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A CELT-SITE IN SINGBHUM

(A Study in Typology)*

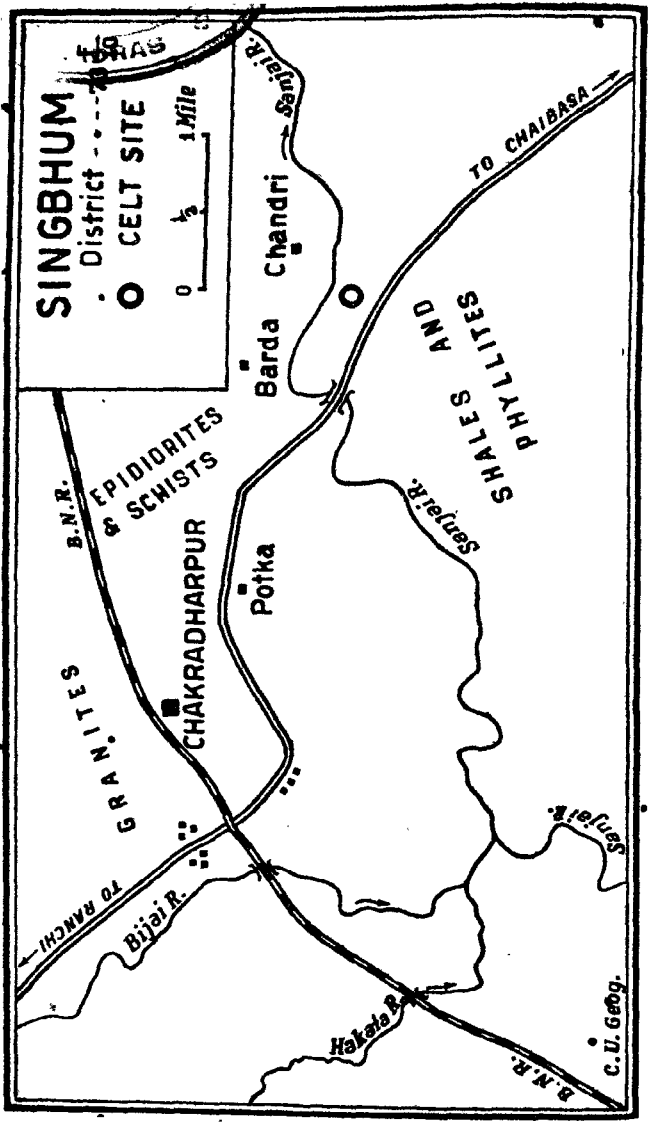
D. SEN

WHILE on a trail for neolithic artefacts in Singbhum, South Bihar, which is long known¹ for its prehistoric antiquity, the author as a research fellow of the Calcutta University, found (in the field-season of 1938-39) a rich celt-site on the Sanjai Valley four and half miles south-east of Chakradharpore, near the Barda bridge on the Sanjai by the Chakradharpore-Chaibasa road.

The site with low hills in near background, is situated on an ancient land-surface covered with a deposit of dark clayey soil interspersed, among other things, with blocks of *shales* and *phyllites*, rolled quartzites and a mixture of pebbles and gravels. The country is *archaean* in solid geology and mainly consists of *shales* and *phyllites*. Not far from this site, there are also outcrops of *schists*, *quartzites* and *epidiorites*, of which the last two mainly furnished the necessary raw materials for the manufacture of the celts and related tools. The *archaean* rocks on the bank of the Sanjai are overlain by a mantle of recent alluvium. The *celt-site* is on a high ground above the alluvial flood plain, overlooking the river and is more than fifty feet above the present level of the river. The alluvial deposits which bank against the celt high-ground have not yielded any artefacts. No fossils have been found. As superficial deposits seem to have been more or less obliterated from the site and as stratified deposits are lacking, the geological dating of the site is difficult. Typologically, however, the finds, which include among others a large number of chipped, ground and polished celts, suggest a neolithic culture.

*The paper was read under the caption—A Note on the Neolithic Typology of Chakradharpore—before the 28th session of the Indian Science Congress held at Banares in January 1941.

¹ C. W. Anderson—Journal of the Bihar and Orissa Research Society No. 3. 1917. Roy, S.C. JBORS. II, 1916.



Map of Singbhum Showing the Celt Sites

The site may well be called a *celt-factory* or *workshop* site from the quantity and variety of celts it has yielded in almost all the stages of their manufacture. The celts are so far found to be concentrated in a small area. Only a few have been found, obviously carried down, in tunnels flowing from the above. The tools are not rolled and it seems that most of the celts, if not all, belong *in situ* to the site. Their state of preservation is generally good. Some of the tools however show a degree of *patination* of a yellow-brown colour. Some of the more slender polished celts have been broken by some agency. The rocks of which the tools are made are *quartzites*, *epidiorites* and *basalts*.² The number of tools collected from the site is about two hundred and fifty.

The predominant *tool-family* is the celt. It is represented by a variety of types and sub-types. A preliminary examination reveals nearly all known stages of celt manufacture. On this basis the following classification may be attempted: (1) The completely chipped celt, (2) Partially chipped and partially ground celt, (3) Partially chipped, ground and polished celt (4) Completely ground celt, (5) Partially ground and partially polished celt, (6) Partially chipped and partially polished celt., (7) Fully polished celt.

If the chipped celt is taken as the basal type and the polished celt as the last in the series, we have here no less than five intermediate stages. It should not be inferred however that the basal or the intermediate types are merely stages and were not used as tools. It seems that they were used as some bear marks of utilization. Each stage illustrates the tool-technique employed to give form and shape to a really effective implement. It is however undoubted that the polished celt is the finished tool.

In the manufacture of celts, chipping is a primary process. It consists of the removal of coarse flakes from the body of the core. The basal type stage here i.e. the chipped celt from this site (Figs. 1,2) illustrates a bold chipping technique, spread all over the face and the sides, leading to a more or less tapering tool, broad at the cutting edge which is usually but not always convex, and more or less narrow or pointed at the pole. In some specimens the chipping is deep while in others it is more or less shallow. In some tools, chipping is somewhat controlled at the cutting edges and at the sides. An advance is indicated by pecking. The sides are roughly straight but converge at the pole. Some examples of the chipped celt with blunt poles showing fractures suggest that they were hammered.

² The chief rock-material is Epidiorite.

If chipping is a primary process, grinding smooths down the body of the tool, giving it a better shape and symmetry. Grinding as a process is also preparatory to polishing. There are some examples which show the process of grinding superimposed upon the chipped surfaces. The amount of grinding, however, is more or less restricted round the cutting edges. Here chipping is found more on the sides. Thus the partially chipped and partially ground variety (Fig. 3) is a technical improvement on the former. Such examples however are not very common, since grinding has gradually given way to the process of polishing.

The partially chipped and partially polished celt (Figs. 7-11) is quite a number in our collection and seems to be rather common. The relative amount of chipping and polishing varies a good deal. In many examples, the amount of chipping prevails over that of polishing which has been restricted only to the cutting edge, giving the tool a fine sharp axe-like appearance. The maker did not perhaps need to polish the sides which are as a rule left chipped perhaps to save labour. In some examples, however, polishing spreads over the greater part of the body of the tool. The partially chipped and partially polished celt shows a variety depending upon the forms of the cutting edge, the sides and the pole.

The combination of all the three processes, chipping, grinding and polishing is well in evidence in some examples (Fig. 14). The relative amount of chipping, grinding and polishing varies a good deal. It must be remembered that to completely polish a tool is a difficult and laborious work. A clever artist perhaps would like to get quicker results by restricting polishing to the cutting edge only and obtaining a sharp edge. The primitive chipping becomes now more controlled and is restricted to the sides and round the pole. Often there are only traces of chipping.

Ground all over but unpolished and without definite traces of chipping, such examples of celts (Fig. 4) are not uncommon in our collection. By the process of grinding, the sides have been rounded off and the tools look stouter. The grinding however varies in quality from more granular to smoother members and sometimes the grinding leads to such well developed smooth surface that it becomes difficult to ascertain in a particular case whether the specimen is roughly polished or finely smooth ground celt, specially where it is also patinated.

The partially ground and partially polished celt (Fig. 15) illustrates how the technique of polishing has been superimposed upon that of grinding. It seems that the grinding process

attempts to give a symmetry to the shape as well as some rigidity to the tool. It also makes the tool ready, if necessary, for the purpose of polishing it. It seems that the makers at last preferred to make a display of the art and technique of polishing to grinding alone not only on the cutting edge but also to some extent on the sides. The amount of polishing and the ground surface left as such varies however a good deal in many tools. In many examples, polishing is restricted only to the working edge.

The completely polished celt, though not very common here offers very good examples (Figs, 19-25). Some are beautifully polished and with almost glossy surfaces. Some specimens are of beautifully symmetrical form and compare well with the polished celts of Europe and elsewhere. The cutting edge is more or less convex and is very sharp.

We now come to the consideration of the *forms* of the cutting edge of the celts. In our collection, in all eight forms of cutting edge, may be figured out: 1. Normal convex. 2. Deep convex. 3. Very deep convex.—almost half-circle. 4. more or less straight. 5. Slightly oblique 6. Deeply oblique 7. Convex-oblique. 8. Laterally bulging—a peculiar development of convexity.

The most common form is the convex cutting edge, the amount and nature of convexity, however, varying a good deal. In some examples, it is symmetrically convex, in others it is asymmetric. When the convexity is asymmetric and the depth irregular, the cutting edge thus becomes more or less bulging lending to an asymmetric shape to the tool itself. In many examples, the cutting end is *bivelled*. The almost straight form of cutting edge gives rise to a chisel type rather than to a celt or axe-edge. The straight cutting edge form is thus a contrast to the convex form. In many examples, the straight cutting edge is slightly rounded off at the sides. These tools belong to the family of the celt and not to that of the chisel. It has been suggested by some typologists that the straight-edged celts have graded into what are known as chisels. The oblique form of cutting edge though not so common as the convex form is also in evidence in our collection. It seems that it is related to the latter form when it is deep. But when the obliquity is slight, it is more related to the straight cutting edge. The different forms of the cutting edge described here is not to be taken in any evolutionary series. The forms of the cutting edge may however to some extent be roughly correlated to the main stages of celt manufacture. For example, the basal chipped celt has usually

a more or less normal convex cutting edge. The ground-polished celts or chipped-polished celts have deep convex edge and the polished celts have very deep almost semi-circular form of cutting edge, while some ground celts and chisel-like celts and typical chisels have straight cutting edges. Some polished as well as ground celts have asymmetric convex cutting edges.

Next we come to brief classificatory description of the different forms of the pole or butt in cross-sections. Roughly ten forms may be figured out as follows: 1. Rectangular or sub-rectangular. 2. Square. 3. Triangular. 4. Hexagonal. 5. Circular or round. 6. Oval or elliptical. 7. Oblong. 8. Irregular. Of these, the most common forms are the circular and oval. Chipped celts have usually round or oval or triangular poles. The rectangular and square sections are very prominent in chipped-ground celts and chipped celts and chisels with rectangular or squared up sides. It is obvious that the form of the pole varies with that of the sides and with that the general shape of the implement. The common roughy triangular or tapering chipped celts with more or less straight sides converging at the pole would have pointed or rounded poles. The rectangular celt with rectangular or squared up sides would have rectangular or square forms of the pole. Such correlations between the forms of the pole, the sides and the shapes may be usefully attempted to yield interesting typological results.

The sides show a number of different forms. Straight converging sides are common; straight but non-converging sides are also common. Rounded convex sides and rectangular or squared sides are familiar with the marginally chipped celts or with the pick and chisel-like celts. V-shaped profile is very common, the line of profile is more or less straight and is sometimes continuous. It is a rule that the ground celts have rounded or convex sides. It may be that these are later typological features while straight chipped celts with converging profiles are earlier.

The celts in our collection presents a variety of shapes, of which the more common are the triangular or V-shapes and the oval shapes with more or less convex form of cutting edge. Besides, there are the characteristic U-forms or horse-shoe shapes and roughly rectangular shapes. The several U-forms have either convex, oblique or more or less straight cutting edges. The shape of the tools is obviously consequent upon the forms of the

cutting edge, sides and the pole. Thus the shapes may be symmetric or asymmetric.

We shall now briefly refer to some chisel-like tools and other related types that come from the site. Specimen Ch. 404. (fig. 18) has all the characteristics of an excellent chisel or "chēni" if we may so designate it. It is made of quartzite and is deeply patinated. It is a small rectangular tool, slender at the edge and stouter at the butt or the pole-end. The tool is somewhat ground with conspicuous traces of chipping specially at the margin. The straight cutting edge or the chisel-end is sharp while the butt-end is square in section. Each side is V-shaped in profile, the two margins on each side meeting at the cutting edge. On the margins the chisel is minutely chipped with care and control. It seems that the tool was used as a cold chisel, held in position by hand and hammered upon the butt head or pole with another object. There is a prominent ridge-like bulge slightly below the butt-head. This seems to provide a suitable hold or grip for the fingers.

There is another interesting tool type (Ch. 403) from the same site in our collection (Fig. 17). It is short and stout and rather rectangular in shape. The tool is well ground and smooth and is patinated. It is made of quartzite rock. The cutting edge is more or less oblique and the butt head is roughly square. The sides are V-shaped, the margins converging at the pole. The tool is flat at the under-surface and is smoothly ground. The outer face is more or less convex and is *bivelled* at the cutting end. The butt-head shows peculiar fractures which suggests hammering. This tool may be a chisel type.

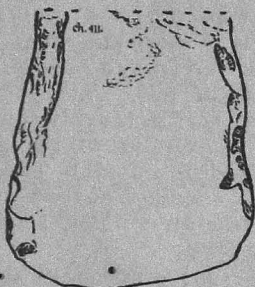
Another curious tool (Ch. 405. Fig. 26) in our series shows some remarkable typological features. It is perhaps a peculiar development of the chisel, somewhat in the nature of a *screw-driver* type of tool. That it may be a tool of such a type or that it had a special function is suggested by the following remarkable features: obliquely and sharply *bivelled* at the cutting edge; the margins of the sides converge at both the ends of the tool; the pole-end is sharp and is slightly oblique and slender, suitable for hafting, possibly for insertion into a hollow stem of a handle; *spiral* nature of the tool which on careful examination would suggest that it is specially suited for spirally driving or using the tool. The peculiar *oblique bivelling* suggests that it is a tool of a special type adapted for some special function. This type is unique of its kind and is not duplicated either at this site or in any other site in India that I know of.



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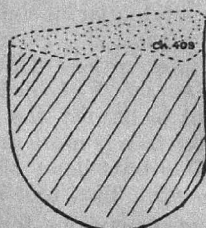


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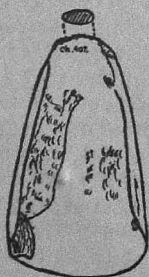


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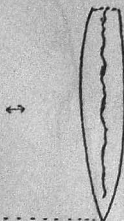
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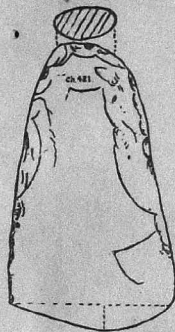
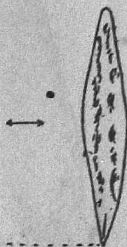
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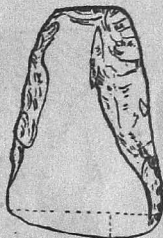
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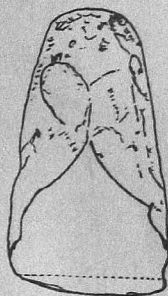
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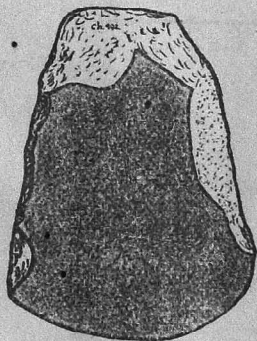
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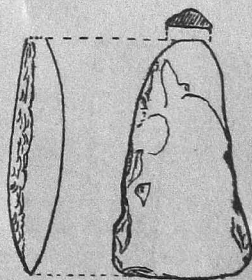
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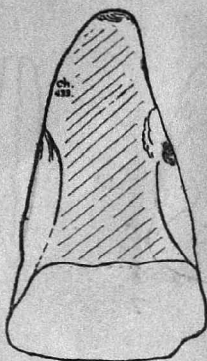
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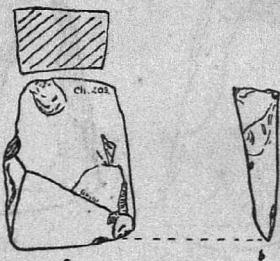
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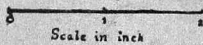
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16



17



a

b



b

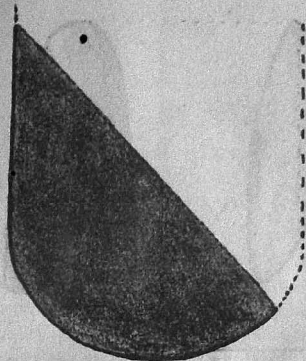


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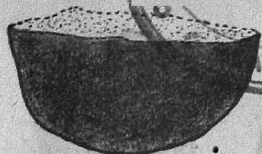
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A CHELT-SITE IN SINGBHUM

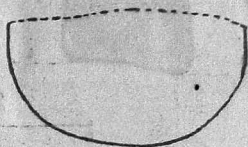
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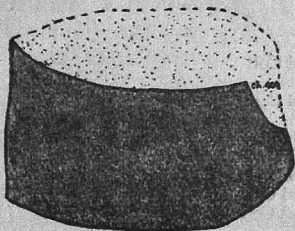
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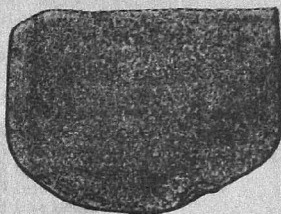
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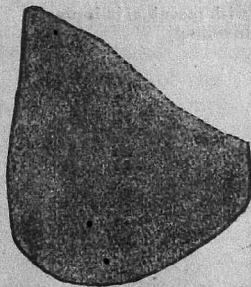
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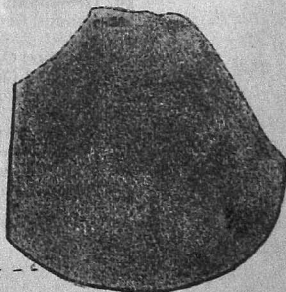
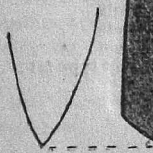
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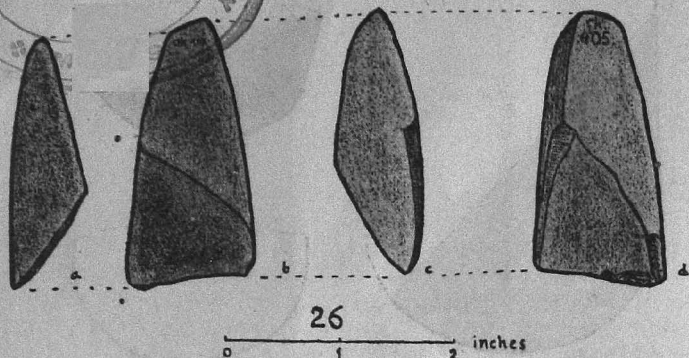
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24



25



GUIDE TO ILLUSTRATIONS

1. Chipped Celt
2. Chipped Celt
3. Chipped and Ground Celt
4. Ground Celt
5. Chipped and Ground Celt
6. Ground Celt
7. Chipped and Ground Celt
8. Chipped and Ground Celt
9. Chipped and Polished Celt
10. Chipped and Polished Celt
11. Chipped and Polished Celt
12. Polished Celt
13. Chipped and Ground Celt
14. Chipped, Ground and Polished Celt
15. Ground and Polished Celt
16. Ground and Polished Celt (with marginal chipping)
17. Ground Celt (with oblique bivelling)
18. Chisel
19. Polished Celt
20. Polished Celt
21. Polished Celt
22. Polished Celt
23. Polished Celt
24. Polished Celt
25. Polished Celt
26. Screw-driver type (?)

MUSIC IN ASSAM : ITS DIVINE ORIGIN

PRAFULLADATTA GOSWAMI

1. Religion plays a distinctive role in primitive societies, and though it is now considered irrational, it goes a great deal to explain phenomena in an atmosphere where fear rather than scepticism is the rule. Religion covers not only the beliefs of primitive peoples about such problems as the nature of deity and the hereafter, but also much of what some of us call science, medicine, and philosophy. It would be unfair to conclude that the vestiges of primitive beliefs have disappeared from our midst. Our belief in magic gives the lie to such conclusions. Nevertheless in certain spheres certain beliefs have survived in a way which still keep them encased in a primitive atmosphere. The consideration of music as divine which obtains in the villages of Assam is a case in point

2. In a way music whether the instruments used or the songs sung, is often held to have been first communicated by the gods. (See Hastings, Vol. IX, p.6). Verrier Elwin notes that the Murias sing of the "eighteen instruments of Lingo Bai", their cult-hero:

O the songs that Lingo taught us,
O the steps that Lingo taught us!
The first song is Lingo's, and the first step is Lingo's.

The first musician of the Murias was Lingo himself, and the practice of music is not held as so often in India, to be discreditable but is honourably rooted in the history and mythology of the tribe. Many of the songs and dances have a religious purpose, and often begin with an invocation to Lingo and other gods (Elwin, *The Muria and their Ghotul*, 1947, pp. 521-4). An attempt will be made here to put across certain instances so as to bring out the position music holds among the Assamese and to point out how often it is attributed a divine origin.

3. The folksongs of the *Bihu-geet* class constitute perhaps the best love poetry in Assamese. They are sung on the occasion of the *Bihu*, a spring festival, and they throw light on the psychology and beliefs of the rural population of Upper Assam. The following should be appropriate in this context :

It was God who planted the shoots of songs
 it was Brahma who tended them
 forgive me, people, if an unbecoming song comes out
 first I sing of love.

First God created the world
 he also created the creatures
 the same God made love
 why not we ?

Song and love, salient features of the *Bihu* are given a divine origin.

4. With the *Bihu* is to be associated the *Husari* institution, in which the lads of the village move about singing benedictory songs at each household of the village. Visiting household was also a part of the European May festivities and, in Assam, is observable among the Kukis in the south-east and the Abors in the north-east. The Kacharis of upper Assam have a myth to explain the origin of the *Husari*. It is said that Brahma had a daughter from an Apsara. This unrestrained god later saw his grown-up daughter and fell for her. King Dharma weighed the scales of justice and found the girl wanting. So she was driven away from heaven, She came to the earth and roamed about. When spring came there was a thrill of new life throughout the universe, and the gods remembered this girl pining away in misery and loneliness. They went to Visnu and spoke to him about her. Visnu sent them to Bathou or Siva. Sitting under a *pipul* tree Bathou gave them lessons in the *Husari* dance and music. They then went to each divine household, danced and sang and thus collected various articles. With these articles they rehabilitated the Cinderella goddess. The girl looked up again in all her youthfulness and feeling of joy. She started dancing while the gods accompanied her on their instruments. Her bewitching dance so moved the heart of King Dharma that she was called to her divine home. But the dance and music remained on earth, to be celebrated by the Kacharis every spring, "when the annual *Bihu* comes and trees change their foliage." Indian *shastras* also hold that Nataraj Siva is the ultimate source of dance and music.

5. In the villages are found indigenous drummers and among them are traditions to explain the origin of the drum as of other instruments. When was the drum born, who made it, who first beat on it, what wood it was of, what bamboo and what kind of string were used to make it, where did the skin come from, from what kind of cattle, how was the stick with which the drum is struck made, . . . are the questions that an initiate in the fold of drummers has to learn.

The traditions or myths begin with the very beginning of things— as in the mantra literature of the province— that is, from the creation of the world itself. At first there was only Adi Niranjana (the name smacks of later Buddhism) and finding that there should be creation he made Prakriti from his left side. Prakriti gave birth to an egg from which was born Brahma. From the pores of Brahma's hair was born the earth. Then were created the five handfuls of creatures. Ages wore out and when the *Kali* age came musical instruments like, *Vin*, *Pepa*, *Dhol*, *Khol*, *Mridang*, *Tal*, *Banhi*, *Tokari*, *Tabala*, *Khutital*, *Nagara*, *Khanjari*, *Dholok*, *Behela*, *Sereṅgar*, *Gagana*, *Muruli*, *Kali*, *Dhak*, *Daba*, *Kaph*, *Jayadhol*, *Sutuli*, instruments of the Gandharvas and which were born in heaven, came down to the earth : "In the primal *Satya* age were the instruments born ; the drum was given birth to by Mahadev of Kailasa."

Then come the details of the construction of the *dhol* or drum itself. The wood from which it is made is from the *Sam* tree and the seeds of the *Sam* were given by Krishna to Narada who planted them in the earth. The tree grew up and Maha-dharma became its central portion. It was cut down by Viswakarma and given the shape of the drum by the carpenter Sukmal. In this way descriptions of the particular kind of cow from which skin is procured, the chamar who procures it, how the skin is dried and cut up, how the drum is constructed, and so on are given.

The drummer also has his birth and evolution. The drummer explains his body : when he is in the embryo stage, Sankara takes his place on his head, Surya on his eyes, the Aswini Kumars on his nose, Varuna on his tongue, Vayu on his skin, Indra on his hands, Visnu on his feet, Mahadev on his heart, Govinda on his ears, Kesava on his brows ; the three arteries Ingala (Ira), Pingala and Susumna remain disguised as women. The description accords in part with the description of birth found in the songs of the Buddhist-Sahajiyas of Bengal and Assam. The summary given here is from Tirthanath Goswami, *Dhol, Mridang, Aru Khol Malita*, 1940.

This esoteric interpretation of the institution of drumming would seem to show in what respect a drummer is held by the rural population.

6. If the Dehbichar songs of a certain class of mendicants, whose practices have affinities to the Buddhist-Sahajiyas of Bengal, references are found as to the origin of the Dumaru carried about by the mendicants as they beg for alms :

O, who gives you the cap the princers, O Bhakat, who
gives you the Dumaru ?
Visnu gave me the Dumaru, Rudra gave me the discipline

The Dumaru is a thin waisted handy thing ; it has a stone tied to its waist and when shaken the stone strikes each head in turn. It is seen all over India.

7. These wandering Bhakats also sing to the tune of the Tokari, a gourd instrument with a string. The Tokari also has its divine descent, The Bhakat would sing :

Rebab and Sebab, the two Tokaris
came down to the world,
one was taken away by the wild Sankara
the other the witness to the four Vidas,
the wooden Tokari, it does recite the name of Hari
who would explain this riddle ?....

The tunes of the Tokari have a hypnotic effect on the listener and the musician also sings in a long-drawn and rather mournful style.

8. The Bahua is the buffoon and minstrel combined. He regales the villagers with satirical and often vulgar songs. He traces his origin to the severed head of Daksha, the king of the Himalayas and father-in-law of Mahadev. There may be other versions as well, for the Bahua composes extempore and sings whatever he likes. The *Ban-geet* is allied to the *Bihu-geet*, being pastoral song, and its origin is explained by the Bahua in a peculiar manner. Mahadev found that Brahma, when he raised his head upwards, used to utter obscene things and therefore he severed the latter's head with a slap. The severed head turned into the *Ban-geet* !

9. Assamese ballads invoke divinities like Saraswati, the goddess of learning, and this is perhaps because of Hindu influence in later times. Mere invocation, of course, is not quite helpful to establish the thesis that music in Assam is supposed to have a divine ancestry. More helpful are the instances of the *Bihu geet*, the *Husari*, the drummers, and so on. The drummers especially refer to musical instruments as having a divine origin.

It must, however, be admitted in conclusion that the sanctity with which popular music and instruments have been held is getting itself shorn of with the impact of a changing economy and a different set of values.

THE MYTHOLOGICAL ORIGIN AND CLAN SYSTEM OF THE BANJARAS OF HYDERABAD

P. KAMLA MANOHAR RAO

BANJARAS are found in almost all the districts of Hyderabad State, specially in the Warangal, Nalgonda and Adilabad districts they are found in large numbers. The total population of Banjaras in the State according to the census report of 1941 is 4,04614

Before entering into details about the mythological origin of the Banjaras and the organisation of their clans it would be interesting to speculate on the origin of the word "Banjara". Banjaras are a nomadic people and used to live in jungles. Those who lived in jungles and wandered from place to place were called "Vanachara" in Sanskrit. As years passed on it seems probable that the word Vanachara or Banachara changed into Banjara.

It is rather difficult to locate the exact place or region in India to which the Banjaras originally belonged. Mythological stories and history only tell us that their homeland was somewhere in Northern India. This fact is further confirmed by a study of their physical type. The prominent nose, long face, projected chin and fair skin colour are the main physical features of the Banjaras which place him nearer to the people of Northern India, rather than to those of the Deccan.

Another question that arises at this stage is how and when these Banjaras migrated in such large numbers into Southern India? When the Moghul Army invaded Southern India it had to face severe difficulties due to bad communications and lack of transport. In this respect Banjaras were of great help to them. With their pack bullocks they could move fast and could quickly supply rations and other necessaries to the army. With their magnificent system of speedy transportation through difficult and trackless terrain they stood in high esteem in the eyes of the Moghul Emperors and generals and for their services they were granted many privileges. As the Moghul kings conquered Southern India and strengthened their position, the Banjaras too settled down in different parts of the Deccan. When their duties as suppliers of rations and provisions to the Moghul army

ended, the Banjaras with their pack bullocks started trading and became a useful medium of transaction between North and South.

With the advent of the British rule, the Banjaras gradually lost much of their trade because of the introduction of the railways. The introduction of railways had destructive repercussions on their trade and livelihood. They were forced to abandon their profession and seek fresh means of livelihood. Mostly they adopted agriculture as their occupation. The Southern environment had a conspicuous effect on their manners, customs and practices. They began consciously or unconsciously to copy the local people. Gradually they lost their nomadic character.

The small hamlets where the Banjaras settle are called Tandas. Generally these Tandas are situated in an open space and at some distance from the main villages.

The traditional account of the origin of the Banjaras is contained in the mythological legends and stories which are popular among them. According to these stories the Banjaras are the descendants of the Rajputs and hence they call themselves "Kshatriyas". This is illustrated by the following story.

"Lord Vishnu is the creator of the world. He first created two Maharishis, namely, Bhrugu and Raghu. These Maharishis created both Raja Dhaj and Amba Bai and to them was born a son known as Kowar Dhaj. In turn Kowar Dhaj had Rajpal and to Rajpal was born Reem. Reem had two sons, namely Habal and Kabal. The direct descendants of Habal were Hindus and Kabal were Muslims. Habal had a son named Waged. Waged had Jogad, Jogad had Sandal, Sandal had Kasam, Kasam had Karan, and to Karan were born two sons namely Teeda and Chada. The descendants of Teeda are Banjaras. The descendants of Chada are the other Hindu communities.

The third and fourth sons Mola and Mota were among the disciples of Lord Krishna. Lord Krishna in his last moments, as their story tells, distributed all his Gopikas among his disciples. Radha and Rakmini were given to Mola and Mota respectively.

Radha and Mola became life partners and became dancers and acrobats. They used to go from one capital to another, exhibiting their skill before the Rajas and Maharajas. One day they happened to visit Raja Lohad Pamhar, Swamsha Kuli of Dharungadh. Radha and Mola exhibited their dance before the Raja. He was highly pleased with their amusing dances.

Mola and Radha demanded one of his children as reward. The Raja was happy to give away his son as reward. Taking this child with them they approached Raja Kasam of Rathod. Here too, by their exquisite dances they could get one of the sons of Raja Kasam. In the same manner they went to Raja Chetur Bhuj, *alias* Phoolia of Mandvi. He too was pleased with their dances and gave away his son as reward.

Taking these three boys, Radha and Mola visited several places exhibiting their dances. These three boys were named Raja Pamhar, Karan Kathod, and Payan Chowhan. They were known as Gwars, and they married three Brahmin girls. The descendants of these three were Gwars or Banjāras.

In connection with the marriages of these three boys the myth runs as follows

There was one Brahmin whose name was Neelakantham. He had three daughters and a son. The names of three daughters were (1) Kakarache, (2) Modasche, (3) Nagarache and the name of the son was Parashram. In those good old days it was the custom among the Brahmins that the marriage of a Brahmin girl should take place before the attainment of puberty. As he could not celebrate the marriage ceremony of his daughters in time, due to some unforeseen circumstances, the Brahmin was forced to leave his daughters in the jungle.

Radha happened to see those three girls and they were taken back and married with those three boys.

At this stage we can mark the beginning of the clan system of the Banjaras. The descendants of Loyad Pamhar were known as the people of Pamhar clan. The descendants of Loyad Pamhar were Rajah Pamhar, Bhawayya Pamhar, Poona Pamhar and Abdu Pamhar. Abdu Pamhar became the Naik in the village of Agad Mandla. The descendants of Abdu Pamhar were (1) Ayat Pamhar, (2) Chayat Pamhar, (3) Leka Pamhar, (4) Bani Pamhar, (5) Tarbani Pamhar, (6) Mongany Pamhar, (7) Vislawat Pamhar, (8) Amgot Pamhar, (9) Jharpla Pamhar, (10) Noonsawat Pamhar, (11) Injrawat Pamhar and (12) Vankdot Pamhar.

These twelve names of the Pamhar descendants were afterwards known as the twelve sub-clans of the main group of Pamhars.

The descendants of Karan Rathod were known as the people of Rathod clan. The ninth descendant of Karan Rathod was Ratna, who had two sons Bheeka and Khandar.

The descendants of Bheeka were (1) Khatro, (2) Khola, (3) Modrech, (4) Khakrocha, (5) Gokalia, (6) Gidawatya, (7) Shi-

roya, (8) Poolya, (9) Kalu, (10) Malu, (11) (?) (12) Khad-dura, (13) Harka, (14) Peempa. (altogether fourteen).

The descendants of Kander were (1) Patalee, (2) Ransé (3) Khetasee, (4) Kodyasee, (5) Venie, (6) Dhania, (7) Megavat, (8) Dhegvat, (9) Voodasee, (10) Meravat, (11) Karamtot, (12) Marajot, and (13) Rajavat.

The total descendants of Bheeka and Khander were 23. These 27 names afterwards became the sub-clans of the Rathod group. The descendants of Paya Chwhan from Mondvi were known as the people of Chowhan clan. The descendants of Paya Chowhan were six in number (1) Korra Chowhan, (2) Sapavat Chowhan, (3) Kalcot Chowhan, (4) Mood Chowhan, (5) Lawadia Chowhan, (6) Paltia Chowhan. The six names afterwards became the sub-clans of Chowhan group.

Besides these three groups, Pamhar, Rathod and Chowhan, There is a fourth group which is also a main group called Vadtya. The myth regarding the origin of the Vadtya clan is as follows :—

The Banjaras were wanderers. Trade was their main occupation. At one time their trade became dull and they had to cover heavy losses. They became indebted to Dema Guru. Dema Guru sent his desciple named Jaju, a Brahmin to pursue them. Jaju easily found their hideout. But in the meanwhile he fell in love with a beautiful young girl Hanski of Jharapia Pamhar clan. The poor Brahmin forgot his supreme duty and stayed among them. Some days passed in this happy romance and consequently Hanski became pregnant. In order to hide this sin Jaju and Hanski fled. Hanski gave birth to an illegitimate child of whom they wanted to get rid by burying it alive. They took this child to a banyan tree and dug a pit under it. As they were about to bury the child, out of the pit innumerable ants came to their utter surprise. Thinking it to be a good omen, a superstitious conception crept into their minds that the child may bear as many children as the innumerable ants, they did not bury the child, but named him Bhavvu. As Bhavvu was to be buried under the banyan tree, the Vade-jhad, in the Banjara dialect, so his clan was given the name of Vadtya in the name of the tree.

The descendants of Bhavvu were three in number. (1) Katajee, (2) Patajee and (3) Netajee. The descendants of Katajee were four in number (1) Darawat, (2) Ghuglot, (3) Lakavat and (4) Noonavat.

The descendants of Patajee were seven in number. (1) Hala-vat, (2) Keonsot, (3) jet, (4) Bharot, (5) Boda, (6) Jatot, (7) Teawat.

The descendants of Netajee were three in number, (1) *Barmavat*, (2) *Padyee*, and (3) *Molot*.

All of them in Banjara dialect are called "Ateen Takat Ghar Vadyar". In this way we find four main groups among the Banjaras.

Besides these four groups we find two other groups, namely *Banot* and *Ajmera*. All of these groups are exogamous, and no Banjara can marry a girl from his own group. Monogamy among Banjaras is the general rule but polygyny is not forbidden.

Besides these main groups there are three inferior groups which are being looked down upon by other groups of Banjaras. They are *Bhat*, *Dhadi* and *Dhapra Lambada*.

There is much difference between these clans; *Bhat* is superior to *Bhadi* and *Dhadi* in turn is superior to *Dhapra*. There is no inter-marriage between them and their social status among the other Banjaras is varied. Food prepared by *Bhat* is eaten by both *Dhadi* and *Dhapra Lambadas*, but food prepared by *Dhadi* is not eaten by *Bhat*, but it is permissible with *Dhapra*. Both the above clans *Bhat* and *Dhadi* refrain from dining with *Dhapra* and even do not eat the food prepared by him. *Bhat* and *Dhadi* are the musician to the higher clans and they usually attend marriage functions and other festive rivalries. They sing the glory of the Banjaras, their past heroic and chivalrous deeds and take *Bakshish* from them either in kind or coin. *Dhapra* Banjaras attend all functions with their *Dhapda* instrument which is quite in vogue in Southern India.

There is also another group known as *Koryas*. These are the offshoots of the kidnapped women from other Hindu communities. In olden days, these Banjaras were migrating from North to South, they kidnapped some Hindu girls and boys in their infancy from the villages and kept and reared them in their *Tandas* for their menial work, such as cattle grazing, cattle shed cleaning and other household duties. In this way number of *Koryas* increased and they were married to each other. They were adopted in each big family, and they bore the name of the clan of the family namely, *Dhooky*, *Korya*, *Vadtya Korya*, *Pamhar Korya* and *Chowhan Korya* etc. Among these different *Korya* exogamous groups inter-marriage is permitted.

Though these *Koryas* worked as servants in the *Nayak's* houses, yet they are loved and looked as their own children. They have the right to the property of the *Nayak* and hence are given a portion of it when they are married. The term *Korya* is used as an abuse among the Banjaras. *Korya* in *Banjara* means

adopted.' A Korya may become pure Banjara after five generations. He can then enjoy all the privileges which are^o enjoyed by the other major groups. He can become equal with other groups. Banjaras are able to maintain their dialect upto now. We find little differences among Banjara dialect and Gujrati or Marwari. • One who knows Gujrati or Marwari can understand Banjara dialect very easily. We find slight change in the dialect among the Banjara of Telangana and Marathwada. Those who live in Telangana use some Telugu words. In the same manner Marathi words are found in the dialect of the Banjaras of Marathwad. On the whole the dialect is the same except the slight influence of the local language over it. It belongs to the Aryan language group.

MEDICINES AMONG GONDS, KOLAMS AND CHENCHUS

SYED KHAJA MAHBOOB HUSAIN

THE aborigines in the Hyderabad State, which has several great zones of hilly forest tracts where for thousands of years the remnants of India's most primitive and ancient culture have lived till now, number about 6,78,149 according to the Census of 1941.

There are 1,42,026 Gonds (Raj-Koitur), about 5000 Kolams (the 1941 Census returns of Kolams i.e. 746, are incorrect) and 3864 Chenchus in Hyderabad State inhabiting in Adilabad, Warangal and Mahboobnagar districts respectively.

These aboriginals who live in the thickest area of jungles have evolved hereditary knowledge of certain herbs and roots etc, for medicinal purposes. But they do not generally give out these secrets to any one —not even to their own kinsmen except to their very thick friends. It is said that these herbs have very potential effect and there are instances where even educated persons have tried to find remedy of their incurable ailments from those aboriginals.

The primitive idea that some diseases like cholera, small-pox etc. come through the evil spirit is generally prevalent among the aboriginals for they worship certain deities and give some alms to the dead ones by celebrating some feasts with liquor to their kinsmen. Besides they also use medicinal herbs, roots etc. for curing the ailments. Moreover, Yaws is also prevalent to a great extent among them and they seem to trust to nature for the cure of Yaws, as many of them believe that Yaws disappear after the victim has suffered for three years. Children are found to be suffering from Yaws more than adults. The vaccine for Syphilis i.e., "theosormine" has proved very effective medicine to cure Yaws, which is supposed to be a highly infectious disease.

It is a well known fact that Gonds, Kolams and Chenchus have a wide and competent knowledge of these herbs.

FRACTURE OF BONES

Gonds use "Khanduka Chakka". This is a bark of a forest tree. They grind the bark and take it internally with milk and water once a day. It is said that this heals fractures and general debility.

There is another plant by name "Ram-ke-ray", which is also used for the same purpose. This is also taken in the same way.

Both the above medicines are used by the Kolams also but they call them "Kandoor Chakka" and "Ramkeray" respectively. Kolams also use bark of a tree called "Dumpinimak". They grind it and make it into plaster and apply it on the fractured bone for three days. This is also used for healing the fracture of animal bones.

Gonds also use a bird for this purpose known as "Pokray", which in Telugu language is called "Kappera". This bird is generally found on cart tracks at dusk. To heal the fractures they eat the meat of this bird.

Chenchus use externally "Khanduk Chakka" as paste for animals and sometimes for men. Moreover they use "Ari Chakka" (tree). The bark of this tree is made into paste and applied externally and juice of the "Bai tree" (creeper) is extracted and used internally.

There is another medicine for internal use. The leaf-juice of "Noonaymunta" (plant) is given with milk three times a day.

BABY FITS

Gonds use "Kerajira" (wild pollen) to cure this disease. They first powder it and administer to babies with milk or water.

Chenchus take "Oosri Yeru" creeper, "Siriboddi Yeru" (creeper) and "Tella papdi Yeru". They take the bark of these three creepers and plants and make paste and give to the children in mother's milk or in water three or four times.

WOUNDS

(i) Gonds use "Khaayur" shoots to heal wounds. These shoots are grinded and applied to wounds.

(ii) "Gopadiara" (Dumpidi in Telugu) is another tree, whose bark is powdered and dusted over the wound. The Kolams also use it but call the tree "Dumpinimak". Daily they wash the wound and then only the powder is dusted on it.

Chenchus take the leaves of 'Yerr-Buddi' (creeper) and

make paste, and then it is made somewhat hot and applied to the wound.

And also they take the leaves of "Gayap" (creeper), extract juice from the leaves of the creeper and give internally to the patients.

FEVER

(a) *Typhoid* :—"Yellikevi" is a plant whose leaves are like the rat's ears. The Gonds take out the juice of these leaves and drink it three times a day.

(b) *Typhoid and other fevers* :—"Palakursa" is a plant whose bark and root are used after extracting juice from them. This juice is taken three times a day.

Seltay :—Juice of the bark of this tree is used.

Potra :— Juice of the bark of this tree is used.

Kamuni :—Leaves of "Kamuni" mixed with tamarind are prepared into a paste and given to the jaundice patients.

For typhoid, Kolams take 4-5 leaves of "Madnavli" (creeper) known as (Malay Ram Teeg) and prepare a cup of decoction in water and use it three times a day. When they prepare the juice they worship Madana Devi and after pouring some drops on "Pola Kamma"—a stone which is kept in the courtyard of every Kolam's house, they drink it.

Chenchus take the leaves of "Resk" (tree) and "Neerpepela" (tree) and take some pepper of the same weight and prepare tabloids and give them to the patients suffering from typhoid.

Chenchus take roots of "Neela Maded" (tree) and keep in fire-place till it becomes red. Then it is powdered and given with ginger to the patients.

Cough :—"Bhoidorli" a creeper whose leaf juice is used by Gonds.

"Neyay Tokkur" —is a plant. The ashes of this plant are used both by the Gonds and Kolams.

Chenchus take the roots of "Ramulkategay" creeper, and "Nalamulka Tegu" (creeper) and dry and make powder and use internally.

Stomach Pain. Barks of the plants "Salay" and "Thaka" are powdered and then given to the patients by the Gonds, internally, with water.

Kolams use the powder of the bark of a tree called in Kolami "Polaki", in Gondi "Polesa" and in Telugu, "Ponaki" mixed with water. It is given only once.

Chenchus take the roots of "Jittu Vargu" (plant) dry and powder it and with the powder of pepper of the same weight, given internally.

Carbuncle or Cancer : The Gonds use the leaves of "Goladeed" a creeper mixed with *Gulmohwa* flowers. After grinding and making into paste it is applied to the wound four times. It is said that this is a very effective medicine for cancer.

Chenchus take the roots of "Balli Rakash Gudda,, (creeper) make it into a paste and apply to the cancer.

Snake Bite :— There is a tree called "Kottora". The bark of this tree and the bark of the "Neem" tree are turned into juice and this juice is taken internally three or four times. This is used by Gonds.

The Kolams use the bark of "Kalgodi" tree, turn it into juice, separately make the juice of the bark of the "Neem" tree and mix them proportionately and give it internally to the patient for about 4 or 5 times.

The Chenchus take the roots of "Pennair Gudda" (creeper) make paste and give internally once or twice.

They also take the bark of "Chilla Chakka" (tree) and powder it and take with water internally.

They also take "Maila Tutturu" (copper-sulphate) and powder it and then mix with flour (maida) poured into one of the nostrils. If the patient is unconscious pure copper-sulphate powder is poured into the opposite nostril.

They also take Oppi's roots and extract juice and then pour it in one of the nostrils.

Scorpion Bite :—The Gonds use the leaves of "Rengapala" (Wild berry) after making it into a paste. This paste is applied on the place stung. They also give the skin of soapnut to the patient only once internally.

The Kolams use a peculiar medicine; they take castor oil and massage it on the private parts.

The Chenchus say that they do not get the poisonous effects of the scorpion, therefore, they do not use any medicines.

Gonorrhoea :—Gonds use the bark of "Dhaonrialmur" (white *plass* plant). They powder it and mix it with unrefined sugar (red sugar) and give it.

Kolams use the plant "Tanged" (Tadwad); they skin the roots, powder them, mix with the powder of 7 black pepper and give the mixture.

The Chenchus take the roots of "Chitramola" (creeper) and extract juice in lime water and take internally for only one day.

Syphilis :—There is no medicine either in Gond or in Kolams for syphilis. They neither have any idea of the disease.

The Chenchus take the bark of "Survur Teegay" (creeper) leaves of "Tella Nakkera" (tree), bark of "Tella para Potaram" (creeper) dry and make powder and mixed with milk and powder of pepper use internally for three days.

They also take the leaves of the "Gandu Tirail" (tree), make juice and give with milk.

Potency :—(i) The most renowned medicines among the Gond for potency is "Bhoo Chakkoram Gudda" This is a root of a flat shape. The milky juice and the root are given for potency. Kolams also use this.

(ii) "Narvenja (Evrur Buray in Kolami) are earth worms. They are dried, powdered and used with milk both by Gonds and Kolams.

(iii) "Yerjseer" (Godina Naringa in Kolami) is the male bear's genitals. It is dried, powdered and given with milk every morning.

(iv) "Gorre Chipota" is a small plant. The leaves of this plant mixed with the juice of "Bhuchakram is used both by the Gonds and Kolams.

(v) "Persa Kobray Veli (Kobar Teeg in Kolami). The roots of this creeper mixed with the "Bhuchakaram Gadda", is powdered and taken internally.

(vi) "Dobay" it is the queen of white ants. It is dried, powdered and given with milk.

(vii) "Banda Sakur" (Gondu Sankur in Kolami) is a creeper. Its juice is used by the women to increase breast milk.

Chenchus take the roots of a "Maka Potu Gadda" (plant) and "Moga Siri Gudda" (plant) mix with pepper and powder them; then they make pills and give internally for three days.

FOR MAKING ONE IMPOTENT

Gonds and Kolams use :—

I. "Gorrapuri," (Roka Porray in Kolami) i. e. common snails (thousand feet red worms) that come out during rainy season are dried and powdered and use it with tobacco in Chutta.

II. "Koray Khok" (Tole Kom in Kolami) i.e., the loose horns of the bullocks (these are found dangling) are powdered, and given.

The Chenchus also take the snails (Rokati Banda) dry them and make them into powder and give this powder in *bidis* to smoke or give smoke of this powder to the man.

• *Small-pox* :—“Leamb” Aki (i.e. Neem leaves) are used both by Gonds and Kolams. The leaves are powdered, and pasted after four days of the start of small-pox. Before doing this, they worship Pochamma, their deity.

Chenchus do not use any medicines for small-pox but worship the deity “Mutiala Amma”.

• *Leucoderma* :—Gonds use Leem Aki. The patient is to start taking from one leaf and every day adding one more upto 40 leaves. They retrace again by 40 leaves by taking one less and gradually decreasing by one leaf each day, thus come back to one. Next day they again take one leaf more and the process is repeated for 4 months.

It is said that this medicine has proved quite effective so far. It is used both by Gonds and Kolams.

The Chenchus take the bark of a “Chilla Chakka” (tree) “Pedda Mushti Chakka” (tree) and “Teega Chakka” (tree) and keep in earthenwares in fire place somewhere for seven days. And then take out, make powder and use for ten days internally. Moreover, they some times also apply the blood of the sparrow to the white spots, externally. They say that this medicine has proved very effective in an early stage.

Leprosy (i.e. Pedda Rogam) Malondi, a snake with two heads is taken alive, by Gonds and Kolams, kept in an earthen ware securely fastened from all sides, bury it in a dung heap. Then they take a pound of gram, make hole in the trunk of “Neem” tree and put them in it and cover it up in such a way that no water can enter it. They leave these things upto six months. After six months they take out the earthenware, throw the skeleton of the snake and only take the powder, also the grams are taken out. One seer of flour of Peeli Jawar is then taken. The three powders are mixed and bread is prepared out of it and eaten by the patient.

The Chenchus take the roots of 40 trees, plants and creepers like “Dommadola Gudda” (plant), “Kanna Kumar Gudda” (plant) “Pennir Gudda” (creeper), “Sanna Kuppi Ail” (creeper), “Pedda Jannur Chakka (tree), “Borra Jamalalu Chakka” (tree), “Gajjimonga Chakka (tree) etc. etc., mix with other medicinal things like pepper, dried ginger, *shah zira* (cummin-seed) stone flower etc., make this powder and taken with water internally for ten days.

Eye Sore :—The Gonds put salt, oil of marking-nut (Bhilawan) and flies in a brass plate. This is pasted on the eyesore. (The use of oil of marking—nut in the eyes is little strange.)

The Kolams use the juice of the shoots of “Anduk” tree, (salay in Gondi i.e. frankincense (loban)).

The Kolams also use the juice of “Lamdi” (plant) and pour into the eyes three times.

Piles :—“Monodol Tokray” or the shell of the tortoise is powdered and after making it into a paste is applied internally to the combs by the Gonds.

“Orrum” (Lizard Ghodphod) the skin coins on the back of the lizard are used for making rings which are worn in the fingers of left hand so that these rings might touch the combs during washing the private part. It is used both by Gonds and Kolams.

The Chenchus take the leaves of “Nakkerā” (tree) “Ganti” (tree) and “Tangerkonalu” (tree) mix then along with *darcheeni chakka*, cardimum and zira, (Cummin-seed or caraways). They dry and powder these things and give with the curd of she-buffalo for five days.

Cholera :—Gonds and Kolams use “Olli and Appu” i.e. onion and opium. They make juice of this and give it to the patient.

The Chenchus take marking-nuts and making it into paste in lime juice, give to the patient internally. They also use white onion’s juice and the juice of mint (Podina) and mix it with ass dung and give internally nine times to the patient.

Dysentery :—The roots of “Ghattera” and bark of “Salay” plants are mixed, turned into juice and given both by the Gonds and Kolams.

The Chenchus take the bark of “Tella Tousi Chakka” (tree) dry and powder it and mix it with sugar double in weight and zira and give with water three four days.

Rheumatism (Pains in the joints) :—“Pherangi Chakka” called “Chob Cheni”, (china-root) locally, is powdered and given, by Gonds and Kolams.

The Chenchus take the bark of “Tella Voppi Chakka” (tree) and mix with dried ginger, pepper and pipli and take internally for eight days.

Ear Pain :—The legs of peacock are burnt and made into powder and mixing it with sweet oil poured in drops into the ear. Used both by Gonds and Kolams.

Chenchus pour few drops of *Mohua* liquor in the ear.

Toothache :—“Barrenki” is a tree whose leaves are burnt, powdered and applied to the itching teeth by Gonds and Kolams.

The Chenchus burn the foot of sheep or goat, make powder and use as tooth powder.

Tonsil :—“Advi Ooli” (wild onion) is a root. It is grinded, and after heating it for sometime is pasted externally. This is generally used by Kolams.

The Chenchus prepare the juice of the bark of “Pedd Manu Chakk” (tree) and apply externally to the tonsils.

Inflammation of Hands and Legs :—(Oedema) “Booda Gasay is a creeper, whose leaves are grinded and making into a paste, then applied on the body.

The roots of the “Doola (Kachkori) is turned into juice and used internally both by Gonds and Kolams.

The Chenchus take the leaves of “Jammuru Chattu (tree) keeping in fire for an hour and then extract the juice of the leaves and mixing it with the powder of pepper and *zira* use three times only.

Headache :—“Madar Buti” (Palundi) is a plant whose milky juice is poured into the nostril on which side the ache is, used by both Gonds and Kolams.

The Chenchus take the leaves of “Voil” (tree) extract oil and then mixing with castor oil and garlic apply to the head and massage it.

Willow (Pain on the thumb) :—Coat of cobra is applied to the wound, or any egg is taken, made a hole into and the finger is put inside. Used by the Gonds and Kolams.

The Chenchus take the leaves of “Jatta” tree and prepare powder and then mix it with the paste of marking-nut and then apply to the wound externally.

Wound inside the Nose :—“Gandmalla” plant. Gonds and Kolams take the roots of this plant, powder it, and mix it with the flour of wheat or *Jawar* and use the bread thus prepared.

The same roots are also useful for the pains in testicles. The powder of the roots is boiled in goat’s milk and the *halwa* used as food.

The Chenchus take the leaves of “Pippa-Ku” (tree) extract juice and then mixing it with the juice of white onion pour it into the nostrils.

“*Dunbal or Ggadda*” :—“The leaves or roots of “Darra” tree are taken, made into paste and applied on the gaddas. This is used by both Gonds and Kolams,

Female Complaints :—Chenchus take the bark of the “Garju Chakka” (tree) make it dry and powder it. Then keep it in cow butter milk for 3 days. Then they give it to the patient three times a day for 4 to 5 days. And as they use “Karmun Gadda” (tree), the Gadda is powdered and given with jaggery 4 to 5 times. There is no medicine for this among Gonds and Kolams.

Haina's (Taras) bone is used for dog's bite.

Fore Naroo (Guinea-worm) and epilepsy, they take Dekeamli $\frac{1}{2}$ tola, and mixing with sugar, ghee and boiled rice, use it internally in coconut water. For Naroo they also use, *ajwayan*, (a species of aniseed having the flavour of caraway's) and white onion and prepare paste and apply this with cotton to the wound and after three days they take out the cotton from the wound.

There are no hard and fast rules prevalent with regard to the actual doses to be taken, but as a rule for medicines to be internally administered the general doses for adults range between 1 to 2 tolas, for children $\frac{1}{2}$ to 1 tola, for infants upto half tola. In case of mixtures the standard dose for adults is $\frac{1}{2}$ to one tumbler, and for children and babies upto $\frac{1}{4}$ tumbler. From this it would be obvious that from the quantitative point of view the doses are definitely above the average that are administered in the allopathic system.

But many Gonds, Kolams and Chenchus know quite a few medical herbs, but it is very difficult to get the information from them. Instead they are prepared to give only the herbs when required.

It is rather difficult to give the Botanical names of these plants. But there seems to be a wide scope for research for the technicians in this line and to know how far these plants, roots and leaves, etc. contain the medicinal properties of any value. If only some interested persons take the lead and organize a systematic survey and research, there is every likelihood of their finding some effective medicines from the knowledge of these aboriginals.

ABO BLOOD AMONG THE GAROS OF EASTERN PAKISTAN

D. N. MAJUMDAR

During the summer of 1945, the author was invited to undertake an anthropometric and serological Survey of undivided Bengal by the Indian Statistical Institute Calcutta. The Survey was financed by the Institute and by the Government of Bengal. Extensive tours into the interior parts of Bengal, and continuous work for six months made it possible for the author to collect a large amount of material, on the physical and physiological status of of castes and communities in Bengal. The anthropometric data are being analysed by the Indian Statistical Institute under the supervision of Prof. P. C. Mahalanobis.

The serological data have been statistically analysed and now it is possible to publish the material. In this paper we are giving the ABO blood groups of the Garos, of undivided Bengal, of the Mymensingh district, now in Eastern Pakistan.

The Garos of the Garo hills, are a Tibeto-Burman speaking tribe. The Garo hills round off a remarkable range, like an arm thrust forward to guard the eastern frontier and occupy an important position at the entrance to Assam, separating the Assam Valley, from the plains of Mymensingh and Sylhet. The Garos, it appears, have not played any significant political part in the fortunes of the valley ; only in 1671, they came down to help the Ahoms against the Muslim invaders. They are divided into two exogamous divisions, viz the Sangma and Marak. In some parts of the Garo hills, also among the Garos and Lyngans in Goalpara, Kamrup and Khasi hills, the Marak group is called, 'Momin'. Each of the two big divisions is sub-divided into several sectors. Playfair gives a tradition of the Garos which traces them from Tibet through the plains of Assam reaching their present habitat. G. D. Walker says that this tradition is known only to the Chisaks (of the north-east of the Garo hills and the plains of Goalpara and Kamrup) but the eastern origin of the Garos is supported popularly on the basis of their physical features. The Garos donot claim any chiefly dress but any man who has acquired social status is called a *Nokma*. The *Nokma* is an ac-

quired social status and 'feasts' are indispensable to claim it. The Garos usually wear a strip of coloured cloth passed between the legs, the end of which hanging loose which is often ornamented with 'rows of white stone, half an inch long.' When they come out of their settlements, they wear a turban, the *Nokmas* putting on a silk turban. The Garo women are not very handsome and Col. Dalton described them as 'the most unlovely of their sex' but their human, gay disposition and good cheer leave a lasting impression on visitors. They dress in a red cloth striped with blue or white about sixteen inches long 'which is tied at the upper corner on the left side, leaving the thighs exposed; 'strings, beads, they use profusely round their neck and the lobes of their ears are dilated by heavy brass rings, scores or more, sometimes. From the early decades of the nineteenth century, the Garos earned a notoriety for their frequent raids on the peasants of the valley, and as reported by David Scott, the Garos entered valleys, made demands for pigs, goats, fowls, or any other article they took fancy to, which the cultivators of the plains voluntarily complied with and with which they purchased the 'forbearance of the Garos.' This tithe was known as *mata-raksha* or consideration for preserving their heads.' Rev. William Carey who wrote 'A Garo Jungle Book' (1919) described an interview of a missionary with the then Lieutenant Governor of Bengal, Sir William Grey. Wrote the missionary, "The Governor said, 'Mr. Stoddard, you say you are on your way to the Garos of Assam?' 'Yes' was the missionary's reply. 'Do you know the Garos,' interrogated His Excellency. 'Not much' was the reply. 'Allow me to kindly advise you and warn you. They are a blood thirsty set of savages and deserve extermination. Government is now considering that question'. "But the Garos were not exterminated and they are still alive and formidably settled in their habitat. When in war, the Garos take heads and ceremonially inter them under stones or 'Kosi'. But in ordinary life the Garos are fully peaceful, and a decent tribe to live with. Once it is said of the Mymensingh Garos who were subjects of the Raja of Susang, that they were invited to a wedding feast in the house of their Zemindar. The Raja made elaborate arrangements for the feast and served the nicest delicacies in the shape of sweets, *halwa* etc., After the feast was over, the '*Nokmas*' or leaders of the Garos were asked if the fare was good. They kept mum but one of them voiced the feelings of the company, when he put a counter question, if the Raja was impoverished lately; for had he been as rich as he was before, he would have certainly provided for 'dried fish' a delicacy with

them. The Garos come down from their hill tops, to buy this delicacy and at Bang-Bazar one can see mountains of dried fish, which scatter their fishy smell round several miles of the country. The Garos are a matriarchal people now in transition, through Christian Mission activities and contacts with the plains

TABLE

Name of caste or Tribe (number in bracket)	Percentage Distribution of ABO blood				Gene Frequencies		
	O	A	B	AB	p	q	r
Garos (142)	38(n) 26.76	32(n) 22.53	58(n) 40.85	14(n) 9.86	0.1784	0.2990	0.5226

A comparison of the Garo blood groups with those obtained for other tribes of Mongoloid origin will be of interest, in view of the importance attached to serological data for racial comparison.* The percentage of B among the primitive and aboriginal tribes of India and elsewhere, has not been found to be very high, and that itself is an interesting point to be reckoned with in the context of anthropological taxonomy. The Paniyans of Madras have been found to possess 7.6 p.c. B, (Aiyappan). The Angami Nagas show 11.5 p.c. B (Mitra,) the Konyak Nagas 10.2 p.c. (Br. Ass. Res. Com on Blood Groups,) the Khonds, 10.8 p.c. Korwa 20.4 p.c. (Majumdar) the Bantus 19.2 p.c. (Pyper) American Negroes, 20.0 p.c. (Snyder), Solomon Islanders 17.8 p.c. (Howells, 1933), Papuan 13.2 p.c. (Bijlmar) Fiji, 9.4 p.c. (Howells, 1933) Samoa, 13.7 p.c. (Niggo) Pre-dravidian tribes of Madras 9.0 (Macfarlane) Australian Aborigines 8.5 p.c. (Tebutt and Macconnell) and 6.4 p.c. (Lee)

TABLE 2
Serological Status

Name of the tribe or Group	O	A	B	AB
Bohksas (144)	30.55	19.55	36.11	13.89
Tharus (24)	27.08	17.08	37.50	18.33
Khasis (200)	33.9	35.0	18.5	13.5
Angami Naga (165)	46.0	38.8	11.5	3.6
Tibetans (187)**	14.9	47.1	13.9	24.1

* cf. R.R. Gates, Human Ancestry (1948.)

** The frequencies are not in conformity with Bernstein's genetical theory. We have explained the possibilities of discrepancy in the E A, Vol 1, No 1, Sept, 1947

The $B+AB$ percentages for the Bhoksas and the Tharus of Nainital Tarai, are 50.00 and 55.83 respectively. The Khasis, a matrilineal Mongoloid tribe of Assam, in the process of transition into patriarchal, have 32.0 p.c. $B+AB$, the Angami Nagas have 15.1, the Tibetans 38.0 while the $B+AB$ percentage among the Garos, is according to our estimate, 50.9. The Garos of Mymensingh, are in the process of transition from matriliney to patriliney and are much influenced by contacts with civilisation. The area inhabited by the Garos is highly malarious. We wonder if the Garos are not one of the tribes among whom the B percentage has been determined by the greater resistance, of B to malaria, a possibility which is becoming more and more evident, as we are getting corroborative data from malarious parts of the country.

Ruggles Gates also finds it a possibility, as otherwise the high incidence of B in India is difficult to explain. The Negrito influence in India is not significant and even if it were there, it could not explain such high incidence of B among some of the primitive tribes of India, Australoid or Mongoloid particularly these in the process of transition, Writes, Dr. Gates in a recent book of his, "If the B gave greater resistance to malaria, as has been suggested, its great increase in modern India might be explained." (Human Ancestry (1940) p. 357.

The serological status of the various areas in India where malaria is always rife or endemic, needs to be investigated to test this assumption; even if the data may not warrant such optimism, the need for planning and randomising in serological research, is too great to be ignored. As regards the racial importance of blood groups, it is necessary to mention that no general theory concerning blood type distribution does hold water; distributions are not clear cut, and consistent, 'but vary and wobble provincially very much as visible race features vary in subraces and local types, as pointed out by Prof. A. L. Kroeber (Anthropology, 1948, p.161). The use of serological data for purposes of anthropological taxonomy is yet premature and only succeeds when we *select* our data on the basis of conformity to theory or theories we advocate.

REVIEWS

THE FOUNDATION OF HUMAN THOUGHT—By Fr. Vinding Kruse
LL.D. Published by Oxford University Press, London (A translation
from original Danish) Price Dan. Kr. 30,00.

In the present times of ours, under an epoch of spiritual confusion in all the spheres of life the world is torn and seems doomed. Man's heart is bleeding under different and mutually working political and social systems. The intellectual world is growingly becoming suspicious of the values which have hitherto been regarded as the sustaining basis of all human activity. Whither the road? The author of the present work by thoroughly and systematically criticising all the past and present currents of human thought, offers to shed a light on the problem. He says, "Beneath these great political and social questions, there lies a still greater, still deeper question for humanity, namely the problem of moral and juridical evaluations." According to him, ethics is the scientific examination of the moral phenomena, jurisprudence the scientific examination of the juridical phenomena. He is of opinion, that these sciences should not only give a description of the world and legal rules, which are actually in force, but it will be their second and main task to examine after actual description whether it is possible to establish morality and justice on a scientific basis. And he asserts that the scientific way is the only way in the present turmoil of conflicting ideas and in the course of about 400 pages he has elaborated his thesis in his own way. He supports Plato in his saying, "Either the philosophers must become kings in the states or they who are now called kings and rulers must begin to study philosophy in a genuine and satisfactory manner." Again while putting such premium on science and knowledge, he is careful in examining and understanding the fundamental problem in all science and knowledge: "In what does human knowledge and scientific apprehension itself consist?" After tracing earlier attempts to place morality and justice and scientific systems on scientific basis from Socrates, Plato, Aristotle, Epicurus the stoic and sceptic systems during pre-Christian era—which, however, were not able to give any scientific reason for ethical values,—and the Christian era upto Renaissance—which saw a total eclipse of free scientific investigation—right upto the modern times, to ethical nihilism which is again but negativism or scepticism, Part I of the present treatise ends with a profound question, "what is science and how can science itself be validated?" This fundamental question, as the author says, has been forgotten to be raised in all the trend of thought during the whole period beginning from Socrates to ethical nihilism of the present age.

The subject referred to in the above question is dealt with in Part II, the longest of the three parts. Here the writer criticises *in extenso* the theory of knowledge and analyses the 19th century specialisation of sciences with a series of new investigations into the theory of knowledge more or less connected with the new natural sciences particularly by thinkers like Ernst Mach, Kroman, Meyerson, Bertrand Russell, Herbert Iverson. On the one hand, we have the traditional morality prescribing rules for personal conduct of the individual without any real reason given for them, on the other, the negativistic school, proclaiming the free unfolding of life and asserting that to yield readily to instinct and impulse was healthy while inhibition of the impulses by the traditional moral rules led to morbid conditions. So, in order to counteract these widespread free tendencies, a definite validation must be given of every ethical rule for personal conduct. According to the author, the experience of medical science goes hand in hand with the common experience of mankind through thousand of years, and he suggests that closer cooperation should be arranged in future, between psychology, psychiatry, other branches of medical science and a practical psychological and economic doctrine of vocation or doctrine of aptitude. This being done ethics will be able to turn to the study of the difficult third task : whether it be possible to suggest or indicate roads that will lead to human happiness or satisfaction of the individual. He says, "ethical principles can be proved by the evaluating experimental proof, just like the principles or modes of treatment of medical science that is, as being appropriate to promote the welfare of man." The author has discovered after a searching enquiry that ethics and jurisprudence can be scientifically validated with the same safe starting point and by the same reliable scientific methods as all other science. In this enquiry he has first of all ascertained whether there was anything at all that could be called truth or objective knowledge about justice and other ethical aims and thus seeks to kindle a ray of hope in the face of the assertion of the impossibility of all ethics.

In the third Part, the subject of individual and social ethics is dealt with and in the concluding chapter he says, "That light in which man beholds his life in the coherence of existence, and his feelings towards it, is the ultimate synthesis." He feels he has a responsibility for his life and its deeds towards the spirit."

In the end copious notes are given on complicated issues.

Though the get-up of the book under review is good, we can not help pointing out that the printing mistakes are too many, indicating careless supervision.

A. R. CHAUDHURY.

SOCIAL STRUCTURE—By Peter Murdock, Professor of Anthropology, Yale University, Published from New York by the MacMillan

Company Ltd. Price 33/6d net. (Pp. 323, with Appendix, Bibliography and Index.)

This book is a valuable addition to the science of human behaviour and it shows how the sciences of anthropology, sociology and psychology are so correlated as to make proper study of such a science otherwise impossible.

In 1937, a research was undertaken by the Institute of Human Relations at Yale University and cross-cultural survey was made of 250 societies. The author hopes that more light can be thrown on the subject if at least a representative ten percent survey of all the cultures known to history, sociology and ethnography be made. The book is primarily influenced by four systems of social sciences, namely sociology, historical anthropology, behaviouristic psychology and psycho-analysis.

The term family is ambiguous and is characterised by various factors such as common residence, economic cooperation and reproduction. From studies of 250 representative human societies it is clear that three distinct types of family are found, nuclear family, polygamous family, (polygamous used in the recognised technical sense as referring to any form of plural marriage) and an 'extended family'. In the nuclear family, the relationships are eight in number, husband-wife, father-son, father-daughter, mother-son, mother-daughter, brother-brother, sister-sister, sister-brother and all these relationships are studied in proper perspective in the first chapter of the book. The author remarks, "To regard sex as the sole factor or even as the most important one, that brings a man and a woman together in marriage and binds them into the family structure, would however be a serious error." There are other factors one is economic cooperation which also plays an important role... "By virtue of their primary sex-differences a man and a woman make an exceptionally efficient cooperation unit." "Economic cooperation not only binds husband and wife, it also strengthens the various relationships between parents and children in the nuclear family.

The composite forms of family and their two principal types are described.

The next subjects of study are social groupings based upon kinship ties—called kingroups. In every type of family organisation, the kinship bond which link the members to one another are always in part affinal and never exclusively consanguineal. "In nuclear family, the tie between father and mother, or husband and wife is one of marriage; incest taboos universally prevent their being primarily consanguineal. In complex forms of the family a number of members are linked by affinal bonds". One of the most definite conclusions of the present work is that kin groups are the primary determinants of both kinship terminology and marriage rules.

The distinction between types of kin groups is very clear, one is based upon a rule of residence, and the second major type on a rule

of descent rather than that of residence. "A group to constitute a genuine clan it must conform to three major specifications. 'In the first place it must be based explicitly on a unilinear rule of descent which unites its central core of members.....In the second place, to constitute a clan, a group must have residential unity. This cannot exist if the residential rule is inconsistent with that of descent. Nor can it exist if any appreciable degree of individual deviation is permitted from the normal rule of residence. In the third place, the group must exhibit actual social integration. It can never be a more unorganised aggregate of and independant families like those residing in block in American suburbs'" (Page 68).

Community, the maximum group of persons who normally reside together in face-to-face association' is discussed in the next chapter. In this chapter the author makes a fuller consideration of the social groups which appear peculiarly effective in channelling kinship and ceremonial association have been mentioned but not fully discussed as 'it is beyond the scope of the present study.

The most interesting chapters are on "Analysis of kinship and determinant of kinship terminology"; tables attached thereto help the more advanced scholar for a closer appreciation. The study of these somewhat dry statistics actually brings a reward in realising 'that the data of culture and social life are as susceptible to exact scientific treatment as are the facts of the physical and biological sciences.

In the chapter on Evolution of Social Organisation, the author points out 'that distributional studies by careful historical anthropologists have conclusively shown that cultural traits and trait-complexes tend to be found among contiguous or related peoples. They are usually exhibited by a cluster of tribes in a single culture area or in several adjacent areas, and are not scattered at random over the world. If they are found in more than one continental or insular area, they are attributed to diffusion if there is historical, geographical or linguistic evidence of a former migration or other connection, to independent invention and diffusion of two or more centers, if reasonable grounds for assuming a previous connection are lacking."

By a careful study of several types of social organisation the author comes to the conclusion that cultural forms in the field of social organisation reveal a degree of regularity and of conformity to scientific laws not significantly inferior to that found in scattered natural sciences."

No book on Social Structure is complete without a study on the regulation of sex for the drive of sex is so strong and imperious that it is capable of impelling individual towards behaviour which may disrupt the sweet and cooperating relationship upon which social life depends and society therefore cannot remain indifferent to it but must try to bring it under control.* There may have been people who have failed to do so, but none has survived. "As evidence

suggests that excessive sexual deprivation produces personality maladjustments that are inimical to satisfactory social relationships. A society must therefore permit sufficient sexual gratification to maintain mental health and efficiency of its members as well as their numbers.

An understanding of sex regulation is dependent on an analysis of sex behaviour. "Socially considered, any act of sexual intercourse may be regarded as falling into one of seven major categories. When engaged in by a married couple, observing all social proprieties, it may be termed *marital sexuality*, when it takes place outside of marriage between two persons of whom at least one is married to another person it is called *adultery*. If its participants are related to one another by a real, assumed or artificial bond of kinship which is actually regarded as bar to sex relations, it is classed as *incest*. If the couple belong to different social classes, castes, races or ethnic or national groups between which sex relations are naturally forbidden, it may be called *mismatching*. If either party occupies a social status in which permanent chastity is required e.g. a priest in our society or a widow in certain other, sexual intercourse may be termed *status-unchastity*. If either or both are violating social proprieties or cultural taboos such as the temporary injunction of continence during a ceremonial fast or when the woman is menstruating or pregnant, the act may be called *incontinence*. The final category of *fornication* includes all other instances of sexual intercourse i.e. all sexual relations that are either marital, adulterous, incestuous, mismatched, ritually unchasteous and incontinual. It applies to intercourse which conforms to social conventions in all respects except that the partners are not married". (page 261-262)

In regulating patterns of behaviour that prevails between kinship of opposite sex may be divided, according to the author into five segments, from complete avoidance to marked restraint, from respect to moderate reserve, from informality to intimacy, from familiarity to privileged joking, from obligatory joking to extreme license.

The last two chapters (chapters 9 and 10) are devoted to the study of incest taboos and their extensions and that of social law of sexual choice. So in every chapter the tables added thereto are analytical and interesting.

The Appendix A deals with the technique of historical reconstruction. The author appeals to historians and anthropologists with historical interests :—

"As is well known, the records of departed civilisations, archaeological and documentary, are relatively rich in evidences as to technology, economics, religion and government but poor in information as to rules of descent, kinship terminology and other aspects of social organisation. If a technique were available whereby a social system fully described at some recent date or during an historical period of

rich documentation could be subjected to analysis in such manner as to reveal its antecedent structural forms with a high degree of probability, it might prove exceedingly useful."

To an advanced student of Sociology and allied sciences the book is indispensable.

L. K. B