MAN IN INDIA

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DEMOGRAPHY OF PREHISTORIC MAN

JATINDRA MOHAN DATTA*

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1. In the study of prehistoric man, age or sex of the individual has been treated as a matter of secondary importance. The age of a prehistoric individual can be determined with sufficient accuracy from his fossil bones. Of the two criteria for determining age, namely, the evidence of the teeth and the closure of sutures of the cranium, the latter is taken generally as more trustworthy and more accurate.

2. Dr. Henri V. Vallois has determined the age of about 187 subjects on the recorded evidence and view of the light of a personal examination of a number of specimens. (L' Anthropologie, 1937, vol. 47, p. 499 et seq.—La durée de la vie chez l'homme fossile.)

3. In the table below we follow his classification and determination of age and age-categories. In the first column, the number of subjects, and in the second respective percentages are given.

TABLE 1

	Neanderthal Man (20 subjects)		Palaeolithique Man (102 subjects)		Mesolithique Man (65 subjects)		Total (187)	
Age	No.	% age	No.	% age	No.	% age	No.	% age
0-11	8	40	25	24·5	20	30·8	53	29·3
12-20	3	15	10	9·8	4	6·2	17	9·1
21-30	5	25	28	27·4	32	49·2	65	34·8
31-40	3	15	27	26·5	6	9·2	36	19·2
41-50	1	5	11	10·8	1	1·5	13	7·0
51-60	...	...	1	1	1	1·5	2	1·0
61 & over	...	...	...	...	1	1·5	1	0·5

*Mr. J. M. Datta is a practising lawyer. He took his M. Sc. degree in Physics, and has been a Fellow of the Statistical Society and of the Economic Society. He has long been interested in Indian population problems.

A perusal of the above data shows that the life of fossil man was short, more than a third died before 20. Of the remainder, half died before 40, only three survived the age of 50.

4. In addition to the number given above, there were 31 specimens of whom it was not possible to determine the exact age ; of these 19 were not yet adults, and it is practically certain that the remaining 12 had not attained old age.

5. Of the total number of subjects, 218, only *three* or less than 1.4 per cent attained old age, i.e. were 50 and over. Sir Arthur Keith in *A New Theory of Human Evolution*, gives certain interesting facts in pp. 126-127. He says,

'In order that we may have a concrete example in front of us, I propose to empanel a group of early humanity, such as existed in China near the beginning of the Pleistocene period ; people who lived, according to the most reliable estimate, about 600,000 years ago. It so happened that at this remote date a series of limestone caves became filled in, entombing fragments of the people (now known as Sinanthropes) who then lived in that part of China. They were people who retained certain marks of the ape—namely, prominent eyebrow ridges, receding foreheads and low-roofed skulls. Fragments of thirty-eight individuals were unearthed ; of these, it is important to note, fifteen were under fourteen years of age, and only one was over fifty years ; the remainder were between fourteen and fifty. Such figures suggest a heavy bill of mortality.'

Arranging the data as we have done before, we get :—

SINANTHROPUS (38)

Age	0 – 13	14 – 50	50 & over
No.	15	22	1
% age	39·5	57·8	2·7

The percentage of old men is very low,

6. *Age-distribution.* What was the age distribution of these populations—Neanderthal man, Palaeolithique man and Mesolithique man ? For convenience of reference, we shall call them populations N, P and M.

Let us *assume* the age-distribution to have been constant during the respective periods. The assumption is fundamental.

Dividing the percentage of subjects (to make them comparable with each other) by the respective age-intervals, we get the following table :

	AGE-INTERVAL					
Population	0–11	12—20	21—30	31—40	41	
	12 Yrs.	9 Yrs.	10 Yrs.	10 Yrs.	41—50 10 Yrs.	50 & over 5 Yrs. say*
N	3·33	1·66	2·50	1·50	0·50	...
P	2·04	1·09	2·74	2·65	1·08	0·2
M	2·57	0·70	4·93	0·92	0·15	0·6
Combined Early Man	2·36	1·14	3·48	1·92	0·70	0·32

The age-distribution cannot be obtained from the above table. There is a permanent kink at ages 12-20 ; the index obtained is always less than that of the next age-group 21-30. Further the indexes for P and M for ages 0-11 are less than those for ages 21-30 ; and in case of P it is less than that for even the subsequent age-group 31-40.

7. If X-axis represents age, Y-axis the number of persons in a given population, the curve of age-distribution in a normal population is always sloping down towards right, the number in an earlier age being greater than in the next age.

As the proportion of older men is decreasing rapidly, and as there is evidence that those over 50 are not very old men, we take 5 years to be the limit. No doubt a certain amount of uncertainty is introduced, but its effect is small.

We may obtain the age-distribution of prehistoric man by making successive additions of the percentage figure from right (or bottom of the column). They are :—

	AGE					
Population	0—11	12—20	21—30	31—40	41—50	50 & over
Neanderthal Man (Total – 230)	100	60	45	20	5	.....
Palaeolithique Man (Total – 292·3)	100	75·5	65·7	38·3	11·8	1
Mesolithique Man (Total – 253·4)	100	69·2	63·0	13·7	4·5	3
Early Man (Total – 170·3)	100	70·7	61·6	27·8	8·6	1·6

8. *Specific death-rate.* Specific death-rates for any age-group may be calculated thus : the number in an age-group is reduced by deaths to that in the next group the difference gives the number of deaths, this divided by the number in the earlier age-group gives the specific death-rate.

Specific death-rates for different populations and for different age-groups work out to :

Specific Death-rates

	AGE					
Population	0—11	12—20	21– 30	31—40	41—50	50 & over
Neanderthal Man	400	250	444	750	1000	.....
Palaeolithique Man	245	130	417	650	898	1000
Mesolithique Man	308	90	783	762	330	1000
Early Man	293	127	556	691	814	1000

Specific death-rates follow the general pattern of U-curve. The left arm is shorter, because infant mortality is not shown here. From the fact that specific death-rate for ages 0-11 is high, we may infer that infant mortality is very high. We have not been able to find out why the curve for Mesolithique population is wavy, the very small number of subjects may be a reason as being not representative.

9. *Mean-age.* In modern populations infantile mortality is high ; the specific death-rate for very early ages declines very rapidly, and then from age 5 (say) it rises, and rises rapidly with increasing age.

We assume a similar state for Early Man. As a first approximation, we assume specific death-rates within each age-group, except the first one, to remain constant. The average age would give the multipliers. But the specific death-rates increase with age rather rapidly. The mean age would be *one-third* the age-interval. In any case it would be near the truth.

For the age-category 0—11, as there is likely to be heavy infant mortality and child mortality, as the specific death-rate curve which is generally a U-shaped curve has its entire left limb within this age-group, we take the mean-age to be *one-third* the age-interval. For ages over 50, we take it to be 55 or 53.

The multipliers used are

Age category	0—11	12—20	21—30	31—40	41—50	50 & over
(a) $\frac{1}{2}$	3·7	16	25	35	45	55
(b) $\frac{1}{3}$	3·7	14·66	23	33	43	53

The mean-ages are

	(a)	(b)
N	14·7 years	13·7 years
P	17·6 ,,	14·4 ,,
M	15·4 ,,	14·4 ,,
Early Man	16·6 ,,	15·5 ,,

The mean-ages cannot exceed the figures given under (a). They are likely to be those given under (b), if not smaller.

10. We should not be surprised at the mean age being so very low. The span of life in former times was small. The U. N. publication, *Determinants and Consequences of Population Trends*, says,

> Though knowledge of mortality conditions in the early centuries is meagre, it is clear that the life span was

short in those times. A life-table for ancient Greece prepared from burial inscriptions, indicate the average life span of 30 years in about 400 B. C. Using the ages at death recorded on Egyptian mummies dating from the 1st century B. C. Pearson estimated the expectation of life at birth to be 22·5 years' (p. 50).

The life span of the three highest anthropoids, namely, gorilla, chimpanzee and orang-utan are :—

Gorilla—may be as much as 28 years
Chimpanzee—18—25 years
Orang-utan—life span up to 25 years
(cf. Palmer's *Field book of Natural History*)

Taking span of life to mean *twice* the average length of life, i.e. the mean-age, the mean-ages found are comparable with those of higher anthropoids and of early historic man.

11. *Death-rate.* We estimate the death-rates thus :—

$$\text{The average number of deaths per year} = \frac{\text{Population}}{\text{mean-age}}; \text{ and}$$

$$\text{Death-rate} = \text{no. of death per year} \times \frac{1000}{\text{Population}}.$$

The death-rates are, using the mean-ages (b),

N	73·0	per mille.
P	61·0	,,
M	69·4	,,
Early Man	64·5	,,

Without being taken to be dogmatic, we think the actual death-rates are likely to be still higher than the above figures. For among the subjects fossilized, the number of infants or *near*-infants is smaller than what it ought to be, as infantile bones being soft and immature are less likely to be preserved and fossilized. There were actually greater number of infants among pre-historic men than what the number of bones found fossilized would suggest.

At present about one-fifth to one-fourth of total deaths is due to infantile mortality, especially in backward and under-developed countries with high birth- and death-rates.

As the death-rates estimated above are due to that portion of the population who are not infants or near-infants, we shall have to increase them by one-fourth to one-third to get true death-rates. In prehistoric times the infantile mortality was very great. Hence we increase it by one-third.

The corrected death-rates are :—

Neanderthal Man	97·3
Palaeolithique Man	81·3
Mesolithique Man	92·5
Early Man	86·0

12. *Population Types.* Sündbarg has shown that for modern man the number of those who are between the ages of 15—50 is usually half the total population. He classified populations as Progressive, Stationary and Regressive, if they conformed to the following age-categories. To these, statisticians have added Accessive and Secessive, if the populations conform to the age-categories noted against them.

	AGE-CATEGORY		
Population	0—15	15—50	50 & over
Progressive	400	500	100
Stationary	330	500	170
Regressive	200	500	300
Accessive	250	600	150
Secessive	400	400	200

Putting the several populations into Sündbarg's age-categories, we find the numbers in different age-categories to be :—

Population	0—15	15—50	50 & over
N	565	435	0
P	472	525	3
M	531	457	12
Early Man	496	491	13

13. The age-distribution of Early Man does not conform to Sündbarg's age-categories. The number of older men is

abnormally small and is very much different from Sündbarg's types. If it be argued that as nearly half the total number of men are in the age-category 15—50, they do conform more or less, then we must take the populations of Early Man to be of Progressive—if not of '*over*-Progressive' type. We would expect such populations to be rapidly increasing. But all the evidence goes to show that the growth of Early Man, especially during the Palaeolithique Age, was very very slow ; the population was stationary.

14. If instead of taking Sündbarg's age-group 15—50 as an absolute standard, we take it to mean 'prime men', i. e. virile men and women mostly of the reproductive age-period, and those below it to be 'mere children'—dependants ; and those above it as 'old men', physiologically, economically and socially belonging mostly to the non-productive category, we may translate his age-categories in the case of prehistoric early man by modifying it to

0—12, 12—30 and 30 and over, we get age-distributions comparable with his several types.

15. When we divide early populations into the age-categories 0—12, 12—30 and 30 and over, we must not be taken to be dogmatic. What we do say is that such age-categories divide early man into categories fairly comparable with Sündbarg's age-categories for modern man.

The age-distributions for several populations of Early Man are

Population	0—12	12—30	30 & over
Neanderthal Man	434	457	109
Palaeolithique Man	341	484	175
Mesolithique Man	390	526	84
Early Man	370	489	141

16. Assuming that the number of 'prime men' is half the total, the difference between Sündbarg's age-category of 15—50 and half the total number is greater than that between half

the total and our modified age-category of 12—30. The differences are,

Population	15—50	12—30
N	500 − 435 = + 65	500 − 457 = + 43
P	500 − 525 = − 25	500 − 484 = + 16
M	500 − 457 = + 43	500 − 526 = − 26
Early Man	500 − 491 = + 9	500 − 489 = 11
Sum of the differences	+ 92	+ 44

The sum of the differences in the case of the standard age-category 15—50 is more than twice that in the case of age-category 12 − 30. On the assumption made that prime men are half the total, the latter age-category agrees more closely with what is likely to be a biological truth.

From the above divisions we find that Neanderthal man, and Mesolithique man belong to Sündbarg's (as modified by us) Progressive type, and Palaeolithique man to the Stationary type.

Gordon Childe, in *What Happened in History*, says at p. 32, Penguin edition,

'Despite the seemingly unfavourable conditions prevailing we get the impression that humanity had multiplied. In any case we have from Europe at least five times as many middle palaeolithic as lower palaeolithic skeletons, though the phase lasted perhaps only a fifth as long.'

17. *Reproductive Age.* For modern man the prime age is 15—50 ; and the reproductive age-period is generally taken to be 15—43 a period of 28 years. For Early Man we have tried to show that the prime age is 12—30, and the reproductive age-period is very likely to be reduced in the same proportion to 12—26 a period of 14 years. Cf. Keith, *New Theory of Human Evolution*, p. 127, 'The expectation of life was low—not more than 20 years. I assumed that in primal times women were fertile for only 20 years of their lives' (i. e. 15 to 35).

If we suppose that every woman of the reproductive age-period in early times gave birth to a child in alternate years, a year for gestation and another for rearing the infant, an

assumption or approximation likely to have happened actually in the past, when the influence of seasons on both food-gathering or food-production and mating and sex-activities was greater, the number of births during 14 years would be 6·5 (half of 13—deducting a year for the first period of gestation) × the number of women in the age-group 12-26.

The number of women in a population of 270·3 (Early Man) would be, taking the sex-ratio *to be equal*, 135·2. The age-distribution is

12–20	70·7
21–30	61·6

Deducting one-ninth from the first group for those who have not completed the age of 12, and thus come within the reproductive range, and taking 6/10th of the later age-group the number is 50. The birth-rate is, therefore,

$$\frac{50}{270{\cdot}3} \times \frac{6{\cdot}5}{14}, \text{ or } 85{\cdot}3 \text{ per mille.}$$

We have found the death-rate of Early Man to be about 8·60 per mille. The rate of increase is 85.3-86.0 = −0·7 per mille.

Calculating in a similar way on the assumption that the sex-ratio is equal, we find the birth-rates and the rates of increase for the various populations to be

	Birth-rate	Death-rate	Rate of increase
Neanderthal Man	93·6	−97·3	−3·7
Palaeolithique Man	85·1	−81·3	+3·8
Mesolithique Man	90·8	·92·5	−1·7

18. *Sex-ratio.* The above rates of increase are calculated on the assumption that the sex-ratio is equal. But the sex-ratios of the several populations are not equal. Further the data available show that the age-distribution of males and females are not the same.

Of the human fossils, whose age has been determined, sex could not be determined in all cases. Of the 187 fossils whose age has been determined, sex has been determined in 120 cases.

No sex has been determined of those who are in age group 0—11.

	Total	Male	Female	Sex-ratio
Neanderthal Man	20	6	4	667
Palaeolithique Man	102	37	30	811
Mesolithique Man	65	21	22	1048
Early Man	187	64	56	875

These are the sex-ratios among those aged 12 and over.

From the age-distribution of males and females for Early Man, we get the mean ages for those who are 12 and over to be

Males	30·3 years
Females	25·1 ,,
Difference	5·2 years

The adult females were shorter lived than males by one-fifth of their lives.

If we assume the specific death-rate for ages 0—11 to be the same for both males and females, then the number of males aged 0—11 : the number of females in the same age-group would be in the proportion of 64 : 56.

Using the age-distribution for Early Man, the respective numbers would be

$$\frac{100}{70\cdot7} \times 64 \text{ males} : \frac{100}{70\cdot7} \times 56 \text{ females}, \text{ or } 90\cdot5 \text{ males} : 79\cdot2 \text{ females.}$$

The sex-ratio would be (91 + 64) : (79 + 56) or 1000 : 871. Previously we have found it to be 875.

19. Age-distribution by sexes for the several populations is given below.

	Neanderthal			Palaeolithique Man			Mesolithique Man			Early Man		
Age	Male	Female	Undetermined	M	F	U	M	F	U	M	F	U
0—11	...	...	8	...	...	25	...	...	20	...	...	53
12—20	1	1	1	3	2	5	1	1	2	5	4	10
21—30	1	3	1	10	16	2	13	19	...	24	38	3
31—40	3	...	...	15	11	1	4	2	...	22	13	1
41—50	1	...	...	8	1	2	1	...	...	10	1	2
51 and over	...	...	...	1	...	...	2	...	...	3	...	...
	6	4	10	37	30	35	21	22	22	64	56	67

We now try to estimate the number of women of the reproductive age-period 12-30. The total population and the number of those who are of ages 12-20 and 21-30 for the several populations are (see para 7) :—

Sex-ratio in ages

X	Total	12—20	21—30	12—20	21—30
N	230	60	45	1000	3000
P	292·3	75·5	65·7	667	1600
M	253·4	69·2	63·0	1000	1461
Early Man	270·3	70·7	61·6	800	1582

The number of women of reproductive age has been estimated thus :—

Age 12—20 Age 21—30

$\frac{60 \times 1000}{2000} = 30$; $\frac{45 \times 3000}{4000} = 34$. Total 64.

Of these, according to the reasons given above, the number of women of reproductive age for Neanderthal man is

8/9 of 30+6/10 of 34=26·6+11·4=38·0. Similarly for,

	Palaeolithique	Mesolithique	and Early Man
they are			
Age 12—20	30·2	34·6	31·4
21—30	40·4	37·4	37·7
No. of reproductive age	51·0	53·2	50·5

20. *Rates of Increase.* The birth-rates estimated above in para 17 require modification in view of the sex-disparity. Following a similar method, we arrive at the following birth-rates :—

	Birth-rate	Death-rate
Neanderthal Man	129·1	97·3=+31·8
Palaeolithique Man	81·0	81·3= - 0·3
Mesolithique Man	97·4	92·5=+ 4·9
Early Man	86·7	86·0=+ 0·7

Leaving aside the figures for Neanderthal man, which are based on too few subjects, the rates of increase as found are confirmed by other evidences. The rate of growth of Early Man was slow ; and that in Middle Palaeolithique the rate was very much greater than in the Early Palaeolithique Period.

Sir Arthur Keith, in his *A New Theory of Human Evolution*, has estimated that 'the total population of the world in mid-Pleistocene times was 4.2 millions—a total which is less than the present population of Scotland. The 4·2 millions of Pleistocene times has now (1946) became 2,000 millions and it has been estimated that this number could be increased to 132,000 millions if all lands were properly cultivated' (p. 270).

Taking mid-Pleistocene to be 300,000 years back, and assuming the rate of growth to have been uniform, the rate of increase works out to 0·2 per cent per century.

22. We know that the population of the earth has increased very rapidly during the last 300 years. Carr Saunders estimated it to be 545 millions in 1650; and Willcox 470 millions in 1650. The rate works out to 0·16 per cent per century. The rate of growth must have been slower still in earlier times. We are, therefore, forced to the conclusion that in prehistoric times the population was absolutely stationary. So the birth- and death-rates must equal each other.

23. G. H. Knibbs in Appendix A to the Census Report of Australia, 1911, p. 148, has worked out a formula on the basis of actual data of birth-rates and infantile mortality in various countries (1907-1913). They are :—

$$\beta = \cdot 00785\ (1 + 19.6\ \mu) \quad \ldots \quad \ldots \quad (a)$$

$$\text{and } \mu = \cdot 0510\ (1 - 127\ \beta) \quad \ldots \quad \ldots \quad (b)$$

β being the birth-rate per unit of population, and μ the infantile mortality per birth.

If this relationship held good for prehistoric man, then for birth-rates noted in the first cloumn infantile mortality was as in the second column.

Birth-rate	Infantile mortality
70	453
80	518
90	583
100	648

We have already found that the specific death-rate for age 0—11 was high, being between 246 and 400. Infant mortality was likely to be very high. Probably Knibbs' relationship held good for prehistoric men.

24. Prehistoric Early Man was short-lived ; the mean-age being 15.16 years ; he aged rapidly passing his prime by 30 ; the birth and death rates were almost equal, and of the order of 80-90 per mille and infant-mortality of the order of 500. The sex-ratio was abnormal, there being 10 males for 8 or 9 females.

THE KAKMARA

A nomadic community in West Bengal

P. K. BHOWMICK*

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Introduction

IN the south-eastern plains of Midnapur in West Bengal, a group of nomadic people is found to move about from place to place throughout the year. Locally called 'Kakmara' or 'Crow-killers', their number in this district is about 250-300. A few peculiarly striking customs are noticed among them, the most pronounced among which is the collection of polluted or discarded earthen pots thrown away during funeral or on similar other occasions for cooking purposes, and utilization of the unburnt or half-burnt wooden logs picked up from the cremation ground as fuel and for other domestic purposes, and having no definite shelter to live in. It has been attempted in this short paper to deal briefly with their manners and customs, ways of life and the nature of their nomadism. The writer visited some of their semi-permanent settlements, but in most cases, the majority of the families were out on their traditional pursuits at the time of investigation. A detailed and fresh investigation in this respect may throw new light on some important aspects of their life.

In the Census Report of 1951, these people have been classified as 'Madrasi' as they usually speak in corrupt Telugu among themselves. They also speak Bengali, though not very fluently, when conversing with outsiders. As they are a nomadic community, they move in loose family bands from place to place. They camp at a spot like a market place, or fair, or in an open space under a big tree, as the case may be, whenever they find a convenient shelter. They stay generally from 10 to 30 days at a stretch, according to the nature of earnings they make at such places. Begging constitutes their main source of earning, the income depending on the agricultural condition of the locality, this being mainly

*Mr. P. K. Bhowmick is Lecturer in Anthropology at the Bangabasi College, Calcutta.

an agricultural area. Generally vacant shops and school or club buildings provide them with ready shelter for the night, and the branches and cavities of big trees are used for keeping earthen utensils and beddings or other small and essential objects of daily life. Yet, in different parts of the district, a few semi-permanent settlements have sprung up for invalids or old family members where they are lodged for rest till they recover and feel fit to resume their roving life. According to some of the informants, these nomads are mainly concentrated in Contai, Tamluk and in parts of the Sadar Subdivision of Midnapur. A section of them is also found in the districts of Balasore and Puri in Orissa, though this particular group has lost some of their special characteristics, having separated from the main body for more than two-hundred years. The approximate distribution of the people is as follows.

TABLE 1

Distribution of settlements and families

Subdivision	Police Station	Name of settlement or village	No. of families
Contai	Contai	Peskachak	1
		Dingalberia	2
		Masagaon	2
		Kisannagar	8
		Bhabanipur	2
		Sillibari	4
		Namaldiha	1
		Annapurna	1
	Patashpur	Pratapdighi	3
		Lawa	1
		Manglamaro	1
	Khejuri	Alipur	1
		Golabari	6
		Mundamari	1
		Ajanbari	1
Tamluk	Nandigram	Sidharer Bazar	1
		Hanschara	1
		Harikhali	1
	Mahishadal	Chak Bainchberia	2
		Ranir Bazar	1
	Sutahata	Bajitpur	3
Midnapur Sadar	Sabang	Makramichak	5
		Bania	1

Probable Origin and Causes of Migration

It is very difficult to collect accurate information about the origin and causes of migration of this tribe. A few of them say that they are Ahir (?) and had migrated to this part of the country in the distant past. They used to tend cattle and pigs and a few poultry in their homeland. Due to chronic poverty and periodic famines, they were forced to migrate. They found this land very suitable for living, as much of their requirements of food could be supplemented by begging. Their ancestors had never practised agriculture, and in this tract of Midnapur they are seldom to be found working as agricultural labourers. However, they stayed in this district and gradually their link with the motherland was totally lost. Though they speak corrupt Telugu among themselves, yet it is their belief that they would not be able now to understand the Telugu of their original land on account of long separation.

Settlements and Population

Most of the Kakmaras have semi-permanent fixed shelters where they reside for quite a few days every year. These are generally located in isolated places. The writer went to four such settlements during investigation.

Kishannagar is a village near the town of Contai. Eight Kakmara families erected some temporary sheds here just after the devastating cyclone of 1942. The local zemindar gave them formal permission to stay on rent-free land. This settlement is situated in a corner of the village near the sand-dunes. Out of 8 families, 5 were out on their daily round at the time of investigation. One person has built a small hut with mud walls and a thatched roof.

Dingalberia settlement of the Kakmaras was originally established on the bank of the big tank, away from the village. Recently one paddy-husking machine has been installed here and a Mahishya family has built a hut on the opposite bank. During the investigation, most of the members of 2 families

were out for a long time excepting their old mothers who live by begging in the locality.

Golabari settlement is situated by the side of a canal, on the bank of a tank belonging to a local zemindar. There are altogether 6 families, but all the members of 2 families were out at the time of investigation. One Gobind has built a hut with mud walls and thatched roof. They pay taxes or rent to nobody.

Bajitpur settlement is situated on an isolated bank of a tank. One Panchanan built his hut after the last cyclone here when he moved over from the market place of Nandigram. A metalled road has recently been built close to this tank and a Junior Girls' High School has also been established here by a local mendicant. A few shops have also sprung up here. During the investigation, 2 families were out begging. Panchanan left his old mother and two children in his dingy hut, for the latter have been admitted into the local primary school. Though due to constant movement population varies from time to time, yet it is estimated by some of the informants that these families are more or less permanent settlers in their present houses.

TABLE 2

Population

Village/Settlement	No. of families	Population		
		Total	Male	Female
1. Kisannagar	8	28	14	14
2. Dingalberia	2	8	3	5
3. Golabari	6	26	15	11
4. Bajitpur	3	13	6	7
Total	19	75	38	37

Occupation and Camping Places

The main occupation of the Kakmaras is begging. Generally one or two families move out at the time of their

seasonal treks. Early in the morning they take boiled rice steeped in water and go out for begging in the locality. The whole family is split up into 2 or more groups according to the number of members and they start in different directions. The men dress themselves in a peculiar fashion with vermilion marks on the forehead. A coloured head-gear or crown is worn at the time. They wear an iron bangle around the right wrist and carry a sharp knife without handle for use as well as for defence. They have bags made of palm-leaf, mat and telescopic spears for killing or catching birds. Dogs are trained and employed to keep watch on their beddings or other domestic kit slung on a tree. Women generally move about with children, carrying infants tied to their back with a piece of cloth. To get more alms they recite loudly the name of God in a melodious tone, 'Govinda', every time they approach a prospective giver. They have the dirty habit of spitting frequently and thus they soil the places they visit. Sometimes they make a gash on the body from which blood is allowed to flow. In this way they try to draw sympathy and get more rice, vegetables and tattered cloths from people of charitable disposition in the villages.

Castration of goats, dogs and cats is done only by the Kakmaras. When others require their services for such purposes, they get a few annas (from 25 nP. to 50 nP.) for each operation. Castrated dogs and cats do not run after females and remain in the same house permanently.

They also tend pigs while wandering from place to place. Once a local zemindar of Contai gave them some pigs for tending for which they were paid a little remuneration. But now-a-days pig-keeping and maintenance of piggeries is seriously resented by the local peasantry. Yet a few families have pigs of their own.

Haricharan Singh of Bajitpur, belonging to this community, pulls a rickshaw and thus maintains himself. During their long wanderings, they traverse through almost all the bazaars one after another. Srinibas Das of Golabari gave a statement

about his camping places during last year. He moved with his family members only. The stations were as follows :—

TABLE 3

Camping Stations of Srinibas Das (1958-59)

Months (approx.)	Days stayed (approx.)	Place
July	20	Jukhia Bazaar
July-August	15	Erinchi
August-September	30	Birbandar Bazaar
September	25	Kistoman Janar Bazaar
October	15	Mundamari (under a tree) ; sometimes in a shop in the locality
October	15	Chunpara Bazaar
November	15	Tekhali Bazaar
November	15	Takapura Bazaar
December	15	Kamarda Bazaar
December	15	Tikashi Bazaar
January	15	Mugberia Boarding Bazaar
January	15	Bainda Bazaar
February	10	Gopinathpur
February	18	Iswarpur Bazaar
March	15	Srikrishnapur (Roadside tree and school house)
March	15	Najir Bazaar
April	20	Gholpukur Bazaar
April—May		Golabari Bazaar (his semi-permanent place of residence)

During this long period he returned once every month to the last place to see his old mother in order to supply her with rice and other essential things.

Material Culture

Their huts, as said before, are rectangular in shape. Walls are generally constructed by planting branches of trees side

by side and plastering these with mud and cowdung. The thatches are of straw which are generally collected from the locality by begging. The entrances are very small without any door to close and one has to enter by crawling. According to some of the informants, they rarely get mutual co-operation in the construction of a hut. The family members alone help one another. There is no definite plan or structural preference for the orientation of a hut. They have very few domestic utensils. One or two iron or german silver pots for cooking and a few earthen pots are all that they keep. For bedding they prepare mats of date-palm leaves. Gobinda of Golabari brought an abandoned charpoy-bedstead from a cremation ground and Panchanan of Bajitpur collected one small bench from another.

In respect of dress and ornaments they are poorly attired. Ornaments like bead necklaces or bangles of cheap quality are in vogue. Women are also found to have tattoo marks on the forehead and upper arms. Panchanan has got a few gold and silver ornaments. He also possesses one acre of cultivable land of his own. Rice is their staple food. Locally available vegetables collected from neighbours or the market place by begging, are consumed. They eat almost all varieties of fish. They also hunt and catch mongooses, otters, tiger-rats, crows, etc. and eat their meat. Almost all families have dogs. These help them in hunting. The telescopic spears of adjustable shafts are for catching birds by transfixing. A peculiar variety of net is used by them for catching crows. This net is placed on the ground with small pegs inserted into it. One end of the net is firmly fixed with a big pole while the other end is tied with a long rope and this rope is pulled by the operator at the time of catching these birds. Soaked rice is used as bait. Sometimes feathers of a dead crow are skilfully manipulated to draw the attention of the birds. In this way, they are decoyed to the net and finally the long rope is pulled while the crows are picking up the grains from underneath the net which is closed automatically on them. They say, that at a time, 30-50 crows are caught and 3 to 5 persons work together in catching crows.

They have very few fishing appliances except one Panchanan of Bajitpur who has got a rod and a line.

They drink habitually. Fermented wine prepared from date-palm juice is generally available all over this locality. Both men and women drink at night when they come back after a whole day's begging.

Chewing of betel-leaves with tobacco is popular among the Kakmaras.

Status

The Kakmaras claim to be Hindu and they never eat beef and the like. A very few amongst them also assert that they are Ahir (?) and have a very faint idea of their descent and the occupation of their ancestors. Due to their peculiar habit of using unclean and polluted things, they are treated as the lowliest among untouchables in this locality. But none of them have been found to commit any sort of crime. At the time of preliminary census of the families in these four Kakmara settlements, it was found that 5 persons, of local castes have been absorbed in Kakmara society. These, when interviewed, said that since their very childhood they have been reared by the Kakmaras. They had, however, heard that they were made over to Kakmaras by their parents or guardians who fell into dire economic distress. Table 4 furnished below details of their caste.

TABLE 4

Persons belonging to other castes among Kakmaras

No.	Name	Male/ Female	Age	Original caste	Birth place
1	Subhadra	F	18	Weaver of Vaishnava sect	Kalamdan
2	Jamini	F	21	Mahishya	Kalamdan
3	Basanti	F	62	Paundra Kshatriya	Ranichak
4	Motilal	M	45	Mahishya	Harikhali
5	Mokshoda	M	35	Paundra Khastriya	Sutahata

Though these people remember their original caste, they are not accepted by their friends as such, nor do their relatives venture to take them back into the parent caste.

On ceremonial occasions in this locality, a feast is given to beggars accompanied by small cash present to all those entertained. Kakmaras, like other beggars, attend such feasts and have to clean the dining place and throw away the leaves or plates when it is over, like other untouchables.

Social Structure

Kakmara society is divided into exogamous phratries. These are named after two persons who are considered to have been their religious preceptors. One among them is Ram Singh and the other is Narain Das. The Ram Singh group bears the surname of 'Singh' and the Das group uses the surname of 'Das' or 'Sardar'. All families belong to either of these groups. It is said that all of them originally belonged to the Ram Singh group. In the distant past, accidentally, one of them married unknowingly within the same group and as enjoined by social convention, he had to change the preceptor and henceforth some of them belonged to the Ram Singh group and the rest to Narain Das. This is the statement of Basanti, mother of Panchanan of Bajitpur. In this short investigation, it was not possible to verify the truth about these two main divisions of the community.

The Kakmaras have three types of families among them, simple, extended and joint. In the extended group, the widowed mother or father lives with their married sons. In joint families, married sons live together with their parents. The following table gives their numbers.

TABLE 5

Types of families

Simple family	Extended family	Joint family	Total
14	4	1	19

In 14 simple families, 2 widows live at Kisannagar. Four persons have their old mothers with them and only 1 person has two married sons living with him at Kisannagar.

Marriage

They are generally a monogamous people; divorce or widow remarriage is not rare among them. Due to the two-fold exogamous division of the society already described, marriage takes place between these two groups only. According to some of the informants they prefer cross-cousin marriage of both the varieties, i.e. marriage with the father's sister's daughter and mother's brother's daughter. The genealogy of Srinibas of Golabari shows that he married his father's sister's daughter, Sailabala. According to the statement of Basanti, mother of Panchanan, Kakmaras also marry their sister's daughter. Her son Panchanan married Bilasi who is Panchanan's father's sister's daughter's daughter, i.e. who is sister's daughter by relation. A detailed investigation is necessary to analyse how far this is true.

Marriage by exchange is also permitted among the Kakmaras, in which case the customary bride price is not paid. Not a single case of levirate or sorrorate was found during investigation. Divorce, remarriage of widows or of divorced women are all permissible in this community. Divorce is permitted when the wife is lazy, barren or one of the couple is guilty of adultery. Ramadasi of Dingalberia had relations with a man of another settlement. As a result, her husband demanded back the bride price paid for her from her parents. The panchayat decided that Ramadasi should take off the iron bangle, which is the mark of the married state,* in the presence of the village elders and henceforth become free to marry again. In case of re-marriage of widows or divorced women, no ceremony is observed. The parents of the woman receive a fee of Rs. 14 generally. Now this has become a formal demand only, the payment being never made or insisted upon. Subhadra, a divorced woman, married Sudhir of Harikhali in the Police Station of Nandigram. Another Sarada, being widowed, married Kartick of Mundamari, P. S. Khejuri.

On the death of a woman's husband, this iron bangle is taken off ceremonially, when the woman becomes formally a widow.

Ceremonies in the Life Cycle

Kakmaras have a few ceremonies connected with child birth, attainment of puberty, marriage and death.

During pregnancy, they have very little restriction on diet and movement. After delivery, the umbilical cord is cut by an elderly female member of the household, if any, or by the mother herself by means of a p i l a shell. Srinibas's wife Sailabala gave birth to a male child last year in a shop during wandering. She herself cut the umbilical cord. The placenta was buried in a place away from the village. The child was washed with a pitcherful of water and was fed on honey for three days. The mother simply cleansed her body and on the fourth day took a bath. For three days, she was given fried potato and banana and liquid food. On the 21st day, a small ceremony was observed with the service of better meals to friends and relations. No formal feeding of rice or name-giving ceremony was observed.

Puberty Ritual

Commencement of first menstruation is carefully observed by girls and they generally inform their mothers about it as soon as it starts. Then a temporary shed, rather a secluded place, is prepared for her at a distance, with leaves of date-palm or palmyra palm ; the hut has an opening in the west. The menstruating girl has to remain there for three days, and is anointed each day with turmeric paste and mustard oil before evening. Then she takes a bath. For three days she is fed on sweetened rice gruel. On the fourth day, she takes a full bath and returns to her home. At night she may have the company of a girl friend if she is afraid of being alone.

Nuptial Rituals

Marriage takes place only after puberty. A formal negotiation is conducted by elderly members of the respective families, though it is generally settled according to the practice

of cross-cousin marriage. Marriage takes place in the bride's house where the bridegroom and his party arrive on the appointed day. The date is fixed by elderly members. The months of Bhadra (Sept.-Oct.) and Chaitra (March-April) are avoided as these are not considered propitious. The bridegroom brings with him a new basket with a woman's cloth, s a r i, a wooden bead-necklace, an iron bangle, vermilion, betel leaves and betel nuts and a small quantity of rice. They also bring with them a palm-leaf mat. The bridegroom's party sit on the mat. The bride's father is requested to take a present on a plate consisting of rice, 9 betel leaves, 9 betel nuts and Rs. 4 in cash from the father or guardian of the bridegroom. After receiving these formally, he returns the presents thrice to the bridegroom and finally receives them back. He then asks for the permission of the assembled relatives. When the assembly give their formal permission, then both the bride and bridegroom are given a bath and made to put on new cloths after which they return to the wedding place where all relatives assemble. Then the former is assisted by a man who is known as Baurdi or the chief conductor of marriage. He ties a bridal knot between the corner of the cloth worn by the bride and that of the bridegroom. Then the couple are advised to pay obeisance to the assembly and the chief conductor asks their permission for marriage and then requests them to be witnesses to the ceremony. After that the couple are taken to a room inside, evidently for consummation of marriage. The door is closed and one of the brothers of the bride says to the couple from outside, 'If you have a female child that should be given to my family'. The couple reply, 'Yes'. Then the couple are fed on two separate plates. The ceremony ends here.

It is the general custom that the bridegroom must remain with his father-in-law till they have two children. Otherwise, they have to pay an extra fee of Rs. 4 to the father-in-law.

Funeral Observances

After death, the head of the corpse is placed northwards and invitation is sent to relatives and friends for help in its

burial. Burial is the popular mode of disposal of the dead. A pit is dug in the ground and the dead body is interred. Before the final burial, it is washed and anointed with mustard oil and turmeric paste. For three days watch is kept at the grave all through the day and night. On the fourth day an elevated mound is made on the grave with earth just above chest height. Ten days are observed as the mourning period. On the eleventh day a purificatory ceremony takes place. A relative is called to conduct the ceremony. He shaves the chief mourner and other male kin, for which he gets a remuneration of a few pice. Then, the place where the person breathed his last is washed and all the articles, including head-dresses, iron rings, necklaces, knives, etc. are gathered together and in front of these, three banana leaves are spread out. On two leaves, vegetables and fruits purchased from the market are placed and on the third leaf, some cooked rice with coarse sugar is offered. After that a pig is killed with seven strokes of a big bamboo pole on its chest, while the four legs of the animal are pulled hard by four men. Then a fowl is sacrificed. This is cooked separately. Then a pumpkin is broken by throwing it upon the ground. This is also cooked.

For cooking rice and coarse sugar, the fuel is to be collected from a single tree. All these things are offered to the spirit of the dead, and three rice-balls are prepared, out of which one is taken to the grave. Having done this, the purificatory ceremony is over and the relatives take their meals thereafter.

Tribal Organization

The Kakmara have no caste panchayat to discuss their social problems. When disputes arise, or a wife runs away from her husband, elderly members of the community are informed and the culprit is traced out. Once the wife of Jatin Das of Mokramchak ran away with a person much younger in age. Jatin appealed to his kin and community members and paid their travelling expenses to detect the culprit. They were detected at Kakdip Bazaar. Later they

were brought down and the culprit was seriously beaten. The panchayat had by now finished its sitting. At night, Jatin, already very angry over this incident, made an earthen tobacco pipe red hot, and burnt a mark on the left cheek of his wife as punishment. This resulted in a scar on her cheek. Now they live happily. There are many examples of this kind.

Religion and Festival

They look upon themselves as Hindu and sometimes worship Kali, Sitala or Manasa like their neighbours, with sacrifices of goats and fowl. They have their own priests, washermen and barbers.

There is practically no communal celebration, nor have they any traditional dance or music.

RELIGION AS FUNCTION OF LIFE SITUATION

HENRY H. PRESLER*

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RELIGION is that combination of myth and ritual enabling a particular group of humans to interpret and to attempt to control their destiny. A 'function' in this connection is that correlation between patterns of resources and behaviour that makes either pattern sometimes cause and sometimes effect of the other. Life situation is the total material, social and ideological context within which a particular group of humans is operating. The thesis of this paper is that their religion is both cause and effect of the particular life situation of the leather workers (Chamars) described.

The differences between my thesis and some other theses related to the problem of accounting for the connection (if any) between religion and its cultural matrix, are at least two :

(a) Certain students have proposed one factor as the determinant of all phases of culture. My thesis differs in avoiding a unilateral explanation for all cultures, and in preferring to seek for explanation in a combination of factors.

(b) The other difference marking my proposal is simply this : Some theories defend a one-way determinant (for instance, the material influences the immaterial, but not vice versa), being persuaded that the factor argued is a cause and a cause only. I am urging that the influence among the factors is reciprocal, both causing and effecting, perhaps more cause at one time, but more effect at another.

The particular illustration thrown up for inspection here happens to be a group of ten families of Indian leather workers, living in a state of friendlessness, illiteracy and poverty. We might have selected a group characterized by friendship, literacy and wealth. The thesis, if valid, would hold true for such a case also.

*Dr. Henry H. Presler, S. T. B., Ph. D. is in charge of organized research in the Leonard Theological College, Jabalpur.

Leather workers are accorded a very low status in the prestige ladder of local society ; indeed they would needs reach up to touch the first rung, but would not be allowed by the orthodox to place their little finger on that rung. There are very few groups lower than these who collect the carcasses of dead animals for the privilege of removing the hides. In spite of much propaganda to the effect that all men are to be treated equally, the leather workers are not included in the social affairs of most members of society, and are left in isolation and loneliness. It is difficult for them to overcome the impression that men avoid them.

This sense of friendlessness is intensified by their feeling of strangeness in Hinditown.[1] As emigrants, they forsook their ancestral home due to semi-famine conditions, and to alleged oppression from their superiors. Their dialect is akin to the local language, but marks them as strangers among the local people.

Crowded together in their ten huts, they look outside their circle to a forbidding social world, expecting affronts from some, and reserve from all.

Illiteracy

Not a person among them can read. Their oral scriptures and ritual systems are intact, known to adults.

Poverty

On arriving in Hinditown they did not obtain rights to follow their occupation as leather workers, and hired themselves out as day labourers. Some are carrying logs in a sawmill. Others work on roads. They take whatever unskilled labour is offered. Most have irregular employment. The usual wage for a day's work is Rs. 1.50 (thirty-three cents in U. S. A. currency). In their poverty they found an undesirable spot near the railroad tracks, owned by a religious institution whose priest leases land plots for temporary shelters. The tank at the temple afforded enough water to mix with clay. They built the usual mud hut or j h o p r i with thatched roof.

[1] A fictitious name for a real city in India, namely, Jabalpur, M. P.

The huts are very close together, for mutual protection. This 'huddling' keeps them in almost immediate contact with their kind, and in constant danger from conflagration sweeping over the straw roofs and destroying human life. The annual rental of Rs. 10 for the land plot for the single room hut is a week's wages, not much for the higher income brackets but considerable for an income which is not sufficient for food. The daily wages of Rs 1.50 is not enough for one person, let alone husband, wife and children.

These three—friendlessness, illiteracy and poverty—are among the important factors in the life situation of these leather workers. These suffice for the purpose of illustrating the way in which religion interprets and tries to control that situation, being itself limited by it.

The Interaction between Religion and Friendlessness

The persons under discussion begin by calling themselves Raidasis, or followers of Raidas who flourished in the 15th century A. D. His sect is found chiefly in the Uttar Pradesh, but adherents are scattered over north and middle India. Its members are low castes. Raidas was himself a leather worker who laid stress on b h a k t i or devotional faith in God, as (in his opinion) infinitely superior to knowledge of the scriptures (which the people being described cannot read in any case). As natural among members of a despised community, stress was also laid on the unimportance of social status. Salvation was not the monopoly of the literate, nor enshrined in Sanskrit, but is freely offered to the masses in their own vernacular. A man can be a saint no matter what his rank. To circumvent the cultural respect for high castes, shared also by the leather workers, the Raidasis say that their leader was originally a Brahman, but was cursed by his teacher for having taken alms from a shopkeeper who had dealings with leather workers. Raidas at once died and was reborn immediately in the home of a shoemaker, while remembering all he had known as a Brahman. When a babe the saint demanded religious initiation, and as a man gave shoes free to any pious

pilgrim coming to Banaras. The ambivalent emotion towards high castes is thus expressed.

Vicariously overcoming the poverty in their own lives, the Raidasis say that God Himself intervened and made their saint wealthy, who in turn founded a monastery for his disciples.

Reflecting their feeling of friendlessness, Raidas is said to have been persecuted by social and political superiors, but in the end he caused the priests and the king to be converted unto him. The biography of Raidas thus interprets the living Chamars as having the best religion, as being equal to all men in the opinion of the Deity, and as having had a leader who overcame social stigma, illiteracy and poverty by devotion and by the miraculous intervention of God. In other words, the leader controlled the three factors that inconvenience his followers today.

The mythology around Raidas helps them to redefine themselves to themselves, and to ameliorate the societal stigma under which they suffer. One such myth goes like this :

> Raidas was no other than a tanner, a renowned devotee of the river goddess. She was pleased by his intense love for her, even though he was but an untouchable. One day a priest sauntered along the river bank on his way to perform religious rites in the holy stream. The saint begged the priest to offer, on his behalf, a coin of lowest denomination (a pice) and a betel nut. At first the priest demurred, but finally took the things and carelessly tossed them into the waters, as not worthy of a ritual. Behold, Mother River stretched forth her hand, caught the offerings, and then threw back a pearl on bank. The priest was supposed to give the jewel to Raidas, but instead hurried off to curry favour with the queen. She was delighted to receive the pearl, and insisted that any jewels must be in matched pairs to bring out their beauty. She demanded a mate to it on pain of death. The priest fell on his knees, confessing the origin of the pearl. The queen was possessed with the lure of a matching gem and herself

went to the house of the lowly tanner, who was making shoes on her arrival. Her royal highness begged Raidas to obtain another bauble. The saint called for an earthen pot of Ganges water, and then said, 'If the heart be pure, the goddess can appear even in a pot of holy water'. So saying he thrust his hand beneath the liquid and drew out a matching pearl, of the same size and of equal beauty. This made such an impression on the queen that she fell down before him and henceforth became his disciple.

This oral scripture is one of those that enable these people to retain an inner sense of worth against the friendlessness of the society. It helps to bind them together and to interpret themselves as underestimated participants in the total culture pattern.

But the other teachings of Raidas (one of the disciples of the famous Kabir), are not much in evidence among this group. Theology and cult have been so modified by the surrounding orthodox religion that these people believe and practise the very doctrines and rituals against which their saint inveighed so strongly. In other words, their life situation functioned to preserve the title (and with it the assumed high status in Deity's sight) but not the cult. The name of Raidas raises their own estimation of themselves, and impresses others ; but what Kabir and Raidas were actually driving at in the way of theological and moral reformation, that they do not fully know or follow.

In sum, the title, Raidasis, avoids the social odium of the conventional name, Chamars. The sectarian name helps them to face resolutely the unfriendliness of the society.

We turn now to their major problem after reaching the city, namely, how to import some divinities whom they could call their own and interact with. The strange city augmented their sense of isolation. There were two reasons why they could not adopt any local divinities : (1) Local people would not want them near their shrines, due to the social ranking system. (2) They did not know the local divinities, had not

heard many of their names, and were unacquainted with their rituals.

Among the earliest arrivals was the father-in-law of an old woman who has one of the main private shrines. On arriving here about twenty-two years ago, he had no god to worship, and hence was compelled to go at least once a year some 150 miles north of our city to a well-known pilgrimage centre. Generally he went at the spring festival, in order to have a d a r s h a n or beatific sight of the gods and goddesses symbolized there in statuary.

(Here I interrupt to remark that both Raidas and Kabir were deadly enemies of three-dimensional symbols, so that this father-in-law was acting oppositely to their teachings and practices. This merely underlines what was said previously : these people took the distinction but not the religion of Raidas.)

He explained his plight (being without any god or goddess) to the functionary at the pilgrimage centre. The priest performed a ritual by which the father-in-law was enabled to bring back to the strange city four of the possible 160 gods and goddesses at that place. (Raidas was a strict monotheist, so that, this acceptance of four divinities but further emphasizes the group's choosing only what suits their life situation. Orthodox image worship is the very woof of their total culture pattern. He brought the four divinities from the temple on the top of the hill there. This means, that he brought their spiritual presences as well as their forms, in human likenesses. On reaching our city he went to the betel leaf field, with cemetery adjoining, which was to be the site of the present settlement of ten families. He selected a spot for the sacred dwelling place, and raised a mud platform. Then he engaged an ecstatic to perform the s t h a p a n a (ceremony of establishing and fixing divinities at a new place of residence) rite. This priest was an aboriginal, a member of the Kol tribe, also low in social status. The Kols are the religious functionaries of these Chamars in their homeland, and one of them happened to be here. The

s t h a p a n a was accompanied by fervid singing of lyrical ballads, and loud drum beating on a d h o l a k (a percussion instrument made of a ring of wood over which a tanned skin is stretched).

The importation of these four goddesses inserted friendly divinities into an unfriendly environment. Religion responded to the life situation.

The abhorrence of the Chamars for their social degradation is reflected in the absence of ranking among the four divinities. All are thought to be residing in the one shrine, and no one of them is chief. They are all equal. Their symbols are three flags, and thus two divinities (who are twins) have the third flag. The four are sisters, and the other 156 divinities are in the air somewhere hovering around the pilgrimage centre up in the north country. The offerings to the four sisters are also without distinction : they share alike in two black bangles, two wooden tops with which to amuse themselves, and one red thread (the r a k h i bracelet which sisters annually give to their brothers). As among real friends there is no discrimination, so the divinities symbolize the sort of society that is friendly.

There are other kinds of unfriendliness to be countered by the Chamars' religion. First, there are the thieves ready to snatch their few belongings at any unguarded moment, or when the ten families happen to be absent at the same time. Second, there is the g a l i (verbal abuse) directed their way by social superiors. G a l i is not the same as profanity and must be heard and understood in the vernacular to be sufficiently appraised. The shrill, screaming voice of an expert in g a l i will make a stout heart quail. Third, there is that burial ground with the unknown spirits of the departed. Those who take reincarnation seriously must reckon with the cemetery, especially since the departed are likely to redress the wrongs against themselves when in the flesh, by afflicting the living. Fourth, there is the omnipresence of death, awaiting every individual.

The four divinities entrusted to the father-in-law for conducting to Hinditown, are believed to control, in some measure, these four troublers. One of the sisters is able to keep thieves at bay. Another has as her special province the control of verbal abusers. Again, one is able to keep the spirits of the departed in tow, while the fourth is herself the goddess of death.

Thus, religion for these people is a system of myth and ritual whereby they seek to reinterpret their actual life situation to themselves and to control the unfriendliness of the culture towards themselves. The prestige of the name of an acknowledged saint of India is appropriated, but not his theology. The myths enabling them to vicariously triumph over societal ill-will, are told again and again. But to nerve them against the dreaded new place, they fall back upon the polytheism against which Raidas inveighed, and bring divinities from the homeland. To control the thieves, abusers, departed spirits and death itself, Raidas' rapturous monotheism does not suffice for them, and they resort to the orthodox goddesses who seem to come to grips with the four enemies. The religion appears to be a function of their life situation, and also to perpetuate their focus on certain few aspects of it.

The Interaction between Religion and Illiteracy

Groups with written scriptures profess to know what the Deity requires of them. But how are illiterates to know? Their oral scriptures are not systematized or codified, and consist chiefly in myths (traditional stories of religious import, relating to the activities of supernatural beings, which stories are handed down by tradition). These myths may not enunciate those principles from which one would know what is required by the divinity in a particular time, place or emergency. Some means must be found to learn the divine requirement. The religion of these people provides immediate access to and conversation with the divinities, through ecstatic mediums. It is pertinent to translate literally what the Chamars have to say.

There are two annual p u j a s[2] regularly observed by us. One is in the spring (March-April), and the other is in the fall (Sept.-October). Before the actual festival comes, we start singing to our goddesses at night, usually from 9 p.m. to 12 p.m. In this night celebration, someone of our male ecstatics gets b h a u (ecstacy, characterized by speaking in an unknown tongue and uncoordinated physical movements of an excessive and wild character). Then one of the goddesses speaks through him and makes known her wishes to us (this mediumship occurs after the extravagant behaviour when the ecstatic quiets somewhat and speaks as if in a trance state, using the vernacular. People go near to him and ask the goddess in him to tell them what she wants). But if no one gets b h a u, then the general singing goes on. In this case, the next day every family brings the offerings (described below under the heading, Interaction of Religion with Poverty). Our head ecstatic does the rituals and then sits down before the sacred symbols drawn on the floor, and puts himself into deep meditation, looking with a fixed gaze toward the images. Others present, who also can act as ecstatics, imitate him. In this posture and state, somebody or other will get b h a u, and so reveal the wishes or blessing of the goddesses.

The above is their general statement of how they find out what is to be done with reference to the biannual anxiety of

[2]The word p u j a has been inaccurately translated as worship service by some Westerners with Christian cultural backgrounds. Actually, the term does not indicate the Christian act of adoration, praise, thanksgiving and petition. P u j a rather means the sort of homage and celebration rendered by subjects to their king, especially when he goes on tour to visit them. They greet him, welcome him, give presents and expect the same in return. The greatest such d u r b a r in the 20th century may have been the visit of the Prince of Wales to India in 1912. He received in Delhi the felicitations of loyal princes and commoners from all over the land. When the Prince of Wales paused in my city, the local nobles competed for the privilege of entertaining him. The one chosen built a special palace for the occasion, and two British lions still recline at its entrance within shouting distance of my typewriter. Gardens and walks, fountains and elevated seats were specially constructed for the royal visitor, and have fallen into decay and ruin. P u j a is more a celebration of a divine visitation.

the ten families to keep in harmony with the four divine sisters. To clinch the point, I shall add their words with reference to special festivals.

> There are two kinds of special p u j a s observed by us. The first is in the spring and fall. We sit down before the goddesses beforehand of the p u j a days to get to know what they wish to have us to do for them. We (the house-owner and a few other male members from the surrounding huts whom we have to call), take our places at the shrine on an appointed day, and invite our goddesses in the name of the queen goddess at the pilgrimage centre in the north country. We ask them to let us know what we, her devotees and servants, should do for her. At first we start praises led by one of us who knows how to spin verses with the music of drum and cymbals. Then when in the proper mood of meditation, and having no other concern or feeling than that of the goddesses, we start one after another with folded hands to earnestly request the goddesses to come upon us and to reveal their wishes. Gradually the songs stop and the ecstatics get b h a u. They shake themselves forward and backward. Then comes the spirit of the goddess upon whomsoever she chooses. Sometimes almost all present get b h a u, one after another. Otherwise, only a few get b h a u. Now, whosoever first possesses the spirit, starts speaking for the goddess or goddesses and says what she wants and what we have to do. This lasts for 20 or 30 minutes, and the ecstatics act like mad men and speak vehemently without stop. Their words are often without understanding, but the ecstatics reveal the wishes of the goddess when asked repeatedly. When we come to know the thing, then we plan to do it.[3]

The informant goes on to say that the goddesses usually demand either a j a w a r a (barley or sprouted grains)

[3]Ecstacy is not to be 'explained' as merely an expressive movement, or as an abnormal psychic state induced by group pressures. The life situation out of which it arises, including illiteracy, must be included in one's estimate.

offering, or an animal sacrifice. One more quotation will follow to illustrate how an illiterate people (lacking written and fixed definitions of divine requirements) fall back on the experiential authority of ecstacy and alleged communications with the divinities themselves.

> The second kind of special ceremony has no set time or place, and becomes necessary whenever the goddesses wish to contact us of their own accord. Whenever certain misfortunes (caused by spirits or other goddesses or our own four goddesses) enter our locality, our m u k h i a (community leader) comes to know through severe pain on his body caused by the goddesses. Then he consults with us. To find out the actual thing troubling us, and what remedy to apply, we again go through the ritual of invoking the spirits to come upon us, that is, the spirits causing the trouble. In b h a u a medium makes known to us who he or she is, from where he or she has come, and what is demanded of us. Sometimes our own goddesses, wishing for special favour, hurt us or our leader, or one individual. In the latter case, one man bears the trouble, a dangerous situation. So we all help to meet the goddesses' demands.

The people of India have tremendous respect for the sacred books in the Sanskrit language. A functionary able to read and recite Sanskrit is accorded high honour. But these Chamars have neither Sanskrit books nor vernacular books, and as people without a book evolve a religion offering a substitute authority. The religion is in one sense an effect of a life situation, in another sense it perpetuates that life situation, by substituting the discipline of ecstacy for the discipline of learning to read.

The Interaction of Religion and Poverty

Three inconsistent cult procedures manifest the mutual dependence of poverty and religion among these people. (1) They seldom perform a ritual because, in India, rituals take artefacts and ingredients that cost money. (2) Whenever a ritual is performed ostensibly for the goddesses, the Chamars

usually eat most of the offering themselves. (3) Periodically they pay (relative to their income) extraordinarily large sums for festival rituals to honour and placate their goddesses. The following may make these points clearer.

Regarding the paucity of rituals, this dearth contrasts with the ordinary practice of India's masses with a modicum of economic security. Those somewhat higher in economic resources will certainly offer flowers and water daily. The next higher level will add incense, oil lamps at night, and copper coins to the daily observances. Still higher rankings may engage a priest to assist them in daily rituals. Most believers above the Chamar level will keep their private shrines in repair and colour, covered with fresh blossoms. The shrines of these ten families are in total disuse most of the time and may not even be swept. When questioned, they explain that their goddesses are not greedy for offerings, which is convenient for them who cannot furnish them except occasionally.

Pertaining to the matter of eating most of the offering themselves, these people manage to satisfy the divinities and their own hunger at the same time. This also is helpful to the poor. The doctrine that devotees may eat foods offered to idols is believed and practised. They say that the goddesses take their h a q (share), leaving the rest for them. (They do not say that the goddesses eat the essence of the offering, leaving them the rest, but frankly admit eating the self-same stuff presented to the image.) This occurs in the following cases :

(a) H o m Sacrifice (term used by Chamars, Brahmans say h a v a n).

This is one of the ancient rites coming down from earliest times, in which grains and clarified butter are cast into a fire pit, to the chanting of Sanskrit verses. The orthodox require four learned priests to perform it. Somehow these Chamars have got hold of their own version of h o m, and manage to imitate their superiors in the general practice of the ritual, but of course, without the Sanskrit and without the details. I have never seen the upper

classes associating h o m with ecstasy, nor eating any of the ingredients.

These people, calling themselves Raidasis, begin by performing their version of the ancient rite (although Raidas himself was against all such rituals), and use it to induce ecstasy. After the ecstasy, they tell me, 'all eatables that are there are distributed to the gathering as the p r a s a d (derived from a Sanskrit word meaning 'favour of a divinity') of the goddesses, and thus ends the usual h o m p u j a.

(b) B a l i or Animal Sacrifice

During the preceding song services, the man providing for the sacrifice, distributes b e e r i e (Indian cigarettes) t a m b a c o o (tobacco to chew) and p a'n (the favourite chewing narcotic of the masses consisting of the areca nut, lime paste, various spices and condiments, and the leaf of the n a g l a t a). All these are consumed by the people themselves.

On the day of the sacrifice, the sponsor provides rice, flour, oils, and the carcass of the sacrificed animal. The animal demanded by the goddesses through the ecstatic may be a b a k r a h (male goat) or a s u a r k a b a c h c h a (male piglet), or a m u r g a (cock). If the sponsor be the community, likely the first can be afforded, but if a private individual, 'he tries to provide a piglet, and if unable to meet the expense, then a cock. Whatever the goddess wants, we must offer ; if one man cannot be found to provide it, then all of us must combine to give it'. In either case, all unite to eat most of it ; the head is given to the functionary, the blood is poured out on the ground for the goddesses, and the carcass is consumed by all after cooking it along with flour and rice cakes.

A further accompaniment of the general feast is the fasting beforehand. If the sponsor be one man, he fasts for nine days previously, eating only a little fruit and drinking juices at nightfall. Naturally this reduces the household

expense for food, and helps to pay for the feast. If the community at large sponsors the feast, then all may fast for some days beforehand. There is, of course, no admitted connection between the fasting and the expense of the feast. The people say they fast to get supernatural power (t a p a s originally meant mortification not for moral reformation but for the acquisition of supernatural powers by holy men who were sometimes able to get even gods into their control. That is to say, their t a p a s was so extraordinary that they obtained more supernatural power than the gods possessed). But whatever the reason for the fasting, it helps to meet expenses of the feast.

It may also be noted that sooner or later every man is expected to sponsor a religious feast. This means that each adult feeds all the other adults during one round of responsibilities, and thus the individual comes out at least even. In view of the fasting, he may come out better than even. This depends upon the market prices which vary with the seasons.

In other words, religion interacts with poverty so as to sanctify part of existence, to obtain the willingness of the goddesses to desist from troubling the people, or even their positive favour, to solidify the social bonds, and to accomplish all this with a few heavy expenditures, which are cancelled out in the end by participation in the religious feasts given by others.

This brings me to the third paradoxical point, the extraordinarily large sums occasionally expended for religious purposes. The masses of India are utterly sincere, with their attention focussed on other considerations than those mentioned in this article. Realization of the facts given above is no doubt there, but in the margin. These people wish to placate their divinities or to honour and please them on their periodic visits to the community (b u s t i). Moreover, sometimes they are desperate for supernatural help, and dedicate a large proportion of their resources to the p u j a. By a large proportion, I mean about four months' steady income to a p u j a

occurring once in three years. At their subsistence level, this is, in my observation of their life situation, a remarkable gift.

These Raidasis say that every man should 'sow j a w a r a' at least once in three years. The word j a w a r a actually means grain sprouts, and usually barley, wheat or even rice and some other grains may be planted. Over a period of three years, it is likely that the average Chamar could somehow get together enough saving and loan money to finance the rituals.

In this expensive procedure, the sponsor buys three or four earthen jars for rich earth. He sows the seed and takes the jars inside his house, to allow them to grow yellow sprouts for nine days. The sponsor fasts by day, and each evening stages a singing party in which musicians may be hired. This is called k i r t a n a, in which professional bards and instrumentalists render myths and epics in fervid song. Large crowds gathering from 9 p.m. to 2 a.m. have to be supplied with refreshments. Further, the functionary doing the nine days of rituals for the sprouting grain must be paid. On the ninth day, there is a procession to the bank of some water body, in full regalia of best possible cloth and accoutrement. The sprouts are immersed (the meaning of which need not concern us here). These things are then crowned with a community feast in which all participate. But if this last be beyond the capacity of the sponsor, he must at least provide k a n y a b h o j a (Virgins' Feast), in which the unmarried girls are elaborately fed, in addition to as many high caste priests as the sponsor dares to invite. For this purpose, a high caste cook must be hired.

Each Raidasi feels theological imperative to sow j a w a r a within a maximum of every third year. Of course, there are many subordinate motives for doing this (prestige, social solidarity, recreation, celebration and the like). But with this community, and most others of my acquaintance, the j a w a r a expenditure is primarily religious. My point is that its frequency and nature are accommodations to the poverty

of the community, and in return consume their savings and keep them economically poor. Yet, the celebration of theological and social values which the sowing of j a w a r a affords, the parade through the streets before startled social betters, help to keep life meaningful and livable, and to furnish these Chamars with strengthening memories for the drab days that lie ahead.

There are other features of their routines which interact with religion, and demonstrate religion to be a function of their life situation. This paper is not intended to be exhaustive. My hypothesis suggests that these three are among the important ones for this particular group only, and that other features might be important to other life situations.

POLITICAL CONSCIOUSNESS IN TRIBAL BIHAR

SACHCHIDANANDA*

(*Received on 21 September 1959*)

Introduction

WHEN the second General Election under the new Constitution of India was held in February-March 1957, an attempt was made to estimate the political consciousness of the Munda and the Oraon at several places where polling booths were situated. Three research assistants of mine were deputed to different centres with a small questionnaire. In most cases, however, the interviews had to be open-ended in nature and had to be combined with observation.

I

The great majority of the tribals do not have an exact idea of the purpose of elections. On being asked about it the characteristic reply was, 'How could we know about it? We are simple illiterate village folk'. In one area people first came to know of elections in the month of January when brisk canvassing began in that area. Those who had voted in the first election recalled their earlier experience but others were in a confused state of mind. Except those who had come into contact with party workers of any political party everyone thought that he was going to vote because others did the same and no harm had thereby come to the latter. In one area people disclosed that no public meetings had been held but door to door canvassing had been carried on. Some of them had received leaflets in the village markets which they did not understand.

The interest which the tribal voters took in this election was very much less than in the first election. From three

*Director, Social Education Organisers' Training Centre, Ranchi.

polling booths in the Ghaghra Police Station, a purely Oraon area, the following figures were collected :

	Strength of the electorate	Number of votes cast	No. of male voters	No. of female voters	Total percentage
Kurag	800	291	234	59	36.3
Dodang	1100	261	227	34	23.8
Toto	700	194	155	39	27.5

These figures amply prove that the tribals were not at all anxious to use their franchise. Women voters turned up only from the villages in which booths were situated.

II

The tribals were familiar with party symbols like the cock, bullocks and cycle which stood for the Jharkhand, Congress and Janata parties respectively. In one area people appeared to be very much party-minded. The merits and demerits of the candidates set up by their party did not very much matter for them. Most of the people at one booth appeared to favour the Jharkhand party. The sitting M. L. A. from that area was a popular figure elected on the Jharkhand party ticket. But this time due to a rift in the party, he did not get the party ticket. Even then he contested the election as an independent candidate. His contestant, the official candidate of the Jharkhand party was unknown in that locality. The latter had never personally canvassed in that area. The agents asked people only to look for the symbol of the 'Cock' and drop the ballot paper in the box with that symbol. It was also seen that most of the tribal voters flocked near the seat of the agent of the Jharkhand party while the Rajput, Brahman and voters of other castes took their identity tickets from Congress or Janata party agents.

Asked about reasons for casting vote in a particular box many interesting answers were given. When a tribal voter came out of the booth after casting his vote an investigator enquired of him as to how he had voted. The voter

had forgotten whom he had voted for and replied in a happy-go-lucky manner, 'Babu, it is just a matter of luck for the party concerned. However you make up your mind, when you enter inside (the booth) you are bewildered and drop your ballot paper for the party which is lucky enough to have it'. One voter was so much perplexed when he went inside the booth that he said, 'I tried hard to find out the cock symbol but failed. In the meantime people waiting outside (Polling Officers) asked me to hurry up and in haste I do not know where I dropped my ballot papers'.

For some other tribal voters the party or its work in the interests of the public had little importance. Some had a peculiar fascination for the party symbols. One voter said, 'Bullocks are our wealth and so I have cast my vote in the box with that symbol'. Another remarked, 'I possess a few bullocks, so I must vote for my bullocks'. One party agent exhorted his supporters not to forget the bullocks. This propaganda was countered by the other party by saying that though bullocks help them in ploughing, the cock saves them from distress and disease by being sacrificed to 'Singbonga' and therefore they must vote for the Cock.

A seventy-year old voter when asked about his choice clearly said that he had voted for the Bullocks as he ploughed the land with the oxen and the Cock was of no use to him. Another reason of his voting for Congress was that he had seen the Congress candidate. Some other voters said that they had voted solidly for one party as no one could go against what the majority does. One of them said, 'You do not expect me to swim against the current'. In a few areas the traditional panchayats decided the way in which votes were to be cast and the entire village voted in one way. No one dared to go against the panchayat's decision. Some voters revealed that church fathers had asked them to vote in a certain way and they could not go against their wishes.

One person narrated the following story to explain why he voted for the Congress, 'I saw Gandhiji at Jamshedpur praying to Lord Shiva. One day he jumped into boiling oil and remained there praying to the Lord. Shiva appeared

before him and blessed him and asked him to pray to Goddess Kali. Gandhiji prayed to her for six months, one day she appeared before him. I saw this with my own eyes and there were hundreds of persons who saw it. Goddess Kali told him that his wishes were granted and the British will have to leave this country and that he would be the king. After saying this She disappeared'.

This made him believe that he is right in supporting the Congress candidate. He told others who did not believe him that even if their candidate wins, he would not be of much use as the Congress will still rule. The personality of Pandit Nehru gave another reason for people voting Congress. 'The Government is headed by Pandit Jawaharlal Nehru, who is a pandit and does everything after consulting Shastras (scriptures) and therefore things are running so smoothly. The Mundas cannot do it. The work of ruling is of Brahmans and so only Panditji can do it'.

In most areas people were deeply impressed by the Jharkhanda party's propaganda of Jharkhand for the people of the soil. People believed that the Government did not understand their problems and introduced such schemes which the people did not need. They readily believed when it was said that people from outside Chotanagpur were holding key posts there. If the Government provided wells, taxes have also been imposed. The Jharkhand party compels Government to pay scholarship to the Adivasis (aboriginals). Congress is an organization of non-Adivasis. The Government was enforcing 'Chakbandi' against people's wishes. Though Jharkhand was a rich area in respect of minerals the people were exploited and poor. When people were asked if their dream of having Jharkhand had been realized when they voted for that party in the first election some of them replied that though their dreams could not be realized, they would get it ultimately.

Some tribals known as Tana Bhagats who are vegetarians, wear khadi (hand-spun hand-woven cloth) and follow Gandhiji voted solidly for the Congress because it was Gandhiji's party. Their number is small but so strong is their faith in Gandhiji

and his teachings that no amount of propaganda by agents of the Jharkhand party could waver it.

At a polling station in the Munda area wavering voters were given the identity cards forcibly by party agents and told that if they did not exercise their franchise they would be punished by the Government. They were also told that Mahatma Gandhi would be present in the polling booth and though they may not be able to see him, he would see how each person voted and if they want to avoid dire consequences they must vote for the pair of oxen.

Workers of certain welfare organizations played an active part in the elections. In one village where the propaganda of the opponents was strong, the villagers were told that the newly obtained order for opening a school in that village would be cancelled if they voted against the Government. When the opponents sent their agents in that village, the villagers drove them away as they did not want to lose their school anyway.

In one area the Janata party had set up a candidate who was till recently the landlord in that area. The troubles and tyranny during the zemindari regime were played up by other parties. People were reminded of forced labour, numerous impositions and other oppressions of the zemindar. The voters naturally sore with the conditions prevailing in days gone by, were easily weaned away from that party. The ruling party was charged with the nonfulfilment of the promises of its candidates in the first election. Though zemindari had been abolished, land revenue had increased and people had no financial relief. Villagers had been prohibited from cutting wood from the jungle. If they still went to the jungle to fetch firewood they were subjected to endless harassment by forest officials. Instead of people being allowed to use the jungle for their petty needs, it had been turned over to the rich contractors and common people felt that they had been deprived of something which they could claim as their own. In these circumstances people were asked to vote for the third party which had a vague programme with an elusive objective and no solid constructive work to its credit.

In some cases some of the missionaries took more than usual interest in the elections and in areas where the concentration of converted tribals was great their views had strong grip over the people. Even the election pamphlets of some candidates assumed the support of the Christian tribals.

III

A perusal of the election appeals of two opponents from one constituency would reveal the puerile nature of the propaganda carried on.

A. *Please do not forget*

Dear Brothers and Sisters,

We have sent our representative to the Legislative Assembly many times. But we have not got an able man even once. This time God has sympathised with us and that great man has appeared in this election. Stout in body, comely in looks, tall in stature and adorned by a silk shirt, attractive, undaunted orator, Sri X who has sacrificed his soul on the altar of social service for the cause of the country is standing before you.

Wise men are engaged in uplifting you all with great alertness. The illiterate class should also become active. There should be no refusal. Missionary brothers would be greatly benefitted. (We) will give full rights over the burial ground and reward persons who get their names inscribed there. As this candidate is sponsored by the Jharkhand party, Christians will be given special privileges. Non-Christian tribals and non-tribals should not be worried as they would be given freedom to drink wine.

Future members of the Legislative Assembly are mad with joy to know that he is going to join them. They are breathing a sigh of relief. They are fully confident that the Legislative Assembly would shine forth. It will be completely changed. All plans will succeed. All the troubles of people will vanish and Ram Rajya (Kingdom of God) will be established. Therefore you should not forget the election symbol of Sri X.

B. Our holy thought

Dear Brothers and Sisters,

Our five yearly festival (Vote) has arrived. It means that we have to send an able person to the Bihar Legislative Assembly through our pure thoughts. Now we have two persons before us. It is from these two that we have to choose an active person with a pure heart. It is now necessary to know the distinctive features of an able person. The person who is responsible for people comprising two police stations must be educated. He should have some proof of having done something for the country, should be a selfless person, should have a fixed aim and should have worked for getting education, communications and tanks for people.

Shri Y is a dutiful person, cultured society respects him. He is always engaged in constructive work. He knows that illiteracy is a great curse and to eradicate it he has opened many schools and hostels and induced the Government to award scholarship to many students. He has got the approval of the Government for many embankments and wells. In times of scarcity he has distributed grain and clothes and even to-day is moving day and night for satisfying the manifold needs of common people. With pure thought he is engrossed in social service. So Y is full of many pure qualities.

The second candidate is Shri X who was formerly in Congress but has now joined the Jharkhand party. His mind is not steady. As regards literacy he can only sign. He had no opportunity of serving the country. When there was shortage of vegetable seeds in Chotanagpur he was busy in selling these. When he had leisure he used to take litigants to court. His nature is cruel. Children who pluck guavas from his orchard are severely beaten by him. His name does not appear on his pamphlets. Now you can understand who is better of the two candidates. Surely you will find Shri Y to be better.

Therefore we appeal to all lovers of the country that they should cast their votes in the ballot box of our non-Christian

brother Shri Y and elect him a member of the Legislative Assembly.

IV

The study of the state of political consciousness of tribals brings out the following points :

1. None of the parties seeking election from reserved seats seriously tried to educate the people politically.

2. The merit of the individual candidates did not matter. People voted for the party rather than for the candidate.

3. Opposition parties instead of putting forward an alternative programme banked on the failings of the ruling party.

4. Unscrupulous politicians made use of the Church and traditional leadership for mobilizing public opinion in their favour by fair means or foul.

5. Students and teachers worked as election agents for propaganda among tribals.

6. The tribal is more concerned about the petty tyrannies touching him rather than in national affairs. Petty grievances loom large in the context of elections.

7. General interest in the elections was at a strikingly low ebb compared to the first election. This is evidenced by the low percentage of total votes cast.

8. There is no political consciousness worth the name among tribal women and the few that turned up to cast their votes voted as their menfolk instructed them.

9. All the political parties through their election symbols appealed more to sentiment than to reason.

10. The standard of appeals to the electorate was remarkably low and arguments put therein were puerile.

TAMIL-CHINESE CROSSES IN THE NILGIRIS, MADRAS.

S. S. SARKAR*

(Received on 21 September 1959)

DURING May 1959, while working on the blood groups of the Kotas of the Nilgiri Hills in the village of Kokal in Gudalur, enquiries were made regarding the present position of the Tamil-Chinese cross described by Thurston (1909). It may be recalled here that Thurston reported the above cross resulting from the union of some Chinese convicts, deported from the Straits Settlement, and the local Tamil Paraiyan women. He published anthropometric measurements of one family having four children, a girl aged 18 years and three boys aged 10, 9 and 5 years respectively and emphasized the 'paternal influence on the external anatomy of the offspring'.

Preliminary enquiries both at Neduvatam and Gudalur did not at first reveal anything. Thurston had stated that the Chinese convicts had squatted for a long time between the above two places, a distance of about 8 miles. In the meantime, a bus-conductor informed the present writer of a hill, which is even now known as 'Chinese Hill'. This hill is about 4 miles from Gudalur. Thurston also mentioned that the Chinese had adopted Christianity and, as such, while coming down from the Kota village, Kokal, and also through the ungrudging assistance of Mr. Ramalingam, Khadi Extension Officer, Gudalur, enquiries were made at St. Mary's Church. The Parish priest, Rev. Fr. Kanippilly, on hearing about our query, at once sent for III_3 (Fig. 1), who happened to be present at the mission compound, and introduced us to him. He was tall, robust and showed an unmistakable Mongolian countenance with flat, broad, squarish face and high cheek bones. His skin colour was whitish with a clear yellowish tinge. He had practically no body hair and facial hair was rather scanty. His head hair

*Dr. S. S. Sarkar is Lecturer in Physical Anthropology in the University of Calcutta.

showed a clear brownish tinge. He could speak English very well and was good enough to acknowledge that he did not know much of his family history but would take us to his mother (II_4), about 85 years old, if we would go to her. We went with him and the following details were obtained from the above old lady in the presence of her son (III_3) and daughter (III_2).

I_1 was one of the original Chinese, deported from Singapur, who died about 30 years ago. He married I_2, a Tamil woman, who gave birth to 10 issues. The dead issues in Fig. 1 are not in their proper birth order, but II_4 was the third child of their

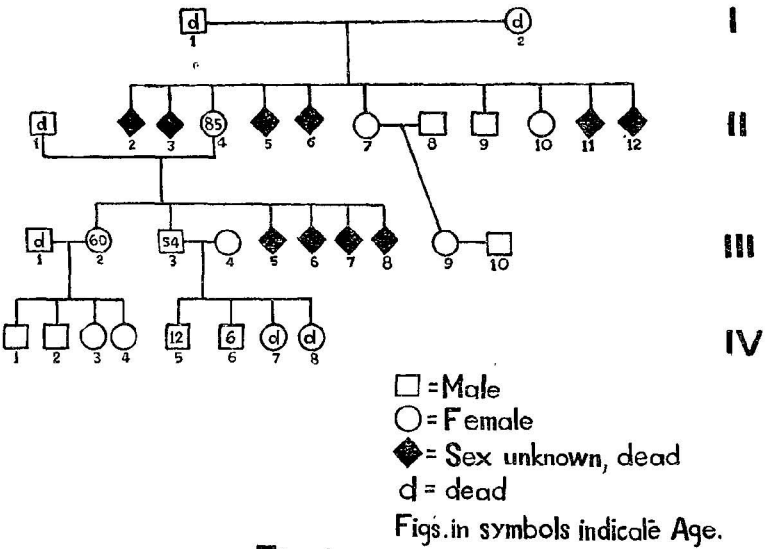

Fig. 1.
TAMIL-CHINESE CROSS IN THE NILGIRIS.

parents. The old lady was also sure of the birth orders of the sixth (II_7), seventh (II_9) and the eighth (II_{10}) issues. Her mother died about 25 years ago. II_4 was very short in stature and light-built in constitution. Her skin colour was distinctly yellow, but the triangular face with a pointed chin appeared to be of native origin. Her face and hands were wrinkled, but her body did not appear to be emaciated in spite of old age. She married one Brown, who according to the statement of III_3,

was a *pucca* European. This appeared to be partly true from the physical features of III_3—his whitish skin colour, light brownish head hair and tall stature support it, but when we look to the case of III_2, it is difficult to deduce a true Tamil type, unless the father had also some Tamilian ancestry. III_2 showed the most contrasting features of her brother (III_3). She was very dark in skin colour, slender built but tall in stature. She married a local Tamil (III_1) and all her children (IV_{1-4}) were true Tamilian in features. She is now a widow. III_3 also married a local woman (III_4) and his two sons ($IV_{5, 6}$) showed both Chinese and Tamilian features. The eldest son (IV_5) inherited his father's skin colour to a certain extent. It was not so whitish as the father's, but the yellow skin colour was distinct. His head hair was light brownish, eyes oblique but no mongolian fold was seen. In contrast to the elder brother, the younger showed dark skin colour and more Tamilian features. Both the sons had, however, the same triangular face with pointed chin as seen in the grandmother.

II_7 married a local man in Gudalur, whose daughter (III_9) married a Nepali, also residing in the town. II_9 settled at Bangalore, while III_{10} was married at Coonoor. No other information was available about them.

The shortcomings of the present note, due to its lack of many other details, must be acknowledged. The data were collected at the end of a tiresome uphill journey and the present writer had to speed up his investigation because of the collected Kota blood samples which were to be grouped as soon as possible on return to camp at a distance of about 4 miles down hill.

The present data are offered, firstly, to show that a part of the cross is yet discernible after a lapse of 50 years, and secondly, if it could be of any value to those interested in such studies. Thurston's field notes, if available, may also help in correlating the family reported by him with the present data.

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A PRELIMINARY REPORT ON A COLLECTION OF NEOLITHIC TOOL TYPES FROM WESTERN ASSAM

M. C. GOSWAMI

A. C. BHAGABATI*

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NEOLITHIC celts from different parts of Assam were collected by a number of persons and published in various books and journals. H. C. Das Gupta[1] and recently K. Pakrasi[2] have recorded detailed lists mentioning the various celt finds in Assam. The occurrence of celts of different types in Assam has given rise to a number of observations. For instance, connection among the inhabitants of Malay, Burma, Khasi Hills (Assam) and Chotanagpur in the Neolithic period has been sought to the supported by the occurrence of shouldered celts in these areas.[3] Worman is also of opinion that Assam together with Burma acted as a corridor through which celt-making techniques entered India from South-East Asia.[4] In this respect, Krishnaswami also states that certain Assam types, namely, 'the facetted hoe, the shouldered hoe and the splayed axe have a wide distribution in South-East Asia and South China and belongs to this general complex'.[5] However, this large number of celt finds in Assam could be studied only typologically since none of these was found in any well-defined Neolithic archaeological context. As far as is known, no concentration of celts within a limited area, either as stratified or as surface finds have so far been reported from any part of Assam. The first author of the present article has, however, discovered an area in Rongram near Tura in Garo Hills where celts have been found on the surface of lateritic soil extending

*Prof. M. C. Goswami is Head of the Department of Anthropology, Gauhati University, Assam. Shri A. C. Bhagabati is Lecturer in the same Department.

about 2 square miles. Exact field-data of the area are lacking at the moment.

The tools reported earlier were mostly from eastern and north-eastern parts of Assam. The present paper deals with a collection made by Goswami in Rongram, Rombhagiri, Rengchangiri, Tura, Rongchugate and Phulbari areas in Garo Hills district and in Rani and Kamakhya in Kamrup district. The collection was made from 1949 to 1959, the major portion being collected from 1954 onwards.*

The present discussion is based on a typological study of 132 neolithic artefacts. Of these, however, only 25 specimens have been selected as types representative of the whole collection for purposes of drawing and description (vide Description). 68 out of 132 specimens were collected from individual householders of villages in Kamrup and Garo Hills. The owners of these tools preserved these for curing ailments. The Garos call these celts 'goera gitchi' ('goera' = god of lightening; gitchi = hoe). The Kacharis call these 'Sarak-ni-Ongthai' ('Sarak' = heaven, 'ni' = of, 'ongthai' = stone). The plains people of Kamrup, on the other hand, call these 'Parasu Kuthar' or 'bajrapathor' (thunder-stone). The Garos and the Kacharis use small bits of stones from the preserved celts as ingredients in medicine for curing stomach and chest pains, and the plains people of Kamrup for quick and safe delivery.

The remaining 64 tools out of 132, were collected as surface finds from Rongram in Garo Hills. As mentioned earlier, exact geological and archaeological investigations are yet to be carried out. Rongram is however a hilly area and the celts have been collected from the lateritic surface of the undulating jhum fields. The area of the tool-finds extends over about two square miles.

A preliminary study of the rock types shows that the tools of the Kamrup collection are mostly made of slaty shale and

*The author is grateful to Prof. K. P. Chattopadhyay and Sri D. Sen of the Department of Anthropology, Calcutta University, for their encouragement in collecting neolithic data from Assam.

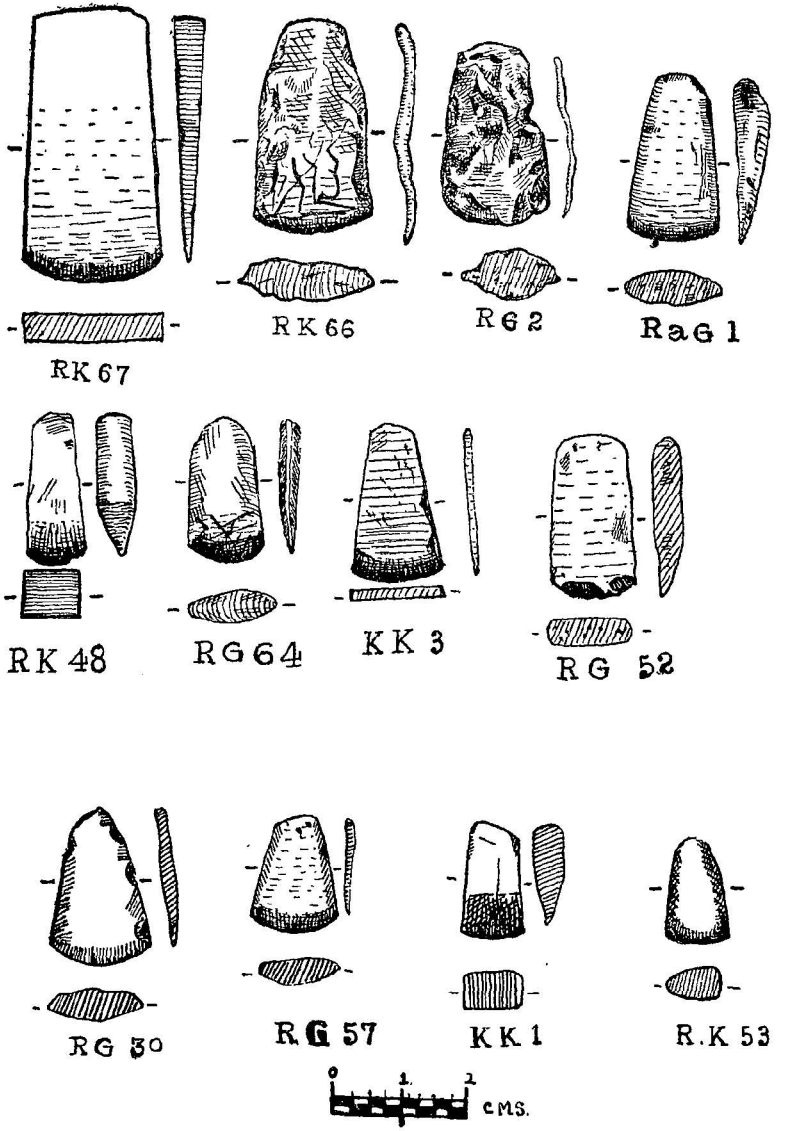
compact clay and shale. The materials of the Garo Hills collection are dolerite, quartzite and fine-grained granite*.[1]

Nearly all specimens of the surface collection from Garo Hills show a deep ferruginous patination with a reddish brown colour and some specimens have rolled appearance (RG 2). In fact, a ferruginous patination is seen in some other specimens from Garo Hills and this may be due to their association with lateritic soil. The Kamrup specimens do not show such conspicuous patination. The colour of the tools varies from light yellow in some clay specimens (RK 66) to ash (RK 31), reddish brown (RG 2), and black (RK 53). State of preservation is fairly fresh except for some specimens which have rolled appearance.

For purposes of convenience, we can divide the collection into two categories, namely, shouldered celts and non-shouldered celts. The first group is seen to include all grades or stages in the process of making shouldered celts from feeble attempts at shouldering (ReG 8) to well-made products (RK 15 & ReG 21). Shouldered celts are 41 in number, i.e. they make 31.06 % of the total collection. The remaining 91 specimens (68.94%) out of 132 include shapes that may be grouped under trapezoidal, triangular and rectangular forms. Of the 41 shouldered specimens, 29 (70.73%) have curvilinear outlines (ReG 22) and 12 (29.27%) have rectilinear outlines (RK 15). 22 (53.65%) out of 41 are typical or well-made shouldered celts while 19 (46.53%) show only incipient shoulders or attempts at shouldering. The shouldered celts appear to be an important series for various reasons. The preponderance of curvilinear forms over rectilinear forms is to be noted. There are no particularly large specimens and these are comparatively thin. Shouldered celts with rectilinear cross-section are only 5 in number (12.19%). Out of 41, 34, i.e. 82.92% have biconvex cross-section and 2, i.e. 4.87% have plano-convex cross-section. Thus, shouldered celts with rectilinear outline and cross-section form a minority in the collection.

*[1]Thanks are due to Sri D. N. Goswami of the Geology Department, Gauhati University, for kindly identifying the rock types of the artefacts. Microscopic examinations are awaited.

None of the shouldered celts in the collection display the characteristic angular bevelling on one face meeting with the flat undersurface at the cutting edge. Thus, none of the



specimens can be said to be of typical 'shouldered adze' form. A few shouldered celts show bevelling, but this bevelling is observed on both the surfaces for preparation of the cutting

edge. Some (e.g. ReG 21) have no bevelling and the sharp cutting edge is formed by the convergence of the two gradually sloping surfaces. The shouldering of the celts was perhaps a definite advantage for hafting ; but judging from the nature of the specimens it is difficult to ascertain whether the mounting was done adze-wise.

The three remaining forms of celts in the collection are triangular, trapezoidal and rectangular, numbering 23 (17.42%), 36 (27.27%) and 12 (9.09%) respectively. The remaining 18 specimens are broken, in which the shape cannot be determined definitely. It is to be noted that more than 45 specimens are typical axes while about 15 specimens belong to the 'adze type'.

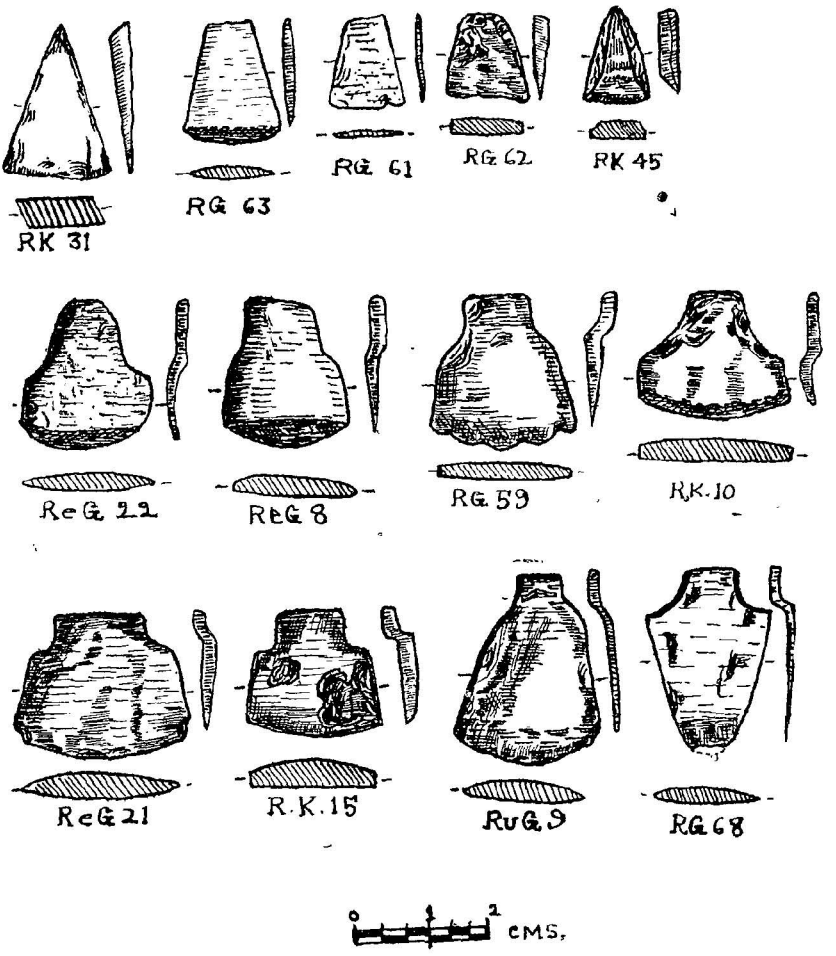
Rectangular tools with rectilinear cross-section are 8 in number of which 5 are typical Neolithic cold chisel forms with thick hammering facets at the pole end. Rectilinear cross-section is however seen in 9 trapezoidal and 3 triangular celts. But celts with biconvex or a lenticular cross-section number more than 50 out of 132. Plano-convex cross-section is noted in about 10 specimens. But the most characteristic cross-section is displayed by two axes from Rani in Kamrup made on slaty shale. These have typically rhomboidal cross-section.

Apart from the criteria of form and cross-section, the presence of certain miniature celts in the collection is to be noted. More than 10 celts are less than 5 cm. in length. Specimen RG 62 is 3.9 cm. and RG 61 is 4.2 cm. in length. But inspite of their pygmy size, the celts are well made. Specimen KG 62 appears to be a very small chisel having a thick hammering facet at the pole end. RG 61 is very thin. It is difficult to ascertain the use of these small celts. Some might have served as effective tools and others as ritual objects or, as used at present, for magico-medicinal purposes.

A ritual origin also seems plausible in the case of celts made of softer materials like clay or shale. Specimen RK 66 is a typical example of this kind. It is made of comparatively softer clay and while the sub-triangular or trapezoidal form has been perfectly attained, no stress has been laid in sharpening the

cutting edge. Moreover, such soft materials would not be suitable for effective use.*

Two specimens of the collection need special mention. One is a small but heavy hammerstone (RK 53) and the other is a shouldered lance-head or point (RG 68). The former is



pyramidal in shape having a triangular cross-section and a flat hammer facet at its broader end. It is completely polished. The latter is fully ground and has the shape of a typical lance- or spear-head with a short but distinct tang for hafting.

*The authors are thankful to Prof. N. K. Bose for suggesting the possibility of ritual use of these tools on softer material.

So far we have not said anything about the technique of manufacture of the tools. The collection exhibits development from very crudely chipped to highly polished and finely made tools. All combinations of chipped and ground, ground, ground and polished, completely polished tools are present. RG 2 is a completely chipped tool having no grinding or polishing. But the sharpness of the cutting edge is well attained by the removal of small chips along the cutting edge. A number of tools from Rani (Kamrup) show a combination of chipping and grinding. Few specimens are polished near the working edge only. Fully ground specimens are more numerous from Garo Hills. Specimen RK 67, the largest and the most well-made specimen of the collection, is a fully ground and polished axe and no earlier attempts of chipping or pecking are visible. Specimen KK 1 from Kamakhya (Kamrup) is a chisel form showing a high and shiny polish.

Coming to the cutting edge and its preparation, it is noted that bevelling as a means of preparing the working edge is fairly common. Some of the chisel (KK 1) and axe forms show bevelling on both the surfaces converging towards the sharp cutting end. Bevelling on one surface, meeting the plain under-surface to prepare the working edge is found in many celts. This is the adze form. Most of the celts have broad convex cutting edges which are sufficiently sharp and effective. In some cases an obliquity of the cutting edge is observed. A straight cutting edge is also not infrequent. A number of well-made celts show edge-wear or signs of use. Two or three specimens exhibit traces of bevelling at the pole-end. This might have been intended for easy hafting.

We have broadly pointed out the salient features of the collection. In the present state of our findings, it is not possible to arrive at a conclusion regarding the presence of a Neolithic culture in Assam unless the primary traits are discovered. Nevertheless it can be hoped that further archaeological and geological investigation might prove the existence of a Neolithic industry in western Assam.

Short descriptions of representative tools are given now.

DESCRIPTION OF SOME TOOLS

(Only maximum measurements are recorded. Tools with initials RG, RaG, ReG, RuG are from Rongram, Rombhagiri, Rengchangiri and Rongchugate respectively within Garo Hills district and tools with initials RK and KK are from Rani and Kamakhya respectively in Kamrup).

1. No. RK 67. Preservation—Fresh.

Length—16.8 cm., breadth—7.7 cm., thickness - 1.3 cm. Large, thin and perfectly made celt with rectilinear outline. Medial cross-section is rectangular. Surfaces and sides fully ground and polished near the working edge. Working edge typically convex and sharp. Type—Large axe.

2. No. RK 66. Preservation—Fairly fresh.

Length—12.9 cm., breadth - 7.5 cm., thickness - 2.7 cm. Large celt with trapezoidal outline. Made on clay. Medial cross-section biconvex. The lateral sides on the upper surface show chipping marks. Other portions ground. Pole end and sides are thick. The convex cutting edge is not very sharp and the tool, due to its soft material, does not appear to be suitable for effective use. Type—Axe.

3. No. RG 2. Preservation—Slightly rolled.

Length—10.2 cm., breadth—6.0 cm., thickness—2.3 cm. Celt with roughly trapezoidal outline. Medial cross-section typically biconvex. Both the surfaces are completely chipped. No sign of grinding and polishing are visible. The sharp margins are continuous with the pole end. Cutting edge sharp and convex. Type—Axe.

4. No. RaG 1. Preservation—Fresh.

Length—9.9 cm., breadth - 5.7 cm., thickness—1.7 cm. Fully ground celt with typically triangular outline. Broadest near the cutting edge and narrowest at the pole end where maximum thickness is attained. Medial cross section is ovoid. Cutting edge is convex and sharp. Lower surface shows slight bevelling to prepare the cutting edge. Type—Axe.

5. No. RK 48. Preservation—Fresh.

Length—8.6 cm., breadth—3.2 cm., thickness—2.3 cm. It is narrow rectangular in outline. Medial cross-section is rectangular. Cross-section near the pole end is square. Surface and flat sides are completely ground. Cutting edge is prepared by two distinct bevellings from either surfaces. The cutting edge shows signs of use. Pole end is thick with a hammering facet. Type—It is a typical Neolithic cold chisel.

6. No. RG 64. Preservation—Fresh.

Length—8.2 cm., breadth - 4.2 cm., thickness—1.8 cm. Celt with roughly trapezoidal outline. Broadest and thinnest at the effective end and narrowest and thickest at the pole end. Medial cross-section lenticular. The sharp convex cutting edge is formed by the meeting of a sharp bevelling on one face with the convex upper surface. The specimen is fully polished. Type – Adze.

7. No. KK 3. Preservation—Fairly fresh.

Length—7 5 cm., breadth—5.6 cm., thickness—0.7 cm. It is a small celt, trapezoidal in form and having a perfect rectilinear cross-section. Surfaces and sides are fully ground. Polishing is seen near the cutting edge which is prepared by two indistinct bevellings from either of the surfaces. Cutting edge nearly straight and sharp. Type—Small axe.

8. No. RG 52. Preservation—Fresh.

Length—9.3 cm., breadth—4.9 cm., thickness—1.9 cm. The specimen is nearly rectangular in shape and has a rectilinear cross-section. Surfaces and sides are fully ground and polished and show no signs of chipping except at the working edge which was possibly done to obtain sharpness of the edge. Pole end thick. Type—Axe.

9. No. RG 30. Preservation—Fairly fresh.

Length—8.7 cm., breadth – 6.8 cm., thickness – 1.4 cm. It is a triangular celt, broadest and thinnest at the cutting end and narrowest and thickest at the pole end. Both the surfaces and

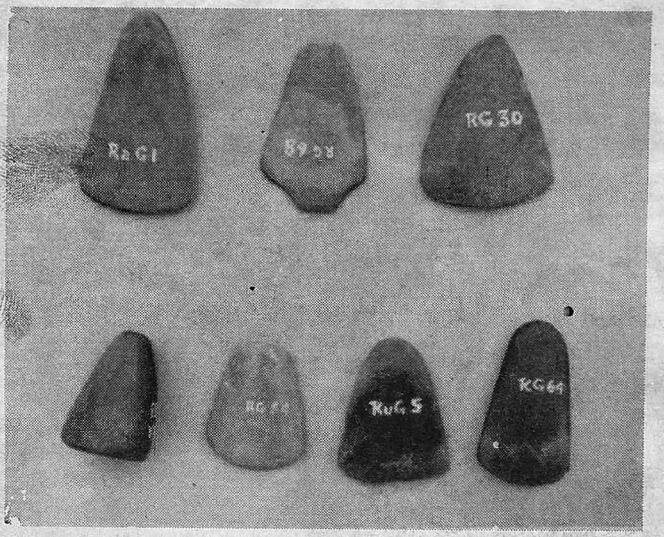


Plate I

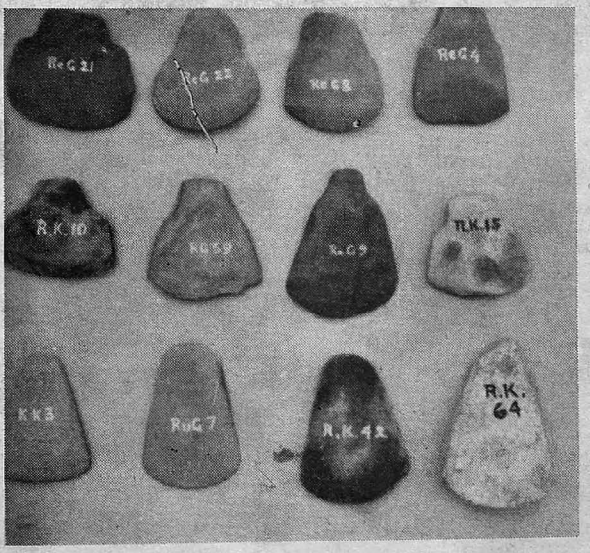


Plate II

Tools from Western Assam

sides are ground. The upper surface is more convex in outline than the flattish lower surface. Medial cross-section is nearly plano-convex though near the pole end the section is roughly rectangular due to the flattening of the margins at that portion. Cutting edge convex and rather sharp. Type—Axe.

10. No. RG 57. Preservation—Fairly fresh.

Length—7.2 cm., breadth—5.9 cm., thickness—1.9 cm. It is small, fully ground celt with a roughly trapezoidal outline and a medial plano-convex cross-section. Cutting edge is convex, oblique and rather sharp. It is formed by the meeting of a large sharp bevelling on the upper surface with an indistinct bevelling on the lower surface. Type—Adze (?).

11. No. KK 1. Preservation—Fresh.

Length—6.9 cm. breadth—3.8 cm., thickness—2.2 cm. The specimen is thick and rectangular in outline with a uniform rectilinear cross-section. The tool is fully polished. The pole end is thickest with a nearly square cross-section and having a hammering facet at its top. Working end is broad and formed by the meeting of the two sharp and distinct bevellings from both the surfaces. The cutting edge is straight. Type—Cold chisel.

12. No. KR 53. Preservation—Fresh.

Length—6.2 cm., thickness—3.9 cm. It appears to be a hammer-stone having a pyramidal shape and conical cross-section. It has hammering facet at its broader end.

13. No. RK 31. Preservation—Fairly fresh.

Length—6.9 cm., breadth—5.1 cm., thickness—1.1 cm. It is a small celt with a typically triangular shape and rhomboidal cross-section all along its length. Surfaces and sides fully ground. Cutting edge is nearly straight and shows edge-wear. Type—Small axe.

14. No. RG 63. Preservation—Fairly fresh.

Length—5.6 cm., breadth—4.0 cm., thickness—1.0 cm. It is a small, thin celt with a trapezoidal outline and biconvex cross-section. Surfaces fully ground. Cutting edge is convex

and sharp and prepared by the meeting of a bevelling on one surface with a plain surface. Type—Adze.

15. No. RG 61. Preservation—Fairly fresh.

Length—4.1 cm., breadth—2.9 cm., thickness—0.3 cm. It is a miniature celt with a perfectly trapezoidal outline and thin biconvex cross-section. The specimen is extremely thin. Cutting edge is sharp and thinner than other portions. Type —Miniature axe.

16. No. RG 62. Preservation—Fresh.

Length—3.8 cm., breadth—3.3 cm., thickness—1.1 cm. This is another very small but well-made celt with a trapezoidal form. Medial cross-section is rectangular. Surfaces are fully polished except for some chipping marks near the pole and on one surface and on one margin. Cutting edge is sharp and shows edge-wear. Pole end is thick and shows a hammering facet. Type—Small chisel (?).

17. No. RK 45. Preservation—Fresh.

Length—5.0 cm., breadth—2.5 cm., thickness—1.3 cm. It is a perfectly made miniature celt with a triangular outline and roughly hexagonal cross-section. Pole end is thick and narrow while the opposite end is broad with a sharp, straight effective edge. The surfaces are polished. The working edge is prepared by a bevelling on the upper surface meeting with the plain and somewhat flat under-surface. Type—Miniature adze.

18. No. ReG 22. Preservation—Fairly fresh.

Length—7.2 cm., breadth—5.3 cm., thickness—1.5 cm. The specimen is a fully grouud shouldered celt with a curvilinear outline. The pole or tang end is thick and rounded. The blade portion is broad with a rather sharp convex but slightly oblique working edge. This edge is formed by the meeting of two indistinct and unequal bevellings on both the surfaces.

19. No. ReG 8. Preservation—Fairly fresh.

Length—6.8 cm., breadth—5.8 cm., thickness—1.3 cm. It is a fully ground shouldered celt with roughly rectilinear out-

line. The shouldering is not very perfect. The broad blade portion and the tang have biconvex cross-sections. The cutting edge is prepared by a sharp bevelling on one surface meeting with another small, indistinct bevelling on the other surface. It is rather sharp, convex and slightly oblique.

20. No. RG 59. Preservation—Fairly fresh.

Length—7.1 cm., breadth—6.6 cm., thickness—1.1 cm. The specimen is a thin but well-made shouldered celt with curvilinear outline. The pole end (tang portion) is short but distinct and has a rectilinear cross-section. The broad blade portion has also a rectilinear cross-section. The sharp, but irregular, cutting edge is formed by the gradual sloping of both the surfaces.

21. No. RK 10. Preservation—Fairly fresh.

Length—6.0 cm., breadth—6.6 cm., thickness—1.2 cm. The specimen is a well-made shouldered celt with a rectilinear outline. The shoulders extend equally on either side. The tang portion is short but distinct. The regions of the shoulders show chipping marks. Blade portion is broad, rectangular in outline and has a rectilinear cross-section. Surfaces are ground. The sharp convex cutting edge is prepared by the meeting of an indistinct bevelling on one surface with the other sloping surface.

22. No. ReG 21. Preservation—Fairly fresh.

Length—6.6 cm., breadth—7.3 cm., thickness—1.4 cm. It is a finely ground shouldered celt with rectilinear outline. Shouldering is perfect. The tang portion is short broad and has a bus shaped cross-section. The blade portion is broad. It has a biconvex cross-section and a sharp convex cutting edge with edge-wear. The cutting edge is formed by the convergence of the two gradually sloping surfaces. There is no sign of bevelling.

23. No. RK 15. Preservation—Fairly fresh.

Length—6.0 cm., breadth—6.0 cm., thickness—1.3 cm. It is a typical shouldered celt with a rectilinear outline and angular

shoulders. The tang portion has rectilinear cross-section but the broad blade portion has a rather plano-convex cross-section. Surfaces are ground, but the upper surface shows certain large scars. Cutting edge is convex and sharp.

24. No. RuG 9. Preservation—Fairly fresh.

The specimen is a thin shouldered celt with curvilinear outline. It is perfectly polished. The tang portion is rather short and narrow. The blade portion is large and thin with a sharp convex cutting edge showing signs of use.

25. No. RG 68. Preservation—Fairly fresh.

Length—8.4 cm., breadth—5.5 cm., thickness—1.0 cm. It is a thin fully ground specimen and seems to be a shouldered lance head. The blade portion tapers towards its free end. The shoulders extend nearly equally on either side of the blade. The tang portion is short but distinct.

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MISCELLANEOUS NOTES

HUNTING EDIBLE RATS

In 1941 I went to Belgaum in Bombay State, 150 miles south of Poona, for prospecting and proving a bauxite deposit on behalf of a Calcutta firm. As bauxite occurs on the top of hills, I set my camp right on the top of the hill. For facility of work, I was once camping on the Navge-Bijgarni hill, 5 miles (as the crow flies) from Belgaum city. At places the hill top is covered with soil, specially the lateritic portions.

For my general work, I had two gangs of workers, Marhattas (non-brahman Maharastrians) and Dhers. The Dhers are by far the better type of workers. They are thinly built but are very hard working and painstaking people quite suitable for our type of hazardous work. By caste they are Bhangi-Sweepers though they never work as true Bhangis. Their occupation is agriculture and in spare time labour. The local Marhattas do not recognize them as Hindus. Once these Dhers wanted to stage a playlet in my camp and I agreed. They brought colourful dresses and prepared a small stage for the play. The gist of the play was that a prince wanted to marry the daughter of the King of Srirangapattam. Being baffled by negotation he went to the jungle and began to worship God Siva, often shouting 'Haro Haro Shankara'. In the jungle he heard Siva's voice instructing him to go to a place where he would find some Rakshasas-demons. He would have to kill them and then he could marry the princess of Srirangapattam. After this play I asked the Marhattas whether they are Hindus or not, but still they said that they were Dhers and not Hindus.

My third batch of workers was formed by the Waders. They are stone-cutters by profession. They live in jungle in the bushes with the whole family and work on stone. At times they go to collect roots and other forest produce for food. Once on a holiday I found the Waders in a big batch

with sticks, picks and spades moving here and there and smelling something with a stick. I was curious and went to see what they were doing. An old man told me that they were going to catch edible rats. I then began to watch the process. The process is as follows.

The old man began to examine by smelling the dust from the mouth of each hole with the help of a stick. After this type of examination he could say whether the rats were inside the hole or not. When he found that the rats were inside the hole he asked his men to close some of the holes. These homes of the rats had really several openings and a network of interconnected trenches inside the thin soil capping over laterite. Most of the holes were closed but a few were kept open and men with sticks were placed at those points. Then one man took a burning cowdung cake and covered the same with green grass leaving a small opening at one point. He then placed the covered cowdung cake at the mouth of the main entrance and began to blow air through the small opening in the cake by the help of his mouth. Immediately he began to blow air into the trench some rats came running through the holes which remained open and the people placed at those points began to beat them to death with sticks. Another batch very quickly opened the whole trench system with picks and I found smoke inside the trench and some rats were still gasping there. The Waders collected these rats from the trenches. The process was finished in a very short time. These people then took the rats, roasted them in fire for a few seconds, only to remove the hairs and then began to eat them, no further cooking or preparation was required.

After they caught the rats, I asked them to keep the rats on a cloth and to repeat the process of blowing whereby I could take a photograph.

Hindusthan Minerals and Natural
History Specimens Supply Co.
39, Russa Road, Calcutta 33.

Sukumar Ghosh

BOOK REVIEWS

Method In Social Anthropology : Selected essays. *By A. R Radcliffe-Brown. Edited by M. N. Srinivas. 1958. Pp. xxi+189. The University of Chicago. 28 shillings.*

In a memorable essay on Galileo, Bertrand Russel once pointed out how the former had paved the way for the birth of modern science with his insistence upon observation and the use of the inductive method. In the field of social anthropology, Radcliffe-Brown stands out as one of the most prominent figures to have carried out this tradition of modern scientific method. In this collection of essays which covers a span of almost three decades one is impressed by the remarkable consistency with which the author has developed his arguments. One feels tempted here to compare the ephemeral brilliance of Malinowski with the relentless perseverance which Radcliffe-Brown devoted in his endeavour to create a system.

Through his entire range of work there are a few major intellectual preoccupations which recur again and again. Whatever the topic the author is discussing, he tries to relate it to these major preoccupations. They are, first, the formulation of general statements, sociological laws, as he calls them and, second, the use of the comparative method to this end. The comparative method is to be based upon observation, and only through observation can scientific hypotheses be verified.

The book is divided into two sections. The first contains a number of papers published in various journals between 1923 and 1951. The second consists of a fragment of an introductory book on social anthropology which the author left unfinished. A problem which is dealt with in both sections of the book is the definition of social anthropology, and the relation of ethnology to social anthropology. Elsewhere Radcliffe-Brown has spoken of an ideographic and a nomothetic mode of enquiry. The former studies particular events, their relation to each other, and their succession in time. The latter seeks to arrive at acceptable generalizations which will be valid irrespective of the conditions of space and time.

Social anthropology as a nomothetic discipline is concerned with providing generalizations, or laws regarding relations between individuals and groups. It has to explain such relations in particular situations by showing that they constitute examples of a more general class of phenomena. Two types of explanation are to be specifically avoided. One is the historical, and the other is the psychological. A historical explanation consists in demostrating that a particular event is related to another event, or a set of events which is its antecedent in time. This is not the object of social anthropology. A psychological explanation consists in reducing human action to the needs, drives, dispositions, etc. of the individual actor or actors. This also is not the object of social anthropology. Social anthropology explains social phenomena in terms of sociological laws, just as chemistry explains chemical phenomena in terms of chemical laws, and not in terms of the laws of physics or biology.

An alternative name which Radcliffe-Brown proposes for social anthropology is comparative sociology. He complains against the studies of sociologists by and large by saying that their generalizations do not have a sufficiently wide comparative basis. If it is the object of the sociologist or the social anthropologist to discover 'invariable relations', then these must be derived from a study of the most diverse types of systems. Failing this, there will always be the danger of treating as universal what is only specific to particular conditions of space and time.

The comparative method as Radcliffe-Brown came to see it is committed to certain fundamental problems, namely, those of system, variation, and classification. An analogy which he never tired of repeating was that between natural systems and social systems. Social relations constitute systems. They have characteristic patterns and they are recurrent. Any system can be observed and scientifically analysed. Sociology or social anthropology should have as its object the analysis of systems of relations between individuals and groups.

Social relations not only constitute systems, they constitute systems of variation. In this also they are to be seen as parallels to natural systems. Now, the variations in natural systems have to be reduced to order through the device of classification. The

history of biological sciences in their early years have, to a large extent, been a history of classification. Radcliffe-Brown himself has realized this problem again and again, and has called for a classification of human societies as a prerequisite to any scientific analysis.

Classification in the natural sciences, as Radcliffe-Brown has elsewhere pointed out, is based upon the existence of natural kinds. One groups together plants and animals not on the basis of a single character, but of a number of associated characters. Members of a plant group or an animal group resemble each other with respect to a number of important characters and differ from members of other groups with respect to these. It is the existence of natural kinds which makes it possible in botany or zoology to have a single plan of classification which can be referred to, whatever the problem one is studying. If we are to consider social systems as natural systems, and human societies as natural kinds, we also must have a plan of classification which will incorporate all the important attributes. The zoologist cannot afford to have a certain taxonomy for the study of circulatory systems, and a different taxonomy for the study of nervous systems. He has one plan of classification which takes all these variations into account.

Radcliffe-Brown himself has been somewhat diffident in meeting this point. In a certain context he has spoken of human societies as constituting natural kinds, implying thereby the possibility of a general classification of human societies. Elsewhere, however, he has pointed out the fact that two societies which resemble each other in some important respects may differ in others. Under this consideration there will be classifications with respect to different attributes which will not overlap, but cut across each other. And, there might be as many classifications as there are sets of attributes. There is then, this one important respect in which systematic sociology is handicapped as compared to systematic botany or zoology. And this is a handicap which might lead one to question the very possibility of using the comparative method in sociology.

André Béteille

The World of Man, *By John J. Honigmann. Harper and Brothers, Publishers: New York. 1959. Pp. 971, including bibliography and index.*

This book breaks fresh ground as a text in general anthropology. It is a comprehensive guide to the functional understanding of man and human behaviour. While the main emphasis is on cultural anthropology, the author discusses areas of culture that do not generally find a place or are only superficially dealt with in common text-books. Such fields are the concept of social equilibrium, communication and comparative ideology. Religious experience of man has been bifurcated between such unorthodox titles as Ritual and Collective Representations. Magic and witchcraft have been treated as the coping mechanism against threat, danger and uncertainty which confront man.

The author has dealt with the growth of Euro-American culture at considerable length. Evolution of man and the concept of race has also received adequate attention. It is desirable that a book on general anthropology should contain such material, as it has valuable bearing on our cultural problems.

Another feature of this book is the author's keenness to define the important concepts extant in anthropology. This is necessary because concepts are the tools by which to manipulate the phenomena one studies. It is only when words are defined that they can be used for moving from one culture to another. If anthropology has come of age and has to take its rightful place in behavioural sciences, it is high time that its concepts are standardized.

Prof. Honigmann has coined certain new concepts or adapted them from the lesser known sources. Some examples are given below. 'Sociological Anthropology' is that part of Ethnology which is marked by a tendency to focus on the forms of relationship between people to the almost total exclusion of other parts of culture. The term 'Origination' covers both discovery and invention. Distinction has been made between uneven social change and uneven culture change. The former implies that categories, groups or individuals modify their behaviour or artefacts independently of one another. The latter occurs when overt behaviour alters without a corresponding change in values. The concept of 'Social Circulation' is drawn from the Wilsons. It is the process through which individuals join or retire from groups or shift from

one group to another. The concept of 'Synergy' is drawn from Ruth Benedict. It denotes the working together of separate categories or segmental groups in a society. Each contributes to the adaption and adjustment of the others.

The author has integrated a large part of current anthropological theory and research using fresh illustrative material not from remote and unfamiliar regions but from the reader's own life. Indian readers would find mention of some tribes and peoples of this sub-continent as interesting illustrations. A number of pictures, charts and line drawings has enhanced the value of the book.

Sachchidananda

An Anthropologist at Work. Writings of Ruth Benedict. *By Margaret Mead. Houghton Mifflin Company, Boston. 1959. Pp. 583 including chronology, notes, index etc. $6.0.*

This book is a collection of the writings of Ruth Benedict, some of them unpublished, as well as a brief biography by Margaret Mead. Nobody was better qualified to bring out a book of this kind than Dr. Mead who was first a pupil and then a friend and colleague of Ruth Benedict. In the beginning of each section of the book the editor gives a valuable introduction dealing with the inner urge behind the writings in that particular period. She does not evaluate the work but only tries to describe how and why a particular piece was written in the way it appears. Ruth Benedict was by no means a prolific writer and her early writings do require some background information to be completely understood.

Ruth Benedict saw her work in the context of three other anthropologists, Franz Boas, Edward Sapir and Margaret Mead from all of whom she received inspiration, criticism and advice. She has been called a figure of transition from one phase of anthropology to another. When she came into this field after seven years of childless marriage in search of a career, Boas was still deeply interested in Diffusion. At the time of her death the Configurational School had already had its day and the Culture-Personality School was making a headway in the direction of studies of National Character, in which her own work *Chrysanthemum and the Sword* gave a notable lead.

Though deeply attached to Boas, she never became rubber stamp of the latter's thinking. She delved deep into the works of Nietzsche,

Spengler and Dilthey. Its quintessence she blended with the Boas tradition of intensive field-work in a particular area. Out of such material her epoch-making book *Patterns of Culture* was fashioned. Critics have questioned Ruth Benedict's characterization of cultures as Appolonian and Dionysian. The indictment is that such work was more artistic than scientific and that she saw only such characters in cultures as fitted with her scheme.

Her book on Japanese national character had enormous effect both in Japan and in the U. S. In Japan students of all aspects of Japanese society were stirred to attention and controversy. It also created a generally favourable attitude toward anthropological work on other modern cultures and a demand for more work of the same kind was also voiced.

From this narrative emerges the picture of a complex and fascinating woman, diffident but determined, gentle, affectionate and solitary. The story of her life as a daughter, wife, student, teacher, poet, researcher and writer has been admirably told.

Sachchidananda

The Art of The North-East Frontier of India. *By Verrier Elwin. North-East Frontier Agency, Shillong. 1959. Rs. 30.*

The author is an anthropologist of repute and he knows the right attitude and approach to the subject. These are not one of neglect and scorn, but one of sympathy and imagination. The author has observed with sympathetic eyes the design and symbol in textiles, the wood carvings, ornaments, the head-dress etc., of the people inhabiting the land now called the N. E. F. A. He has observed the effect of custom and religion on these and also noted the adverse effect of the impact of so-called civilization on these people and their art. He has also pointed out how some of their own customs have helped in progressive destruction of ancient articles of art and craft. But inspite of all these the author closes the book with a note of hope. According to him it is not inevitable that the art of the frontier peoples must decline, but properly guided and encouraged it may go forward to a far-reaching and exciting renaissance.

The book will be read with pleasure and interest by lay readers as also by the officials of the Agency and by students of anthropology. The photographs and get-up are excellent.

H. D. Ghosh

Prehistoric Religion : A Study in Prehistoric Archaeology. *By E. O. James. Thames and Hodson, London. 1957. Pp. 300 including maps, notes, bibliography and index. 30 shillings.*

The spade of the archaeologist is bringing to light man's prehistoric past. Excellent works by competent authorities have appeared in recent times unravelling hitherto unexplained mysteries of different lands and peoples. Of all aspects of man's existence, his relations with the universe and belief in the supernatural and practice of certain rituals are perhaps as important as his quest for food. While Clarke's book* fulfills the need for an investigation of the latter sector so far as Europe is concerned, the former was up till now neglected. Prof. James' work on *Prehistoric Religion* fulfills this long-felt need.

The author has given a wide meaning to the word 'Prehistoric' by including the texts, documents and inscriptions written or carved on prehistoric or proto-historic tombs, temples, stelae or tablets, as without this the material on prehistoric religion could not have been provided with a broad canvas. He has also tried to put in analogous data from existing primitive societies at appropriate places.

Prehistoric religion centred in and developed round three difficult situations in which early man was placed—birth, death and the means of subsistence in precarious conditions. The struggle for existence was unending. Frustrations were numerous. Some of his experiences were inexplicable and awe inspiring. These factors created in him tensions which could only be released by engagement in ritual techniques and belief in supernatural beings.

The book opens with a detailed examination of the modes of disposal of the dead, the funerary equipment and ritual technique employed in the Palaeolithic period in Europe and the Near East.

The rise and diffusion of Megalithic ritual in the Mediterranean and Western Europe is then discussed and cremation in Bronze Age and Egyptian mummification leads on to the conception of after life among those cultures as also among other primitive communities. Fertility cults, mother-goddesses and the vegetation cult which prevailed in Western Europe have received adequate attention.

**Prehistoric Europe : An Economic Basis.*

Prof. James does not subscribe to the sequence of religious development as given by Evolutionists. He shows how High gods or supreme beings co-exist with a multiplicity of deities in prehistoric and primitive cultures and the concept of primeval monotheism given by Schmidt and his school is not substantiated by facts. The existence of a High god whose abode is in the sky is demonstrated in Egypt, Babylonia and Indo-Iranian belief. High gods in tribal religions of Chotanagpur, viz Singbonga and Dharmes also partake of the character of Sky-god.

Discussing the wide prevalence of cow symbolism the author has shown that extreme deference for the cow existed in Egypt and in Mesopotamia ; she was treated as a goddess who 'gives life to the dead' and from whom 'holy milk' is drawn. Cow worship or prohibition against cow killing is not found in Rigveda and only appears in the Atharvaveda. Prof. James, therefore, concludes that cow worship arose in the indigenous Dravidian civilization when, with the development of agriculture, the cow as the source of milk needed for sustenance became essentially the sacred emblem of fertility hedged round with taboos. Bull worship is found in Harappan civilization. In the light of these findings, an investigation of the pre-Vedic ingredients of Hinduism may be very fruitful.

This book is valuable alike for the student of religion, social anthropology and prehistory.

Sachchidananda

From Ape to Angel. *By H. R. Hays, Published by Methuen & Co.. Pp. 461, including bibliography and index. 36 shillings.*

From Ape to Angel is an informal or popular history of social anthropology. The author has tried to cover the main currents and the different schools of social anthropology. Eminent thinkers whose contributions have helped social anthropology to attain its present stature have been grouped under four heads, viz. the Classical Evolutionists, The Critical Reaction, Diffusion and Sociology and Psychological Insight and Social Responsibility.

The author traces the beginnings of social anthropology to the efforts of early explorers and merchants in the 18th century who nursed it as a pastime or a hobby. In very many cases the role of the contingent and unforeseen is clearly revealed. Had Schoolcraft

not been attracted towards a half-Indian girl who later on became his wife in his business assignment at St. Marie, had Morgan not been associated with Ely Parker, a Seneca youth, had Malinowski not been interned in the Trobriand Island for being an enemy alien or had Ruth Benedict succeeded in raising a family, the saga of anthropology would have been very much different. The book records intimate and interesting details and conversations of the great savants of the discipline which throw a flood of light on the turn of events or on the crystallization of their thoughts.

The title of the book is somewhat misleading, but it has been explained on the last page of the text that while man has not become an angel 'The countless tragedies of ignorance and misunderstanding is preventable if he continues to look away from the ape and towards the angel.'

The tagging of the influence of sociology on the development of anthropology to the subject of diffusion and historical ethnology is rather unfortunate for no two approaches could be more dissimilar. Radcliffe-Brown who sharply drew a line between ethnology and social anthropology would smart in his grave if he learnt that he had been bracketed with Elliot Smith or Graebner, who was once described by Malinowski as a 'Museum Mole'.

The space given to Kroeber does scant justice to his position as the doyen of American cultural anthropologists. Similarly the works of the pillars of the English Functionalist-Structuralist School, viz. Firth, Evans-Pritchard and Fortes have not been given due importance. None of the Indian anthropologists or anthropologists working on Indian tribes or villages have ever been noticed. The amount of work done in this country should certainly earn a place for India on the anthropological horizon. The only mention about India is an inaccuracy—the Tamils being referred to as a hill tribe (page 49).

The author deserves credit for sifting enormous material and weaving out a highly interesting narrative detailing the phenomenal growth of social anthropology from a hobby for amateurs to a science for professionals. A large number of plates and drawings enhance the value of the book. A fairly detailed bibliography at the end of the book is very useful.

The book will fascinate graduate students of anthropology as well as the general reader. Sachchidananda

India's North-East Frontier in the Nineteenth Century. *By Verrier Elwin (Ed.). Oxford University Press. 1959. Pp. 473. Rs. 28.*

Myths of the North-East Frontier of India. *By Verrier Elwin. North-East Frontier Agency, Shillong. 1958. Pp. 447. Rs. 10.*

India's North-East Frontier is a collection of extracts from forgotten literature about the colourful people of NEFA as lived in the nineteenth century. The writings come from the pen of administrators, military officers, missionaries, traders and explorers, not from trained anthropologists. One may sometime doubt if some of the passages have any scientific value, but coming as they do from a period when the NEFA was an isolated land, and its inhabitants were in their own and when anthropologists were not at work in this country, they are of great value to anthropologists and administrators alike. Quite a number of passages reflect the bias of the writer and perhaps none except E. T. Dalton approached the tribal people with humility and affection that they deserved. Their opinion about the tribes was 'scornful and patronising'. Nevertheless, they recorded the beliefs and customs of the people and sometime presented vivid accounts of their life.

Nine authors have primarily been quoted in the book: John Butler, T. T. Cooper, E. T. Dalton, J. Errol Gray, William Griffith, Father Krick, William Robinson, R. Wilcox and J. F. Needham. Of these only Dalton has been known to a wide audience of anthropologists. The other authors left behind them some occasional publications together with their notes, documents and letters. Dr. Elwin has done a good job by digging up the old records and organizing them in a meaningful shape which is reflected by the book.

Myths of the North-East Frontier is a significant contribution to the study of folk-lore in India. Two points emerge prominent about this anthology of myths: first, it records the myths of an isolated people, and second, the myths recorded herein are original products of tribal imagination. On these tales one discerns very little influence of the neighbouring people. The volume records the traditional history of the tribes of NEFA. It is passed on from generation to generation through dance on ceremonial occasions, or round the fireplace. There are myths which cannot be made public but are 'passed down from shaman to shaman as a kind of traditional wisdom and history'.

The myths are poetic; sometime exalted and imaginative. But there are realistic myths as well. The people of NEFA have a strong sense of beauty, a deep love for flower, and an exquisite taste for colour. The myths are rich and diverse and although they are presented according to the author's old scheme they are fresh and vigorous.

D. P. Singha