	Raikon ki dhani	Binjario ki dhani	Total
Jat	43	42	10	—	5	100
Bhambi	56	—	—	—	—	56
Raika	30	—	—	4	—	34
Bhil	24	—	—	—	—	24
Jain	11	—	—	—	—	11
Rajput	10	—	—	—	—	10
Daroga	5	—	—	—	—	5
Lohar	5	—	—	—	—	5
Suthar	17	—	—	—	—	17
Sad	5	—	—	—	—	5
Swami	1	—	—	—	—	1
Purohit	4	—	—	—	—	4
Kalal	2	—	—	—	—	2
Nai	2	—	—	—	—	2
Sonar	1	—	—	—	—	1
Darji	1	—	—	—	—	1
Brahmin	4	—	—	—	—	4
Kumhar	2	—	—	—	—	2
Harijan	2	—	—	—	—	2
Muslim	—	—	1	—	—	1
Wadi	2	—	—	—	—	2
	227	42	11	4	5	289

descended from a common ancestor or are related by marriage. Quite a few, however, established themselves independently. The agnatic ties will be evident by examining the position with regard to Thorio ki dhani. Out of the 42 Jat households living here, 25 belong to the Thori *gotra* and are descend-

ed from the same ancestor. The genealogical chart of the Thori Jats shows that three hundred years ago a Jat of Thori *gotra* established himself here by constructing a hut, whence the name Thorio ki dhani. In course of time his descendants multiplied, so that now there are 25 households who claim descent from him. Similar is the position with respect to other castes.

Land-use

The village is spread over an area of 7,775.8 acres. Table 3, which indicates the land-use in the village, shows that

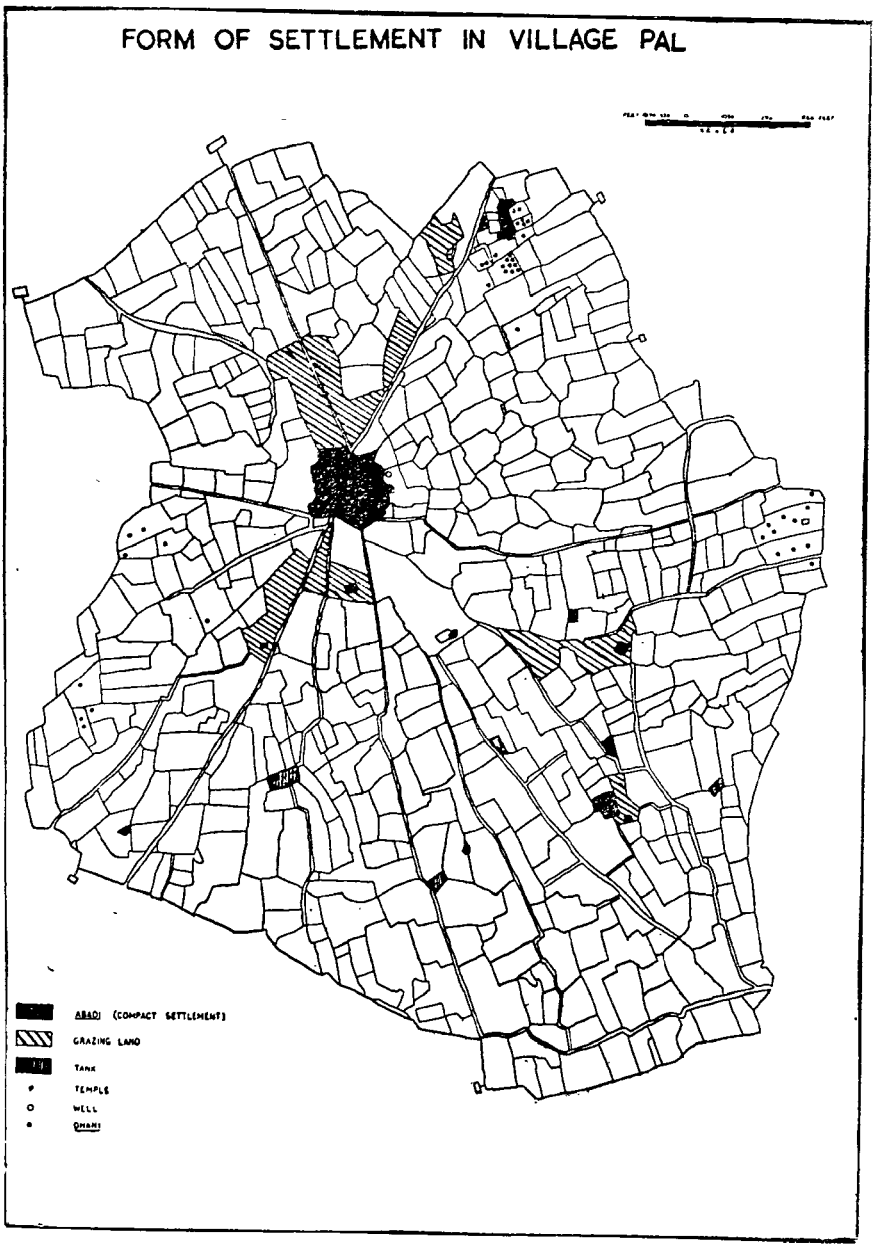
TABLE 3

Land use in Pal

Land-use	Acres	%
A. Uncultivated		
(1) Uncultivable	527.3	6.8
(a) Land put to non-agricultural use	185.8	2.4
(b) Permanent pasture and other grazing land	341.5	4.4
(2) Cultivable		
(a) Fallow land	2,538.8	32.6
B. Cultivated		
(1) *Barani* (un-irrigated)	4,709.7	60.6
	7,775.8	100.0

cultivation has already reached saturation point. There is no forest land and no *usar* or *banjar* land which could offer scope for reclamation. All the cultivated land in the village is un-irrigated. The cultivated and fallow land together occupy 93.2 per cent of the total land area. Out of 185.8 acres of land put to non-agricultural use, 62.4 acres is classified as *abadi* (compact residential area), 95.1 acres as land occupied by roads, 26.4 acres as land occupied by tanks, and the rest as land put to miscellaneous use like temple site, wells

and *dhanis*. The tanks are fairly dispersed over the fields. More than half of the grazing land is near the compact village site. The attached map shows the different uses to which land has been put. The map relates to the



time of settlement of land revenue about eleven years ago. Since then a few changes have taken place. For instance, the road to Balotra formerly passed through the centre of the

abadi as indicated on the map, but now a new metalled road has been constructed which passes round the village residential site rather than through it. Similarly, a school building, a *piyau* and a tea-stall have come up. The *abadi* land, grazing land, tanks, wells, and roads are village common lands on which no taxes are levied. Within the *abadi* area plots demarcating the houses occupied by different households do not exist nor is any tax paid for such land. Formerly the village belonged to the Jagirdar whose lands were cultivated by the farmers as share-croppers. Sometimes the Jagirdar allowed a few households to cultivate land without rent in return for certain services rendered to him. With the introduction of land reforms, agricultural lands are held by farmers from the Government and land revenue is paid for these in accordance with the classification of land. There is no intermediary.

As one leaves the metalled road in order to enter the *abadi* in the village core, one comes across the new school structure on the right. It is located outside the compact residential site. This has obviously been dictated by considerations of space since there is hardly any vacant land for any new structure to be built in the *abadi* area. The pauchayat is located centrally in a pukka structure ; a part of it is used for housing a veterinary centre. The women's welfare centre is housed in an old building. No accommodation has been provided by the Government for its officials. They commute daily from Jodhpur. There are two pukka serais in the village built by Mahajans where travellers can rest. They are, however, not well looked after, nor are there any satisfactory arrangements for providing comforts for travellers. There are only three structures in the *abadi* area which are entirely put to commercial use, namely, two shops of Mahajans at the village core and one shop on the Jodhpur-Balotra road for selling tea.

At the centre is the village square. There is a *chabutra* or raised pukka round platform about three feet high built round a *neem* tree. A *than* or shrine of Hanumanji has been built on it. There are two more

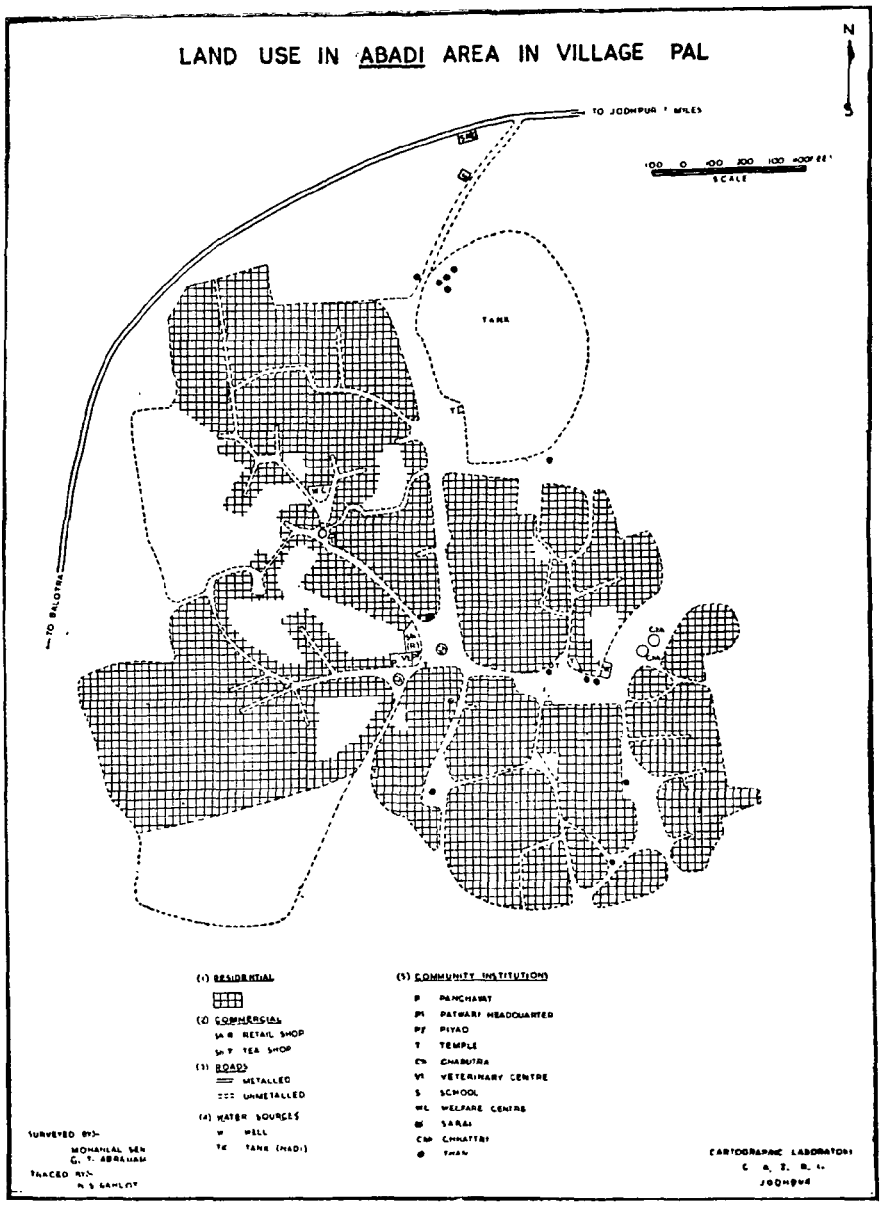
chabutras in the village. Arrangements have been made in them for keeping water for birds to drink. The religious-minded scatter grains every morning on the *chabutra* for feeding pigeons.

The most colourful place is the village well. Bringing water in earthen pitchers delicately balanced on their heads is conventionally a feminine activity; and a man who goes to the well to fetch water when his wife is not unwell is the subject of scorn and ridicule. During the cultivating season people drink water from *naris*. When these dry up, villagers arrange the well to be worked by some family which undertakes to draw water using its own pair of bullocks and supplying it to the villagers at the lowest cost. Caste hierarchy exercises its influence even here. While the upper castes can fill their pitchers right at the top, lower castes like Bhambis, Bhils and Harijans have separate *kundas* (places) marked off for them from where to collect water.

The village has also its sacred places, the temples and shrines. Structurally the temples have a larger built-up space and look more sophisticated and imposing, while the shrines vary from a simple stone slab on the ground or on a built platform to a small structure built of stone. The villagers, however, distinguish between the two in the sense that a temple has a priest or *sewa-karne-wala* while the shrines lie in the open and do not have the daily attention of any priest. Shrines are believed to be more responsive in granting relief from certain specific ailments like snake-bite, etc. None of the shrines has been built recently. They have been in existence for several generations and are associated with different saints. These temples and shrines hub with activity on appropriate occasions. The villagers have considerable faith in the shrines, and stories are told about how people have been cured when brought to the shrine. After marriage it is customary for the newly-wedded couple to go round all the shrines and temples and make religious observances. It is interesting to note that whereas restrictions have existed regarding the

entrance of the lower castes to temples, they have been in enjoyment of free access to the shrines.

There is no common meeting place in the village where people regularly assemble to gossip or share news.



The panchayat building becomes busy only when official business has to be transacted. On other occasions it

does not pulsate with life. People usually meet, talk and smoke with their agnates in their homes when they seat themselves round the *kau* which contains ashes of cow-dung cakes. They are sometimes joined by people of other castes with whom social intercourse is permitted. Unlike other villages, one does not come across *chaupals* where elderly men may be found sitting, smoking and discussing matters of common interest. The probable reasons are the nearness of the village to Jodhpur due to which people get less leisure time, the temporary shifting of most of the village population to *dhanis* in their agricultural fields during the cultivating season when many parts of the *abadi* area bear a deserted appearance.

The *abadi* area is a conglomeration of houses of all sizes, shapes and materials. The housing pattern does not represent any planned or systematic growth. There are narrow winding streets, often *cul de sac* and without any drainage facilities, so that during the rainy season they become a quagmire. The predominant land-use is residential. The density in the *abadi* area in the village core is 30 persons per acre. With the passage of time the population in the *abadi* area has increased so that now there is hardly any open space left. In spite of the observance of purdah, there is hardly any privacy, and what goes on in another person's house is common knowledge for any one who cares to know.

Water-resources

A dominant factor in the selection of sites for human habitation is the availability of water. The sources of water supply in the village are *naris*, *tankas*, a water-tap and two wells. Whereas the *naris* and wells are meant for public use the *tankas* are usually dug by householders, the more affluent among them lining the *tankas* with cement. The sources from which households living in the different clusters draw water is indicated in the following table.

TABLE 4

Sources of water supply

Cluster	Sources	Approximate distance	Period of use
Village core	(a) *Nari*	1 furlong	4—6 months (cultivating season)
	(b) Well	nil	6—8 months
Thorio ki dhani	(a) Well	1 furlong	12 months
Junavo ki dhani	(a) Water-tap	4 furlongs	12 months
Raikon ki dhani	(a) *Nari*	1 mile	4—6 months (cultivating season)
	(b) Well in village core or adjacent village	1 mile	6—8 months
Binjario ki dhani	(a) *Nari*	4 furlongs	4—6 months (cultivating season)
	(b) Well	4 furlongs	6—8 months

The community resources are managed on a corporate basis. For instance, when the *nari* has to be deepened, people contribute by way of labour or money. Similarly, working of the village well is taken up when water in the *naris* dries up. There are three reasons for this. Firstly, rain water which collects in the tanks is sweeter than well water. Secondly, most of the major cultivators shift to their fields during the cultivating season so that water is more readily accessible to them in the *naris*. Thirdly, water is available free from *naris* whereas for obtaining water from wells payment has to be made.

Community Facilities

Pal has a primary school, a women's welfare centre, a co-operative society, and a cattle-breeding centre. It is also the headquarters of the village Patwari and the Gram Panchayat. All the facilities are, however, located at the village core ; and this pattern of location has influenced the extent of their utilization. Table 5 gives the number of students attending school from different clusters.

TABLE 5

Places from where students come to attend school

Cluster	Number of students	%	% households
Village core	49	76.6	78.5
Thorio ki dhani	10	15.6	14.5
Junavo ki dhani	—	1.6	1.7
Raikon ki dhani	—	—	3.8
Binjario ki dhani	1	—	1.4
Outside village	4	6.2	—
	64	100.0	

The percentage of students attending school from the village and from Thorio ki dhani is approximately equal to the percentage of households living there. No student attends school from Junavo ki dhani and Raikon ki dhani, the former because of the distance factor, and the latter both because of the distance factor and the inability of Raikas to spare children who are needed for grazing sheep and goats. Even in the village core, although there are 30 households of Raikas, only one Raika student attends school.

Classes are also run at the Social Welfare Centre for very young children and is attended by 10 boys and 28 girls, all from the village core. There are 11 housewives who participate in the women's welfare activities of the centre ; they are all from the village core.

A co-operative society has been functioning in the village for about five years. Its main activities are related to the distribution of loans and improved seeds. The distribution of membership of the co-operative society in different clusters shows a fairly even representation from all the clusters, and unlike attendance at school, the percentage of members in clusters other than the village core is larger than the percentage of households residing therein.

TABLE 6

Distribution of membership of co-operative society

Cluster	Number of members	%	% households
Village core	102	68.0	78.5
Thorio ki dhani	29	19.3	14.5
Junavo ki dhani	4	2.7	1.7
Raikon ki dhani	—	—	11.4
Binjario ki dhani	4	2.7	3.8
Outside village	11	7.3	—
	150	100.0	

Economic Aspects

The pattern of distribution of occupations is related to the form of settlement, the occupational pattern in the *dhanis* differing from that in the village core. This follows as a natural corollary to the pattern of settlement of households belonging to different castes in the village core and elsewhere, since there is a close relationship between caste and occupation. What is implied is that only those castes tend to settle in the *dhanis* whose occupations can be followed better therein, as for instance agriculture and animal husbandry. Table 7 gives the occupational distribution of earners in the different clusters in sample households.

TABLE 7

Occupational distribution in the village core and other clusters

Occupation	Village core	Other clusters	Total
Cultivation only	160	56	216
Cultivation and other occupations	112	16	128
Other occupations	22	4	26
	294	76	370

There is significant association* between the occupation of earners and the form of settlement. Most of the earners in

* In this and subsequent tables test has been applied to see if there is significant association.

dhanis practise only cultivation showing that the dependence on cultivation is greater here. About one-fifth of the earners combine it with cattle-raising and casual labour in the city. In the case of the village core, however, in addition to cultivation and sheep-and-goat-rearing and casual labour in the city, the traditional caste occupations are practised. These caste occupations are survivals of the traditional organization of society into a self-contained unit. They were meant to cater to the needs of the community in economic, social and cultural aspects. Thus the Suthar (CARPENTER), the Lohar (BLACKSMITH) and the Nai (BARBER) live in the village core and serve their clients even though they may live in the *dhanis*.

Since most of the earners in *dhanis* practise only cultivation, it is worth while investigating whether the size of agricultural holding is related to the form of settlement. Table 8 shows the relationship between the two.

TABLE 8

Distribution of agricultural holdings by size in the village core and other clusters

Acres	Village core	Other clusters	Total
No holding	7	—	7
Less than 12	23	3	26
12 — 24	29	9	38
24 — 36	8	3	11
36 — 48	7	1	8
48 and above	6	4	10
	80	20	100

The association between size of agricultural holding and form of settlement is not significant. Only seven per cent of the households living in the village do not have agricultural holdings. They have alternative sources of livelihood like shop-keeping, money-lending, etc. There is no problem of landless labour as such in the village.

It is contended that subdivision and fragmentation of holdings is a natural corollary to the village type of settlement (Smith 1953). Table 9 gives the extent of subdivision and fragmentation of holdings with sample households in the village core and other clusters in village Pal.

TABLE 9

Form of settlement and number of fragments per agricultural holding

Number of fragments per holding	Village core	Other clusters	Total
1	20	2	22
2	26	5	31
3	11	5	16
4	6	3	9
5 and above	10	5	15
	73	20	93

The association between form of settlement and number of fragments per agricultural holding is not significant. Thus the results here conform to the findings in a study made earlier in village Chirai where too the difference in the average number of fragments per agricultural holding owned by households living in the village core and in *dhanis* was not significant (Bose and Malhotra 1961).

Living in the *dhanis* is advantageous from the economic point of view. Better care of livestock and crops is possible, fields surrounding the *dhanis* are properly manured, time is saved in agricultural operations, and better use is made of the limited resources of the farmers. Even those living in the village core realize this. Consequently, during the cultivating season the major cultivators shift their residence and live in leaf-huts built in their fields. After harvesting and threshing is over, they return to their homes in the village core. Thereby they combine the economic advantages of living in *dhanis* with the social advantages of living in compact settlement, namely, greater security, richer social life, easier access to community facilities like

wells, shops, temples and school and greater employment opportunities. Those who live in *dhanis* throughout the year, however, claim that they live more peacefully in cleaner, healthier, and more spacious surroundings, maintain greater co-operation with families in neighbouring *dhanis* for reasons of security and mutual aid, and spend more time in constructive activities rather than in gossiping. The present form of settlement of households is, however, a part of the cultural heritage, the households living in the same way as their ancestors did. The original settlers, before establishing themselves, must have weighed the relative advantages and disadvantages of the two forms of settlement. Households who live in *dhanis* and compact settlement were asked which of the two forms of settlement they considered more satisfactory. It is interesting to note that in each case the replies were in conformity with their existing mode of settlement.

SUMMARY

Village Pal has a compact settlement and four clusters of scattered homesteads. The village has been in existence for more than a thousand years. Within a period of seven decades it has experienced a population increase of 66.9 per cent. There are now 289 households in the village. A large number of households living in different clusters have descended from a common ancestor or are related by marriage. The village is spread over an area of 7, 775.8 acres. Cultivated and fallow lands occupy 93.2 per cent of the total land area. Cultivation has reached saturation point. There is no forest land, and no *usar* or *banjar* land which could offer scope for reclamation. All the cultivated land in the village is un-irrigated. The sources of water supply in the village are *naris*, *tankas*, a water-tap and two wells. There is a panchayat, a school, a co-operative society, a welfare centre for women, and a cattle-breeding centre. The location of all the community facilities in the village core has influenced the extent of their utilization. The *abadi* area is a conglomeration of houses of all sizes, shapes and materials.

The housing pattern does not represent any planned or systematic growth. Caste has influenced the form of settlement of households, there being a tendency among people belonging to the same caste group to cling together. The names of the clusters are suggestive of the caste group which predominantly resides therein. Those households who follow their traditional caste occupations like carpentry, blacksmithery etc. live in the village core because they can thereby serve their clients better. Houses in the village show a wide range both in design and material used in construction, the determining factors being the occupation of earners, economic position of the family, caste, and form of settlement. The occupational pattern is related to the form of settlement, most of the earners in *dhanis* practising cultivation. There is no association between size of agricultural holding and form of settlement, and between number of fragments per agricultural holding and form of settlement.

BIBLIOGRAPHY

Baden Powell, B. H. 1896 *The Indian Village Community*. London : Longmans Green & Co.

Bose, A. B. and S. P. Malhotra 1961 The Form of Settlement in a Desert Village, *Indian Geographer*, vol. 6, no. 1.

Burgess, E. W. (Ed.) 1927 *The Urban Community*. Chicago : University of Chicago Press.

Dube, S. C. 1956 *Indian Village*. London : Routledge & Kegan Paul.

Galpin, Charles J. 1915 *The Social Anatomy of an Agricultural Community*. Bulletin 34, University of Wisconsin Agricultural Experiment Station.

Lewis, Oscar 1958 *Village Life in Northern India*. Urbana : University of Illinois Press.

Maine, Henry S. 1889 *Village Communities in the East and West*. New York : Henry Holt & Co.

Mayer, Adrian C. 1960 *Caste and Kinship in Central India*. London : Routledge & Kegan Paul.

Mc Kenzie, R. D. 1933 *The Metropolitan Community*. New York : Mc Graw Hill.

Park, Robert E. 1925 *The City*. Chicago : University of Chicago Press.

Redfield, Robert 1955 *The Little Community*. Chicago : University of Chicago Press.

Sims, N. L. 1928 *Elements of Rural Sociology*. New York : Thomas Y. Crowell.

Smith, T. Lynn 1953 *The Sociology of Rural Life*. New York : Harper.

Spate, O. H. K. 1960 *India and Pakistan—a General and Regional Geography*. London : Methuen.

Thomas, William L. 1960 *Man's Role in Changing the Face of the Earth*. Chicago : University of Chicago Press.

Williams, W. M. 1956 *The Sociology of an English Village*. London : Routledge & Kegan Paul.

INNOVATION AND INNOVATORS IN INDIAN VILLAGES

SATADAL DASGUPTA

(*Received on 23 August 1962*)

THE Five-Year plans aim at bringing technological changes in the field of agriculture. The objective of the State Extension Agency is to change the farmer from his traditional method of cultivation to the more modern scientific and effective method by giving him technological assistance and knowledge. But all farmers do not uniformly respond to this programme of agricultural improvement. Although one would expect the farmers to come forward and take advantage of the assistance that is offered in the form of technical knowledge there are differences between farmers in regard to their willingness and ability to accept change. It is expected that economic considerations would make all of them accept change promptly. But their behaviour does not appear to be solely economic. There appear to be other forces at work. It would be interesting and fruitful if we could predict at the outset as to who would respond quickly, who would take much time to respond and who would not respond at all. This would be of considerable interest to anthropologists who are interested in the process of diffusion of culture, as well as to extension workers who have to plan an agricultural programme for acceptance by farmers.

The Problems

It is observed that when a new farm practice is introduced in a village it does not meet with immediate total acceptance. Generally a few farmers come forward first and take active interest in it. They seek information about its utility, appli-

The author is Research Officer of the Socio-Agro-Economic Research Organisation, Department of Agriculture, Government of West Bengal. His private address is 64/69 A, Belgachia Road, Calcutta-37.

cability and advantage over the older practice, and if convinced after making a trial adopt it. We shall designate them as Innovators. When innovators have accepted it, another group of farmers, who had not shown much interest initially, now come forward. They seek information about the new practice from the innovators and, if satisfied about its utility, accept it. They are the Early Adopters. From these early adopters, again, the average farmers or Late Adopters seek information and adopt the new practice.

It is important for the extension worker to know who these innovators and early adopters are and what qualities and characteristics distinguish them from average farmers.

To answer these questions three hypotheses were postulated and tested. The hypotheses were as follows.

The innovators own larger farms than those owned by early adopters and average farmers. The early adopters in their turn own larger farms than the average farmers.

II. The innovators mostly own the farms which they operate. Smaller numbers of early adopters and average farmers own their farms.

III. The innovators have higher socio-economic status, have greater degree of outside contact, adopt more improved practices and are more socially oriented than average farmers. The position of early adopters is intermediate.

Four villages were selected from a list of 25 villages which were in their turn selected at random from a list of 594 villages in the Barasat Subdivision of the district of 24-Parganas.

Barasat Subdivision is not far from the city of Calcutta and covers an area of 384 sq. miles. Its total population is 393,980, of which a population of 22,546 reside in two small towns and the rest are distributed in 594 villages. Two-thirds of the population depend on agriculture.

The region has been exposed to agricultural extension for a fairly long time, and this has recently been intensified after the inception of seven Development Blocks in the region.

The Design

All the 245 farm families of the four villages were interviewed. The head of each of these families was interrogated. The interviewee was asked which of the nine recommended practices[1] he had adopted and for how many years he had been practising it. He was asked from what source he had first heard about the practice and whom he consulted most before adopting each practice. His relationship with the farmer from whom he sought information and also his age, occupation and residence were noted. The interviewee's religion, caste, education, occupation, size and ownership of his farm, number of rooms he owned, condition of his house, nature of his outside contact and other items of living were also noted.

Out of 245 farmers 14 farmers were found to be the first to adopt the practices and they were designated as Innovators. 21 farmers were classed as Early Adopters who sought information from the innovators, from whom again 210 Average Farmers got information about the improved practices.

Size and ownership of farm, socio-economic status scores, outside contact scores, adoption scores and degree of social participation of these three groups of farmers were computed and compared.

TABLE 1

Percentage distribution of Innovators, Early Adopters and Average Farmers by their size of farms

Size of Farm (in acres)	Innovators (N=14)		Early Adopters (N=21)		Average Farmers (N=210)	
	No.	%	No.	%	No.	%
Below 2.49	—	—	7	33.33	126	60.00
2.5 to 4.9	3	21.43	7	33.33	57	27.14
5.0 to 7.49	7	50.00	3	14.29	18	8.57
7.50 to 9.99	2	14.29	3	14.29	6	2.86
10.0 and above	2	14.29	1	4.76	3	1.43

Findings

Size of farm

Table 1 shows that the innovators had larger farms than the average farmers, the position of early adopters being in between. Fifty per cent of the innovators had farms between 5 and 7.49 acres, while only 8.5% of average farmers owned such farms. While none of the innovators owned the small-sized farms of 2.49 acres and below, 60.0% of average farmers owned such small farms. 14.29% of innovators owned large-sized farms of 10 acres and above, while very few of the average farmers owned such big farms. The position of early adopters was intermediate.

This shows that the innovators owned farms larger than those owned by early adopters and average farmers. Early adopters in their turn owned comparatively bigger farms than average farmers.

TABLE 2

Showing relationship between land tenure and innovation

	Innovators (N=14)		Early Adopters (N=21)		Average Farmers (N=210)	
	No.	%	No.	%	No.	%
Entirely dependent on own cultivation	13	92.86	19	90.48	158	75.24
Dependent on own cultivation and share-cropping	1	7.14	2	9.52	49	23.33
Dependent only on share-cropping	—	—	—	—	0	1.43

Ownership of farm

It can be seen from Table 2 that most of the innovators owned the farms which they operated. A comparatively smaller number of early adopters and average farmers owned the farms which they operated. While there was no share-cropper among innovators and early adopters a few average farmers were share-croppers. A comparatively larger number of average farmers depended partly on share-cropping and partly on owner-cultivation than the early adopters and innovators.

TABLE 3

Percentage distribution of Innovators, Early Adopters and Average Farmers by educational, socio-economic status, outside contact and adoption scores

Type of score	Innovators (N=14)		Early Adopters (N=21)		Average Farmers (N=210)	
	Total score	Average score	Total score	Average score	Total score	Average score
Socio-economic status score	733	52.36	822	39.14	6834	32.54
Outside contact score	227	16.21	230	10.97	1806	8.6
Adoption	342	24.43	377	17.95	2345	11.17

Socio-economic status

Rahudkar's scale[2] for measuring socio-economic status of Indian farm families was utilized after slight modification for computing the socio-economic status score of the farmers.

The composite index of socio-economic status utilized included factors like caste, education, number of houses and rooms owned, condition of house, tenure of land, size of farm owned, acres of land operated and level of living index.

The average socio-economic status scores of each of these groups were then computed and compared. It was found that the innovators had higher socio-economic status than the early adopters and average farmers. The average socio-economic status score of innovators was 52.36 while the corresponding figures for early adopters and average farmers were 39.14 and 32.54 respectively. This shows that there is a big difference between average farmers and innovators in socio-economic status, while the difference between innovators and early adopters was also high in this respect.

Outside contact

The outside contact score of a farmer was calculated by giving 4 points for each visit to the city and 1 point for each visit to any other town during the last one year. The

farmer's total score was then divided by 10. In this way, the average outside contact score of each group was calculated and it was found that the innovators had a higher degree of outside contact than average farmers, the position of the early adopters being intermediate. Table 3 shows that the average outside contact score increases from the average farmers to the innovators.

Adoption index

The adoption index is the sum of the total number of years a farmer had used various improved farm practices. Thus if a farmer had used sulphate of ammonia for three years, insecticides for ten years and green manuring for two years, then his adoption index is 15.

On this basis, the adoption index of every farmer was calculated and then the average adoption score of each of the three groups was computed and compared.

Table 3 shows that the innovators had the highest average adoption score of all the three groups. Thus the innovators, from whom early adopters and average farmers sought information, were far ahead in the adoption of improved practices. The early adopters, in their turn, adopted more than average farmers.

TABLE 4

Distribution of Innovators, Early Adopters and Average Farmers in the context to their membership or holding office in formal and informal organizations in the villages

Type of Organization	Innovators (N=14)				Early Adopters (N=21)				Average Farmers (N=210)			
	Member		Holding office		Member		Holding offiec		Member		Holding office	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Formal Organizations												
Kishan Samiti	—	—	—	—	—	—	—	—	1	0.47	—	—
Agricultural Marketing Society	1	7.1	—	—	—	—	—	—	—	—	—	—
School Committee	7	50.0	2	14.2	8	38.0	1	4.7	6	2.8	2	0.95

Type of Organization	Innovators (N=14)				Early Adopters (N=21)				Average Farmers (N=210)			
	Member		Holding office		Member		Holding office		Member		Holding office	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Union Board and Gram Panchayat	1	7.1	1	7.1	1	4.7	1	4.7	2	0.95	—	—
Village Defence Party	—	—	—	—	2	9.4	1	4.7	1	0.47	—	—
Village Development Committee	2	14.2	—	—	2	9.4	—	—	1	0.47	—	—
Village Library	2	14.2	1	7.1	1	4.7	—	—	1	0·47	—	—
Credit Society	1	7.1	—	—	—	—	—	—	1	0.47	—	—
Block Development Committee	1	7.1	—	—	—	—	—	—	—	—	—	—
Hat Committee	1	7.1	—	—	—	—	—	—	—	—	—	—
Congress Committee	1	7.1	—	—	—	—	—	—	—	—	—	—
Co-operative Society	2	14.2	1	7.1	2	9.4	—	—	1	0.47	—	—
Informal Organizations												
Village *Barwari*	6	42.8	—	—	7	33.3	—	—	—	—	—	—
Village/Caste Organization	10	71.4	8	57.1	12	57.1	9	42.8	—	—	—	—
Jatra, *Kirtan*, *Harisabha* Committees	2	14.2	—	—	3	14.2	2	9.4	2	0.95	—	—

Social participation

It can be seen from Table 4 that the percentage of membership and holding of office by innovators, early adopters and average farmers decreases from innovators to average farmers. Innovators were members of formal organizations which were regionally oriented. In organizations like Block Development Committee, *Hat* Committee, Agricultural Marketing Society, etc. the innovators and the early adopters participated more than the average farmers. The average farmers partici-

pated more in organizations like village defence parties, village school committees, etc. which are village-oriented. Their participation in region-oriented organizations was insignificant. Participation in region-oriented organizations provided contact with farmers of a wider region for the innovators, and the participation of average farmers in village-oriented organizations was restricted only to the village. This implies that the agricultural innovators and leaders were also leaders in social and cultural fields. That the innovators were also traditional leaders is implied by their greater participation in village *barwari*, village and caste panchayats as members and leaders than by the average farmers.

Conclusion

We, therefore, find that there are three categories of farmers in a village. Those who take to improved practices first have been classified as innovators, those who follow the innovators are the early adopters and the majority who adopt the practices last are the average farmers. It has been observed that these categories of farmers differ in respect of such variables as socio-economic status, education, outside contact, land-ownership, and land tenure, etc. The innovators scored high in all these variables. Thus it appears that in the village those who are social leaders also lead in the field of agriculture. Such persons have a high level of education and more outside contact. Thereby they develop a broad outlook which makes them change-oriented.

REFERENCES

1. The following practices recommended by the Agricultural Extension service were included as improved practices :—ammonium sulphate, fertiliser mixture, plant protection chemical, improved jute seed, improved rice seed, Japanese method of rice cultivation, drilling of jute, use of pumping plant for irrigation and artificial insemination.

2. Rahudkar, W. B. 'A scale for measuring socio-economic status of Indian farm families' *Nagpur Agricultural College Magazine*, vol. xxxiv, no. 1-2, 1960.

DESCRIPTION OF A VILLAGE IN BENARES DISTRICT

REV. WILLIAM TENNANT

(Benares 1798)

[**Editor's note**—A book entitled *Indian Recreations*[1] was published in 1803 in two volumes. In one chapter it presents a remarkable picture of the *jajmani* system present in the neighbourhood of Banaras in 1798. The chapter is reproduced below.]

THE mode of living, and the climate of India preclude Europeans, in a great measure, from acquiring any intimate or minute knowledge of the manners of the natives. Unless I had made particular enquiry for the express purpose of laying before you the following account of a village, I might have remained in this country for half my life without any knowledge of the very partial detail which I now intend to present to you.

The inhabitants of the small zemindary of which you lately had a description, live together in one village, which contains about one thousand souls ; a population of nearly one person to each Scotch acre ; and twelve individuals to each plough. The number of working cattle on this property is four hundred ; that of ploughs ninety.

After the Zemindar, the person next in rank and importance is the *Putwari*, the factor or keeper of accounts between the proprietor and tenants : he collects the rents whether in grain or in money, measures the ground, and in the absence of the Zemindar succeeds to any petty jurisdiction which the small society may require. In him you may recognize the Baron Bailie of Scotland : the salary of this officer

[1] *Indian Recreations* ; Consisting chiefly of strictures on the domestic and rural economy of the Mahommedans and Hindoos / By the Rev. William Tennant, L. L. D. M. A. S and lately one of His Majesty's chaplains in India. Vol. II. Edinburgh: Printed by C. Stewart, and sold by T. N. Longman and O. Rees. London, and John Anderson, Edinburgh. 1803. The chapter appeared in vol. 2, pp. 191—201. Old spellings have been retained as in the original without change.

is paid by the farmer at the rate of one seer and a half each for every hundred paid to the proprietor. Sugar, cotton, and other articles not consumed on the estate, pay a certain portion of their valued price to the landholder, and for each rupee paid to the landlord the Putwari receives half an ana, or the 1-30th part nearly.

The Byah, or weigher of grain, is the next to the Putwari; this man divides the grain between the zemindar and the tenant by weight in their respective proportions. The Byah is paid by both parties at the rate of twelve seer for every hundred mauns.

From the mean habitations of the farmers, and their scanty and wretched implements of every kind, I had conceived that there were but little division of labour, and few profest tradesmen. Iron smiths and carpenters make two separate professions in the smallest village. A *Sochar* or master tradesman receives from each plough a maun of grain, consisting of a part of each sort. This is in the nature of a retaining fee, and must be paid annually over and above his allowance when actually employed in your house. As often as you have occasion for his services there, whether in constructing the building or making furniture, he is entitled to a daily allowance of one *pukka* or great seer of grain. During each of the three harvests he receives one sheaf of wheat, barley, or rice, according to the nature of the crop then reaped. This sheaf is not undefined in quantity, but consists of about three seer.

Whether it arises from indolence or superstition, I am unable to determine, that the poorest Hindoo families do not wash their own cloaths; it is certain however that each village retains a number of washermen as a distinct profession. The washerman receives from each plough twenty seer of grain annually; and three sheaves during the three harvests, as in the case of the other tradesmen already mentioned. The families of tradesmen, who have no plough, pay the washerman in specie at the rate of two annas yearly. A sum not exceeding four-pence of British money annually, is certainly a small allowance; but you will recollect that the quantity of clothing

used by a family of Hindoo peasantry, is not the fortieth part of what is necessary for one of your tenants. The children, till they are ten or twelve, seldom put on any clothing at all ; and after that season a small piece of cloth covering the middle, is the whole attire of the lords of the creation in this country. Washing to Europeans in this country is performed by a servant hired by each individual, at the rate of from eight to ten pounds annually, a very small sum, if you advert to the quantity of work. Here our whole dress is white cotton, and must on account of the heat of the climate be changed twice or thrice every day*.

The superstition of the country occasions another profession not common in your villages, that of a Shaver. Part of the beard, the arm-pits, etc. are regularly shaved even among the lowest classes. As one person in this capacity can accommodate a considerable number of individuals, his wages are settled at one ana, or two-pence sterling per annum ; a plough giving twenty seer.

The greater part of cooking utensils, and vessels for holding water, are of earthen ware ; several of these are in daily use in each family, and from their frangible nature the consumption of them is considerable. This occasions the trade of a potter to be universal in every village of the country. The potter receives from each plough his three sheaves in the three successive harvests ; he is paid besides for each pot according to its size ; only the zemindar has his at half price and custom also obliges the potter to provide utensils for soldiers, or such travellers as may pass the night in the village. Earthen pots are very common through all Asia ; and by what we read concerning the 'potters field', they seem to have been in use in Judea, and to have had an allotment of ground for their manufacture. In India the ground is furnished by the proprietor, and for this reason he is supplied at an inferior price.

* In some parts the washermen are entitled to five seer of grain for washing the child-bed linen at each birth. The washing is not performed within doors, nor by putting the clothes in vessels as in Europe ; but at the side of a tank or river, and by striking them against a curved plank of wood.

The lowest, and most despised order of tradesmen in India, are the *Chumars*, or leather cutters. The Chumar receives in harvest three sheaves from each plough ; but besides this annual fee he is paid for every set of ropes or harness he furnishes for a plough two seer and an half of grain. For each pair of shoes the customary price is ten seer of grain : tradesmen pay two annas, which is deemed in ordinary times a higher price ; but they pay no part of his annual fee of three sheaves : when cattle die the hide goes to the Chumar.

The bad police of the East impose the necessity of employing watchmen during night to protect the property of individuals, and to preserve the peace. This business is committed to the Dussauds or Chockidars, several of which are required even in sequestered villages. The nature of their employment invests these people with some power resembling that of a constable. They apprehend delinquents, or report disturbances to the magistrate. Like all other servants of the public in this country, the Chockidars have an annual fee of three sheaves from each plough during the harvest : ten biggahs of ground are allowed to each for his support ; and as several are necessary, the police of the country, imperfect as it is, constitutes a heavy burded on the community. In the vicinity of Europeans there is a greater circulation of property, and of consequence greater temptation to the violation of it. Even in our military cantonments an officer can by no means trust the charge of his house to sentinels ; he is obliged to hire two or three Chockidars, the only terms upon which he can hope for security. Without this precaution, the thieves have attained to such dexterity in their trade, that they can easily steal the pillow from under his head during night.

The most numerous class of labourers in a country village is that of the ploughmen. In this village they amount to about an hundred ; and the wages of each is five seer of grain daily, and one rupee each *hulwary*, or ploughing season : two stated ploughing seasons occur each year, one at the setting in of the rains in June ; the other after they break up in November. The wages of other country labourers is five seer of grain per day ; and during harvest the twenty-fifth sheaf.

The *Aheer* or *Burdiah* (cow-herd) is another necessary profession in every Hindoo farm. The ploughed land is neither fenced nor lying contiguous, but in scattered and detached spots, perfectly exposed to every invader. The cow-herd receives two mauns of grain each month ; and for every ten cows under his charge he receives the milk of one : if buffaloes are under his management he is entitled to the milk of every fifth beast. The cause of this difference I have not learned ; but conceive it to be the greater trouble occasioned by keeping these bulky and obstinate animals. The pasture is common to the whole village, and the tradesmen graze cows on paying their proportion of the cow-herd's fee, which is two anas per month for each buffalo, or the milk of the cow every fifth day. Sometimes the pasture fields lie far from the village ; to it however they are driven ; and should it be necessary to cross a river, the cow-herd lays hold of the tail of a buffalo, and transports himself to the further side with great ease. In the community of the pasture grounds, the joint possession of several tenants, and the payment of rent in kind, you will perceive a strong similarity to the practice of certain districts in the Highlands of Scotland.

The two trades I am next to describe, are so different from every profession to which European manners give rise, that I beg leave to refer you to the authority upon which this narrative is grounded ; for I here with to disclaim all responsibility, as well as merit, in giving the information they may afford.

The trade of a *Barhi* is to prepare dishes of leaves from which the Hindoos eat their food. In Bengal the plantain leaf is so common, and from its size so commodious for this purpose, that the object is attained at once without the intervention of professional skill ; but in the upper provinces there is no single leaf which can supply the place of the plantain ; and artificial combination is made up by patching different leaves together, which forms a substitute for a plate at the Hindoo meals. Five or six different kinds of leaves are employed for this purpose, according to the produce of each district. In all, however, the manufacture is carried on ; and for every hundred

plates furnished by the Barhi, he receives two anas; the zemindar paying only half that sum, either because he affords a house to the Barhi, or because he takes the leaves from his trees. During festivals and religious solemnities, the Barhi carries a torch, and performs the office of a Mussalgee.

The other profession alluded to is that of *Bhaut*, or poet, a person who celebrates the family, and the atchievements of the patron; and indeed of every one who employs him. He is recognized as a member of the community, and has an annual fee of three sheaves from each plough of the village. Should a man's vanity lay him under no contribution, he has nothing more to pay to this officer. A share of this, however, falls to the lot of many; and to gratify it they call upon the Bhaut to compose a poem in their praise; for every such composition he receives a gratuity proportioned to his merit, or the gratification afforded to his employer. Before marriages, which are here contracted by the parents, it is not uncommon to employ on each side a Bhaut, who celebrates the wealth, influence, and respectability of the party who employs him. And after the marriage, or the birth of their first child, the married persons give him a present of a bullock, or a piece of cloth, according to their circumstances.

These particulars are offered on the authority of a native officer of the Bengal army, who at my request made the necessary enquiries upon his own estate. The result he has obligingly communicated in a manuscript in the Hindivi, taken upon the spot. A translation of this manuscript forms the substance of this account; and as this gentleman bears a very respectable character, I have on my part perfect confidence in the accuracy and truth of every part of his narrative. It ought, in fact, to be regarded as neither absurd nor incredible, that in a country where every great man retains in his service a domestic merely for the purpose of proclaiming his titles to the mob as he passes, there should exist a race of men who subsist by flattery. Our own manners, a few centuries ago, are said to have countenanced a race of bards, who frequented the houses of chieftains and celebrated their praises in as rude poetry, and by flattery as gross as the Bhauts of the

Hindoos. There are a thousand particulars in which the European customs and manners in the twelfth century seem to have resembled those of Hindostan. The practice of entertaining buffoons and jesters at court, was common to both countries, and seems to announce a state of manners equally indelicate with that above described.

In this community we have to notice five families of shepherds who possess fifteen hundred sheep ; they constitute a particular class who sheer their sheep, and manufacture the wool. The finer blankets are sold for one rupee each ; the coarse eight anas ; but the zemindar is entitled to what he uses at an inferior price. Mutton is ate on certain occasions by almost every caste, at least the rams ; and the case is the same with goats flesh. In this part of the country there is a price fixed by Europeans for every sheep ; three for a rupee, or about ten pence each. This is lower than the real value, and must operate as a grievance ; it explains the reason why the natives are so averse to sell their productions to Europeans.

From the shepherd we pass to the village Brahmin. As often as the Ryut has collected a particular harvest, the Brahmin is sent for, who burns ghee, and says prayers over the collected heap ; all present join in the ceremony ; and the Brahmin receives as his part one measure of grain in that implement which is employed in winnowing it. He is employed by all the farmers, and at each harvest, he collects a contemptible tithing for a village curate ; besides this the Brahmin receives many different fees and annuities. At each marriage he claims five per cent. of the bride's whole portion ; in cases where the parents can afford no marriage dower, the bridegroom pays the Brahmin his fee, which rises with the circumstances of the party ; but even to a poor man it costs five rupees.

SEX AND MARRIAGE IN THE AGE OF THE MAHABHARATA

A. K. Sur

(*Received on 14 October 1962*)

THE patterns of sexual behaviour and forms of marriage as described in the *Mahabharata* (one of the two great epics of India) bear ample evidence of a cross-cultural understanding between the immigrant Aryans and the autochthons of the land. The Aryans of the Rigvedic period had only one kind of marriage, and that was marriage sanctified by performance of a *yajna*. In the *Mahabharata*, however, four distinct types of marriage are mentioned. In the *Anusasana-parvan* of the work, Bhisma mentions these four types as follows : Brahma, Gandharva, Asura and Rakshasa. The last three had manifestly an un-Aryan ancestry. As such Brahma, it seems, was the only form of Aryan marriage known to the people of the *Mahabharata*. Against these four types of marriage mentioned in the *Mahabharata*, Yajnavalkya and Manu mention some eight different types, namely, Brahma, Daiva, Arsha, Prajapatya, Asura, Gandharva, Rakshasa, and Paisacha. According to Manu the performance of *yajna* was necessary only in the case of the Arsha form of marriage. It would appear that recitation of *mantras*, performance of a *yajna* and pacing of the seven steps were not usually resorted to in the earlier phase of culture represented in the *Mahabharata*. These elements, it would seem, came to be introduced only during a late phase of epic culture. This is clear from the story of Draupadi's marriage with the five Pandavas in the *Adiparvan* of the work. There, after marriage Draupadi first goes to stay with her husbands for a time. Thereafter she returns to her father's house for performance of the *yajna* and all other ritualistic formalities !

Mr. A. K. Sur is a distinguished economist and historian. His personal address is 11A Kalicharan Ghosh Road, Calcutta-2.

It seems that the episode relating to the return of Draupadi to her father's house for performance of the *yajna* was a later interpolation inserted to sanctify the marriage of the heroes according to the custom and usage of a subsequent period. Similarly the Narada-Parvata-Srinjaya episode in the *Dronaparvan*, the Bhrigu-Puloma episode in the *Adiparvan*, and Bhisma's emphasis on the ceremonial aspect of marriage in in the *Anusasanaparvan* are later accretions to the work. These episodes in fact were introduced at a later period when marriage without recitation of the *mantras*, performance of the *yajna* and *Saptapadigamana* had come to be denounced by the lawgivers.

When the ceremonial aspect of marriage was introduced, naturally stress was laid on the superiority of this kind of marriage. Thus in the *Adiparvan* we find that when Bhrigu married Puloma, she was also claimed by her namesake Rakshasa Puloma. The Rakshasa claimed that he had previously chosen her as his wife. Agni was asked to mediate. Agni said : 'Puloma, it is true that you have previously chosen this woman as your wife. But you did not marry her according to the *mantra* rites. This Bhrigu has done. So Puloma is Bhrigu's.' Again, in a later part of the work, namely, *Anusasanparvan*, Bhisma says to Yudhisthira that a marriage is complete only after the recitation of *mantras*, performance of *homa*, and pacing of the seven steps.

Against this later glorification of the ritualistic kind of marriage, it is, however, mentioned in many places of the *Mahabharata* (apparently representing an earlier phase of the epic culture) that Gandharva was the ideal form of marriage for a Kshatriya. Thus in the *Adiparvan* of the work, Dushyanta says to Shakuntala : 'Blessed one, be my wife. Marry me according to the Gandharva form, for this kind of marriage is superior to all. For a Kshatriya, the Holy Writ prescribes either a Rakshasa or Gandharva form of marriage, or a mixture of the two. Be thou pleased to marry me according to the Gandharba form'. Kanva, on returning to the Ashrama, also echoes the same sentiment. Says he : 'The union of willing wife with a man in solitude and without

recitation of *mantras* is called a Gandharva form of marriage. For a Kashatriya this is the proper form of marriage'. Many of the heroes of the *Mahabharata* contracted this form of marriage. Thus Santanu married Ganga in this way. In this way also Bhima married Hirimba, Arjuna married Ulupi and Chitrangada, and Parikshit of the Ikshaku race married Susobhana.

While the Gandharva form of marriage is thus extolled in certain episodes of the *Mahabharata*, Svayamvara, a variant of the Rakshasa form of marriage, is however considered to be the norm. Thus in the Svayamvara meeting of Amba, Ambika and Ambalika, daughters of the King of Kasi, Bhisma tells the assembly : 'The lawgivers tells us that the best form of marriage for a Kshatriya is winning of the girl by vanquishing the rivals in a Svayamvara meeting.' Instances of Svayamvara marriage are not rare in the *Mahabharata*. The Pandavas won Draupadi from the Svayamvara meeting at the court of King Drupada. The Nisada king Nala also won Damayanti, daughter of the king of Vidarbha, from the Svayamvara meeting at his court.

Instances of marriage by capture, also a variant of the Rakshasa form of marriage, are not rare in the *Mahabharata*. Thus, Rukmini was captured by Krishna. Devaki was forcibly captured by Sini from the court of Devaka for marrying her to Vasudeva. Similarly, Karna captured Chitrangada from the court of the king of Kalinga for Duryodhana. When staying at Raivataka, Arjuna became enamoured of Subhadra, sister of Krishna. Krishna advised him the way of winning her as follows : 'For a Kshatriya, Svayamvara is the accepted form of marriage. But the mind of a woman is uncertain. So there is no knowing whom she would choose. So you capture her by force. The lawmakers have said that for heroes such a form of marriage is honourable.' So Arjuna carried her off by force. When the Yadavas became angry at Arjuna's conduct, Krishna mollified them by saying : 'That we sell our daughters for the sake of money is conceivable to Arjuna. Neither is he agreeable to Svayamvara. Hence he captures her by force.'

References are also numerous in regard to the Asura form of marriage, namely, winning of a girl by payment of a bride-price. Thus Madri was won for Pandu by payment to Salya, of gold, jewels, elephants, horses, etc. Krishna also refers to the custom of selling daughters by the Yadavas. When Richika, son of Bhrigu, wanted the hand of the daughter of Gadhi, King of Kanyakubja, Gadhi said : 'According to the custom of our family one thousand speedy horses must be paid as bride-price for her hand.' From King Harvasya and two other monarchs, Galava obtained four hundred horses each for handing over Madhavi, daughter of Yajati, for the purpose of raising sons on her. In the *Karnaparvan* Salya also refers to the custom of selling wives by the people of Anga.

Marriage of a woman for the second time is referred to in several passages of the *Mahabharata*. Such a woman was called *Punarbha*. The first husband of the daughter of Airavata (name of the daughter not given in the *Mahabharata* but according to the *Visnupurana* she is Ulupi) was killed by Garuda. Thereafter Airavata gave her to Arjuna. Arjuna raised a Kshetraja son on the passion-stricken girl. This son was Iravan. Gautama, when he came to the house of a gentleman for alms, in the guise of a Brahmin, was given a young Sudra widow whom he married, and raised sons on her. Despaired of any news about Nala, Damayanti also contemplated a second Svayamvara.

Marriage in the age of the *Mahabharata* usually used to take place within the caste. But marriage outside the caste was not rare. There was, however, a repulsion against the marriage of a man with a girl of a superior caste. Thus in the Garuda-Vinata episode mention is made of a Brahmin marrying a Nisada girl. King Devaka married a Sudra woman, the mother-in-law of Vidura. In the *Dronaparvan*, it is said that if the Brahmin husband of a Sudra woman performs a *Sraddha* ceremony, it produces no result, implying thereby that a Brahmin also used to marry a Sudra woman. But the opposite was disapproved. Thus in the *Anusasanaparvan* it is said that a man born of a lust-inflamed Brahmin woman by a Sudra barber is called a Chandala.

Polygyny or marriage of two or more wives by a man was widely practised. Many of the heroes of the *Mahabharata* had more than one wife. Yajati married Sarmistha and Devayani. Dushyanta married Shakuntala and Lakshana. Santanu married Satyavati and Ganga. Vichitravirya married Ambika and Ambalika. Dhritarashtra married Gandhari and Vaisya. Pandu married Kunti and Madri. In addition to having Draupadi in common, Bhima married Hirimba, Arjuna married Ulupi, Chitrangada and Subhadra. In one place of the *Mahabharata*, Krishna is said to have 1,016 wives and in another place 16,000. In the *Vanaparvan* it is stated that King Somaka had 100 wives. Vrihadratha, King of Magadha, also married the twin daughters of the king of Kasi.

As to polyandry, the most notable example in the *Mahabharata* is that of the five Pandava brother marrying Draupadi. But Draupadi's is not the solitary case mentioned in the *Mahabharata*. Thus references are also made of Jatila of the race of Gautama marrying seven *Risis* (sages), and Varksi, daughter of a sage, having ten husbands. On the occasion of Draupadi's marriage, Vyasa says that a woman marrying several husbands is the eternal law (*Sanatana Dharma*). It should be noted here that there are references to polyandry also in the *Dharmasutras*. In the *Apastamba Dharmasutra* (II. 10-27, 2-4) it is stated that a bride is given to the family of brothers and not to one brother alone. Vrihaspati also refers to it, but considers it reprehensible. (Vrihaspati quoted in *Smritichandrika* I.10. Cf. Nair practice.) In later times, however, the Smriti writers emphasized that a woman cannot have several husbands.

Apart from satisfaction of lust, the main motive force behind sexual relations in the age of the *Mahabharata* was the need for progency. There is an insistent demand by both men and women, for getting sons. Thus the mendicant Jaratkaru who was following the life of a Brahmacharin, was thus admonished by his progenitors : 'Son, give up your celebacy. Marry and procreate children. That will do us immense good.'

Agastya married Lopamudra, daughter of the king of Vidarbha and asks her : 'How do you want me to raise sons on

you ! Do you want one, a hundred or a thousand sons ?' In the *Salyaparvan* is narrated the story of Subhra, daughter of the sage Mahatapa, who after practising great austerities wanted to go to heaven, but was told by Narada that an unmarried woman cannot go to heaven. So Subhra married Praksringavan, son of Galava. For this reason, there is stress laid on getting both sons and daughters married in proper time. Thus in the *Santiparvan,* Bhisma advises Yudhistira : 'One would get his son married, when he grows up in age.' Again, in the *Anusasanparvan* Bhisma tells Yudhistira : 'One who does not marry his daughter to a suitable groom commits the sin of killing a Brahmin.' The need for getting son is also emphasized by the *Niyoga* usage of raising sons by a person other than the husband after his death or even during his lifetime in an emergency.

Some of the passages of the *Mahabharata* are quite frank about the sensuality of the men of the time. Vikarna says : 'The kings have four luxuries : hunting, drinking, dice playing and sexual excesses with women'. In the *Anusasanaparvan* it is stated that rich and handsome young men always hanker after their neighbours' wives. The episode of Yajati-Puru in the *Adiparvan* of the work relates how Yajati, stricken with the curse of old age, implored his son Puru to transfer to him his youth, so that he could enjoy life. Yajati says to Puru : 'There is no end to the enjoyment of sexual pleasure. Like *ghrita* (clarified butter) in union with fire, man's sexual passion becomes more intense in union with women. All the women in the world are not sufficient to satisfy the lust of a single man.' Awakening of the lust at first sight seems to be the keynote of the sexual psychology of the age of the *Mahabharata.* Only a few of the male personages in the work are immune from it. Kings, sages, and even gods manifest the same passion. The earliest mention of it in the work is that of Parasara having sexual intercourse with Satyavati. Surya had also sexual intercourse with Kunti. Agni in the form of a Brahmin had also amorous frolics with the beautiful daughter of Nila, king of Mahismati. Even Chyavana from inside of the valmik mound (ant-hill) desired Sukanya, daughter of

King Saryati. Sukanya was also desired by the twin gods Asvinikumaras. In the *ashrama* (hermitage) of Raibhya, Yavakrita on having seen the beautiful wife of Paravasu, desired to have sexual intercourse with her. Agni was filled with lust when he saw the wives of the Saptarshi, and one of them Svaha had sexual unions with him for six times. Nahusa, when made king of the gods desired Sachi. Indra in the guise of Gautama violated Gautama's wife Ahalya. When Galava offered to Visvamitra Madhavi, the daughter of Jayati, mother of three children, Visvamitra reproachingly said: 'Why did you not offer this girl first to me? I could have raised all the four sons on her.' When Narada along with Parvata, visits King Srinjaya, son of Svitya, a friend of theirs, Narada burns with passion for Srinjaya's daughter. Parvata quarrels with him saying that it was he who had first desired her. Vyasa becomes amorously mad when he saw the Apsaras sporting in a naked state on the bank of the river Mandakini. Oghavati, wife of Sudarsana, permits herself to be enjoyed by a Brahmin guest when he desired her. Indra becomes lustful for Ruchi, wife of the sage Devasarma and tries to win her.

While these are instances of men desiring women for temporary sexual relations, some instances where permanent relations were established are also given. Yayati sees Sarmista, falls in love with her and marries her. When Dushyanta sees Shakuntala he too falls in love with her and marries her. Shantanu on seeing a beautiful woman on the banks of the Ganges says: 'Be thou a goddess, a demoness, a nymph, or a human being, you marry me.' Riksha Samvarana enamoured of Tapati, desires to have sexual union with her. But Tapati says: 'I am not free. I have my father. So first conciliate my father.' Thereafter Tapati was given to Samvarana. Samvarana left his capital, went to the solitude of the forests to enjoy Tapati to his heart's content for twelve years.' When Arjuna sees Chitrangada, daughter of Chitravahana, king of Manipur, he desires her hand. Arjuna marries her and lives with her for three years in Manipur. Again, Arjuna captures Subhadra when he becomes enamoured of her, and marries her. Parikshit of the Ikashaku race finds Susobhana by the side of a pond

and desires and marries her. When Kichaka sees Draupadi, he becomes filled with lust and tries to seduce her.

An idea of the sexual psychology of women too is obtained from the *Mahabharata*. In the *Virataparvan*, Sudesana tells her companions : 'Unknowable is the mind of a woman'. In the *Anusasanaparvan*, Panchachuda when asked by Narada to unfold the nature of women says : 'It is the weakness of women that even though born of a noble family and married to a good husband they deflect from the path of virtue. There are no sinners worse than them in the world. They have not the patience to wait for the return of their husbands however wealthy, handsome and loving they may be, but would give themselves up to the first man who comes to woo them with soothing words'. It is added : 'If they remain faithful to their husbands, it is only because of the absence of extra-marital suitors or out of fear for their kith'. None is considered incompatible by them for sexual union. They care neither for a man's age nor for his looks. When the wife of a householder looks at a *Svairini* (courtesan) she too desires to follow her path. When they find no males near about them, they satisfy each other's desires. Their passions are excited when they see handsome men. They are one-in-all of death, wind, hell, fire and venomous snake.' In the Astavakra episode of the same *parvan* it is said that women are ever unsteady, and that even women stricken with old age do easily become excited for sexual union.

In the *Adiparvan*, Pandu tells Kunti that in ancient times women were sexually free. They could freely go away to have sexual enjoyment with persons other than their husbands. This was not considered a sin, for such was the olden law. It is pointed out that the same custom still prevailed among the Uttarakurus. It is further stated that in this country too this ancient custom had been abolished not very long ago. It was Svetaketu, son of the great sage Uddalaka, who put an end to it. It is related that one day he found his mother taken away from his father's presence by a stranger for sexual intercourse. Svetaketu became inflamed with rage. But the father pacified him saying : 'Son, don't get angry,

for such is the eternal law (*Sanatana Dharma*). In this world all women are as free as cows.' But Svetaketu would not be pacified. Declared he : 'From today a woman who would have sexual intercourse with a man other than her husband, or a man who, leaving his own wife, would have sexual union with another woman, or a woman who would refuse to raise a son through a person other than her husband when commanded to do so, would commit the sin of *bhrunahatya* (destruction of foetus).'

In the *Sabhaparvan,* it is stated that the women of Mahismati are promiscuous. 'Nobody can prevent them from their promiscuous habit.' In the *Karnaparvan,* Karna says to Salya : 'Who has not heard of the wickedness of the Madraka women, as sung in the *gathas.* In the presence of their fathers and mothers-in-law, of maternal uncles, sons-in-law, daughters and sons, grandchildren and guests, servants and maids, they indulge in sexual acts after taking powdered gram, fish, wine and beef. Intoxicated with wine, the Madraka woman would cast off their garbs and start dancing stark naked. They have no self-restraint. They are *Svechchacharinis* (libertines). When somebody begs of a Madraka women, Kanjika or Sauvira (kinds of women), she would say : 'I can give up my husband and sons, but can't give up my Kanjika'. Again, of the Vahikas who inhabited the regions of the Indus Valley, it is said that their women have no virtue ; they speak obscene language. The Arattas among the Vahikas raised *Jaraja* (illegitimate) sons. It is because of the curse of a *Sati* (a chaste woman) that their women have cone to be promiscuous and matriarchal. They scruple not to have sexual intercourse even with their preceptor's wife'.

In the *Vanaparvan* Dhritarastra tells Vidura : 'An unchaste woman would leave her husband even though she receives sweet treatment from her husband'. In the same chapter of the work, Draupadi advises Satyabhama not to wait in solitude even on Pradyumna or Samba.

In the *Vanaparvan,* Kausika was about to curse a housewife because of her willingness to serve her husband first. In the *Anusasanaparvan,* Oghavati, wife of Sudarsana promptly

gives herself up to a guest when he desires her. When her husband calls her out, the guest says : 'I am a Brahmin guest in your house. Your wife is satisfying my desire'. To this Sudarsana replies : 'Brahmin, when you are my guest, my wife is yours. You enjoy her to your heart's content'.

In the various chapters of the *Mahabharata* there are references to two distinct types of independent women, namely, *Svairinis* and *Sairindhris*. The former are women having complete sexual freedom. The latter are women who earn their living independently by residing in another's house and remaining free from any sexual taint. A notable example is that of Draupadi when as a Sairindhri she lived in the palace of Virata and resisted there the amorous solicitations of Kichaka.

Pre-marital sexual relationship was also permitted for women in the age of the *Mahabharata*. In the *Adiparvan* of that work, Parasara says to Satyavati, the virgin daughter of Uparichara Vasu : 'Darling, satisfy my desire'. Satyavati says : 'How can I do it here in the boat, for people from the shores may see us in the act'. So Parasara created a fog and under the cover of it he satisfied his lust. He gave her a boon that despite this sexual union she would ever remain a virgin. Kunti in her virgin state had also sexual intercourse with Surya and had a son Karna. Through a boon of Durvasa, she too continued to remain a virgin. The retention of virginity after the birth of each son by different men, is told also in the Madhavi-Galava episode of the *Udyogaparvan*. That pre-marital sexual relationship was socially tolerable is proved by the mention of two distinct kinds of sons born of such unions. Thus, in the *Udyogaparvan*, Krishna tells Karna : 'Two kinds of sons may be born to a virgin : (1) *Kanina*, and (2) *Sahodha*. *Kanina* is one who is born before marriage and *Sahodha* is one whom she delivers after her marriage.' Again in the *Anusasanparvan* Bhisma tells Yudhistira : 'A son born of a virgin before marriage is called *Kanina*.. One born after marriage is called *Adhyoya*.'

Of extra-marital relationship under certain circumstances we have numerous direct and indirect references in the

Mahabharata. In fulfilment of the canons of hospitality (as we have already noted in the episode of Sudarsana) the housewife could give herself up to the guest. But more frequently was it permissible for the purpose of raising a son. In the *Adiparvan*, when Vichitravirya dies, Satyavati, the mother, asks Bhisma to raise sons on the wives of his younger brother, Ambika and Ambalika. Bhisma resents it. So Vyasa's services are requisitioned. Vyasa raises two sons on the widows and another on a maid-servant. In the solitude of the Satasringa mountain, Pandu commands Kunti : 'Make endeavour to get a son. It is enjoined in the Holy Writ that in an emergency a woman can raise a son through her own brother-in-law.' Kunti says : 'It is said that when King Vusitasva died, his queen raised a son by having sexual union with her dead husband'. So Dharma was called to raise sons on Kunti. The three sons raised were respectively aged 16, 15 and 14 when they were taken to Hastinapur later on. So Dharma must have been called thrice, or he must have lived with Kunti for at least three years. Madri also desired the Asvinikumars, so that she could have consecutive sexual union with two gods. Vasista too raised a son on the queen of Kalmasapada, a king of the Iksaku race.

Even the wives of the venerable *Risis* (sages) were not free from extra-marital sexual impulse. In the *Aranyakaparvan*, it is stated that Renuka, wife of Jamadagna, became passionate when she saw Chitraratha, king of the Martikavata country sporting amorously with his wives in the river.

While describing the sexual nature and habits of the men and women of the age of the *Mahabharata*, mention should be made of the Sulabha-Janaka episode of the *Santiparvan*. Sulabha, a nun, wanting to test the piety of Janaka, king of Mithila, came to his court and entered his body. Janaka said : 'You are a Brahmin, I am a Kshatriya ; You are a *sannyasini*, I am a householder ; so there cannot be any union between us. Further, if your husband is living, then you are forbidden to me as another's wife. If a man and a woman have mutual affection for each other, only then can the union be *amrita* (nectar), otherwise it is all poison.'

The nun replied : 'Allow me to remain in your body for a night. I shall depart in the morning.' Janaka considered her words to be reasonable and full of meaning. So he demurred not any more.

In the age of the *Mahabharata*, women were also used as commodities for the purpose of sale, gift and wager in games of chance. Mention has already been made of the bride-price paid for the purpose of getting a wife. In describing to Dhritarashtra, the kinds of presents received by Maharaja Yudhisthira on the occasion of the *Rajasuya Yajna*, Duryodhana referred to the hundreds and thousands of slim, long-haired brunette girls of Karpasaka country sent by the Sudras. One of the wagers staked by Yudhisthira at the dice game was 100,000 young maids proficient in dancing and music and adorned with ornaments. When Dhritarashtra heard that Krishna was coming to Hastinapur to mediate in the quarrel between the Kauravas and the Pandavas, he said to Vidura : 'Among other things I shall make present to Krishna one hundred beautiful *nulliparia* girls'. It is also mentioned that Janamejaya, son of Puru, made gifts of many thousands of maids adorned with ornaments after the performance of *yajnas* each time. Gautama, when he came to the house of a gentleman to beg in the guise of a Brahmin, the man gave him as alms one new cloth and a young widow. In his *Asvamedha Yajna*, King Yudhisthira presented to the other kings jewels, elephants, horses, women, cloths and gold. After performing the *Sraddha* ceremony of Dhritarashtra, Gandhari and Kunti, Yudhisthira presented the Brahmins with beddings, food, vehicles, jewels, and maids.

There is only a solitary reference to homosexuality in the *Mahabharata*. In the *Anusasanaparvan*, Panchachuda tells Narada that when women do not find males at hand they satisfy each other's lust. This reference is evidently to some kind of homosexual practice. In later times, Vatsayana gives details of such practices, including the use of artificial penis for the purpose. It is described by Vatsayana that solitary women would dress their female friends as males and fitting then with tubes resembling the penis in shape, embrace

them and hug them and insert the improvised penis into their own organs.

Of abnormal sexual practice, we have also an example in the *Mahabharata*. In the *Anusasanparvan*, it is said that in the forest, Vipula found a man and a woman wheeling round in a copulating state and quarreling with each other that one was moving faster than the other.

Prostitution too was quite familiar in the age of the *Mahabharata*. In the *Aranyakaparvan*, it is stated that Lomapada engaged the services of prostitutes to win Rishyasringa. In the *Virataparvan*, *ganikas* adorned with ornaments are asked to participate in the reception of Uttara, son of Virata, on his return from war to rescue cows. A *ganika* is defined by Vatsayana as a courtesan prostitute. She is distinguished from *Svairini* or an open prostitute. In the *Mahabharata* there is also reference to prostitutes accompanying belligerant forces to the fields of battle. When they went to Dvaitavana, Duryodhana and his company also took prostitutes with them.

Finally, some mention should be made of the sexual ethics of the age of the *Mahabharata*. Relations with one's sister was considered to be incestuous. In the *Adiparvan*, Kacha refuses the amours of Devayani because he treated her as his sister. Arjuna who reared up Uttara as a daughter refused to become her husband, and got her married to his son Abhimanyu. In the *Bhismaparvan*, it is stated that one goes to hell if he sexually unites with the wife of a preceptor, or refuses to have sexual intercourse with his own wife during the menstrual period (from the fifth to the sixteenth day after the commencement of menses), or sexually unites with his wife on a *Sraddha* day. In the *Shantiparvan*, Bhisma advises Yudisthira not to form friendship with a man who has violated the wife of a superior. In the same *parvan*, Bhisma tells Yudisthira not to see another man's wife naked. In the *Anusasanparvan*, it is stated that a Brahmin does not deserve gifts who causes abortion to a woman or maintains a paramour of his wife at home. In the *Asvamedhaparvan*, the duty of maintaining a wife even in old age is emphasized. In the *Shantiparvan* it is stated that when a man retires to the forest in search of *Moksha* (salvation), he should leave his old wife at home. In the *Salyaparvan*, it is stated that an unmarried woman cannot go to heaven.

A NOTE ON THE ANTHROPOLOGY OF THE BHATRA AND THE MURIA (KONDAGAON) OF BASTAR

HIRENDRA KUMAR RAKSHIT

(Received on 28 June 1962)

THE anthropometric data of the Dorla and the Dhurwa of Bastar were presented in an earlier paper (Rakshit 1960). In the present notice, similar data for the Bhatra and the Muria of Kondagaon in Bastar are being presented.

The Bhatra population of Bastar is limited to Jagdalpur Tahsil, in the region to the northeast of Jagdalpur town. Their number is approximately 60,000. The Bhatras are also to be found in large numbers in the adjoining tracts of Orissa to the east of Bastar. In Bastar, the Bhatras are divided into at least three divisions, namely, Bade Bhatra, Pit Bhatra and San Bhatra (Tandon 1960). There is, however, another group who also claim to be Bhatra, but they appear to have come from the ranks of adjoining Raja Murias. The present paper is concerned only with the Bade Bhatra who are by far the most numerous. As distinct from all other important tribes of Bastar who use several forms of Dravidian dialect, the Bhatra people speak an Indo-Aryan dialect, namely, Bhatri, which is very much like Halbi (Bhattacharya 1957), the lingua franca of North Bastar. The Bade Bhatra are divided into a few exogamous totemistic units (clan), the influence of which in regulating marriage is not discernible in case of marriage after divorce, polygamy, etc.

Cross-cousin marriage is quite common among them. Divorces on the initiative of either party and subsequent marriages are frequent as also infertile unions.

Anthropometric measurements were taken on 100 adult males hailing from 16 villages of the Bhatra tract, namely,

Mr. Hirendra Kumar Rakshit is Anthropologist in the Anthropological Survey of India, His personal address is 112/5, Selimpur Road, Calcutta-31.

Kinjoli 22, Chottedeora 6, Sargipal 5, Semalnar 4, Bhejripadar 3, Nenganar 5, Rajnagar 6, Bakawand 10, Korpawand 7, Nolpawand 2, Saltawand 4, Kaorawand 3, Koshmi 5, Chinari 6, Pahurbel 7 and Farsigaon 5. The persons were measured in their respective villages.

The Muria, like the Bison-horn Maria, are one of the most populous tribes of Bastar. They number approximately 2,00,000 (Elwin 1947). Grigson (1939) recognized three distinct regional populations of the Muria, namely, (i) the Raja Muria of Jagdalpur Tahsil, (ii) the Gotul Muria of Kondagaon Tahsil and (iii) the Jhoria Muria of Narayanpur Tahsil. The present anthropometric data pertain only to the Gotul Muria of Kondagaon Tahsil. As noted earlier (Rakshit 1960), the Muria of Jagdalpur Tahsil may be indistinguishable from the Bhatra, where the former come in contact territorially with the latter. On the other hand, Grigson (1939) found the Jhoria Muria of Narayanpur Tahsil in the slopes of Abujhmar Hills and the adjoining areas not very different from the Hill Maria. Nor can the Gotul Muria of Kondagaon Tahsil be considered as wholly an unmixed population. For, there is evidence still retained in the memory of elderly Kondagaon Muria that a numerically significant sector of their population migrated within the last 50 years or so from (i) Londrigura, where the majority are Bison-horn Maria and (ii) from Badedongar, where the people are mostly Jhoria Muria. The Kondagaon Muria are a steadily increasing population group with moderately high fertility. They practice cross-cousin marriage frequently and are divided into a few totemistic clans.

100 adult male Maria measured were from Kondagaon, Chilputi, Girhala, Satgaon, Jaitpuri, Palli, Kerabahi, Masora, Pollari, Dongrigura and from a few other villages off Farashgaon.[1]

In Table 1 are shown the statistical constants of 19 metric characters for the Bhatra and the Muria series. The value of

[1] The names of all villages and actual number of subjects measured in each village could not be secured as the article was prepared at Ootacamund and Calcutta while the primary data are still lying at Nagpur.

't'—test of mean has been found to be at a significant level for as many as ten characters, of which five characters show significant difference in variance ratio as well. The two series are differentiated in their mean values without being differentiated in their variance ratios in sitting height, auricular height, inter-orbital breadth, orbito-nasal breadth and orbito-nasal arc. The values of 't' and variance ratio test are shown in Table 2.

TABLE 1

Statistical constants of direct measurements in mm.

Serial No.	Character	Bhatra N=100		Muria N=100	
		Mean	S. D.	Mean	S. D.
1	St	1603.58	61.79	1617.98	59.02
2	SH	819.66	26.96	827.89	29.47
3	HL	182.42	7.30	187.31	5.19
4	HB	139.56	5.05	137.99	4.12
5	AH	112.34	5.09	113.86	4.49
6	FB	101.44	3.69	100.70	3.34
7	BzB	132.04	4.47	131.19	4.06
8	BB	100.85	4.86	100.63	4.88
9	IOB	32.89	2.36	31.93	2.34
10	ONB	100.30	3.48	102.01	3.20
11	ONA	110.43	4.27	114.19	4.39
12	NH	47.43	2.68	48.22	3.06
13	NB	40.11	2.78	40.46	2.30
14	ND	20.75	2.27	21.74	2.71
15	UFH	63.21	8.36	63.24	4.38
16	TFH	111.59	5.70	111.66	6.01
17	HC	521.96*	13.80*	530.50	11.44
18	SA	327.44	14.06	334.29	11.26
19	TA	329.32	11.10	327.71	9.95

*N=99

TABLE 2

Values of 't' and variance ratio : Bhatra and Muria series

Serial No.	Character	't'	V. R.
1	St	1.70	1.04
2	SH	2.17*	1.04
3	HL	5.43**	1.98**
4	HB	2.40*	1.50*
5	AH	2.23*	1.29
6	FB	1.48	1.22
7	BzB	1.40	1.21
8	BB	0.32	1.01
9	IOB	2.88**	1.02
10	ONB	3.60**	1.18
11	ONA	6.11**	1.06
12	NH	1.93	1.31
13	NB	0.97	1.47*
14	ND	2.78**	1.42*
15	UFH	0.09	1.70*
16	TFH	0.08	1.11
17	HC	4.73**	1.46*
18	SA	3.78**	1.56*
19	TA	1.07	1.24

* 5% level of significance

** 1% level of significance

The estimated median values of 14 indices derived from direct measurements are shown in Table 3. The median values instead of the mean values have been preferred at the instance of Rao (Majumdar and Rao 1958, 266) for two reasons, namely, (i) median gives more appropriate idea of an anthropometric population than mean, and (ii) computations involved in working out median of indices are far less than in the case of mean. For some common indices, namely, CI, NI, UFI and TFI, however, the mean values were also worked out and are shown in Table 4.

TABLE 3

Median values of indices : Bhatra and Muria series

Serial No.	Indices	Bhatra N=100	Muria N=100
1	CI	76.50	73.67
2	LHI	61.58	60.79
3	BHI	80.50	82.52
4	NI	84.57	83.91
5	NEI	51.73	53.73
6	ONI	110.10	111.94
7	TFPI	72.62	72.98
8	UFI	47.93	48.20
9	TFI	84.51	85.11
10	TCFI	94.61	95.07
11	VCFI	99.33	98.07
12	ZFI	76.83	76.76
13	ZMI	74.86	76.71
14	SSI	51.13	51.17

TABLE 4

Mean values of selected indices : Bhatra and Muria series

Serial No.	Indices	Bhatra N=100	Muria N=100
1	CI	76.63	73.73
2	NI	84.77	84.21
3	UFI	47.79	48.24
4	TFI	84.61	85.18

The two series do not appear to be differentiated in any of the 14 indices. In cephalic index, however, the difference is largest, where the two series differ by about 3 units.

Stature

The two groups differ in mean stature by more than 14 mm. The difference is not, however, statistically significant, though the Muria are apparently taller. Persons of medium stature and above account for 33% of the Muria sample, while the corresponding percentage for the Bhatra sample is 27. The classification frequencies are noted in Table 5.

TABLE 5

Stature

Class	Range in mm.	Frequency	
		Bhatra N=100	Muria N=100
Very Short	1300–1499	4	5
Short	1500–1599	45	80
Below Medium	1600–1639	24	32
Medium	1640–1669	13	14
Above Medium	1670–1699	8	11
Tall	1700–1799	6	8

Cephalic Index

The two groups differ appreciably ; the Murias being essentially a dolichocephalic folk while the Bhatras are dolicho-mesocephalic. The Bhatra also show higher percentage of brachycephal heads—18%, the corresponding percentage for the Muria being 3% only. The details are shown in Table 6. It is also to be noted that the dolichocephaly of the Muria is essentially due to larger head-length and not due to smaller head-breadth.

TABLE 6

Cephalic Index

Class	Range	Frequency	
		Bhatra N=100	Muria N=100
Hyperdolichocephal	Below–70.9	4	15
Dolichocephal	71.0 –75.9	46	67
Mesocephal	76.0 –80.9	32	15
Brachycephal	81.0 –85.4	14	2
Hyperbrachycephal	85.5 –above	4	1

Nasal Index

The two tribes resemble one another closely with similar class frequencies as noted in Table 7. Both the tribes are characterized by mesorrhine to chamaerrhine nose form.

TABLE 7

Nasal Index

Class	Range	Frequency	
		Bhatra N=100	Muria N=100
Hyperleptorrhine	Below – 54.9	...	...
Leptorrhine	55.0 – 69.9	...	2
Mesorrhine	70.0 – 84.9	54	52
Chamaerrhine	85.0 – 99.9	44	44
Hyperchamaerrine	100.0 – above	2	2

Total Facial Index

The Muria seem to possess slightly longer face due to smaller bizygomatic breadth than the Bhatra. Both the tribes show low frequencies for hyperleptoprosop. Detailed class frequencies are noted in Table 8.

TABLE 8

Total Facial Index

Class	Range	Frequency	
		Bhatra N=100	Muria N=100
Hypereuryprosop	below – 78.9	14	10
Euryprosop	79.0 – 83.9	38	27
Mesoprosop	84.0 – 87.9	21	41
Leptoprosop	88.0 – 92.9	23	15
Hyperleptoprosop	93.0 – above	4	7

Majumdar (1941) measured a series of 54 Bhatras for which comparable mean figures are available with respect to 13 direct measurements and 4 indices. The two Bhatra series agree very closely in stature, HB, UFH, BB and ONA ; in HL, BzB, ND and ONB also the two series do not show any appreciable difference. But the differences in TFH and AH seem to be significant. The comparative data are shown in Table 9 for selected direct measurements and indices.

TABLE 9

Comparative figures for selected characters : Bhatra

Author		Mazumdar, 1941	Rakshit, 1962
Sample Size	Character	54	100
Serial No.			
1	St	1609.1	1603.6
2	HL	184.4	182.4
3	HB	138.9	139.6
4	BzB	130.4	132.0
5	NH	45.9	47.4
6	NB	39.1	40.1
7	UFH	64.6	63.3
8	TFH	116.9	111.6
9	CI	75.3	76.6
10	NI	85.1	84.8
11	TFI	89.6	84.6

Apart from the present series there are two other series of the Koudagaon Muria, both of sample size 52, one by Majumdar (1941) and the other by Guha (1942). For Guha's series statistical constants of HL, HB and CI only are available, while comparable statistical constants of 13 direct measurements and 4 indices are available for Majumdar's series. Between the present series and that of Majumdar, there is close agreement only in UFH, while in all other comparable measurements the two series are widely different, and specially so in stature, HL, HB, AH, NH, NB, etc. In all dimensions, the present series shows larger values compared to Majumdar's series except in case of AH and TFH. The mean values of HL and HB, only available comparable figures for Dr. Guha's series, are closer to the present series. The mean values of CI of the three series are comparatively less widely different ; in fact the values are quite close to each other than some of the direct measurements. Comparative figures of the three series for important direct measurements and indices are given in Table 10.

TABLE 10

Comparative figures for selected characters : Kondagaon Muria

Author		Majumdar 1941	Guha 1942	Rakshit 1962
Sample Size	Character	52	52	100
Serial No.				
1	St	1577.9	...	1618.0
2	HL	183.6	185 6	187.3
3	HB	134.1	138.6	138.0
4	BzB	127.1	...	131.2
5	NH	43.2	...	48.2
6	NB	36.9	...	40.5
7	UFH	62.1	...	63.2
8	TFH	114.4	...	111.7
9	CI	73.0	74.7	73.7
10	NI	85.5	...	84.2
11	TFI	90.0	...	85.2

An attempt has been made to compare the data on the four tribes of Bastar measured by me. Of the four tribes, namely, the Dorla, Dhurwa, Bhatra and the Muria of Kondagaon, the Dorla seem to be the smallest and the Muria the largest so far as general size is concerned as revealed by the absolute dimension of the direct measurements. Out of 19 direct measurements, the mean values of the Dorla series show smallest dimensions in as many as 16 characters (except in case of HB, AH and SA), while the Muria series show 11 largest dimensions (except in case of SH, HB, FB, BzB, BB, IOB, UFH and TA). The two other series show intermediate dimensions in most of the characters, though it is sufficiently evident from Table 11 that the Bhatra show comparatively larger dimensions in more characters than the Dhurwa.

TABLE 11

Comparative dimension of 19 direct measurements for four tribes of Bastar

Tribe	Smallest	Medium	Medium+	Largest
Dorla	16	1	2	...
Dhurwa	1	11	5	2
Bhatra	1	5	7	6
Muria	1	2	5	11

In the majority of characters, namely, HB, AH, FB, BzB, NB, ND, IOB, SA and TA, the four tribal series of Bastar do not show any between-group appreciable difference. In NH, ONA and HC the Dorla and the Muria seem to be differentiated, the latter being larger in all three dimensions. In stature and also in SH, the Dorla and the Bhatra are slightly shorter than either the Dhurwa or the Muria. In HL, the Dorla, the Dhurwa and the Bhatra are alike in sharp contrast to the Muria, who have a sizably longer mean HL. On the other hand, the Dorla have an appreciably shorter TFH compared to the other three tribes. In mean UFH, the Bhatra and the Muria are longer than either the Dhurwa or the Dorla, and in turn the Dhurwa show larger value than the latter. In BB, the Dorla and the Dhurwa show smaller dimensions as compared to those of the Bhatra and the Muria.

Comparative details for the four tribes of Bastar with respect to stature, CI, NI and TFI are given below. Selected class-frequencies for stature shown in Table 12 indicate a slightly taller stature for the Muria.

TABLE 12

Stature : % Frequency for four tribes of Bastar

Class Range	Dorla	Bhatra	Dhurwa	Muria
1300-1599	48	49	42	35
1600-1669	45	37	44	46
1670-1799	7	14	14	19

In regard to cephalic index, the Muria, being predominantly dolichocephalic, stand distinctly apart from the other three tribes, who are also high in mesocephaly. The Bhatra seem to be heterogeneous, a group showing higher frequencies for both dolichocephals and brachycephals than those observed among the Dorla and the Dhurwa (see Table 13). The dolichocephaly of the Muria is essentially due to larger head-length and not due to shorter head-breadth.

TABLE 13

Cephalic index : % Frequency for four tribes of Bastar

Class	Dorla	Dhurwa	Bhatra	Muria
Dolichocephal (below – 75.9)	45	44	50	82
Mesocephal (76.0 – 80.9)	46	45	32	15
Brachycephal (81.0 – above)	9	11	18	3

As far as the nasal index is concerned, the Muria possess the narrowest nose among the four tribes ; though by mean value their nose should also be classed as mesorrhine bordering on chamaerrhine. The Dorla definitely have broader noses than any of the other three tribes (see Table 14).

TABLE 14

Nasal index : % Frequency for four tribes of Bastar

Class	Dorla	Dhurwa	Bhatra	Muria
Leptorrhine (below – 69.9)	...	...	...	2
Mesorrhine (70.0 – 84.9)	34	48	54	52
Chamaerrhine (85.0 – above)	66	52	46	46

In total facial index, appreciable divergence of the mean of the Dorla series from the means of the other three tribes is noteworthy. In class-frequencies, the Dhurwa and the Bhatra are not very different, closely followed by the Muria except in mesoprosop faces, in which class the Muria series shows high frequency at the expense of the other two classes (see Table 15). Dorla faces are decidedly shorter, i.e. towards euryprosop due to significantly smaller dimension of total facial height.

TABLE 15

Total facial index : % *Frequency for four tribes of Bastar*

Class	Dorla	Dhurwa	Bhatra	Muria
Euryprosop (below – 83.9)	79	48	52	37
Mesoprosop (84.0 – 87.9)	16	27	21	41
Leptoprosop (88.0 – above)	5	25	27	22

SUMMARY

Of the four tribes of Bastar, the Dorla are the smallest and the Muria the largest in general size. In stature the Dorla are the shortest, the Muria tallest. In head-shape the Muria are essentially dolichocephals (82%) while the other three tribes are dolicho-mesocephal. The Bhatra show the highest frequency of brachycephaly (18%). Though, generally speaking, all the four tribes possess broad nose, the Dorla show a slightly broader nose than the rest. The Dorla have significantly shorter faces than any of the other three tribes as revealed by total facial index.

For measurements and indices, abbreviations have been used all through the text and in tables, which are self-explanatory. However, for the list of characters and indices with abbreviations, if necessary, the author's earlier publication (Rakshit 1961) may be consulted. The classification tables 5 to 8 are all according to Martin (1928).

I am grateful to Shri R. B. Bhale, Statistical Computor of the Anthropological Survey of India, Central India Station, Nagpur, for his ungrudging help in statistical reduction of the data.

REFERENCES

Bhattacharya, S. 1957 : Halbi and Bhatri of Bastar *Indian Linguistics*, 18 : 16-18.

Elwin, V. 1947 : *The Muria and their Ghotul.* Oxford University Press, Bombay.

Grigson, W. V. 1938 : *The Maria Gonds of Bastar.* Oxford.

Guha, B. S. : As cited in Elwin (1947).

Kerawalla, J. D. 1952 : Bastar District Census Handbook. *Census of India, 1951.*

Majumdar, D. N. 1941 : Racial Affinities of the Gonds of the Central Provinces. *Jour. Roy. As. Soc. of Bengal.* Science, 7 : 35-36.

Majumdar, D. N. & C. R. Rao 1958 : Bengal Anthropometric Survey, 1945 : A Statistical Study. *Sankhya,* 19 : 203-408.

Martin, Von R. 1928 : *Lehrbuch der Anthropologie.* Jena.

Tandon, J. S. 1960 : The Bhatra of Bastar. *Bull. Dept. of Anthrop.* VIII. 2 : 33-54 (1959).

Rakshit, Hirendra K. 1960 : A Short note on the Anthropometry of the Dorlas and the Dhurwas of Bastar. *Man in India.* 40 : 56-64.

1961 : The Mahars of Maharashtra : An Anthropometric Appraisal. *Bull. Dept. of Anthrop.* IX. 1 : 61-77 (1960).

Sarkar, S. S. 1957 : *A Laboratory Manual of Somatology.* Calcutta.

Welch, B. L. 1938 : The Significance of the Difference between two Means when the Population Variances are Unequal. *Biometrica.* 29 : 350-361.

BOOK REVIEWS

Ciba Foundation Symposium on Medical Biology and Etruscan Origin : *Editors for Ciba Foundation G. E. W. Wolstenholme and Cecilia M. O'Connor. J & A Churchill Ltd., London, 1959. Pp. xii + 255 + 60 illustrations.*

An international institution, the Ciba Foundation, convenes small conferences, the proceedings of which are published in book-form like the present volume. Moreover, this institution organizes informal discussion between workers of various fields of research for the sake of promoting international co-operation. The Foundation's policy has now been extended to the Humanities and Sciences. 'The recent contributions of medical biology to ethnology ; with special reference to the origin of the Etruscans' provided a common basis for discussion between workers in archaeology, anthropology, history, philology and human genetics.

The idea of using biological methods to determine the origin of any population having peculiar genetical characteristics was proposed by Prof. E. G. Young, F. R. S. and Mr. D. S. Kirk.

Altogether seventeen papers were read at the symposium by eminent scholars of varied disciplines, including the Chairman's introductory address, most of which were followed by lively discussion.

Out of the total number of papers read at the symposium ten were on archaeological, historical and linguistic evidences, while six had an anthropo-genetical bias.

Special mention must be made of Barnicot and Brothwells' paper on 'The Evaluation of metrical data in the comparison of ancient and modern bones' in which they point out that 'the kind of skeletal variation with which anthropologists deal is mainly a matter of small, graded differences in proportions ; the inheritance of such quantitative characters seems to depend on the combined influence of many genes, the individual actions of which cannot usually be discerned. When we are studying a character such as a blood group, we can be reasonably sure that we are dealing with the same gene wherever we find it, but we cannot be at all sure that

apparently similar skeletal forms have the same genetical basis in different population' (p. 132). On the other hand, they say, 'bones and skulls...are the most direct, tangible evidence of the physique of vanished populations' (p. 131)...'The bones, with all their limitations, have the merit that they are actual fragments from the past which have endured' (p. 132). They have drawn attention to the different conventions of technique and inadequate descriptions of method which are a frequent source of trouble and often obliges one to reject otherwise useful data. Regarding the drawing of conclusions on variability of older populations on the basis of inadequate sample, they give a word of caution as it is often found that earlier archaeologists had more interest in digging only the richer tombs. It is better to have all the skeletons from a site than a few specimens which may not be characteristic.

They have advocated Penrose's modified procedure of using distance statistics in comparing populations, as it is simple in computation and has the advantage of splitting the distance measurement into two components which he terms 'size' (a measure of divergence in overall dimensions) and 'shape' (a divergence in the relative magnitudes). They have recommended that an examination of skeletons need not be restricted to osteometric comparisons only, but it should be extended to 'observations...on the incidence of certain diseases which leave their mark on bones or teeth, and these may provide a sidelight on conditions of life in ancient communities' (p. 145-6).

One of the participants, Mrs. Madeleine Smith, has described the improved techniques of testing ancient bones for blood group substances by the inhibition method.

Dr. R. Ceppellini suggested two new methods of using flourescent antibodies to see if they become attached to the trabeculae of the bones and of producing specific sera by injecting suspensions of bone into rabbits.

An interesting paper was read by Dr. A. E. Mourant entitled 'The use of genetical characters as indices of population distribution'.

His view regarding effects of natural selection of the phenotypes of a given blood group system is that the ABO blood groups are subject to rather more rapid selection than those of the other systems. As regards establishing ethnic affinity between two

populations, he declares that if they resemble one another in the frequencies of one particular set of genes, that need not be taken as proof of close relationship; only when the gene frequencies for a considerable number of genetically independent systems are similar then it might be considered as a strong indication of biological relationship. '... ... a wide divergence in frequencies even for one system is rather a strong evidence against close relationship, or at least suggests that if a relationship does exist the period of free inter-breeding between the two populations has been followed by some important genetical event such as intensive selection in one or both of them, a fall to very small numbers resulting in a random fluctuation of gene frequencies, or extensive mixing with an unrelated population' (p. 165-6).

In conclusion, Dr. Mourant suggests that investigating the problem of thalassemia will be of great interest to find out the probable existence of selective values with respect to particular ecological setting. This might be proved to be a good example of balanced polymorphism. Certain changes frequently occur in bones in thalassemic patients and an examination of those bones might bring out certain correlations.

On the contrary, Dr. Ceppellini discourages the use of pathological traits as biological markers. He thinks that that would lead to confusion, while blood groups are likely to prove to be of considerable value in ethnological research. His argument is based on the fact that thalassemia is highly adaptive and is rapidly influenced by environment while blood groups are relatively free from environmental influences.

As a pioneer in organizing symposia, The Ciba Foundation must be heartily congratulated for bringing out this valuable book.

P. Gupta

Anthropologie des Tamouls du Sud de 1 'Inde, *par Dr. Georges Olivier. Paris : Ecole Francaise d 'Extreme-Orient. 1961. Pp. xxx—340.*

Dr. Olivier dedicates this fine, painstaking study of the Tamilians to the memory of Sir Herbert Risley. As Professor Jean Filliozat remarks in the introductory chapter which he contributes, the findings of G. Olivier, based on extensive anthropometry, tend to confirm the theories of Risley, proposed more than half a century ago.

The caste system, so characteristic of India, already exercised the minds of ancient writers of B. C. times. Dr. Olivier gives a neat summing up of the problem of caste, particularly as it presents itself in the Tamil country. The conclusions he arrives at are based on a detailed anthropometric study of several hundreds of Tamilians of various castes of Pondicherry. The approach is classical : the biological and morphological charcteristics are studied and tabulated : hence chapters dealing with Pigmentation, Pilosity, Stature, Cephalic characteristics, Facial peculiarities, Somatic and Morphological differences, the Rate of Growth, Serological types, and various genetic features.....etc. Nor does the author rely on his own findings exclusively ; he takes also into account all that has been written by earlier scholars on the Tamilians and the Melano-Indians.

The author's conclusions, as they emerge from his vast documentation, are briefly : (1) that there are considerable anthropological differences between the representative types of the various Tamil castes ; and (2) that these differences parallel the social rank of these castes ; and (3) that these differences are to be explained as the result of varying degrees of ancestral miscegenation. This latter conclusion is offered tentatively. It is the author's opinion that, in general, the mixing of castes (exogamy, hybridization) may have good results anthropologically. Further, the author believes that though the Melano-Indian (Dravidian) race finds itself in many ways, anthropologically, midway between the white and the black races, yet it is not possible to link up the Dravidian race with the classical black (Negro) race, nor with the Mediterranean white race. The wisest is to consider it as a special stock, allied to the Veddas, but more evolved both physically and culturally. I may mention also that Dr. Olivier, whilst not ruling out the possibility of the Dravidians having once occupied the north of India, does not believe there is sufficient evidence for asserting that they are the artisans of the ancient Indus civilization.

The last 55 pages of this book are documentary and interesting for the specialist and the research student. The volume ends with a select bibliography comprising 165 titles and an Analytical Index, both of which add to the usefulness of this valuable study.

F. E.

Bulletin de l 'Ecole Francaise d 'Extreme-Orient. *Tome L. Fasc 2. Paris (1962).*

The present fascicle (running from p. 229 to 590) opens with an interesting article on the construction and the cult of the stūpa according to early Pāli documents. This is followed by studies on Sumatran epigraphy, on the symbolism and legends of the Cambodian duodecimal cycle of animals, on various alphabets found in Laos, and a lengthy report about Indonesian bibliography. The fascicle concludes with a recension of several books on Far Eastern countries.

From patient and detailed study and from monographies as we find here, will eventually emerge a better understanding of the past of these Far East countries, which in turn will give us better understanding of their present condition and attitudes.

F. E.

Archiv Orientalni (1962)

(Journal of the Oriental Institute of the Czechoslovak Academy of Sciences in Prague).

This journal appears regularly in four numbers a year ; and accepts articles on all subjects of Oriental studies, which may be written in any of the major European languages.

The first two issues that have come to hand carry articles on points of Chinese, Burman and Tamil grammar, on matters of Chinese history, philosophy and literature. Several of these articles are written in English. Each issue comprises also a Book Review section.

Archiv Orientalni appears to be a scholarly and carefully edited journal.

F. E.

Le Totemisme Aujourd'hui *par Claude Levi-Strauss. Paris—Presses universitaires de France. 1962. Pp. 156.*

The author, professor at the College de France, Paris, in a small book of the Collection *Mythes et Religions*, shows himself well informed on totemism, which has exercised the minds of many an anthropologist. One thing emerges from Mr Levi-Strauss' study : that modern ethnologists seem to be less sure than their pre-

decessors that they know the deep meaning of totemism. The more philosophical approach of our author tends to show that the minds of these primitive populations with their totemism were not really so very different from ours as had been imagined, even if they express themselves differently.

One closes the book with the impression that the last word has not been said yet about totemism. Significantly the first chapter of Professor Levi-Strauss' book is entitled 'The Totemistic Illusion'.

F. E.

Anugrah Narayan Sinha Institute of Social Studies and Community Development. *Bulletin No. 1, Methodology in Social Research, February, 1960. Pp. 1-201. Rs. 5.*

This first Bulletin of the A. N. Sinha Institute of Social Studies and Community Development contains fourteen papers presented at the Seminar on the 'Methodology in Social Research' held on 26th & 27th of February, 1960. The contributors of the papers are persons holding high positions in educational, administrative and research institutes.

Though all the papers are not directly concerned with methodology in social research the Bulletin presents a general idea about some of the research techniques. One can get a fairly good idea about the statistical, psychological, historical and case study methods applicable in social research.

B. Minz

Economic Thought of Mahatma Gandhi. *Edited By J. S. Mathur and A. S. Mathur. Foreword by Archarya J. B. Kripalani. Pp. xlviii + 666. 1962. Chaitanya Publishing House, Allahabad. Rs. 32.*

Essays on Gandhian Economics. *By J. S. Mathur. Pp. 86. 1960 Chaitanya Publishing House, Allahabad. Rs. 3.*

Mr. J. S. Mathur has proved to be a very careful student of Gandhian literature. He has prepared a compendium of Gandhiji's writings on economics. The matter has been divided into six sections in the first book, namely, Khadi Economics, Rural Economics, Labour Economics, Public Economics, Industrial Civilisation, Economic Reform and Reconstruction.

Readers will feel grateful that practically all of Gandhiji's writings bearing on economics has been made available here. The index will prove particularly helpful.

The second book under review is a collection of essays written at different times and for different audiences. There is some amount of overlapping, and a looseness which is natural. But the essays do contain the essence of Gandhiji's ideas on economics ; and this will serve as a guide to those who may undertake to study the more comprehensive book already referred to.

As Mr. Mathur is fully conversant with Gandhiji's thought, one hopes that the second book would improve considerably if it is rewritten as an integrated piece of work.

Nirmal Kumar Bose

Muslim Caste in Uttar Pradesh. *By Dr. Ghaus Ansari, Ph. D., Lecturer in Anthropology in the University of Baghdad. 1960. Pp. 80. The Ethnographic and Folk Culture Society, Lucknow.*

Though a great mass of literature exists on the Hindu caste system, there is hardly any literature on the emergence of castes among the Muslims living in different parts of India. In this book, Dr. Ansari has studied the Muslims of Uttar Pradesh and has brought out the existence of castes among the Muslims. He classifies the Muslim castes into four groups on the pattern of four *varnas*. These four groups are (1) Asraf (Sayyad, Shaikh, Mughal, Pathan), (2) Muslim Rajput, (3) Clean occupational castes (Nai, Teli, Dhobi, etc.) and (4) Unclean castes (Bhangi, sweeper). These caste-groups, as described by Dr. Ansari, have certain mythological background, social hierarchy, occupational specialization, etc. which are the major characteristics of Hindu caste system. He also examines the inter-caste relations operating among the Muslim castes and comes to the firm conclusion that the existence of a modified form of caste system operating among Indian Muslims enables us to determine the dynamics of culture contacts and its implications. In other words, making profuse historical reference he suggests that a culture, under the influence of mutual contacts and interactions, has developed among many groups which may be called Hindu-Muslim culture.

L. P. Vidyarthi

North-West Ethiopia : Peoples end Economy. *By Frederick J. Simoon, Pp. 250, 84 illustrations. The University of Wisconsin Press, Madison. 1960. $ 5.00.*

This book has been systematically divided into twelve chapter. The first chapter is 'natural setting' where we find the description of the topography, climate and vegetation of the plateau of Ethiopia. The second chapter, which deals with the historical background, gives a clear picture of the people and their contacts with outsiders. The third chapter (Peoples, Social Life and Political Organization), firstly makes a racial, linguistic and ethnic classification of the people and then describes their main social institutions.

In chapter 4 to 12, we find a complete picture of their economic life under the following headings : Settlement and House types ; Agriculture : Characteristics & Methods ; Cultivated Plants ; Animal Husbandry ; Fishing, Hunting and Gathering Activities ; Food, Cooking and Nutrition ; Crafts and Industries ; Markets and Trading ; The Effect of Man's Activities on Vegetation and Soil.

Though the author's emphasis is on economic life, he does not forget to give a clear picture of the entire way of life of the people.

This book is useful for students of society and culture.

B. N. Sahay

Cire perdue casting in India. *By Ruth Reeves. Published by the Crafts Museum, New Delhi 1. Rs. 16.50.*

The book illustrates the technical aspects of hollow and solid casting by means of the lost-wax process. The area covered comprises Bengal, Bihar, Orissa, Madhya Pradesh and Madras. It is the outcome of a scheme of producing a descriptive series on the technical processes involved in India's manual arts and crafts.

With its wealth of illustration, and of careful description, it can be regarded as a valuable contribution to the study of technology.

Salil K. Roy Chowdhury

Seven Tribes of British Central Africa. *Edited by Elizabeth Colson & Max Gluckman. Published on behalf of the Rhodes-Livingstone Institute, Northan Rhodesia, by the Manchester University Press. First published in 1951 and reprinted with minor corrections in 1959. Pages 409. 42 shillings.*

The title indicates the scope and object of the studies contained in the book. Ethnographic accounts of the seven tribes bring the

Lozi of Barotsoland in North-western Rhodesia by Max Gluckman ; the Plateau Tonga of Northern Rhodesia by E. Colson ; The Bemba of North-eastern Rhodesia by A. I. Richards ; The Ngoni by I.A. Barnes ; the Nyakyusa of South-western Tanganyika by Godfrey Wilson ; The Yao of Southern Nyasaland by J. C. Mitchell and Shona of Southern Rhodesia by J. F. Holleman. The tribes belong to different cultural types and habitats, and each writer's account differs in one particular or another.

Salil K. Roy Chowdhury

Primitive Rebels. *By E. J. Bobshawm. Published by the University of Manchester at the University Press, 316-324 Oxford Road, Manchester-13. 1959. Pp. 208. 25 shillings.*

This book mainly deals with social movements and organizations in Sicily and Southern Italy. It describss anti-Government movements and organizations in Italy. There are chapters on social bandits, mafia, millenarianism, city mob, labour sects and ritual in social movements. The author himself admits that none of the chapters is exhaustive and definitive. There is an appendix containing documents collected together to illustrate some of the points made.

Salil K. Roy Chowdhury

Economic Development and Social Change in South India. *By Mrs. T. Scarlett Epstein, Indian Branch of Oxford University Press. 1962. Pp. 352, illustration, comparative figures. Rs. 27.50.*

A useful book on Economic Anthropology. Two types of villages, one dry another wet, were selected in the Mysore State by the author to study the effect of economic development on the village population. Before the irrigation scheme was executed by the Government both the villages were practically on the same level of social and economic development. After irrigation and development schemes came into operation, various changes took place in both the villages ; and the author collected illustrative data on the changes in economic, political and social organizations. Tables have been incorporated at the end of the book giving particulars of the economic condition of the people.

While analysing the changes the author comes to the conclusion that developmental programmes need not necessarily bring about change in economic structure. Only where the new economic

system is incompatible with features of traditional economic organization, does a change in economic roles and relation also become noticeable. Corresponding changes are also effected in political and ritual roles and interpersonal relations. There is a positive correlation between political, ritual and organizational change, with economic change being the determining variable. Functional relations have been drawn between economic development and the different aspects of structural and cultural changes. It is contended that functional changes can be traced in the social events which occurred in the said two villages during the past twenty-five years. The author rightly observes that the possible validity of functional relationship has to be tested by more such studies. This book is a valuable contribution to the growing science of economic anthropology.

Salil K. Roy Chowdhury

The Little Community and Peasant Society and Culture. *By Robert Redfield. Published by Phoenix Books from the University of Chicago Press, pages 1 to 177 and pages 1 to 88.* $ *2.25.*

The Little Community was first published in Sweden as Volume V of the 'Gottesmen Lectures', Upsala University. *Peasant Society and Culture* was published in 1960 and a second impression in 1961 by the University of Chicago Press. The book is now published in a popular and cheap edition.

This edition consists of two groups of lectures delivered by the author one being the Gottesman Foundation Lectures at Upsala University collectively entitled as *The Little Community* and the other W.I. is Cooper Foundation Lectures at Swarthmore College collectively named as *Peasant Society and Culture.*

In the first series of lectures the author has given illustrative discourses on the unit of subject matter of anthropological studies. The method of approach to the problem and the starting point of study of a community are the main objects aimed at in the lectures.

In the series of lectures collected under the heading *Peasant Society and Culture* the author has chosen to present anthropology in process of growth. Though the study of anthropology was originally confined to primitive tribes, the author shows how it can be applied to problems of complicated modern societies.

These are valuable contributions of a renowned anthropologist towards the advancement of scientific knowledge and proper understanding of human culture.

Salil K. Roy Chowdhury

Essays in Social Anthropology. *By E. E. Evans-Pritchard. Faber & Faber, London, 1962. Pp. 233. 30 shillings.*

Three lectures and six essays illustrate the different levels at which anthropologists have to work, namely, in the fields of general theory, and method, literary analysis and field research.

The essays are divided into three parts according to the three levels mentioned by the author. The first consists of three lectures dealing with anthropology and anthropologists generally ; the second consists of a lecture and an essay based on observations of other persons ; and the third consists of four essays containing the author's own observations and study of different topics of the Shilluk and Azande of Central Africa. The author has selected interesting topics of the two tribes. The book will be very useful for the anthropologists and students of sociology and history.

Salil K. Roy Chowdhury

Indian Anthropology : Essays in Memory of D. N. Majumdar. *Edited by Dr. T. N. Madan and Gopal Sarana. Asia Publishing House, Bombay-1. Rs. 26.00.*

This is a fascinating book on Indian anthropology, published in memory of the late Dr. Dhirendranath Majumdar who dedicated his life to the development of anthropology in India. It has been edited by two of the latter's ablest and devoted pupils, Dr. T. N. Madan and Mr. Gopala Sarana.

Part one of the book has been divided into five chapters which deal with different aspects of Professor Majumdar's life, bibliography of his books and papers, list of obituary notices by his students and admirers, etc.

Part two is again divided into three sections (except Introduction) each containing several chapters on various topics. The first section on prehistoric archaeology consisting of four chapters presents the ways of life of people living in ancient times. In the opening two chapters, Dharani Sen and F. R. Allchin and B. Allchin have described the climate and life of the early inhabitants of India. In the third chapter Dr. Sankalia describes the economic life of

prehistoric man in particular ; this being based on field-work in various States of India. In the fourth chapter, Dr. Subbarao gives us an integrated account of archaeology and anthropology in India.

The second section deals with physical anthropology and has been divided into the following seven chapters : (1) some observations on anthropometric surveys, (2) racial surveys in Gujarat, (3) the Asurs and Birhors of Chotanagpur, (4) notes on blood groups in India, (5) the racial composition of the Bengalis, (6) the blood groups and haemoglobins of the Malayalis, (7) dermatoglyphics in India. All these chapters are based on original work done in the field.

The third section, namely, social or cultural anthropology, consists of eight chapters, namely, social anthropology in India (Dube), the scope of social anthropology in the study of Indian society (F. G. Bailey), moral concepts in three Himalayan societies (Christoph von Furer Haimendrof), role variation in caste relations (David G. Mandelbaum), India as a cultural region (Irawati Karve), on terms of kinship and social relationship (K. P. Chattopadhyay), on classification of family structures (Ramkrishna Mukherjee).

These chapters give us a clear understanding of the subject and add to the knowledge of students of social anthropology.

The book is well written, well printed and very carefully edited, which definitely speaks about the interest, devotion and dedication of the editors.

B. N. Sahay

Introductory Sociology. *By William E. Cole. David Mckay Company, Inc., New York. 1962.* $ *7.00.*

The present book is a logical and comprehensive treatment of the science of sociology. It is the outcome of several years of teaching and research experience of the author. The definition of sociology as the 'study of social system' indicates that the approach to the study of society in through social systems. Here one will find all the essentials for a basic understanding of the field of sociology.

The book is divided into four major parts each containing several chapters dealing with various aspects of society.

The introductory portion deals with the concept of the field of sociology and some of the methods generally employed in the study of sociology.

Part I describes how society developed. Here we find the latest information on the development of man on earth, his racial divisions, the growth and impact of culture and society.

In Part II is described the stucture of society. In order to have a clear understanding of the total structure of society, we are given here a detailed analysis of the major components of the structure such as population make-up, different social groups and institutions with their respective roles in society.

As structure is closely related to function, the next section, *i.e.* Part III, deals with how society functions and what happens within it. The section helps us to understand the concept of social interactions, social processes and the developing system of structure and roles which create differences in status and in society.

Part IV is concerned with the major products of society such as the personality development and personality types, human deviation and its implications, social integration, etc.

In short, this book depicts a clear picture of the development, the structure, the functions and the product of the society.

The graphical and pictorial illustrations contribute toward a a clearer understanding of the basic concepts of sociology.

B. Minz

World Prehistory : an outline. *By Graham Clark. Cambridge University Press. 1961. 30 shllings net.*

A great need was felt for a book which would provide a unified framework of the archaeological account of the whole world. Here comes at last the book of that kind. In this book Professor Clark has given a brief but stimulating outline of the prehistory of all the various important areas of the world.

The opening chapter of the book contains a short but clear account of the major climatic and environmental changes during the Pleistocene, where we find several evidences of biological evolution. In the subsequent chapters, a systematic description has been given of the progress of human settlement, the beginnings of technology and the growth of civilization in various parts of the world.

It is hoped that the present book by an authority on the subject would become popular with all interested in prehistory.

B. Minz

Traditional Cultures and the Impact of Technological Change. *By George M. Foster. Harper & Brothers, New York. $ 4.75 net.*

In this book Professor Foster gives us an account of the traditionl rural community, the fundamental barriers and the great stimulants of culture change. He has also shown that a special role can be played by social scientists, especially anthropologists, psychologists and sociologists. One also gets a picture of the role and problems of the American specialist who works in newly developing areas.

It is hoped that this book will be found useful by those who are engaged in different types of development programmes in rural communities.

Under-developed Areas : A book of Readings and Research. *Edited by Dr. Lyle W. Shannon. Pp. 406. 1957. Harper & Brothers, New York.*

The book under review has already become a handbook on the problems of under-developed areas. Dr. Shannon has done a great service by compiling a number of papers arranged under thirteen heads.

The book comprises articles on political status, demographic characteristics, communication, mass media and education, economic development, industry and technical assistance, health practices etc. in under-developed areas of many parts of the world.

This book can be regarded as an experiment in an inter-disciplinary research. As a matter of fact, many of the authors whose articles appear in this volume are pioneers in the inter-disciplinary approach. While primarily qualified in one discipline, they have seen the importance of taking a variety of set of variables into consideration in explaining human behaviour.

The book is not only of theoretical and methodological interest, it also provides an insight in the field of application.

Matrilineal Kinship. *Edited by David M. Schneidar and Kathleen Gough. Pp. 761 including bibliography and index. University of California Press. 1961. $ 11.75*

The book deals with the structural and evolutionary problems

of matriliny by means of a three-fold approach. It analyses the structure of particular matrilineal societies, examines their cultural ecology and inquires into the implications of matrilineal descent for the evolution of kinship systems.

In the introduction, Schneider puts forward the constant features of matrilineal descent groups. These features occur within a variety of cultural frames and differing ecological settings. The actual organization of a particular group must be seen not only in terms of its structural constants but as a product of those features in interaction with cultural and ecological conditions peculiar to this group.

The first part of the book is a description of the social system of nine matrilineal groups from four continents. They provide a wide diversity of types. Navaho and the Plateau Tonga are examples of loosely stuctured acephalous tribes, while the Truk and Trobriand are examples of tightly structured systems. The Ashanti of West Africa are an example of a virile matrileneally organized state. Three of Kerala's matrilineal castes, Nayar, Tiyyar and Mayitta have also been considered in detail.

In the second part of the book, Kathleen Gough treats problems of variation in matrilineal systems, paying particular attention to the determinants of interpersonal kinship relationships and marriage preferences.

In the last part, Aberle selects more limited variables and treats statistically a large number of cases which are readily available from Murdoch's World Ethnographic Sample. He does not regard matrilineal descent as a primary characteristic of one general stage of cultural evolution. He sees it as one of several modes of descent possible in at least three general stages, the acephalous, egalitarian tribe, the ranked but not politically centralized chiefdom, and the small-scale state.

There is a fairly exhaustive bibliography on matrilineal systems at the end of the book. The four chapters on the matrilineal castes of Kerala are very useful for every student of Indian social systems.

Sachichdananda

Pespectives in American Indian Culture Change. *Edited by Edward H. Spicer. Pp. 549. University of Chicago Press. 1961. $ 10.00.*

This book is a compilation of studies in the acculturation of six

American-Indian tribes. The scholars working in their different fields had common framework of investigation and considered the whole series of changes in the ways of life of these tribes from the period of early contact with Europeans to the present day. The operation of the process of acculturation is described in detail and then compared to the whole picture of culture change. As is natural, differences have been discovered in the dominant processes of change and kinds of adaptation within the cultures studied.

The main purpose of these studies is to attempt to develop a cross-cultural analytical scheme, to apply it to a selected number of diverse north American-Indian cases and to formulate certain general propositions that would serve as directives for further research in American or other areas. The approach adopted sought to discover relations between the changes in Indian cultures and the conditions of contact under which those changes had taken place. This involved the description of contact conditions in comparable terms and identification of types of change.

In the last chapter, the editor has sought to compare the cases systematically and to go as far as the date permits in generalization. Two main types of contact situations are distinguished. In the non-directed type, although the innovations may derive directly from one culture, they are accepted and integrated into another culture in accordance with the cultural interests and principles of integration which obtain in the latter. In the directed type, the two systems of interest and integration are linked through the kind of social relations established. Accordingly, any transfer of culture elements orginates and proceeds under conditions which are not set exclusively by either one of the cultural systems involved.

Similarly, four kinds of processes of change have been discovered. In the first, called 'integrative integration', the transfer of elements from one culture system and their integration into another system occurs in such a way that they conform to the meaningful and functional relations within the latter. In the second, called 'assimilative or replacive integration', the distinctive feature consists in the acceptance and replacement of cultural behaviour in terms of the dominant society's cultural system. The third is 'fusional integration' in which elements of two or more distinct cultural traditions are combined into a single system. The principles in terms of which they combine may not be the same as those governing the cultural

systems from which they come. The fourth is called 'isolative integration', by which is meant keeping separate within a realm of meaning of elements and patterns taken over from the dominant culture. The accepted elements lack linkage with other complexes despite serving very similar or identical functions.

This book is very valuable for students of culture change. We may find out if the typology fits in the Indian scene or we have to evolve our own typology.

Sachchidananda

India : A Modern History. *By Percival Spear, published in U. S. A. by The University of Michigan Press. 1961. Pp. xli + 479. $ 10.00.*

The purpose of the book has been to portray the transformation of India under the impact of the West into a modern nation-state. Present-day India or the modern history of India cannot be appreciated without reference to the influences from the past which an average Indian inherits. It is gratifying that Prof. Spear has planned his book in that light and placed those facts in a lucid style. The formation of Hindu society, Buddhism, the rise of the Rajputs, and the coming of Islam and other factors have not been dealt with in isolation but have been treated as themes relevant to the present ; and herein lies the beauty of the book. The reader is not bothered with details of wars or dynastic lists, controversies about chronology and changes of frontiers, etc.

Being a fairly impartial judge of the current of Indian history Prof. Spear rightly argues that much that was accomplished by the British would have been impossible but for the previous achievements of the Moghuls. The two chapters preceding the British period present a picture of India, as being the last period of Indian independence. The glimpse of that period embodies in itself several details which have hitherto never been brought to our notice in a book of this size.

The chapters portrying New India, The Mind of New India, the New Class and the New Party are remarkable because the themes have been interpreted most objectively. This book ends with Nehru's India and concluding reflections on India's problems at home and abroad right up to the days of Chinese blow on Panchsheel and expulsion of the Dalai Lama and their consequences. It ends with a note of optimism that India may well make great

contributions to mankind's understanding of itself and to the human art of living.

The book should be regarded as a valuable contribution to the study of Indian history.

Surendra Prasad Sinha

La Pensee Sauvage par Claude Levi-Strauss. *Paris, Plon—1962. Pp. 395.*

In a previous slender volume (*Le Totemise aujourd'hui*), the author succeeded in demolishing the basis of the totemistic theories that have been elaborated in modern times. In the present volume he is more constructive and presents his views on the thought of 'primitive' man. The title and the precise object of the book should not be misunderstood. There is question, not of the ways of thinking of the primitive or uncivilized tribes or of prehistoric races, but of the characterising the primitive, i.e. the original, natural human way of thinking and of expressing thought in dealing with the concrete world and nature, the 'archetypal' thought-processes of man, recurring at all times and everywhere, 'pre-scientific', more often symbolical ; the way that still breaks forth spontaneously in our times in poetry and art, and in popular wisdom, when man is uninhibited and untrammeled by science and civilization, hence found mostly among primitive populations.

Here we have certainly a novel view on 'primitive' man, one which shows the deep-seated unity of mankind ; a thought which ethnologists and anthropologists should never forget.

A short review, unfortunately, cannot do justice to Professor Levi-Strauss' learned book, F. E.