MAN
in INDIA.
A Quarterly Record of Anthropological Science with special Reference to India.

31372

Edited by
RAI BAHADUR SARAT CHANDRA ROY, M. A., B. L., M. L. C.

572.05 VOL. VIII:
M.I. 1928.

RANCHI:

PRINTED BY EBRAHIM PUSTI AT THE G. R. L. MISSION PRESS.
PUBLISHED BY THE EDITOR AT THE "MAN IN INDIA" OFFICE,
CHURCH ROAD, RANCHI.
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I. INDIAN CULTURAL INFLUENCE IN OCEANIA.

By E. S. CRAIGHILL HANDY, PH. D.,

Ethnologist, Bishop Museum, Honolulu.

My main purpose in presenting this paper dealing with Indian cultural influence in Oceania is to place before students of Ethnology in India a comprehensive statement of probable relationships of the cultures of the Polynesian Islands to known historic and proto-historic cultures of India proper and Farther India. I am not attempting a definition of Polynesian culture in toto, which apparently was compounded of a multiplicity of elements that came from various places at various times, but only an indication of those elements that concern students of Indian culture and history. The simplest mode of dealing with this subject briefly will be to proceed from recent to more ancient accretions of Indian culture identifiable in Polynesia. In a short paper it is not possible to give proofs of relationships indicated, but only illustrative examples.
The most recent phase of the movement of Indian culture eastward that concerns the student of Polynesian history is that which witnessed the spread of Buddhism into Indo-China and Insulindia during and after the seventh century A.D. While evidence of the presence of Buddhist cultural traits in Polynesia are not as clearly defined as those indicating Brahminical influence, they nevertheless do exist. In view of the fusion of Buddhism with Brahminism in Farther India it would be inevitable that Buddhist traits that came to Polynesia from this region would have been obscured. An example of a trait that probably had Buddhist derivation is the division by the New Zealand Maori of their sacred lore into what they called "The Three Baskets of Knowledge", said to have been entrusted by the Supreme Being in the highest heaven to the God of Light, who transmitted the sacred lore or wisdom (wananga) contained in the "Three Baskets" to the Maori priesthood. The Maori "Three Baskets" of course suggests the Tripitaka, or "Three Baskets" of the Buddhist canon.

Traits of the Brahminical culture known to have preceded the Mahayana Buddhist expansion, having flourished in Indo-China and Insulindia in the first centuries of our era, are spread throughout Polynesia. In Indo-China and Insulindia the heart of this Brahminical culture was the worship

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Handy, E. S. C., Polynesian Religion, Bishop Museum, Honolulu 1927.
of Siva. In Polynesia the cult of the lingam was fundamental in the ancient worship. Its manifestations in symbol and philosophy parallel their prototypes in Saivism. And associated with this cult in all phases of the native culture are innumerable traits of Indic derivation.

A good case can be made out for presence in Polynesia of distinctively Vedic elements, but the existence of such traits as distinct from the Brahminical tradition which was, of course, based upon Vedic teaching, is by no means provable as yet. If, as comparative study proceeds, it becomes evident that Polynesia has preserved elements of pure Vedic culture, we shall have an unbroken series of accretions of Indian derivation, including Vedic, Brahminic, and Buddhistic. This would not necessarily mean, however, that these cultures entered Polynesia in this order, for relatively late migrants from Indonesia may well have carried into Polynesia a conglomeration of Indic traits belonging to two, or even all three, of these periods.

So much for the elements derived from historic Indian culture. Amalgamated with these in Polynesia are others belonging to a culture of a barbaric type, traits that find their parallels among the skull-venerating peoples of Indonesia and Southeast-Asia, such as the Ifugao of the Philippines, the Shans of Burma, and the Nagas of

* This stratum in Polynesian culture will be discussed in detail in a manuscript under preparation, to be submitted for publication to the Bishop Museum, Honolulu.
Assam. In Burma and Assam the folk whose culture is of this type represent physically a mixture of Caucasian, or as it is said in India, "Aryan", characteristics with Mongoloid. In the Philippines the Ifugao and related tribes are distinctly Caucasian. And in Polynesia it is in the island groups where the traits of this barbaric culture were dominant that the physical type characterized as Caucasian is most pronounced. Finally, the islands in Polynesia namely the Marquesas and New Zealand which best preserve the traits of this culture, are geographically on the outer fringe of the region; while in Indonesia and Southeast Asia the corresponding cultures are now isolated in the uplands. It seems, therefore, that in studying this particular group of cultures we are dealing with the remnants of a people, and culture that was widespread in prehistoric times, a people physically "Aryan" but not Aryan linguistically, for none of the folk mentioned speak languages belonging to the Indo-European family.

Cultural analysis and comparison are capable of determining the extension of traits of historic Indian civilization in Oceania. But it is probable that archaeology, carefully planned and scientifically prosecuted in India proper and in Indonesia, can alone bring to us full evidence of such a widespread prehistoric culture as is here suggested.  

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* At the Pan-Pacific Science Congress held in Tokyo in 1926 a paper was read describing the recent discovery near Manila and excavation by Professor H. Otley Beyer of the University of the Philippines, of a stratified site of prehistoric habitation in which were unearthed paleolithic implements, and with them pottery, said to correspond in type to material from India and Burma described by Fookes. The antiquity of the stratum from which these relics came was estimated to be at least ten thousand years. This paper was to be published in the Proceedings of the above mentioned Science Congress. (This reference to it is from a brief note made when the paper was read, and should not be quoted as authoritative.
Though the title of my paper is "Indian Cultural Influence in Oceania" as regards Oceania as a whole only Indonesia and Polynesia have so far been mentioned. It may, however, safely be presumed that cultures that have dominated Indonesia and travelled as far as Polynesia, have also contributed largely to Micronesia and Melanesia which lie between Indonesia and Polynesia.

In closing, I should like to point out that, while the story of Polynesian culture is a mere appendix to Indian history, it may be found, like appendices to some books, to contain information of prime importance to the main subject. In the isolated islands of the Polynesian fringe of Farther India there may have survived, there may still survive, ancient Indian lore and customs that have become hopelessly obscured or lost in India proper and colonial India. *

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* This paper was read before the section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
II. THE PONDANS OF CALICUT.
BY S. T. MOSES, M.A., F.Z.S.

The Pondans, to whom Thurston, in his classic work "The Castes and Tribes of South India" devotes a short paragraph with a quotation from Stuart, form a small caste whose name and traditional occupation are little known even among their near neighbours. They were brought to the author's notice, in the course of an investigation into the peoples of the West coast, whose occupation today is palanquin-bearing, which is traditionally said to be one of those originally assigned to the maritime community of fishermen. The palanquin or manchal is a kind of hammock slung on a pole and carried by 4 bearers, at each end, who intone musically 'Eh Hoom, Hoom Hoom' as they trot along. Originally manchals were 'a distinguished means of conveyance reserved only for chieftains'. Later, Brahmans and Kshatryas only could use a manchal. The usual palanquin-bearers for these high caste men were, as today, the Palliehans or the Paruppur Nayars, to give them their more honorific designation. Nowadays the use of the manchal, especially in certain places along the coast or in the interior, where other modes of transport are neither easy nor available, is general, not being restricted to any castes, and the bearers employed belong to the fisherman class—Among the Mukkuvas there is no special section for this work though among the Mogayars there is one called the Boyie—both Hindu and Christian—
‘Nasrani’ and ‘Chettan’ Christians too are so employed—and the tapper class (Thiya, Billava etc.). In fact, taking to this occupation today, is simple question of wages and not a matter of caste or tradition.

The Pondans are not Pallichans—the sight of whom, according to a Malayalam proverb, brings on pain in the limbs and suggests a ride in the monchod—and do palaquin duty for the Zamorin and the Zamorin only, during his visits to the temple and not for any other chieftain or Kshatriya or Brahman. Most of the Pondans are now doing petty business their occupation today being ‘trade’. The women sell sundry articles of food and some men tend cattle. Their number nearly 36 years ago was 28 and has not undergone any marked decrease since; there are today only 5 families and about 26 adults. Due to the abandonment of the original occupation—only 2 families are now occupationally attached to the Zamorin—and the natural changes brought on by time and other factors in the Zamorin’s court, the caste is likely to get lost as an entity in the near future. The Pondans are in receipt of a fixed monthly allowance of grain and other requirements from the Zamorin. Many years ago 22 families of Pondans with 2 leaders were brought away from the ‘Pandya Rajyam’, 11 of which with one leader stopped at Cochin, as intended, for rendering palaquin service to the Rajah of Cochin—My Pondan informant assures me their descendants live today at Thirupanithura—the other 11 with the leader coming to Calicut for service under the Zamorin. The Pondans,
according to my informant, are of 'Vellala caste', of 'Aya Kulam', of 'Sri Krishna Varggam' and the descendants of Nandagopam and Devaki. The name was not newly bestowed on them after their arrival on this coast and so may be a corruption of 'Pogondans', understood by Stuart to be the palanquin bearers of the Idayans of the East coast. That shepherds of the East coast did send out waves of migrants to the West coast is a traditional claim more likely based on fact. For example, Mr. Kannan Nayar states in the Malabar Quarterly Review (1903) that the Gopas, a section of Nayars living in the southern part of Kerala and the Konars of Poondurai near Erode belong originally to the same tribe. The Pondans, however, have no connection with the Nayars while the Pallichans belong to a subsection of Nayars. In fact my Pondan informant took a pride in comparing his people to the 'Tamil Brāhmans' (Pattars) of Malabar whom they resemble, in spite of many differences, more than any one else. In personal appearance they are like the Pattars down to the East coast chignon but they sport a moustache. Their marriages are of the pre-puberty kind and the customs observed during pregnancy, childbirth, marriage and funeral are all like those of the Tamil Brāhmans. The wife is taken to her house for childbirth and returns to her husband's home only after all the delivery rites are over. The Pondans do not wear ordinarily the sacred thread though they do so on marriage and funeral occa-
sions. Among the festivals they observe, the important are the Karthigai, the Makara Pongal and Deepavali. As regards their food, they do not exclude fish and flesh from their dietary. The inheritance is according to the usual East-coast 'Makkathayam' i.e. the succession is in the male line. Their everyday language is a mixture more of Malayalam with mutilated Tamil words, a sort of Tamilomalayalam. Though not considered 'high' in social status, they do not pollute the higher castes by their proximity. There is no distance pollution in their case; the Zamorin who is ordinarily polluted by the touch of any Tamilian has granted them, from the beginning, this special privilege.

* This paper was read before the section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
III. ANT AND FOLK-BELIEFS IN SOUTH INDIA.

By S. T. Moses, M. A., F. Z. S.

From antiquity ants, with their social, orderly and active habits are the types of industry, prevision and frugality. King Solomon commends the sluggard to go to the ant and Muslims have honoured Solomon's ant with a place among the 10 animals admitted into the Paradise of the Faithful. The harvesters or granary ants which instinctively gather rice and other seeds of grasses in their nests and lay up great stores in their galleries are mainly responsible for making the ant which according to Solomon 'provideth her meat in the summer and gathereth her food in the harvest' symbolise frugality—Aesop makes the ant drive the grasshoppers away with the admonition "those who drink, sing and dance in summer must starve in winter"—and prevision. The nest of granary ants is easy to find as there is a ring of chaff all round & many roads—ants are able to beat tracks so well that a Tamil proverb says 'the constant goings & comings of the ants are enough to wear away even stones'—lead to it. The ant granaries contain comparatively large quantities of ant-grain, called in Tamil 'grass-rice', that in times of famine Adidravidas etc dig up the rice and use it. This appropriation of the ants' labours is looked upon with horror by some of the higher caste people who consider it an act of great merit to visit ant-holes on roadsides
etc and to put in each a liberal supply of rice or other grain.

When ants migrate, it is a common sight to meet workers carrying the little white larvae and pupae usually miscalled “ants’ eggs”. Ancient Hindu writings aver that all insects spring from hot moisture, the fact however being that ants are no exception to the rule of animals arising by development from eggs formed in the preexisting individuals of the same kind. According to the Tamils, an indication that rain is about to descend is found in swarms of ants carrying their ‘eggs’ in the mouths and crawling up high places or eminences. Ants on the march follow an order, single file, double file and so on. The Pamburumbu (snake-ant) of Kerala is said to march in twos to summon the cobra when the Vishahari demands the snake’s presence to suck out the poison from the corpse-like patient. The instinctive orderliness of ants is of such high order, that a Nyayam in ancient Hindu law is called after the ants ‘Pipilika Nyayam’. According to ancient Hindu Military methodology one of the 6 methods in which troops may be arrayed is ‘Snehi Vyuha’ the ant array in extended columns one row following another like swarms of ants. Ants whether on their migratory march or on solitary predatory excursions are believed in South India not to cross white lines. The geometric designs (Kolams) drawn on the floor of Hindu households are said to exercise the same ban against their further intrusion into the house. Another belief is that a hunter who while out
meets ants crossing his path, will miss his quarry. The orderliness and discipline of ants are often upset by the interruption of man and others and if such a confused swarm of bewildered ants is seen while the architect and the owner of a land where he proposes to erect a house are inspecting the 'manai' it, according to the 'Silpa sastra' or 'Manai adi Sastra', forebodes misfortune.

The seasonal emergence of winged individuals, known as swarming is a popular 'Clerk of the Weather', especially in the case of termites or white ants. It is an indication of approaching rain. If the swarming takes place in the evening, the Tamils say, there will be heavy and continuous rain. But if it is in the morning, the threatening rain will hold off for a short while. Swarming is unlucky, the Silpa sastra says, if it occurs when the owner and the architect have come to survey the plot for a proposed house. In Godavari the appearance of a swarm is believed to foreshadow some benefit.

An ancient belief is that all ants at a certain age acquired wings the fact however being that the winged ones lose them after their nuptial flight. The texture of the termite wing is of such delicate gauze that the Tamils say "the wings of white ants are the most delicate things ever seen".

The size of ants is well known but the ancient historian Herodotus refers to ants in India larger than a fox and smaller than a dog, which dug up gold and tore to pieces those who came to
gather it. These fierce ants were said to keep golden treasure in their holes. Ancient Hindu literature calls Gold dust 'Pipilikam' (ant-gold) and Mahabharata mentions the gold-digging ants. Probably Herodotus meant the dogs kept by the miners. Or is it a confusion of ant with the anteater a clawed animal of the size stated?

Among termites the workers not merely surrender their sex to serve their community but make an additional sacrifice of eyesight. Some ants are blind, workers or even females in some species. Perhaps it is this fact which made ancient Hindu writers attribute only 3 senses to ants viz touch, taste and smell. The large size of the eye as compared to the body is referred to in a Tamil proverb which says "the eye of the ant is too large for its size while that of the elephant is too small for its size".

Ants use their jaws for biting purposes with good effect when the parts of the body attended to are vulnerable like our seats; the Malayalam saying is 'to place the Katterumbu (the big black ant) underneath where you sit'. An exception among ants in not being a biter is the small black ant which hence is called in Tamil "Swamiar erumbu" (Ascetic ant). The virulence of the bite of some kinds have earned for them the name "Fire ants"; they are popularly believed to be the ghosts of people meeting with untimely deaths.

The food of ants, both true and white, consists of all animal and vegetable matter. Sweet juices
are considered a delicacy by the ants. In Trichinopoly an industrially important place possessing sugarcane pressing plants is Thiruvurumbiyur 'the city of holy ants'. Tradition says that ants worshipped the Lingham there and poured on it the tiny droplet of sugarcane juice each had brought as the offering. Ghee is another favourite drink and one kind is called 'Neyyurumbu'. The Tamil poet the author of Naladyar while mentioning the fact that wealthy men even if misers will never be deserted by people, compares it to the habit of ants creeping round and round outside a vessel containing ghee though they could not get into it.

Ants are recognised as may be seen from the Malayalam saying "The ants which eat away redhot wood, will they spare a coalblack cinder" but the termites are more so, for they devour all animal and vegetable substances mostly the latter, dead or alive, useless or even worse like the thorny shrub mentioned in the Malayalam proverb "Like termites attacking the 'Karakol'.

Anthills, the huge mounds where termites reside, have a religious significance as Shiva is said to have manifested himself in that form. Valmiki, the author of Ramayana owes his name to the fact of his birth on an anthill (Valmeegam). The Vedans of North Arcot have an alias in 'Valmeegalu' as they 'live on the products of the anthills'. The earth of the termitarium crumbles to dust and that is why the Khond swears with a handful of anthill-earth before him, the inevit-
able fate of the perjurer being firmly believed to be to 'crumble to dust like a whiteant-hill'. Anthills afford comfortable lodgings to snakes and are worshipped as such; the Tamilian says 'the termite is the carpenter of the snake'. Manu-samhitâ warns the Brahman against treading in certain objectionable places of which anthill is one. Ants, both kinds, rank easily first among the underground residents of the earth; which is therefore figuratively called an anthill. The Śiṅga-sastra' says that when experimental pits are dug in a plot of land where a new erection is proposed, the sight of termites forebodes no good to the owner.

Agricultural labourers in many districts consider the winged white ants a delicacy. A favourite dish is the bodies of the swarmers fried with rice grains. Among the Tamils of old, Purananuru tells us, curries of winged termites were prepared, with buttermilk and tamarind as the other main ingredients. The bodies of the winged termites, after capture, are sun-dried and stored. The Imulas of Chingleput and the Mutrasahas of Nellore and Katamol are expert termite catchers, the latter being credited with attracting them by the use of a special powder. Mr. Hornell records how Mr. Innes once saw in Madura a low-caste man 'engaged in some mysterious work on a whiteant-hill, with a charcoal-burner in hand. He gave a blast upon the charcoal at one of the major openings into the hill and crowds of ants scurried forth from other openings and these
the man scooped up in handfuls and ate without any preparation. The queen termite is reckoned a delicacy, fried or raw. In the Tamil districts budding athletes of 12 and above keep themselves in trim by swallowing her raw and then sprinting 2 and odd miles. Some kinds of true ants are eaten, one being ground into paste and used as a condiment with curry in Canara. Ants are believed to be a tonic diet as the Tamil proverb says "if you eat 1000 ants you will be endowed with the strength of an elephant".

The globular nests made of papery material by a species of tree-ant are with their occupants much prized by Voids as the balm (Thailum) extracted is said to be very efficacious in cases of delirium. Termites indirectly yield a medicinal oil. Scorpions are among those whose hearts delight at the emergence of termite swarms; and those who have fed sumptuously on an exclusive diet of winged white ants are valued as yielding an oil considered in Indian pharmacopoeia as efficacious for aches in joints.

To destroy ants the best agents are believed to be salt, water and fire. Of course many get trampled to death. This is referred to when the Malayalam proverb says "When elephants fight it is death to ants". In planting cocoanuts, ashes with a handful of salt are used. In sugarcane plantations water in which bundles of Kodikalli and bags of salt are soaked is used as a time-honoured preventive. Fire is a good agent to destroy ants; the pitiable shrivelling up is referred
to in a Malayalam proverb 'Like an ant playing on a red hot cinder'. Water is also believed to be useful. As the Malayalees say "the drops of water dripping from the saves long after the rain has stopped" form an ocean for ants; Such an ocean is according to both Tamils and Malayalees is 'water in a coconut hemisphere. *

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* This paper was read before the Section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
IV. EXOGAMY AMONG THE MALA-ARAYANS OF TRAVANCORE.


The social organisation of the Mala-Arayans, a tribe in central Travancore, is built on the foundation of exogamy, which is the chief characteristic of primitive marriage system. The tribe is divided into six clans, called illoms, an interesting nomenclature which is used to denote the exogamous groups of North Malabar Tiyans and the Izhuvans of Madura and Tinnevelly. 1 They are:

1. Vala illom—comprises those who presented bangles to the Ambala-puzha chief, who called them Vala illakars.

2. Inna illom—comprises those who presented oil to the chief, who hence called them Enna illakars.

3. Mundillom—comprises those who presented mundu or cloth to the chief, who hence called them Mundillakars.

4. Puthani illom—refers to those who presented flowers to the chief, and who hence called them Puthani illakars.

The remaining illoms are Korangani illom and Panthirajira illom. The first two illakars claim superiority over the others. Next come the Mundu and Puthani illakars who are enangans of the first

1 Tamil Studies, by Srinivasa Iyengar.
two clans. The last two are the lowest in social status.

As already stated, the clans are exogamous. Members of *Vala illo* cannot marry within the same clan. They are at liberty to marry anyone among the *Enna* and *Mundu illakars*. It is maintained that members of the same *illo* stand to one another in relation of brothers and sisters, and it would be sacriligious, or rather, incestuous, to marry within the same clan. Formerly members of *Vala illo* married women of *Puthani illo*, but did not give their women in marriage to them. The latter could not serve food to the former owing to their low position. These differences are now vanishing.

Sir James Frazer suggests that exogamy may be due to a belief that the intercourse of near kin is injurious both to the progeny and to the whole community. It is also said to render women sterile, but according to Westermark, exogamous rules are regarded as social survivals from very remote times and the underlying idea is to keep the home free from incestuous intercourse.

Although the members of a clan do not claim descent from an animal or plant, they regard themselves as the descendents of a common ancestor, and, as such, blood-relations between whom marriage or sexual intercourse is forbidden. Although a Mala-Aryan is forbidden to marry in his own clan, he is at liberty to marry into his

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2 Frazer, *Totemism and Exogamy*. Vol. IV.
mother's clan. One of the traces of the old solidarity of the clan exists in the recognition by every member of the clan of his duty to welcome as a brother any other member of the clan, however unrelated, who may happen to require his hospitality. There is no division of labour among the different clans.

* This paper was read before the Section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
V. ANTHROPOMETRY OF THE KANIKARS OF TRAVANCORE.


Anthropometry as a test of race stands much discredited in the eyes of some eminent anthropologist. Professor Sergi says that the method of indices is only a method in appearance and it inevitably leads to errors and can produce no satisfactory results. Professor Ridgeway thinks that these osteological differences are but foundations of sand and that physical type depends for more on environment.

There is at the same time another body of scholars who rely on the absolute certainty of the nasal and cephalic indices, of hair, and colour as permanent tests of racial distinction. Doctor Topinard, Sir William Turner, Sir Herbert Risley, and Doctor Thurston rely on the constancy of cranial measurements.

Doctor Thurston was the first to study the nasal index of the jungle and domesticated Kani- kars who are a small hill tribe in South Travancore. According to Bourdillou, those who live in the jungle are called Kanikars, while those living outside it are called Velanmar, who have undergone some modifications as a result of contact metamorphosis.

Collignon formulates the theory that, in a given race, leptorhiny is in direct relation to stature. The more it is raised, the longer the nose. The lower the stature, the more the nose
tends towards mesorrhiny. Sir Herbert Risley also found from his experience of North Indian Peoples that nasal index ranks higher as a distinctive characteristic than stature or cephalic index itself. This applies to South India also. Doctor Thurston’s observations of the nasal index of the Kanikars are as follows:—

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</tbody>
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It may be seen that the nasal index of the jungle Kanikars is higher than that of the domesticated Kanikars of the plains. As already pointed out, this is an instance of a primitive short, dark-skinned and platyrhine type, changing as a result of contact metamorphosis towards leptorrhiny.

There is a remarkable correspondence between gradations of type as revealed by indices and, according to Sir, Herbert Risley, the gradations of social precedence. This enables us to conclude that community of race and not community of functions is the real determining principle of the caste system. The Rig-Veda uses the word anāśa (noseless) to the Dasyus or Vaiyyas. It is possible to arrive at a definition of pre-Dravidian tribes of to-day from these sources. They are a short-statured, dolichocephalic, and platyrhine people, and these physical traits did not escape the observation of Puranic writers. *

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* This paper was read before the Section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
VI. POLYANDRY IN THE
MAHABHARATA.

BY HEM CHANDRA DAS-GUPTA M. A., F. G. S.

One of the most interesting episodes recorded in the celebrated epic Mahābhārata is the Polyandrous form of marriage between the five Pāṇḍava brothers and Draupadi. The matter was discussed by Dr. Winternitz and the conclusion arrived at by him is as quoted below:

"To sum up, we have three different stories intended to explain the polyandric marriage: 1 the story of Kunti who said, May ye all enjoy it together; 2 the story of the five Indras, 3 the story of the maiden who said five times, 'Give me a husband'.

The conclusion seems inevitable that the original Mahābhārata related the polyandric marriage as a fact without any attempt at explaining it away".

The conclusion arrived at by me after a careful study of the question is essentially in full agreement with that of Dr. Winternitz, though I do not agree with him everywhere and I think that there are other evidences besides those

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1. Journ., Roy. Asiat. Soc. (1897) Pp. 714-759. I am thankful to my friends Pundit Amulya Charan Vidyabhusan and Mr. Surendra Nath Kumar for having kindly drawn my attention to this paper. I am also obliged to Mr. Kumar for the transliteration of the sanskrit verses quoted here.


3. The quotations are all from the edition of the Mahabharat printed at the Nirmay Sagar Press, Bombay. (1908).
enumerated by Dr. Winternitz which go to lend additional support to his conclusion that in the original epic there was no attempt to explain away the polyandric marriage.

As it has been pointed out by Dr. Winternitz, the generally prevalent notion is that the polyandrous marriage was thrust upon the Pandayyas by their mother Kunti who, in complete ignorance of the nature of the alms brought by them, asked them to have it divided among themselves. But a careful consideration of the whole story will show that it is nothing but an interpolation.

The mother's command to the sons was communicated in the following words:—

*Kuṭīgata sā tvanaveksya pulran*  
*Pravāca bhunktote sametya sarve (I, ccvi, 2)*

These lines mean that she (Kunti) who was within the cottage without seeing her sons "replied saying, enjoy ye all (what ye have obtained'". Dr. Winternitz has already adduced reasons showing that the polyandric form of marriage was decided upon by Yudhisthira 'without any reference to Kunti's words' and besides these enumerated by Dr. Winternitz there is another consideration which also throws a considerable amount of doubt upon the authenticity of this particular episode. It has been said in the Mahābhārata:—

*Sāyam ca Bhīmastu ripupramāthi jisnuryamau epi mahanubhāvau*
Polyandry in the Mahabharata.

Bhaiksam caritva tu yudhisztiraya nivedaayamcaakru-
radi'nasataah.
Tatastu Kunti Drupadatmajam tamuvacakale
vacanam Vadanyat
Tato'gramadaya kuruseva bhadre balim ca Viprasya ca
dehi bhiksam,
Ye caanamicchanti dadasva tebyah paris'rita ye
parito manusyah.
Tatasca sesam pravbhajya Sighramardham caturram
mama c'itmanasca,
Ardham tu Bhimaya ca dehi bhadre ya esa nagar-
sabhatulyarupah
Gauro yuva samhananopapanna eso hi viro bahubhuk
Sadaiva.
(I, ccvii, 5-6).

Then Bhima, the grinder of all foes, and Jishnu,
and the illustrious twins, returning from their
elemosnary round in the evening cheerfully gave
everything unto Yudhish-thira. Then the kind
Kunti addressing the daughter of Drupada said,
"O amiable one, take thou first a portion from this
and devote it to the gods and give it away to
Brâhmans, and feed those that desire to eat and
give unto those that have become our guests.
Divide the rest into two halves. Give one of
these unto Bhima, O amiable one, for this strong
youth of fair complexion—equal unto a king
of elephants—this hero always eateth too much.
And divide the other half into six parts four for
these youths, one for myself and one for thee" 4
(p. 541).

4 The quotations of the English translation are from the trans-
lation of the epic by the late Mr. Pratap Ch. Roy (1884).
The lines quoted above show the daily routine that was followed in the family and are not consistent with the episode which purports that Kunti asked the five brothers to enjoy the whole quantity of their alms together.

Let us now turn our attention to the third interpolation mentioned by Dr. Winternitz, namely the story of the maiden who said five times 'Give me a husband'. The idea underlying the story is that it was predestined that Draupadi would become the joint-wife of all the five brothers and so they could not avoid this polyandric marriage, however much they might have disliked it. It is said that Vyasa saw the Pandavas, narrated the story of the birth of Draupadi and added:

_Drupadsya kule jajīne sa kanyā devarūpinī_
_Nirdisṭā bhavatām patnī kṛṣṇā Pārsatyanindita,_
_Pāñca lanagare tasmāṇivasadhvam mahābalāh_
_Sukhinastāmanuprāpya bhavisyatha na samsayah._

(I, ccxxxiv, 14, 15).

"Ye princes of the Bharata line, that damsel of celestial beauty hath been born in the race of Drupada. The faultless Krishna of Prishta's line hath been appointed to be the wife of ye all. Ye mighty ones, go therefore to the capital of the Panchals and dwell ye there. There is no doubt that having obtained her as wife ye shall be very happy." (p. 485).

It appears from a cursory reading of the epic that the Pandavas with their mother heard the story, from Vyasa and then started for the city
of Panchal. Then they met with a few Brähmins on the way who informed them about the beauty of Draupadi and the splendour of the Svayambara and advised them to proceed to the city of the Panchals in their company. Commenting upon these incidents Dr. Winternitz has remarked as follows:—

"The whole chapter (excepting the first verse) has no sense unless we assume that the Pandavas knew nothing about the Svayambara and received the first intimation of it from the Brähmans".  

A careful study of the text, however, indicates that the first intimation about Draupadi and her beauty was obtained by the five brothers neither from Vyasa nor from the Brähmins referred to above. In chapter 179 we find that "within a few days (after the death of Baka) there came a Brähman of rigid vows into the abode of their (the Pandavas) host for taking up his quarters there." (p. 475) After the guest had been suitably entertained a conversation took place in which he, the five brothers and Kunti took part and thus we have:—

Tataste Pāṇḍavāḥ sarve saha kunṭya naṛarsabbaḥ
Upāsaṇačakrire vipram kathayantam kathāḥ subhāḥ.

(I, CLXXIX, 5).

'Then those bulls among men—the Pandavas—with their mother Kunti solicited the new lodger to narrate to them his interesting experiences', (p. 476). The Brahmin, in course of his narrations,

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related the story of the birth of Draupadi and her brother, described the beauty of Draupadi and informed them of her forthcoming Swayamvara. The story runs to the following effect:—

Etacchrutvā tatah sarve Pāṇḍava Bharatārṣabha, Manasā Draupadim jagmuranangasārapiditāh.
Tatastām rajānim rajañchalyavidhā ivābhavan
Sarve cāsvastha manaso babhuvuste mahābalaḥ

(I, CLXXXIII, 1, 2).

'O the illustrious of the Bharata race, all of them after hearing this became stricken with the darts of Cupid. O, king, all of those mighty heroes were of uneasy mind during the night like persons pierced with arrow. Kunti, clever and shrewd as she was, found out at once that all her sons were enamoured of Draupadi and proposed that they would proceed to the city of the Panchalas. They all agreed and started for the place as expressed by the line

Pratasthē naçarīṁ ramyāṁ Drupadasya mahat-
manah (I, clxxxiii, 12),

"set out for the delightful town of the illustrious Drupada."(P. 484). If the polyandric form of marriage was against the family custom, the city of Panchalas would be the last place where Kunti would have liked to resort to. But her decision to go to this very city may be taken as an indication of her latent desire to see if the maid could be won for the five brothers. This shows that neither from Vyasa nor from the Brahmīns (as suggested by Winternitz) did the Pāṇḍavas have their first information about the Svayambhara of Draupadi.
Dr. Winternitz has given certain reasons for thinking that the story of Vyasa was an interpolation and the decision of the mother as stated above gives an additional strength to the theory of interpolation while it may also be presumed that the story of the Brahmins whom the Pandavas met on the way is also a subsequent addition to the epic. If we assume that the story of Vyasa was in the original text, it passes our comprehension how the five brothers and their mother could accept the advice of Vyasa regarding a polyandric marriage without any hesitation whatever if the form of marriage was really against the custom as the subsequent interpolations are meant to convey. Thus the episode of the Pandavas meeting Vyasa at this stage is a case of interpolation but, unfortunately, not very clever.

Another point may be raised in this connection. The chapter where Vyasa is reported to have met the five brothers and related the story of the maiden who said five times, 'Give me a husband' begins with the line 'Vasatsu tesu pracchannam Pandavesu mahatmasu (I, clxxxiv, 1), which coming as it does after the line 'pratasthe nagarim ramyam Drupadasya mahatmanah' (loc. cit.) evidently means that the five brothers were living in the city of Panchala in disguise. This is, however, not consistent with the story related in the next chapter where we find that the five brothers started for the city of Panchala with their mother and met with the Brahmins on the way. The chapter ending with the line 'Pratasthe nagarim ramyam &c. (loc. cit.)
is followed by two chapters which are quite meaningless when they are critically examined, while the third chapter begins with the line, ‘Te pratasthuh puraskṛtya mātarāṁ purusarṣabbaḥ (I, clxxvi, 1), and may more aptly be looked upon as the chapter immediately following that ending with the line, Pratasthe nagarīm rāmyāṁ &c (loc. cit). All these considerations show that not only is the story of Vyasa an interpolation as suggested by Dr. Winternitz, but the story of the five brothers meeting with the Brāhmīns who were also going to the Svayambhara was also added to in some later period.

Goldstucker has described the polyandric marriage as a ‘real piece of history’. The considerations enumerated above lend an additional support to the theory that the stories by means of which it has been attempted to account for this peculiar type of marriage are nothing but subsequent interpolations while there are a few internal evidence showing that the polyandrous type of marriage was not a type of union against the custom prevalent among the Pandavas. In chapter 200, it has been said that after Arjuna had pierced the eye of the fish Draupadi went to him ‘with a white robe and a garland of flowers........And he soon after left the lists followed close by her who thus became his wife’. (P. 533 ) The word that has been definitely used is patnyā and the lines have no sense unless they signify that Arjuna looked upon himself as the representative of all

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* Literary. Remains vol. II.
the brothers and accepted Draupadi as the wife of all. 7

After the publication of the news of the alliance between the Pandavas and the family of Draupadi by means of this polyandric marriage, the Kauravas held a council to devise their modus operandi under the new condition. In this council it was proposed by somebody to try any method that might create some dissension among the five brothers, but to this Karna replied as quoted below:—

'It is impossible to create disunion amongst them. They can never be disunited who have all taken to a common wife......women always like to have many husbands. Krishnā hath obtained her wish—she can never be estranged from the Pandavas'. 8 (P. 565). Here it may also be pointed out that if the polyandric form of marriage was against the family custom, some voices were sure to have been raised condemning it and Duryodhan would, very easily, have tried to

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7 In cases of fraternal polyandry as prevalent in Tibet, Ladak, and South India, the right of selecting a common wife belongs to the eldest brother (Westermarck: History of human marriages. vol. III. chapter XXIX, pp. 112-113, 122, 125). In parts of the Simla hills, however, the selection is to be made by all the brothers, though, usually, the bride is escorted to her husbands' house by the eldest or the elder brother as the case may be (Das-Gupta: Ind. Antiq, Vol. L, P. 148, 1931).

8 This statement may be compared with an observation of Duarte Barbosa according to whom, among the Nairs of the 16th century, the estimation in which a Nair woman was held increased directly with the number of her lovers (Duarte Barbosa: A description of the coasts of East Africa and Malabar in the beginning of the Sixteenth century, translated by the Hon. Henry E. J. Stanley p. 126, 1866).
deprive the Pandavas of their legitimate share in the kingdom on the score of a form of marriage not sanctioned by the family custom.

From what has been said above, it may be safely concluded that a polyandric form of marriage was not against the custom prevalent in the Pandava and the Kaurava families, but there is nothing to show that the Panchalas, too, had no objection to it and hence no definite opinion can be pronounced regarding the episode of the five Indras. Vyasa was present at the Panchala city during the Svayamvara and it is not unlikely that he, a great well-wisher of the Pandavas as he was, having realised the importance of this marriage as it would keep the brothers together and gain for them an alliance with the Panchala family, saw Drupada to persuade him to the polyandric form of marriage and hence the story of the five Indras might not have been an interpolation at all.

It may be added that a paper embodying most of the points enumerated above was published by me a few years ago in a Bengali periodical, but the paper is drawn up in its present form to make it accessible to a wider circle of readers and critics.

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2 Manashi-O-Marmabani pp. 175-178, 1327 B. S.

* This paper was read before the Section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
VII. ON THE CULTS OF THE MARITIME DIETIES IN LOWER BENGAL.

By Sarat Chandra Mitra M. A., B. L.

Section I. Preliminary Remarks.

During the Buddhistic times both Hindu and Buddhist merchants went to foreign countries by rivers and seas for trading purposes. They undertook their voyages by sailing in fleets of ships which were skilfully constructed; some of their ships were named the 'Madhukaras' (the bees), the 'Mayurapankhis' (Peacocks-tinged boats), the 'Sukapankhis' (Parrot-wingsu Pans). The Madhukaras were the show-ships 'uppe' or fleet and in these the merchants and their personal staff sailed. The merchants held very high position in the society of those days, not only because of their importance but also on account of their wealth. The indigenous folk-tales of Bengal and the legends recited in connection with the performance of women's folk-rites (or Vratas) teem with passages which testify to the glory and magnificence of these merchants. In the Bengali folk-tale of Kanchanmala, the heroine says with pardonable pride to her comrades, "My father is a king and a merchant is my husband, I have played with diamonds and rubies as though they were playthings". In a folk-tale compiled by a Mahomedan author, it is narrated that Rupalal, the hero of the story, is at once accepted by the
king of the fairies as a suitable bride-groom for his daughter as soon as he learns that his would-be son-in-law is the son of a merchant. In the folk-tale of Sankhamala, the hero’s mother prides herself on the very high social status occupied by her husband, who was a merchant, by telling her son, “You are not a fisherman, nor one of those who deal in flowers. Don’t you know that you are a merchant”.

Older Bengali literature also contains graphic descriptions of voyages undertaken by eminent merchants, like Chand Saudagar. In 1892, Mahamahopadhyya Pandit (now Dr.) Haraprasad Sastri discovered in the Alised division of Baraset in the District of 24 Parganas in Lower Bengal, two bundles of old Bengali manuscripts, one of which proved to be the Manasar Bhasan composed jointly by two Bengali poets named Khemamanda and Ketakdas. The bundle contained three sets of manuscripts, one of which was a copy of the Manasar Bhasan, the second work on Manasa, the goddess of snakes by a perfectly unknown poet named Bipradas and the third also was an incomplete copy of the same work. From an examination of Bipradas’s work on Manasa, we find that in one portion of it he has described the mercantile voyage undertaken by the then eminent merchant named Chand Saudagar, who detested Manasa, the goddess of snakes and did all he

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1 Vide the Folk Literature of Bengal By Bai Bahadur Dr. Dinesh Chandra Sen, D. Litt. Published by the University of Calcutta, 1920 pp. 63-64.
could to put a stop to her worship, which was much in vogue in Bengal at that time. But after being subjected to a good many trials and tribulations by her offended deityship, he submitted to her and accepted her worship. In this work it is narrated that Chand Saudagar having started for Champanagar sailed along the river Bhagirathi, moored at a place named Indra Ghat, near modern Katwa in the Pergana Indrani of the District of Burdwan. Indra Ghat means one of the 12 ghats in the Pergana Indrani, both the names Indrani and Indra Ghat having derived their names from the worship of Indra, the rain-god of the Hindu Pantheon. Bipradas says that the merchant worshipped the god Indra at this place. This passage shows that the Hindu merchants of those days not only worshipped Manasa, the goddess of snakes but also the Hindu rain-god Indra for ensuring not only the safety of themselves and of their personal staff during the period of their mercantile voyages but also for success in their trading enterprise.  

The voyages undertaken by the Hindu merchants of those ancient times were beset with many perils and dangers. To ensure their safety and for their safe return home their womenfolk worshipped two maritime goddesslings, one named Suo-Duo or So-Do and the other named Bhaduli who appear to have presided over seas and

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rivers and who had the power of affording protection to voyagers or to inflict dangers and troubles in the event of their offending those deities. My intention is to describe in detail in this paper the cult of the aforementioned maritime deities.

There are several versions of the legends connected with the performance of the worship of the goddessling Suo-Duo or So-Do. In one version which has been collected from the village Gaipur in the District of 24 Perganas in Lower Bengal, it is stated that the sister, while setting afloat in the tank or river the miniature boat made of the fleshy pith of the plantain tree, chants the following rhyme:

ढोडी गेल वसेि।
मायेर पुत्र एल हिंसेि॥

“(The boat consecrated to the goddessling) So-Do went away floating (in the tank or river), my brother (lit., my mother’s son) has returned home smiling”.

The recital of this rhyme clearly proves that the goddessling Suo-Duo or So-Do was worshipped by the womenfolk for the safe return home of their fathers, husbands and brothers from their trading voyages.

It is further stated in the Gaipur version that those who worship the goddess So-Do will remain immune from all sorts of dangers.

The version which is set forth at length below appears to be prevalent in other parts of Bengal:
Section II. The Cult of the Goddess ling
Suo Duo or So Do

A rich trader had seven sons and a married daughter. His son-in-law did not send his wife to her father's place. This state of things continued for 7 or 8 years. During this interval, the trader died. After their father's death the seven sons, taking with them seven ships full of merchandise, went out on a trading expedition. After trading in many lands, they arrived in a country, where lived five brothers all of whom were robbers. These robbers welcomed the traders and gave them a warm reception. Thereafter the robbers left the house and went out on a marauding foray. While the robbers were away from home, the seven traders happened to meet a pretty-looking girl who, after she had made acquaintance with the former, recognized the said traders to be her brothers. She advised her brothers to flee away from that place and inform her mother that she was not dead.

Thereafter the robbers' mother also interviewed the seven traders and gave them to understand that they were in the land of robbers and advised them to flee therefrom with all possible haste. Accordingly, the seven traders fled away from the robbers' house and went to another country.

When the robbers returned home and found out that their intended victims had escaped from their clutches, they went in pursuit of them. But they could not discover their whereabouts.

The seven traders, after they had successfully
traded in another country, married seven wives and taking with them fourteen ships laden with merchandise, went back to their own country and arrived at their native town.

On the day previous to the arrival of the seven traders in their native town, their mother, accompanied by the girls of the town had come to set afloat the ships of Suo Duo? When they arrived at the sea-beach, the women-folk found that the seven traders had arrived with their seven wives and with fourteen ships full of merchandise.

Recognising her sons, the traders’ mother and her sons made obeisance to the Goddessling Suo Duo and took her sons and daughters-in-law home. The seven brothers informed their mother their only sister was still alive and living in the house of the robbers to one whom of she is married.

On hearing this, the traders’ mother sent out an invitation to her robber son-in-law who accordingly came to his father-in-law’s place. He was warmly received and entertained. Thereafter his mother-in-law gave him seven ships full of merchandise and advised him not to rob people any more, and pray to God fervently so that He may pardon him for the sins he had committed by robbery. She also advised him to perform on the Makar Sankranti Day every year the worship of Suo Duo in the following way:—

That he should make a miniature ship with the fleshy layer of the trunk of the plantain-tree, adorn with garlands of mari-gold flowers, place therein a pair of betel-leaves, a pair of
plantains, areca-nuts, sacred thread and some cowry-shells. She also advised him to observe strict fast on the day of this worship and then to set this ship of plantain-spathe afloat in the river Ganges or a tank on the next day. An earthen-saucer-lamp fed with ghee should also be left lighted in that tiny ship. She also gave her son-in-law to understand that, if this puja was done every year, the worshipper would not fall into any danger and also expiates his sins. She also said that as her husband's ancestors had performed this worship, the robbers had not been able to kill her seven sons.

Listening to her advice and taking the wealth given to him, the robber son-in-law, accompanied by the mother and four brothers and their five wives, went back to their own country. Since that time the worship of the goddessling Suo Duo has spread to all lands.

The cult of the goddessling Suo Duo or Su Do is so strongly prevalent in Lower Bengal that, on the Pous Sankranti Day or Makar Sankranti Day, which falls on or about the 15th of January every year, the tanks in the Cornwallis Square, College Square and other squares in the Indian quarters of Calcutta become full of the flotillas of these tiny illuminated, be-garlanded and offering-laden boats which are set afloat therein, in the evening of the same day, by the Bengali women.

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8 For this version, vide, Meyeder Vrata Kathā (or "The Women's Folk-rites"). By Ashutosh Mukhopadhyya. 1830 B.C. Published by the Bengal Medical Library. No. 203/1/1, Cornwallis Street, Calcutta, Pp. 75-79.
celebrants of this folk-rite to the accompaniment of the chanting of the hymn cited in section I of this article.

Section III. The Cult of the Goddessling Bhaduli.

Another goddessling, who is worshipped in order that her deityship may grant the boon of the safe return of her kinsmen who have gone on trading expeditions, is Bhaduli (भादुली). A popular saying says:

1. भाद्रे भादुली नरी चप्पर जल।
2. भादुली पूजने छय हुमक्कल॥

1 and 2. "If, during the month of Bhadra (August-September) when the rivers (are full) and the rains (fall in torrents), the (goddessling) Bhaduli is worshipped; She will confer many blessings."

If the husband, father, brother or father-in-law of any woman has gone on a trading expedition or on pilgrimage and if the goddessling Bhaduli is worshipped, she becomes so much pleased that she causes the absentee trader or pilgrim to return in safety.

The worship of this goddessling is commenced on the first day of the Bengali month of Bhadra (August-September) and is continued throughout the month to the last day thereof. She may be worshipped at any time of the day.

The materials required for the worship of this goddess are (1) one pot of rain-water; (2) one potful of river-water; (3) one wooden-plank-seat for sitting upon; (4) one new sacred thread; (5)
one pair of ripe palm-fruits; (6) a basketful of rice, pulses, vegetables, oil, salt, turmeric and other spices for cooking; (7) one punti fish; (8) one bunch of bananas; (9) one miniature boat made of the fleshy spathe of the trunk of the plantain-tree (10) flowers; (11) some sandal-wood paste; (12) some vermilion; (13) some rice-powder paste for drawing the alipana designs with.

The mode of worship may be described as follows:—as

The worshipper should sit with her face either to the north or east and dig a miniature excavation to symbolise the sea. With the earth scooped out of the excavation, a seat for the goddessling bhaduli should be made on the north side of the miniature sea. Then the alipana drawings should be made upon the spot of worship after cleaning the said spot. Three drawings of small seas should be drawn on either side of the excavated sea so that the total numbers of sea should be seven. Then the drawing of a large river should be drawn with the liquified rice-powder paste; and the thirteen mouths of the river should be joined with the aforementioned seas. Then on the banks of this river, drawings of a forest, a tiger, a buffalo, a crow, a paddy-bird, a mountain covered with thorns and brambles, a palm-tree with the nest of a weaver-bird (Ploceus baya) hanging therefrom, a raft and a seat for the worshipping woman (तरौर खाठ) should be drawn with liquified rice-powder paste.

Then the celebrant of the worship should go to the neighbouring river or tank and draw a potful
of water thence from to the accompaniment of the recital of the following charm-formula:—

Devanāgarī Text.

1. ए नरी ए नरी रक्षाने सुखः
2. भद्राली ठाकुराशी दुखावेन दुखः
3. ए नरी ए नरी रक्षाने सुखः
4. भद्राली ठाकुराशी दिवेन तिनकुले सुखः

Translation.

1. All the (thirteen) rivers flow into one sea.
2. The goddessling Bhadrāli will remove (our) troubles and misfortunes.
3. All the (thirteen) rivers flow into one sea.
4. The goddessling Bhadrāli will confer happiness (on us) in all the three lines (father's, mother's and father-in-law's line).

A party composed of several unwidowed ladies and maiden girls may celebrate this worship or folk-rite. An unwidowed lady should occupy the worshipper's seat while the other celebrants should recite the prayer-formulas and offer flowers.

Then the potful of river-water should be placed on the right side of the miniature excavated sea; and the pot of the rain-water to the left thereof. The other offering for the puja should be arranged neatly.

Then the celebrant should place the wooden plank-seat on the clay-seat of the goddessling Bhadrāli, which is to the north of the excavated sea. While doing this, the worshippers should utter cries of "ulu, ulu." Then they should dip a flower in the river-water and rain-water and sprinkle the same on the alipana drawing to the
accompaniment of the recital of the following mantra or charm-formula.

Devanagri Text.

1. नदि ! नदि ! कौशय घायो ?
2. बाय भारभेर दाता दायो !
3. नदि ! नदि ! कौशय घायो ?
4. ख्यामी भारभेर दाता दायो !
5. नदीर जल उड़ीर जल ये जल दूधो,
6. भासार बाय माइयेर दम्मार करी।

Translation.

1& 2. O river! where are you going? Give me news of my father and brother.

3 & 4. O river! where are you going? Give me news of my husband and father-in-law.

4 & 6. O water of the river or rain whatever water you may be! Give me news of my father and brother.

(Note. The unwidowed women should add the words खायो भारभेर (of my husband and father-in-law) after the words ण माइयेर.

After reciting this mantra, all the worshippers should throw the flowers into the river.

Then the worshippers should again take flowers and recite the following mantra or charm-formula:

Devanagri Text.

1. कांडगर एष्टे सोइगर चुढ़ा—मण्डलितिः !
2. बाय भार मेइहुन कीमू बजे ?
3. खायो प्यार केडू कीमू बजे ?
4. भासार ये पुजाराम, भार माइयुन भापें वाही !
5. तीमार भोक सोइ चोपर पिंछ।

Translation.

1, 2 & 3. O mountain covered with thorns and brambles! O Udayagiri with golden summit! (do
tell me) where my father and brother, my husband and father-in-law have gone.

4 & 5. I have worshipped thee in order that, by thy blessing they may return to their respective homes. May thou get a golden seat to sit upon.

After reciting this mantra, the worshippers should throw the flowers upon the drawing of the mountain covered with thorns and brambles. Then worshippers should again take flowers and recite the following mantra:—

Devanagri Text.

1 बाघ बाघ बाघ भोंग!
2 लोमरा निषोभा ग्रामार बाघ माखडेर भोंग।
3 तांडरा भींनन एक पर्ये,
4 फिरे ग्रामबेन ग्रार पर्ये।

Translation.

1 & 2. O tiger of the forest! O buffalo of the forest! don’t be offended with my father and brother.

3 & 4. They have gone abroad by one way and will return home by another way.

Then they should throw the flowers upon the drawings of the forest and the tiger and the buffalo.

Then the worshippers should again take up flowers and recite the undermentioned mantra or charm-formula:—

Devanagri Text.

1 सात बाघई बाघई बाघई भींने,
2 कों बाघई भींने तुंभे?
Translation.

1 & 2. The wind is blowing over the seven seas. In what sea the waves are running high.

While reciting the foregoing mantra, the worshipper who is seated should with other hand take up the pots of the river-water and the rain-water and pour out the water therefrom into the excavated sea, and recite the following mantra:—

Devanagri Text.

1 शागर, शागर, बन्नी!
2 तीमार वन्नी वन्नी।
3 राम भावेन—लक्ष्मण भावेन, शार भावेन तत॥
4 तान विवे चिन भावेन रामुङ्गे तक॥
5 भावार मान गहनेन बाबिलो।
6 भार फिये भावे भाज भे॥
7 भावार भाग गहनेन बाबिलो।
8 भार फिये भावे भाज भे॥

Translation.

1 & 2. O sea! I am saluting thee. I am on friendly terms with thee (lit) I am making peace with thee.

3 & 4. Rama is coming. Lakshman is coming as also Nala. Seeing them the waters of the sea will remain quiet and still.

5 & 6. (my) brother has gone on a trading expedition, and will return to-day.

7 & 8. (my) father has gone on a trading expedition and will return to-day.

In this way, the unwidowed worshippers should also mention that their respective husbands and fathers-in-law have gone on trading expeditions.
and would return to-day and after reciting these words, should throw the flowers into the excavated sea, as also upon the drawings of the six painted seas.

Then the worshippers should again take up flowers and recite the under-mentioned mantra or charm-formula:

Devanagri Text.

1 मेला ! मेला ! ब्रजुह्रे वेचो ।
2 गामार बापं भाशं ये "मेला" वेचो ॥

Translation.

1 & 2. O raft, O raft! remain floating upon the sea and support (lit: bear the weight of) of my father and brother (upon thee).

After reciting this mantra, the worshippers should throw the flowers upon the raft.

Then the worshippers should again take up flowers and recite the under-mentioned mantra:

Devanagri Text.

1 चंदे या! चंदे या! बंधे वेचो ।
2 गामार बाप भाखे वेचे हैसे ॥

Translation.

1 & 2. O river bank! O river-bank keep a sharp look out and smile after seeing my father and brother.

After reciting this mantra, the worshippers should throw the flowers upon alipana-drawing of the river-bank.

Then the worshippers should again take up flowers and recite the under-mentioned mantra or charm-formula:
Devanāgri,

1 कागारें! कागारे! शाय कप ले खाना र?
2 धार्मिक वाप पाण एं गड़बो मार्गवे,—
3 कोषाय वेख्ये "नापा"?

Translation.

1. O crow! O paddy-bird! under whose protection do you live? (lit. under the influence of whose destiny do you feed?)
2. My father and brother have gone on a trading expedition.
3. Where have you seen (their) ships (lit. boats)?

After reciting this mantra, the worshippers should throw the flowers upon the alipana-drawings of the crow and the paddy-bird.

Then the worshippers should respectively clasp the palms of their hands and make obeisances to the accompaniment of the recital of the following mantra or charm-formula:—

Devanāgri Text.

1 योड़ योड़ योड़ चोंगार हत्रू, योड़ कोषाय पा,
2 धार्मिके वेहे कुशख करवेन भागुलो लो घा!

Translation.

1. O pair of golden umbrellas (which perhaps symbolize to goddess Bhāduli)! My kinsmen have now embarked upon the ships (lit. their feet are now upon the pair of boats).

2. O mother (goddess) Bhāduli! confer your blessings upon my kinsmen so that they may remain in safety in their outgoing and home-coming journeys.
Then the worshipper who is seated upon the āsana (or seat) should take up the holy thread and twine it round the pair of palm-fruits. While this is being done, all the worshippers should recite the following mantra or charm-formula:—

Devanāgri Text.

１ योझा ताल ! योझा ताल ! बेंघे राखलाम गाढ़े।
２ ताल पढ़वार थाणे बाप भाढू फिरे बेंघे थाणे॥

Translation.

1. O pair of palm-fruits! O pair of palm-fruits! I have tied you to the tree,

2. May (my) father and brother return (home in safety) before the expiry of the month of Bhādra (August-September) (lit. before the falling down of the ripe palm-fruits).

After reciting this mantra, the worshippers should place the palm-fruits upon the ṛliponā-drawing of the palm-tree and taking up flowers again, and touching the palm-fruits, should recite the following mantra:—

Devanāgri Text.

１ पढ़वी को पढ़वी।
２ ताल ताल परभाषु, तांबेर थाणे चोक,
３ छाटे के दर्पण देंप, „कोम बाढूएर „नोक“ ?
４ मामार बाढूएर नोक।
５ बाढूएर थाणे वल वल।
６ नौका दर्पणे छाटे चल॥

Translation,

1 & 2. O (my) female neighbour! O (my) female neighbour? May you be long-lived.

3. The members of which household have arrived at the ferry of the river and are announcing their safe arrival by beating drums?
4. The members of my (own) household have safely arrived at the ferry of the river and are announcing their arrival by beating drums.

5. The nests of the weaver-birds (Plöceus baya) are hanging (from the palm-tree).

6. (O my female neighbours) let us go to the ferry of the river and worship the ships (or boats). After reciting this mantra the worshippers should throw the flowers upon the anipana-drawing of the palm tree.

After doing this, the worshippers should worship the ships (or boats).

The worshipper, who is seated upon the asana (or seat) should now set afloat, in the excavated miniature sea, the boat made of the fleshy spathe of the trunk of the plantain-tree. All the worshippers should now sprinkle a little sandal-wood paste upon the fore and aft of the boat to the accompaniment of the recital of the under-mentioned mantra or charm-formula:—

Devanāgari Text.

1 ए गलुढके झो—गलुढके चन्न रिबाम ।

2 बाघ पेलाम, बाघेर चन्न पेलाम॥

Translation.

1 & 2. I have smeared sandal-wood-paste upon the fore and aft (of the boat) and have (as the result of this act of adoration) got back my father and brother (lit, father’s son) (The unwidowed worshippers should mention the word “husband” after the words “my father and”,

Then all the worshippers should smear vermilion
upon the fore and the aft of the boat to the accompaniment of the recital of the following mantra:—

Devanāgri Text.

1. गलुष्ये श्रो—गलुष्ये विष्णु विष्णु
2. बाप आदिएर दर्शन पेलाम।

Translation.

1. I have smeared vermilion upon the fore and aft of the boat and have, (as the result of this act of adoration) got back my father and brother.

(The unwidowed worshippers should mention the word “husband” after the words “my father and ”).

Then the worshippers should move the boat about in the water of the excavated sea to the accompaniment of the recital of the following mantra:—

Devanāgri Text.

1. कुल श्रो—कुल चन्द्रान माठि,
2. नामुलाम एक प्राण माठि।
3. एक नोष्क बहाय खागाचारम,
4. एक नोष्क बड़लाम।
5. बले याह बालिच्ये याह,
6. सबजल नोष्क पेलाम।

Translation.

1 & 2. (Coming up with) the tides which are flowing past the banks of the river, I have arrived in my native land (lit. earth).

3 & 4. I have safely brought home one boat, and have despatched another boat abroad.
5 & 6. I have got back all the boats which I had taken with me on my travelling and trading expeditions.

After this has been done, the *punti-fish* should be set free in the water of the excavated sea to the accompaniment of the recital of the under-mentioned charm-formula:—

**Devaṇāgri Text.**

1 पुँटि ! पुँटि ! कहे बा'।
2 माहुरी माये बर हिल घटे एल वस बा’॥

**Translation.**

1 & 2. O punti-fish! O punti-fish! look up (and know that) the mother-goddess *Buduli* has granted (me) a boon, (by virtue of which) (my) seven ships (or boats) have safely returned to the ferry.

Thereafter the worshippers should place the bunch of plantains in the water and recite the following mantras:—

**Devaṇāgri Text.**

1 कबार काँचि ! कबार काँचि !
2 तोमाके द्वाबाग गङ्गाप, भागवर एक्सन राँचि ॥

**Translation.**

1 & 2. O bunch of plantains! O bunch of plantains! I have thrown you into the water of the sea (lit. the Ganges) We should now cook our meal.

Thereafter the worshippers should touch the basket of rice, pulses and vegetables etc. Then they should unwind the holy thread from the pair of palm-fruits and, holding the sacred thread should stand round the place of worship and recite the following charm-formula:—

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Devanāgri Text.

1 दिक दिक छबाल दिक छबाल दिके बाणुषा।
2 त्र्य छोक बाणिज्य छोक, देवताय छंधे राणुषा॥

Translation.

1 & 2. O Brahmins, Wherever you may be travelling or out on a trading expedition, keep all the dieties under your control (lit. keep them tied up).

Then the worshippers should do obeisance to the goddessling Bhāduli to the accompaniment of the recital of the following prayer-formula:—

Devanāgri Text.

1 नमः नमः भादुली देवीं हृद्देरे खाणूँ॥
2 बहर बहर रचा करे बतेर पुरी॥

Translation.

1. I bow to thee, O goddessling Bhāduli, who is the mother-in-law of the god Indra.
2. Do be kind enough to preserve the worshippers’ family from all sorts of troubles and misfortunes every year.

After reciting this mantra, all the worshippers should do obeisance to the goddessling Bhāduli.

Thereafter the worshippers should cook the rice, pulses, vegetables which are in the basket (that is to say, the sidha).

Section IV.

Concluding remarks.

From a perusal of the description of the mode of worshipping the goddessling Bhāduli, we find that the ritual performed for propitiating her is

* For a fuller account of the Bhadrāti or Bhāduli Vrata, see pages 35—53 of Dakshinā Ranjan Mitra Mājumāra’s Thāna Diḍīr Thali or “The Grandmother’s Wallet”.
more elaborate than that practised for adoring the other goddessling *Suo Duo* or *Sodo*. For the performance of the cult-rites in propitiation of *Bhāduli*, elaborate charts representing seven seas and thirteen rivers and sea-beaches and river-banks, and drawings of wild-buffaloes and tigers, crows and paddy-birds and palm-trees with nests of the weaver-birds hanging therefrom, are made with liquified rice-paste.

Now, the question arises: For what purpose are these drawings made? The answer to this question is that they are made for the purpose of symbolizing the various dangers that beset the traders who have gone out on their trading expeditions. This goddessling is worshipped during the month of Bhādra (*August-September*) when the seas and rivers are in full flood; and there is great danger of ships and boats capsizing in them. It is for this reason that charts representing seas and rivers and sea-beaches are made. These are entreated with fervent prayers for preserving the absent traders in safety. The traders may have to traverse through forests infested with tigers and buffaloes and other beasts who may kill them, or cause them injury. It is for this reason that drawings of tigers and wild buffaloes are made. The worshippers of *Bhāduli* also supplicate to these beasts so that they may not kill or injure their absent kinsmen who have gone out on their trading expeditions. The drawing of birds like crows and paddy birds (which represent) aquatic fowls in general indicate that even these birds, which frequent sea-beaches and river-banks, are besought with fervent entreaties to keep a sharp look-out for the safety of the absent traders. The drawings of
the palm trees with the nests of the weaver-birds hanging therefrom, and the offering of the pair of ripe palm-fruits, symbolize the fact that these fruits ripen and fall down from the trees in the month of Bhādra (August September) when the seas and rivers are at the height of their flood. It is for the reason that these trees and their fruits are supplicated with piteous prayers asking them to keep the absentee traders in safety and cause them to return home in safety before the expiry of the Bengali month of Bhādra when the seas and rivers become overflooded and highly dangerous.

But the most note-worthy feature of the folk-rites performed in adoration of both the goddesslings Suo-Duo or Sodo and Bhāduli is the offering of miniature boats or ships made of the fleshy spathe of the plantain-trees. These boats are decorated with wreaths of marigolds and laden with various kinds of fruits, and are then lit up with lighted earthen-ware saucer-lamp. These miniature boats or ships are then set afloat, in the case of the cult of Sodo, in natural tanks or rivers; while in the case of the cult of Bhāduli, they are set afloat in the miniature sea which has been excavated in the ground, for the performance of the folk-rites.

The question now arises: Why are these miniature boats or ships made and why are they set afloat in the tank, river or miniature excavated sea?

My answer to this question is that men and women make offerings of articles, which are dearest to their hearts, to the godlings and goddesslings whom they are seeking to propitiate. These boats or ships are dearest to the hearts of the worshippers because
their absentee kinsmen—the traders—have returned or are returning home in them. It is for the reason that these miniature boats or ships are presented by way of thanks-offering to the goddesslings Suo Duo or So Do or Bhāduli *

The significance of my foregoing remark will fully appear if we examine an analogous ritual which is performed in the Roman Catholic Church both in Europe and America. We find that, whenever, Roman Catholic sailors are saved from ship-wreck or from being drowned in the sea, they make presents of boats (in which they have been saved) by way of thank-offering to Virgin Mary, as will appear from the following instances which are on record.

While travelling in the regions watered by the River Amazon, the well-known naturalist Mr. N. W. Bates, F. R. S. came across the under-described example of the afore-mentioned offering of a boat to Virgin Mary. He says:

"The most important building (in Para) was the chapel of our Lady of Nazareth, which stood opposite our place. The saint here enshrined was a great favourite with all the orthodox Paraenses, who attributed to her the performance of many miracles. The image was to be seen on the altar—a handsome doll about four feet high, wearing a silver crown and a garment of blue silk studded with golden stars. In and about the chapel were the offerings that had been made to her, proofs of miracles which she had performed. There were models of legs, arms, breasts and

* Also see the remarks on this cult in the folk-literature of Bengal by Dr. Dinesh Chandra Sen. B. A. Calcutta. Printed by the University of Calcutta. 1920. Pages 249-250.
so forth which she had cured. But most curious of all was a ship's boat, deposited here by the crew of a Portuguese vessel which had foundered, a year or two before our arrival in a squall off Cayenne; part of them having been saved in the boat, after invoking the protection of the Saint here enshrined."

Another famous example of the aforementioned offering (by grateful sailors) of a boat (or rather the mast of a boat) is that of the brick-and-mortar sails representing the mast of a square-rigged ship which stands in the Mexico's miracles-working shrine of Our Lady of Guadalupe. This shrine is situated in a little village named Guadalupe at the foot of a hill some six miles from Mexico. It is stated to have been erected in 1531 A. D. at the command of the Virgin Mary who appeared successively in three visions to a Catholic Mexican Indian named Juan Diego. At the place where the Virgin Mary stated to have stood during the second vision, a spring gushed out of the earth and exists to the present day in the shape of the holy well from the water of which every pilgrim to this shrine drinks. During the third vision, a rose-bush covered with innumerable blooming roses is said to have grown from the place where the Virgin stood. By the miraculous influence of the Virgin Mary, Juan Diego's tilma or blanket was filled up with the blooming roses from the bush, and a picture of the Virgin was imprinted in the centre of that tilma. Diego took these roses and the picture of the Virgin to the Roman Catholic Bishop of the Valley.

of Mexico, and reported to him the visions he had seen, and the command of the Virgin for erecting a chapel on the hill above Guadalupe. This building was shortly afterwards erected. Men of science in Mexico and of other nations have examined the picture of the Virgin Mary imprinted on Diego's tilma. It has been subjected to the closest scrutiny by experts in painting, dyeing and embroidery. Reports have been made on it by the representatives of many learned societies; and while all have agreed that the picture is neither painted on the cloth nor woven into the texture of the blanket, no one has been able to give any sort of explanation of its presence. The chapel remains the ultima thule of pilgrims. Leading from the level of the village to the crest of the hill (above Guadalupe) are two sets of stone-steps, 436 steps to each stair-way. These are walled in on either side by high flanks of concrete on which have been marked thousands and thousands of names of those who have made the pilgrimage."

"Up these steps it was the custom at one time for the pilgrims to go on hands and knees until, by the time half the travellers had passed to the chapel and down again, the stones were stained a deep crimson from the worn knees and torn palms. The late President Diaz however stopped the practice."

"The hillside is covered with chapels and monuments erected during the past three hundred years in grateful commemoration of temporal blessings received through the intercession of the Virgin."
The most curious, perhaps, being that known as the stone sails of Guadalupe. This consists of square sheets of bricks and mortar, representing one mast of a square-rigged ship. Five grateful sailors, storm-tost on the Gulf of Mexico, vowed this offering to the Virgin of Guadalupe if she would save them. They were rescued and they kept their vow, the great stone sails, which are a landmark for many miles, being the result.*

Lastly there remains the question about the origin of the cults of the two afore-mentioned goddesslings to be dealt with and discussed. The meaning of the name “Suo Duo” is somewhat doubtful. “Suo” means the “The favourite one” while the second cognomen Duo means “The hated one.” So the full name “Suo Duo or “Sodo” means the goddessling who is at once a favourite and a hated one.” We can realize the significance of the full name; if we regard the goddessling *Suo Duo or Sodo as a favourite who bestows success and prosperity, upon the traders and causes them to return home in safety; and we may look upon her as the hated one if she inflicts upon the same traders ill-success and ruin and causes their boat to capsize in the seas and rivers.

The name Bhāduli means “the one who is worshipped in the month of Bhādra (August-September).”

In any case, the two names “Suo Duo” and “Bhāduli” are not to be found in the Vedas, the

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* Vide the article entitled “Mexico’s Miracle-Working shrine” in the calcutta daily Statesman of Sunday, the 3rd October 1926.
Puranas and other standard works on Hindu mythology. Then again, we must take into consideration the fact that it is the women themselves and not the Brahmānas, who act as the priestesses in these cults. Both these facts show, in an unmistakable manner, that the orthodox Hindu Pantheon has not yet thrown open its portals to admit these two goddesslings into it and therefore both these cults appear to be of non-Aryan origin.

Now rises the further question: How did these two cults originate among the non-Aryan peoples of Lower Bengal? The answer to this question is not far to seek.

All the primitive peoples looked upon flowing water as a living being.

In the oldest fragment of Hebrew song, a fountain is addressed as a living being. The late Professor Robertson Smith has stated that all Semitic peoples, who regarded water, notably flowing water, as an object of reverence and worship, looked upon it not only as a dwelling place of spirits, but itself also as a living being. This sort of idea appears to have prevailed among all primitive peoples and in all ages. And no wonder. For the primitive mind associated life with motion and if in rolling stone, and waving branch, it sees not merely the home and habit of spirit, but spirit itself, how much more so in tumbling cataract, swirling rapid and tossing sea, swallowing alike the victim and the offering. †

Following the same line of argument we may presume that the primitive non-Aryan people of Lower Bengal looked upon the sea and the river not only as the dwelling-place of powerful water-spirits but also as the spirits themselves whom they dubbed with the name of *Suo Duo* and *Bhāduli* and whom they began to worship, because they knew that it was they who had the power of conferring success or otherwise upon those persons who did business in those great waters, and that it was they who could keep the latter in safety. *

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* An abstract of this paper was read before the Section of Anthropology of the Fifteenth Annual Meeting of the Indian Science Congress held at Calcutta in January 1923.
MISCELLANEOUS CONTRIBUTIONS.

I. NOTE ON A MUSICAL INSTRUMENT COMMON IN THE N. SHAN STATES, BURMA.

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The musical instruments of the Shan States are perhaps as varied as those in India; but one thing which strikes the casual observer is the comparative paucity of stringed instruments in the former country, their place being taken by instruments fashioned out of bamboo which plays a very important part in the economic life of Shan people. Next in importance to these are the metallic musical instruments.

The instrument referred to in this note is a modification of the pipe commonly used by Snake-Charmers in India. The proximal part consists of a dried gourd and a short tiny bamboo pipe which is applied to the mouth in blowing. The broad distal end of the gourd has a number of round apertures varying from three to five into which fit as many perfectly cylindrical bamboos. The main bamboo pipe in the centre is generally thick and of a larger diameter than the rest. It bears on the front side a series of holes not exceeding seven on which the tips of the fingers are used in playing the instrument. On the back side a little above the level of the first is a hole which is pressed by the left thumb. The secondary
tubes bear no holes, but their sides are cut off to varying diameters and lengths, so that their distal portion is in the form of a channel or gutter. At their lower extremity they are fastened to the main pipe by strips of bamboo.

This instrument is of several sizes, the volume of the gourd, the length, diameter, and number of bamboo pipes varying to some extent in relation to the intensity of sound desired. As a rule these instruments produce very soft musical notes which are often heard at considerable distances in the open on still nights. The accessory pipes seem to modulate the musical notes.

These instruments seem to be more in favour with men than with women. I have seen them on sale in some of the larger villages on market days which come off every fifth day. They vary in price from three or four annas to a rupee or more according to the size and complexity of the instrument.

The gourd was cultivated in almost every village that I visited, and seems to be generally used as drinking vessels or as a component part of this type of musical instrument.
II SOME WOMEN'S RITES IN SOUTH INDIA.

This short paper is intended to give a brief account of some of the ceremonies performed by a portion of South Indian women. The purpose of their performance is the general welfare of the family. It is the desire to see that the members of her family should be healthy, wealthy and wise that inspires the Indian mother to resort to such ceremonies as are calculated, in her opinion and in the opinion of the community, to promote these ends.

One of the more common rites may be thus described. On the twelfth day after the New or Full moon (known to Hindus as Dwadasi day) the Hindu woman bathes, puts on fresh garments and cooks a meal. She worships her family deity and then invites a married male friend to dinner. He bathes, puts on fresh clothes, discusses the meal, and on rising is presented with some fruits and a tumblerful of milk soup (pāyas). This ceremony is repeated on every similar occasion for a year.

A second of the rites is to present a female acquaintance, married, of course—unmarried girls or boys have no status—with a fresh flower first dedicated to a deity every day for a whole year. On the last day, the woman purifies herself ceremonially and invites a woman of her acquaintance and after treating her to a sumptuous feast, presents her with a beautiful flower designed in gold.

Instead of this, some women take it on themselves the task of distributing one lakh of saffron
pieces (a common root used for toilet purposes by Indian women) among their women friends. It is not necessary to extend the distribution over a specific period of time, nor is there any limit to the number of turmeric pieces a woman may receive. What is important is the number of pieces cleared. The saffron is not given alone, it must be stated, but is always accompanied by betel leaves (peculiar to the tropics) and areca nuts.

One ceremony involves the distribution of sixteen fruits of a kind to a woman at a time. The next time the kind has to be altered though the number must be preserved. Thus sixteen kinds of fruit have to be given to women, there being no repetition in the recipients' list.

A fifth kind of rite is known commonly as the Chaturthi Vritam. It is first observed on the Vinayak Chaturthi day (Belli-god worship.) falling in the month of Sravan (August-September.). It consists in feeding a member of the priestly class and presenting him with a small vessel full of a semi-sweet preparation (accounted the favourite dish of the Belli-god) made of rice-meal, cocoanut and jaggery. The woman of the house in which this ceremony is performed, has to fast for some time in the earlier part of the day and to feed solely on the special preparation. She has to be content with that one 'meal'—if it could be so called—for the day. On every chaturthi (fourth day after New or Full Moon) this ceremony is performed.

Rather an unusual kind of ceremony is done in the case of rich and poor people alike, though
the grandeur of the presents involved depends on the family resources. Five things of a kind—it may be any thing from grain to precious stones—are first consecrated; and after being offered to the family deity, four of the things are presented to four female friends. The fifth is kept at home. This ceremony is performed daily for one whole year. Of course this rite is not very popular among the people as it involves considerable expenditure.

Some women conduct a ceremony every Friday. After a purificatory bath, they worship the household deity. Five women are chosen and are presented with five fruits, one each. After the ceremony a story is usually narrated illustrative of the untold benefits, a woman may get conferred on her by the regular observance of the rite.

The most common and popular rite is the circum-ambulation of the pipal tree a hundred and eight times when the New Moon day happens to be a Monday. One hundred and eight things of a kind are offered to the tree, one being dedicated at the end of each circum-ambulation. The offerings include fruits, flowers, grains, precious stones, cloths, coins, in fact anything that may catch peoples' fancy. Though mainly a woman's rite, men occasionally have to do this rite (worship by proxy). Even if widowed, women perform this ceremony till their death.

Sometimes a woman is observed to present a friend with toilet requisites every day for a year.
The friend selected must be a married woman, never a widow.

One fact to be noticed is that if a certain ceremony is once performed it must continue to be so conducted till the total period which it is supposed to run is over. If there is a break in the continuity it has to be compensated for subsequently. The regular observance showers choicest blessings on a woman. That woman is to be pitied who has not at least one or two of these rites to perform.

K. Balasubrahmanyam, M. A.
ANTHROPOLOGICAL NOTES AND NEWS.

The fifteenth annual meeting of the Indian Science Congress held its sitting at Calcutta in January 1928. A number of interesting papers were read in the Section of Anthropology, some of which are summarised below:

1. Presidential Address on "Some Gaps in the Racial History of India"—By Dr. B. S. Guha, of the Zoological Survey of India.

In his presidential address delivered before the Section of Anthropology on Thursday, the 5th of January, Dr. B. S. Guha of the Zoological Survey of India mentioned the chief gaps in our knowledge of the racial history of India. The anthropological work carried on under Government initiative and also under private enterprise has been so long of the ‘survey’ kind or mainly a reconnaissance only of the entire field of study. The works of Risley, Thurston and Waddel belong mostly to this category. The time has now come for close and more intensive studies of the kind of the great work of the Sarasin brothers in Ceylon or of Rudolf Martin in the Malay Peninsula for the problems brought to light by the survey are of great complexity and cannot be solved except by deeper researches. The most important of these problems so far as the living population are concerned are in the opinion of Dr. Guha four, namely,

(1) a thorough investigation among the aboriginal population of India to find out if there
are traces of a truly Negrito element or not. Evidence on this question is conflicting though the prevailing opinion does not seem to favour its existence.

(2) A settlement of the so-called 'Dravidian' question. The term 'Dravidian' is linguistic and includes three distinct racial elements among its speakers, e.g. a Veddah-Australoid type, a dark Mediterranean type and a more or less mixed Alpine type. The last is concentrated in the west up to longitude 78 E and does not extend beyond latitude 12. It appears merely to be the southward extension of the brachycephalic race seen along the western littoral of India up to Guzerat. In the opinion of Dr. Guha it is an intrusive element in Southern India and has nothing to do with the race responsible for the introduction of the Dravidian languages. On the present evidence an association is indicated between leptorhiny and the influence of Sanskritic culture and language. In the absence of conclusive archaeological evidence nothing more can be postulated than the probability that the Mediterranean type is also an alien element which came with Sanskrit culture. If this view is finally borne out then the original racial type of the Dravidian people would come to be the Veddah-Australoid type as Risley and Turner supposed.

(3) The third problem to be investigated is how far the element dominant in the Punjab and North-western India extends eastwards. Does it really stop at the boundaries of the Punjab as
Risley assumed or the main type in the United Provinces belong fundamentally to this category? The somatic evidence is not conclusive and further investigation is necessary.

(4) The fourth problem is the study of the distribution of the brachycephalic type in India. As already noticed it is present along the western borders of India; but the question is, does it extend through Central India to Bengal? The Mongolian origin of the dominant type in Bengal as attributed by Risley is in the opinion of Dr. Guha entirely erroneous for the typical Mongolian characters such as the presence of the epicanthic fold, absence of bodily hair, do not occur in Bengal. Besides the Mongolian tribes bordering Bengal are not necessarily dolichocephalic. Both culturally and physically the Bengali brachycephalic type is linked up with that of Bombay whose original migration probably dates back from some unrecorded racial migration of very early times.

Finally from whatever stand-point it is approached neither the correct affiliation of the present inhabitants nor the proper reconstruction of the racial history of India is possible unless a thorough search is made for the remains of its prehistoric inhabitants in the extensive archaeological sites seen throughout India. In the past, research in Indian archaeology meant only the reading of inscriptions—skeletal materials were not sought for and when found by luck were not apparently wanted as no traces of the numerous human skeletons found in several sites can be found at
present: What priceless documents were thus destroyed it is needless to dilate upon. Fortunately the recent discoveries in the Indus Valley and their direct supervision under the present Director General of Archaeology bodes well for the future, and there is no doubt that at least investigations in this important branch of our knowledge would proceed on the proper scientific lines which will help gradually in the correct reconstruction of the racial history of India.

1. In a paper on "Sun-worship in Bengali Nursery-Rhymes", Mr. Sarat Chandra Mitra, Calcutta, referred to many little acts which are performed by the people of Europe in the course of their daily lives, which are nothing but symbolical methods of worshipping the Sun-God. These methods are resorted to by the performers thereof without their knowing it. The European practices of passing the bottle at table, of turning the crank of the butter-churn, beating eggs and stirring mixtures, from right to left in imitation of the sun's course are nothing but survivals of the universal custom of worshipping the Sun-God.

Sun-worship still survives in the nursery rhymes of many peoples. Mr. Sarat Chandra Mitra has published in this paper translations of three Bengali Nursery-rhymes which are chanted by the little children in Lower Bengal on foggy and cloudy mornings without knowing that they are thereby praying to the Sun-God and imploring him to come out of the sky and shine on the earth below, as they are very much in need of his vivifying influence.
2. In a paper on "A Lushai Kuki etiological myth about the King-Crow",—Mr. Sarat Chandra Mitra, of Calcutta, said that the Lushai Kukis who are a Mongoloid people living in the hill-tracts to the east of Assam believe that the eclipse of the sun takes place by reason of the fact that a ghostly being called the Awk devours this great luminary, this being so completely devoured that a great darkness overshadowed the world. This incident is called by the Lushai Kukis the "Thimzing". During this terrible time a general transformation took place and men were transformed into beasts and birds. During this time also the Lushai Kuki chiefs who were fond of the long tail-feathers of the King-Crow (Dicrurus ater), were metamorphosed into this bird. This etiological myth illustrates that cardinal doctrine of the philosophy of the lower culture, according to which savages believe that beasts and birds can talk like human beings and human beings can readily change themselves into beasts and birds. Accordingly, the primitive Lushai Kukis believe in the interchangability of man and beasts, for they have invented a myth to the effect that in the course of the darkness following the eclipse, the chiefs were readily metamorphosed into King-Crows.

3. In a paper on 'A plea for the protection of Aborigines in India', Mr. Asoke Chatterjee, Calcutta, pointed out that some of the aboriginal tribes in India, e. g. the Andamanese and the Todas are fast dying out. It is necessary that steps are taken for their protection and preserva-
tion on the lines of those taken in U. S. A., Canada and Australia before it is too late. It is urged that a resolution requesting the Government of India to take the necessary measures be passed by the Science Congress. (This proposal was supported by Rai Bahadur Sarat Chandra Roy and unanimously passed).

4. In a paper on ‘Primitive Religion in Chota-Nagpur’, Rai Bahadur Sarat Chandra Roy Ranchi, brought out the essential differences amid the general similarity of the religious systems of the hill-tribes of Chota-Nagpur, by an analysis of the religious ideas of some of the more important tribes.

5. In a paper on ‘Women’s place in the Folk Art of Bengal’, Mrs. Santa Nag, Calcutta, made an attempt to describe and analyse the significance of various Alpana designs drawn by women in some of the popular socio-religious ceremonies of Bengal.

6. In a paper on ‘Some modern painted pottery designs from the neighbouring villages of Mohenjo-daro’, of Prof. Panchanan Mitra, Calcutta, said that some specimens of modern pottery of the neighbouring villages of Mohenjo-daro that he visited—though morphologically distinct—have similar ornamental designs with those of ancient Mohenjo-daro showing the perpetuation of the same technique up to the present day.

7. In a paper on ‘The primitive races of the Andaman basin’, Mr. R. B. Seymour Sewell, Calcutta, said that physical characters, by means of which we discriminate between different human races, are developed late in life and mainly at the
onset of puberty. Recent studies in medicine have shown the importance in the development of the individual of certain chemical substances, either contained in food material or secreted by internal glands. A polyphyletic origin of genera and species in the animal world is now a recognised possibility and the same must equally hold good for man. Similarity of structure may, therefore, be due to similar habits or environment and not be evidence of consanguinity. Anthropologists must study not only mankind but his surroundings on which food supply depends, and even the meteorology of the region occupied. The Andaman Sea basin includes the homes of three primitive races and is, therefore, a favourable locality for the prosecution of such researches.

8. In a paper On the cult of the Godling Uttama Thākura in the district of Mymensing in Eastern Bengal, Mr. Sarat Chandra Mitra of Calcutta pointed out that in the district of Mymensingh in Eastern Bengal unmarried girls worship, during the spring, two godlings named Uttama Thākura and Basanta Rāya who appear to have been originally tree-spirits immanent in the Kadam, Neem and Bael trees. These are worshipped by the girls standing at the foot of any one of the aforementioned trees and by making offerings of various kinds of spring-flowers, blades of Durvīgṛass, unhusked paddy and little clods of earth. They chant a prayer formula while making these offerings. After finishing this puja
they sing two other songs of which the texts and English translations have been published in the paper. They worship these godlings for obtaining the boon that they may get married to handsome husbands.

The facts, that the girls perform the puja at the foot of the aforementioned trees, that no Brahman priests officiate in this worship, and that the names of the aforementioned godlings are not mentioned in any Hindu work on mythology, lend considerable plausibility to the theory that they were originally tree-spirits.

The practice of offering little clods of earth to these deities appear to have been borrowed from the Buddhists.

9. In a paper on 'The women and the family in the Heroic Age', Prof. N. K. Siddhanta of Lucknow, said that superficially speaking, neither the woman nor family ties seem to have counted for much in the Heroic Age. The general attitude towards women is something like that of the Servian hero, Marko, as seen in his treatment of the sister of Leka Kapetan, of the daughter of the Moorish King and of the wife of Phillip the Mayzar. Equally typical are the Cid’s persecution of Dona Ximena (Poema del Cid, VII) and Odysseus’ instructions to Telemachos in the Odyssey XXII 438ff. Moreover bonds of kinship seem to have been loosened in the Heroic Age and the heroic poems pre-occupied with deeds of valour have little to do with pictures of domestic life. Yet there are some materials in the domestic
episodes and incidental passages throwing light on the status of women and the strength or weakness of family ties.

Bonds of kinship seem on the point of disintegration in the Heroic Age and there are too many instances of domestic strife. This disintegration was probably due to transitional stage in kindred organisation, in the strengthening of patrilinear relationship as opposed to the matrilinear. In the period immediately preceding the Heroic Age family ties were perhaps quite strong. In the Heroic Age itself, in India, as in other countries, ties of marriage were frequently utilized for forming and cementing military alliances.

The institution of marriage deserves detailed study. Payment of a bride price was common. Payment of dowry to a daughter or son-in-law was not unknown. There are many instances of marriage by mutual consent, an important variant of which was the Svayamvara. The pure Svayamvara is to be distinguished from the winning of a bride through a deed of prowess as in the marriage of Draupadi or Sita or Penelope. This latter is also explained as the payment of a bride-price with prowess, and is not very different from another common method in the Heroic Age, marriage by forcible capture as with Arjuna and Subhadra or Hethin and Hildr. The bride had generally to leave her own home and proceed to her husband's; but there are exceptions. Polygamy was quite common and there are instances of polyandry and levirate in the Sanskrit records.
Love-marriages were not unknown and if the queen was a forceful woman she could manipulate public affairs to a great extent. The custom of Suttee is mentioned in the Indian epics and was known in the West too.

10. In a paper on 'The Tigari—a primitive type of Boat used in E. Bengal', Mr. B. Prashad of Calcutta, referred to a description published by him in 1920 of a large earthen pot which is used as a boat in certain parts of Eastern Bengal. The author gave an account of certain further observations about this primitive but very interesting type of "boat", and compared it with coracles, bulrush-rafts and goat and buffalo-skin rafts which are used in other parts of India as substitutes for boats.

11. In 'Notes on an Indian community mentioned by Pallas', Mr. K. N. Chatterjee, Calcutta, gave a description of an isolated group of Hindu traders settled in Russian Asiatic territory during the latter part of the eighteenth century.

12. In a 'Note on a recent instance of human sacrifice for discovering hidden treasures', Mr. Sarat Chandra Mitra, Calcutta, said:—There is current in many countries throughout the world a widespread belief that avaricious and miserly persons who accumulate great hordes of wealth during their life-time, cannot take away their thoughts from their riches even after their death. They therefore assume the shape of monstrous snakes and guard their treasures hidden under the earth. When disgusted with their life as snake-guardians
of treasurero, they ask some covetous person to
take possession of the hidden treasures by sacrifi-
cing to them some one of their dearest kinsmen.
The pervalence of this belief in India has received
a striking illustration from a recent case which has
cropped up in the Nizam's Dominion. A rich
woman, named Radhama of village Yelamner, kid-
napped a child and sacrificed it to find out a
hidden treasure.

13 In a paper headed Some observations on
the physical features of the Brahuis, Prof.
Panchanan Mitra, Calcutta, analysed a few measure-
ments of the Brahuis and concluded that the Brahui
physical type is not a homogeneous one but com-
prises at least two groups due possibly to admixture similar to the broad-headed and
long-headed, fine-nosed, light-skinned, peoples of
the Punjab and Sind and quite dissimilar to the
Dravidian physical type of the south though
speaking a Dravidian language.

14. In a paper on 'The frog in North Indian
rain-compelling rites', Mr. Sarat Chandra Mitra,
Calcutta, said:— The frog plays an important
part in the rain-compelling rites performed by
many races all over the world. Sir J. G. Frazer
accounts for this by formulating the theory that
these peoples believe the frogs to be custodians
of rain. But Mr. Sarat Chandra Mitra says, that
this theory is not applicable to the rain-compell-
ing rites performed by the Hindus of Northern
India. These Hindus believe Indra to be the
rain-god and that the frogs are his myrmidons.
If the appearance of the frogs during the rains is travestied by throwing jugs of water containing frogs into neighbours' court-yards the rain-god is pleased and sends down copious rain or if the frog is tortured the rain-god feels pity for his favourite's sufferrings and so far relents that he sends down copious rain. But the most curious rite is "the marriage of frogs" which is performed in Assam, the root idea lying at the basis of this rite is that the god becomes very much pleased with the performers of this rite because by the marriage of his favourites they will increase and multiply. As a sign of his favour the god causes copious rain to fall.

15. In a paper "On an aetiological myth about the Golden-backed Wood-pecker, the Indian Spotted Woodpecker and other species", Mr. Sarat Chandra Mitra, Calcutta said:—The Golden-backed Woodpecker (Brachypternus aurantius), the Indian Spotted Woodpecker (Picus macii) and other species of woodpecker derive their names from their habit of tapping the trunks of trees with their bills. There is current in several parts of Bengal a myth which accounts for the origin of this habit and which has been published and fully discussed in this paper. The main incidents of the myth are that a hungry and thirsty ascetic asked an old woman for food and drink of water which she truculently refused to give him. On this the angry ascetic cursed her with a curse that thenceforth she would have to seek her food in the holes and crevices of the trunks of trees and to quench her thirst by drinking rain-water only. As soon as this curse was pronounced
she was metamorphosed into a woodpecker. It has been compared with another myth which is current in France and in which it is stated that, at the time of creation of the world, the task of excavating the seas, lakes, and rivers was entrusted to the woodpecker but it was refused. Hence a similar curse was pronounced upon it.

16. In a paper "On the cults of the maritime deities in Lower Bengal" Mr. Sarat Chandra Mitra, Calcutta, said that in Buddhist times, Hindu and Buddhist merchants used to undertake long sea-voyages for trading purposes, became weathly and attained high social status. For ensuring the safety of themselves and of their personal staff and for obtaining success in their commercial enterprises the Hindu merchants used to worship the rain-god Indra and Manasa, the Goddess of snakes. For the same purpose and for ensuring the safe return home of their merchant-kinsmen their women-folk used to worship two goddesslings—one named Suo Duo or Sodo and the other named Bhaduli. The cult-rites performed in adoration of them have been described and fully discussed in this paper.

One notable feature of these cult-rites is that the celebrants set afloat in tanks, rivers or miniature excavated seas, miniature flower-decked and illuminated boats made of the fleshy spathe of the plantain tree as votive offerings.

Both these cults appear to be of non-Aryan origin. The primitive non-Aryan people of Lower Bengal looked upon the seas and rivers not only as the dwelling place of powerful water-spirits, but
also as the spirits themselves whom they named *Sodo* and *Bhaduri*, because they had the power of keeping the absent traders in safety.

17. In "Notes on a rite for propitiating the tiger deity in the district of Mymensingh in Eastern Bengal, Mr. Sarat Chandra Mitra, Calcutta, gave the text and English translation of a Bengali song or hymn which is chanted by the womenfolk in the district of Mymensingh in Eastern Bengal on the night of the day fixed for worshipping *Kārtika*, the Indian God of War. The worship is held on the last day of the Bengali month of *Kārtika* (October-November) when the weather begins to be cold. From the evidence of this song, Mr. Sarat Chandra Mitra infers that, in ancient times Mymensingh was full of forests which were haunted by numerous *ferocious* tigers which committed terrible havoc on the people and their live-stock. For appeasing the tiger-deity's wrath and for putting a check to his depredations the people began to worship him towards the close of *Kārtika*. On the occasion of this *Puja* the afore-mentioned hymns used to be chanted. In course of time the worship fell into desuetude but the singing of the songs has continued to present day.

18. In a 'Note on Dog-worship in the Hazaribagh district in Chota Nagpur', Mr. Sarat Chandra Mitra, Calcutta, said:— *Lugu* is a goddess-like who is much adored and prayed to by the Kolarian peoples including the Mundas, the Sāntals, the Kharwars and the Bihors, who inhabit the district of Hazaribagh. She resides on Lugu Hill
with her army of Birs or warriors of whom the leader is Tulsi Bir. During the period from 1900 to 1920 there occurred in the district of Hazaribagh eight cases in which Tulsi Bir is said to have taken possession of dogs and thereby caused these beasts to be worshipped by the aboriginal peoples of the district. Vermilion marks were made on the foreheads of these beasts and garlands of flowers or coloured threads were placed round their necks. They were escorted from village to village by drummers and retinues and ultimately led to Lugu Hill where the godling is said to have left them.

Mr. Sarat Chandra Mitra is of the opinion that the afore-mentioned instance of the dog-worship has originated in the animistic belief of the aboriginal peoples of the Hazaribagh District.

19. In a 'Note on a Ho Folk-tale of the Wicked Queen's Type', Mr. Sarat Chandra Mitra, Calcutta, described and discussed the root-idea which lies at the basis of the practice of women eating fruits and other things for the purpose of procuring children and gave examples of this practice from Ho and Santali folk-tales. Savages look upon conception and birth with awe as being things not understood. They are attributed to causes different from human and often super-human which operate on the woman, who is the agent of birth. The man's relation with conception and birth is disregarded and these are ascribed to all sorts of causes alien from humanity such as fish,
plants and even stones. Hence arise the practices adopted by women all over the world for obtaining children, such as eating fruits, roots, seeds and so forth.

20. In a paper "On a bird-myth from the district of Tippera in Eastern Bengal", Mr. Sarat Chandra Mitra, Calcutta, said:—There is current, in the district of Tippera in Eastern Bengal, a bird-myth, of which the main incidents are as follows:—

When the heroine's younger sister is swinging from a tree on the bank of a streamlet, the heroine gives her such a push that the former falls down into the water below and is swallowed by a huge Boal-fish (Wallago-atitu) lying there. On returning home the heroine gives her parents an unsatisfactory explanation about her younger sister's non-appearance. The next day the mother discovers the younger sister living in the fish's belly and rescues her therefrom. Learning from her about the heroine's wickedness the parents punish the heroine by shutting her up in a pigsty. Being disgusted with the cruel punishment meted out to her she borrows some feathers from the Nāoyā-birds and fixing them on to her arms flies away with those birds.

This myth has been compared with a similar one current among the Garos of Assam. But Mr. Mitra thinks that these two have been evolved independently of each other.

21. In a paper "On an aetiological myth about the Night-Flowering Jasmine", Mr. Sarat Chandra Mitra, Calcutta, discussed a myth about the
evolution of the Night-Flowering Jasmine (*Nyctanthes arboristis*). The daughter of King Parisatic is wooed by the Sun and subsequently deserted by the latter basely. In a fit of despair she committed suicide and was burnt on a funeral pyre. From her ashes sprang the Night-Flowering Jasmine. The root-idea lying at the basis of this myth is the savage belief that souls of dead men and, for the matter of that, the different parts of the bodies of dead persons may grow up into trees, or blossom forth as flowers. This conception is common in folk-lore and in poetry. Based on this belief is the pretty poetical concept of flowers springing up from the graves or ashes of dead lovers.

22. In "An aetiological myth about the Indian black-headed Oriole," Mr. Sarat Chandra Mitra, Calcutta, discussed a myth from Eastern Bengal accounting for the origin of the yellow plumage and the black-headed wings and tail of the Indian black-headed Oriole (*Oriolus melanocephalus*). The main incidents of this myth are that a mother-in-law having repeatedly tried in vain to cook for her son-in-law a pulse soup of the right yellow colour, in a fit of despondency, broke upon her own head the soot-begrimed earthen pot containing the yellow pulse-soup. The yellow turmeric paste in the soup stained her body yellow and the soot in the earthen pot stained her head and lower limbs black. The benign gods felt the compassion for her pitiable condition and metamorphosed her into the afore-mentioned bird, whereupon she flew away.
This myth has been compared with another variant from the District of Faridpur in Eastern Bengal.

23. In a paper "On a Lushai Kuki etiological myth about the Jungle Babbler," Mr. Sarat Chandra Mitra, Calcutta, said:—The Lushai Kukis are a Mongoloid people who live in the rocky fastnesses of the hill tracts to the east of Assam. There is prevalent among them an interesting myth which accounts for the evolution of the Jungle Babbler (Craterapus canorus Linn.). These people believe and state that, on one occasion, a ghostly being called by them the Awk so completely devoured the sun that a great darkness overshadowed the word. This is called by them the "Thimzing". All sorts of wonderful transformations took place during this time. Those men who with white turbans on their heads were going to their hill side cultivation were transformed into Jungle Babblers. Mr. S. C. Mitra is of opinion that this myth strikingly illustrates the cardinal doctrine of the Philosophy of the Lower Culture, that there is no distinction between men and beast, and that, the savage mind is quite unconscious of the line of difference that exists between these two great divisions of the created beings.

24. In "Notes on the Behari myth about the Indian House-Crow", Ml. Sarat Chandra Mitra, Calcutta, said:—In a previous paper, it has been shown that considerable animosity exists between the India house-crow (Corvus spendens) and the domestic cat. It often takes place that while the cat is feeding upon some food, the house-crow will
come and pull at his tail. The primitive myth-maker of Bihar has accounted for this enmity by inventing a myth to the effect that the Indian house-crows were once palki-bearers, that the cat was a Rani who had hired the former’s palki but had not paid the hire to the former and that it is for this reason that the former dun the latter for the payment of the overdue hire by pulling at the latter’s tail.

Recent enquiries have shown that similar animosity exists between the house-crow on the one hand and the dog and the kite on the other. But Mr. S. C. Mitra is not aware whether there is current in any part of India an etiological myth similar to the Behari one, which accounts for the enmity between these creatures. He therefore suggests the search for any such myth.

25. In "Notes on tree-cults in the district of Patna in South Bihar", Mr. Sarat Chandra Mitra, Calcutta, said:—The worship of a small mound of clay standing at the foot of a Pipal tree (Ficus religiosa) which was witnessed by Mr. Sarat Chandra Mitra at Patna on the 5th October, 1927, has been described in this paper. The author thinks that the godling Barham, who is symbolised by the mound of clay, was originally a tree-spirit dwelling in the Pipal tree standing close by. The ingredients used in the worship of this godling and the modus operandi of this worship have also been described. The worship is performed by persons desirous of having their heart’s desires fulfilled. The most curious offerings that are used in the worship of this godling are sacred thread
(Janao) made of jute fibre and ganja. For reasons stated in detail in the paper Mr. S. C. Mitra is of opinion that this cult is of aboriginal origin.

26. In a paper on "Laws of eugenics and the institution of marriage amongst Hindus": MR. S. S. Mehta, Bombay, said:—Eugenics is the science of Race-Culture. It is easy to see that the agriculturist aims at the improvement of his corn; and the eugenist in a similar way aims at the improvement of the human race. The main object of the agriculturist is to produce the best kind of corn and that of the eugenist is to produce the best species of mankind, meaning to say men, who could be both sound in body and sound in mind. He tries to examine, regulate and reform as well as improve in reforming everything pertaining to man such as his form, his colour, his habits and his performances i. e., pertaining to man as an individual as well as a species in the kingdom of nature. And although man is the highest and most important of the known living creatures on the earth, yet very little attention is reported to have been paid to this important branch of study, till our eyes were opened to the various ways in which most of the leading principles of eugenics were shown to have been applied in practice by Hindu Legislators. The Vedic times, the Epic age and the rationalistic period all tend to show how the principles of this useful science were observed ceremoniously by the Hindus in ancient times, who have handed down the tradition to the generations of the civilised 20th
century, when science in all the branches is making rapid strides, in order to cope with the varying needs and exigencies of the hour.

The whole Hindu Society was then based on the laws of heredity. The legislation, too, proceeded on the line of believing that the seed imparts not only the physical but even the intellectual and moral qualities of parents to their progeny; and that inherited proclivities were perfected by practice, and ingrained in the coming generations. Castes were originally meant to be marriage groups; and as such they were intended to carry on the same profession by marrying among themselves. Thus the threads of different professions were carried on unbroken. For instance, the Brahman would choose, under normal conditions his spouse from the castes to which he belonged; and his children would bring to perfection the same vocation for which he was trained; a man of warlike pursuits would do so in his own caste; and similarly also, a trader too in his own caste. Castes, however, were not a small group; and notwithstanding this, there was a fear of inbreeding proving a source of weak progeny by the law of heredity. To ward off this evil effect, marriages among "Sapindas", i.e., the issues of the same forefathers were prevented; and among higher classes, marriages among "Sagotras" were prohibited, i.e., among the descendants of the same Rishi; and among still higher class Brahmins, the same were banned as occurring among the descendants of four Gotras viz., that of the groom's father; of his
mother's father; of the father of his mother's mother and of the father of his father's mother.

On the other hand it will be seen from numerous instances that new blood was imported from distant places. Evidence is not wanting to show that Hindu Kings married the daughters of Greek Kings; some of them married the daughters of Patala Loka, i.e., the inhabitants of Peru, Mexico and such other places; and marriages between Indians on the one hand and Nepalese, Tibetans, Kabulis and Persians were of frequent occurrence. Kaikeyi, one of the queens of King Dasharatha, was the daughter of the King of Kabul. Instances could be multiplied from the Ramayana and the Mahabharata as well as from the great writings of Kalidas, the poet of poets.

27. In a paper on "Indian and Roman marriage ceremonies compared", Mr. S. S. Mehta, Bombay, said:—Since the commencement of civilization, the Hindoos have considered marriage as a unifying act for lifetime, and the restraint of chastity came to be put on the sexual desire of the married couple. According to Spencer, in the primitive stage, in the west, man had no marriage institution and the sexual union was a matter of passing desire free from all permanent obligations. In the epic period of Indian-Aryan civilization, propagation of race was a predominant idea and a woman could be permitted to have children begotten in lieu by the best specimens of the race, as required by the principles of eugenics. Marriage is a sort of limitation imposed upon sexual relations.
According to Prof. W. B. McDaniel, a roman union was a marriage of convenience, so that, the the bride and the bridegroom had to depend upon a post-marital propinquity to develop a love that precedes american marriages. The roman marriage had three forms: (i) the Confarreate wedding, so called because the couple ate together a cake of Spelt for a sacred offering to Jupiter; (ii) the marriage effected by a fictitious sale of the bride to the bridegroom in the presence of 5 witnesses, and of a person who held a pair of scales; (iii) the marriage that demanded a year of uninterrupt ed living together. There was no betrothal among the early Romans. Among the Italians is an american city, betrothal is purely a parental affair, the girl not even knowing whom she was to marry. The maiden wore an iron ring on the third finger of left hand from which it was believed a nerve ran straight to her heart. The Indian Aryans believed the left part of a woman's body holier than the right side and the third finger to be more suited to the growth of love. As regards the age of the couple among the early Romans, a girl could marry at 12 and a boy at 14. A ban is laid on Tuesday and Friday for marriage. A striking similarity exists as regards (1) parental accord; (2) consent of the marrying couple. (3) joining of right hands before witnesses, (4) escorting the bride to her husband's place in procession, (5) the groom dividing the girl's hair into six tresses, whereas among the Hindus the
hair is divided into three tresses; (6) the bride wearing a garland of flowers during matrimony; (7) initial marriage ceremonies which are performed at the house of the bride’s father; (8) a professional diviner (astrologer) ascertaining the omens; (9) a matron friend of the bride clasping the couple’s right hands; (10) the ceremony performed when the evening star rose. The true idea of marriage is the union of souls for uplifting the conditions of the couples towards their mutual spiritual advancement.

28. In a paper on “Exogamy among the Mala-Aryans of Travancore”, Mr. L. A. Krishna Iyer, Calcutta, pointed out that the Social organization of the Mala-Aryans is built on the foundations of exogamy. The tribe is divided into 6 clans, Members of the same clan stand in the relation of brother and sister, and it would be incestuous to marry within the same clan. According to Westermarck, exogamous rules are regarded as social survivals from very remote times and the underlying idea is to keep the home free from incestuous intercourse.

29. In a paper on “Anthropometry of the Kanikars of Travancore”, Mr. L. A. Krishna Iyer, Calcutta, said:—Anthropometry as a test of race stands much discredited in the eyes of many eminent anthropologists. There are at the same time ardent supporters who rely on the absolute certainty of the nasal and cephalic indices, of hair, and colour as permanent tests of racial distinction.
Collignon formulates the theory that, in a given race, leptorrhiny is in direct relation to stature. The more it is raised, the longer the nose. The lower the stature, the more the nose tends toward mesorrhiny. The nasal index of the jungle Kanikars is found to be higher than that of the domesticated Kanikars of the plains. This change is a result of contact metamorphosis.

30. In a paper on "Symbolic sacrifice of cows and buffaloes among certain Brahmans",—Rai Bahadur Hiralal, Jubbalpore, referred to customs of Śṛimāli Brāhmans, killing a symbolic buffalo, Kalanki Brāhmans killing a cow and other Brāhmans sacrificing pigs. The details show these to be relics of human sacrifices, for which a sister's son from amongst the relatives was apparently the best available victim.

31. In a paper on "Two types of sedentary games prevalent in British Garhwal", Prof. H. C. Das-Gupta, Calcutta, described two types of games. One of them—bagh-batti is a type of tiger-play and the other—bheri-bakri is a type of game with two kinds of pieces the movement of which is regulated by the throw of 4 pieces of cowries.

32. In "A short account of The International Conference of Anthropology at Amsterdam", Dr. J. H. Hutton, Naga Hills, who represented India at the International Conference of Anthropology which took place recently at Amsterdam, gave the members of the Indian Science Congress an idea of the main things done in this Conference.
INDIAN ETHNOLOGY IN CURRENT PERIODICAL LITERATURE.

In the December (1927) number of *Man*, Mr. A. M. Hocart writes a note on "Are Savages Custom-bound?" and challenges the common supposition that savages are slaves of custom to a far greater degree than the White Man. Mr. Hocart's long residence in the Pacific and daily intercourse with the people, specially children, has impressed upon him the thinness of their customary life as compared with the extraordinary complexity and pervasiveness of the white man's.

In the *Journal of the Asiatic Society of Bengal* (vol. XXII, 1926, no. 5) issued January, 1928, Mr. J. P. Mills, I. C. S. gives 29 *Folk Stories of the Lhota Nagas* with translations in English. In the concluding number for 1926 of the same Journal (issued in March, 1928) Mr. M. M. Chatterjee describes certain "Marriage Customs in Bengal", and Dr. J. H. Hutton, C. I. E., I. C. S. describes 'Some Megalithic Work in the Jaintia Hills' with interesting illustrations, and Mr. D. N. Majumdar, M. A., P. R. S. writes a note on 'The Boganial Breadth of Some Hos of Kolhan'.

In the Quarterly Journal of the Mythic Society for January 1928, M. L. Krishna Iyer, M. A. contributes "A Preliminary Note on the Hill-Pandarams of Travancore" and a paper on 'Anthropometry of the Kanikars of Travancore'; and Prof. Sarat Chandra Mitra, M. A., B. L. continues his "Studies in Bird-Myth".
In the *Visva-Bharati Quarterly* for January, 1928, Prof. Kshiti Mohan Sen gives an account of the *Dadupanthi* sect in an article headed, "Dadu’s Brahma Society”.

In the March (1928) number of the *Indian Historical Quarterly*, Mr. Umesh Chandra Bhat-charjee, M. A. contributes an article on "*Upanishad-vrata*" in which he gives an account of the sacramental initiation to the study of the *Upanishads* in Ancient India. In the same issue of the Journal, Mr. Kamta Prasad Jain contributes on article on "*Marriage in Jain Literature*.

In the *Cosmopolitan* (Calcutta) for January, 1928, Dr. Arthur R. S. Roy, Ph. D., D. Litt, contributes an article on "*Mysteries of South Indian Temples*".
NOTICES OF BOOKS.


In these volumes from the pen of the two foremost authorities on the ethnology of the Australian tribes, we have an exhaustive and illuminating account of one of the largest and most interesting of the tribes of Central Australia. The authors, who had exceptional facilities and equipment for an intensive study of the tribe, had familiarised us in their previous work on "The Native Tribes of Central Australia" with most of the essential features of Arunta life and mentality, such as, for example, their interesting theory of conception, their beliefs regarding the Alcheringa (described in the present volumes by the more correct term Alchera) and the Churinga and the peculiar Intichiuma (called in the present volumes by the more correct name of Mbanbiuma) ceremonies. Their previous account of the tribe has now been considerably amplified and mostly rewritten in the light of further investigations by the accomplished authors. The most interesting new material presented in the present enlarged edition is concerned with the belief in the splitting of both the original Churinga and Kuruna or spirit, the first to give rise to two Churinga, one associated with a male, the other with a female spirit; the second to give rise to a new Kuruna
which undergoes reincarnation, and its double, the Arumburinrga, which remains unchanged and is everlasting. The complicated subject of terms of relationship has been rewritten in the light of fresh researches which have revealed the existence of further restrictions in regard to marriage than had previously been suspected, and which Sir Baldwin Spencer thinks, "may possibly throw some light on the early development and recognition of the family as now known to us, out of a wider relationship". These volumes will be eagerly welcomed by all students of Anthropology.

The Kiwai Papuans of British New Guinea.

In this most interesting volume we have for the first time an authoritative account of the Kiwai Papuans of British New Guinea. As a result of two years of intensive research among the Kiwai-speaking peoples in the Western Division of British Guinea, the author has supplied us with a mine of valuable information and placed all anthropologists in his debt. The book is divided into thirty chapters under following headings,—I. Country and People; II. Houses; III. Ethnography; IV. Astronomy, Time-calcula-
tion and Meteorology; VI. Agriculture; VII. The Harpooning of Dugong and Turtle; VIII. Fishing; IX. Warfare; X. Social Organization and Intercourse; XI. Totemism; XII. Property; XIII. Traffic and Commerce; XIV. Ideas regarding the Anatomy of the Human Body and Illness; XV. Birth; XVI. Puberty; XVII. Courtship and Marriage; XVIII. Death and Burial; XIX. Ideas regarding the Soul; XX. The Spirits of the Dead; XXI. Mythical Beings; XXII. Black Magic and Sorcerers; XXIII. The Hōriōmu or Great Pantomime Ceremony; XXIV. The Moguru or Life-Giving Ceremony; XXV. The Mimia or Fire-Ceremony of the Stone or Wooden Images; XXVI. The Gāera or Ceremony of the Fertility Tree; XXVII. The Nigori or Turtle Ceremony XXVIII. Minor Festivities and Dances; XXIX. Folk-lore; XXX. Children’s Games; XXXI. Ideas regarding Animals and Plants; XXXII. Arithmetic, Gesture-Language, Signals and Symbols; XXXIII. The Pidgin-English of the Kiwais.

The book is supplied with an exhaustive Index and numerous illustrations and a map. Dr. Haddon’s appreciative and illuminating Introduction adds considerably to the value of the book.

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**Adventure:** The Faith of Science and the Science of Faith. *(London Macmillan, &Co. 1927)*

**PP. XII + 247. Price 7 s. 6 d. net.**

The book consists of six essays of absorbing interest, headed as follows: *The Dynamic of Science,*
by Alexander S. Russel, M. C., M. A., D. Sc.;
Beyond Knowledge, by John Macmurray, M. C., M. A.; Moral Adventure, by Burnett H. Streeter, M. A., D. D., F. B. A.; IV Finality in Religion, by Burnett H. Streeter, M. A. &c; V Objectivity in Religion, by John Macmurray, M. C., &c; and VI Myth and Reality, by Catterine M. Chilcott, M. A. As the authors tell us in the Introduction, this book is not a collection of detached essays but is "the outcome of a continued effort at corporate thinking on the nature of science and religion, and on their relation to one another". The unifying idea which underlies all the essays is that indicated in the title of the book—the idea of adventure. "Recent changes in the outlook of thinkers in the spheres of Science and Religion tend to bring out in different ways the dynamic and adventurous quality in both". The authors believe that the period when the 'reconciliation' of Science and Religion was the grand problem which men could regard, according to their temperaments, as a matter either for hope or for despair, is passing away—to be succeeded by a period in which they will be regarded as two diverse but analogous and intrinsically connected adventures of the spirit of man. The essays are very thoughtful and well-written and will be found immensely interesting and thought-provoking.

The object of this thoughtful volume is "to express definitely the consequences in ethics and religion of accepting the principle of evolution in philosophy". The author very clearly shows how the great concept of evolution and the particular application of it to the story of our human origin have altered completely the whole perspective of the world problem. "There has come to pass in our generation what has more than once occurred before in the short historical period covered by the human continuous historical record, a sudden widening of the intellectual horizon, a new scientific conquest, a vast expansion or outward push of the cosmic environment making the old religious conceptions inadequate. The imagery which once sufficed to overwhelm and awe the human mind has become childish, fanciful and even grotesque". "Evolution has brought into existence a kingdom of man. Man the outcome of ages, the transient possessor of the vast heritage, finds himself—how he knows not—why he knows not—awakened to the consciousness that his destiny is somehow placed in his own hands. The old myth of his creation has suddenly assumed for him an entirely new significance. If we substitute for the anthropomorphically imagined Lord God, planting a garden in Eden and instructing his new-made creature in his duties and privileges, the new idea,
of the living activity, the push of life, which has evolved for itself in its continual creation of new forms a species of higher order in which its creative power may be actualised, and to this new form has entrusted the power of determining its own fate by freeing it from its immediate dependence on its environment, we may still find in the language of the old myth the exact expression of the new science. An active, living force has given man lordship, has given man the choice to eat of the tree of life, carpe diem, or to eat of the tree of knowledge of good and evil with its fatal consequences. The choice has been made. Man has eaten the forbidden fruit and his eyes have been opened. And now he finds his fate in a peculiar sense is in his own hands. He can turn his knowledge to self-destruction, or he can work for a kingdom of man. In either case he must reckon with God, not indeed with a God in his own image, a God who is no more than the fearful projection of his own being against a confused and undiscriminated background, but with the God from whom he derives his being, the ceaseless creative activity which has actualised him, which is ever working in him and through him and beyond him.”

The religious ideal which the evolution theory offers us is the ideal of a perfected humanity. “It expresses itself in manifold forms, but in the depths of human nature a profound, twofold division of spiritual activity appears, a creative imagination and a creative reason. In living individuals this
activity finds varying expression, making of our leaders poets and philosophers. If the ideal of humanity is ever realised, it will be when poets have created the new Jerusalem and when philosophers are kings." We heartily welcome this most interesting and stimulating volume.


In this volume the author has attempted to show in what manner and to what extent ‘primitive’ thought and ‘primitive’ modes of observation and deduction have influenced the evolution of the science and art of medicine. The book is divided into two parts, Part I. is subdivided into three chapters headed respectively,— I. The Evolution of the Medical Man; II. Primitive Pathology; and III. Primitive Treatment. Part II consists of fourteen chapters headed respectively,— I. The Evolution of Animal Remedies, II. The Evolution of Botanical Remedies; III. Astrology in Medicine; IV. Rocks, Stones and Lithontriptics; V. Rings, Bands, Constrictions and Soul Cures; VI. Healing Wells and Waters. The Evolution of Balneology; VII. Colours, Numbers, Etc; VIII. The Evil Eye; IX. The Fasting Spittle, Etc; X. The Midwife, Menstruation and Impregnation; XI. Pregnancy; XII. Midwifery; XIII. Surgery,
Major and Minor, with Counter-Irritation; XIV. Circumcision and other Mutilations. A Bibliography for each chapter of the book is appended. Anthropologists will accord a hearty welcome to this volume in which the author has for the first time sought to give a generalised account of early medicine and surgery and attempted an analysis of the psychology behind 'primitive' man's ideas and practices relating thereto.


Dr. Dahlke in well-known as one of the foremost European exponents of the philosophy and religion of Goutama Buddha. And his luminous exposition proceeds not from a mere intellectual appreciation of that philosophy but from a personal realisation of its living truth. The author characterises Buddhism, in a word, as the Doctrine of Actuality. To quote his eloquent language, "Buddhism stands at the gate of all the mental life of all times, threatening and alluring, destroyer and fulfiller in one, bearing in his hands the one gift, this thing 'not astonishing yet never heard before'; Actuality. With this one gift which gives all and takes all, it stands today also at the door of our mental life with a message that rises to the immeasurable, of whose immeasurability the
Buddha himself was aware in advance when he called the Dhama the "Doctrine for gods and men", for all beings, the which doctrine, today, however, as he said, has become actual because mental life, from the phase of being concerned with one single group, the inhabitants of Holy India, in which it flourished at the time of the Buddha, has grown up to the phase of the community of the whole world". The book is invaluable to all students of Comparative Religion.


The present volume is a sequel to the author's former book entitled "Studies in Religion, Folk-lore and Custom in Borneo and the Malay Peninsula". This highly interesting book consists of 26 papers on the Pagan Races of the Malaya, on Malay beliefs, on Malay technology, and on some of the prehistoric antiquities of the Malay Peninsula. Part IV, in particular, of the present book which deals with Malayan megaliths, neoliths, ancient objects in bronze, iron and other materials considerably advances our knowledge of the subject. In Chapter XXIV, the author has made some general statements about the life of the ancient cave-dwellers of the Peninsula, based on his exploration of the caves of the Peninsula. This
section has a particular significance in that it reveals the close affinities that existed between the neolithic culture of the Malay Peninsula and that of Indo-China and, to some extent, with that of the Dutch East Indies. The book is illustrated by 437 interesting plates. The author has placed anthropologists in his debt by publishing the valuable results of his researches in the present volume and its predecessor.

Notes on Greek Sculpture.—*By Sir Charles Walston (Waldstein), Litt. D., Ph. D. (Cambridge University Press. 1927). P.P. 2-3 (Quarto). Price 3 s. 6 d. net.*

These “Notes” deal with the Constantinople and Early Athlete Statues, and a marble draped female figure in Burlington House. The learned author suggests that the marble torso formed part of the Nereid-monument of Xanthus. As for the figure of an athlete on the sepulchral marble slab, found on the Island of Nisyros in November 1900, the author adduces convincing reasons for holding that the figure represents not a diskobolos but a pentathlete. It is pointed out that the sculptor’s art in commemorating the victory of a pentathlete—one skilled in five forms of athletic activity (namely boxing, wrestling, running, jumping and throwing the discus and the spear) was fraught with many difficulties. The author would assign to this sculpture a slightly later
date than 470 to 460 B. C. which S. Reinach assigns to it. And so dated, it is of importance in showing the evolution of relief technique in the transitional period of Greek art down to the year 450 B. C., as well as in the treatment, especially of the head and the hair in early athlete statues. These 'Notes' are profusely illustrated and are highly interesting and instructive.


This book deals with Early Man in relation to the various geological epochs from the Tertiary period till the dawn of the Historical period. This up-to-date summary of our present knowledge of Prehistoric Man will serve as an excellent introduction to the literature on the subject. The general reader too will find the book extremely interesting. Recent archaeological expeditions and discoveries in different parts of the world have been briefly dealt with, and the archaeological narrative has been carried down from the Stone Age to the Bronze and Early Iron Ages, and the problems presented by the ancient standing stones, the race question, culture-drifting, and the language question have been briefly but lucidly discussed. The book will form a welcome addition to the library of the student of Early Man.

We heartily welcome this revised and enlarged edition of the author's previous work on Prehistoric India. So far, this is the only comprehensive sketch we possess of the prehistory of India. And the author has collected, collated and systematised all available information about the prehistoric culture of India, with commendable industry and and great erudition. The book teems with quotations and references and is packed with information. The only criticism that may be offered is that the author's identification of different types of Indian implements of paleolithic appearance with European Palaeoliths by their form might have been withheld so long as sufficient stratigraphic or paleontological evidence is not forthcoming in support of the antiquity claimed for them. Nor does there yet appear to be any convincing grounds in support of a pre-neolithic antiquity for the hitherto discovered Indian cave-paintings and rock-carvings. As for skeletal remains, the Adit-channalur and Bayna specimens have been authoritatively declared to be of modern type; and the results of the examination of the Mahenjo-Daro skeletons are still awaited.

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BOOKS FOR SALE.

at the "MAM IN INDIA" office,

Church Road, Ranchi.


SOME OPINIONS.

SIR JAMES G. FRAZER, D. C. L., L. L. D., Litt. D., F. B. A.,
F. R. S., O. M., Professor of Anthropology in the Trinity College,
Cambridge, writes:—

.........I find it characterised by the same high qualities as
mark your former monographs on the Mundas and Oraons.
You have rendered a valuable service to anthropology by plac-
ing on record the customs and beliefs of a very primitive tribe
about which very little was known before and which, but for
your careful and prolonged observations, might have passed
away practically unknown. As in your former volumes I
admire the diligence with which you have collected a large
body of interesting facts and the perfect lucidity with which
you have set them forth. The book is a fine specimen or a
monograph on an Indian tribe and must always remain the
standard authority on the subject. I congratulate you heartily
on your achievement, and earnestly trust that you will continue
your valuable investigation and give us other similar accounts
of other primitive and little known Indian tribes.

SIR ARTHUR KEITH, M. D., F. R. C. S., L. L. D., F. R. S., Con-
servator of the Museum and Hunterian Professor, Royal College
of Surgeons of England, writes:—

.........You have done a splendid piece of work—one which will
make Europe indebted to you.........

DR. A. C. HADDON, M. A., Sc. D., F. R. S., Reader in Ethno-
ology, of Cambridge, writes:—
I.—A STATISTICAL STUDY OF THE CHINESE HEAD.

BY

P. C. MAHALANOBIS

1. The material for the present study consists of two series of measurements on living men taken by S. M. Shirokogoroff (Anthropologist, Russian Academy of Science) in 1908-12 and 1923-24 respectively, and published by the North China Branch of the Royal Asiatic Society in the form of two reports:—


(ii) “Anthropology of Eastern China, etc.” Extra Vol. IV, Shanghai, 1925.

Shirokogoroff classified his material according to the province of origin (birth place) of the person examined, and in the earlier portion of my comparisons I have retained his classification. The following list gives the names of the different provincial groups. The number of individuals available in each case is given within brackets.

The so-called “non-selected” data in every case consist of persons measured in hospitals and asylums, while the “criminal” data belong to inmates of Shanghai.
and Hong-Kong Municipal gaols. It will be noticed that although Shirokogoroff uses the name "non-selected" such data do not really represent a random sample of the general population but are selected with reference to disease and disorders of the mind.

(i) Manchuria (96).
(ii) Chihli (114).
(iii) Shantung (185).
(iv) Kiangsu "non-selected" (102).
(v) Kiangsu "criminal" (113).
(vi) Chekiang "non-selected" (62).
(vii) Chekiang "criminal" (44).
(viii) Anhwei "non-selected" (44).
(xi) Kwangtung "non-selected" (110).
(x) Kwangtung "criminal" (220).

In addition to the above Chinese samples I have also taken (xi) Koreans (141), consisting of men from North Korea and the maritime provinces of Siberia, and (xii) Manchus (81), from the Aigun district of Heilung-Kiang.

2. In the present paper I have considered only the measurements on the head (flesh), altogether 16 in number. Shirokogoroff gives the mean values for each province, but does not usually give individual measurements or standard deviations. I have therefore been obliged to use standard deviations calculated from a long series of measurements of 550 Korean men published by T. Kubo.¹

Mean values of groups discussed in the present paper are given in Table I(A).

¹ "Beiträge zur physischen Anthropologie der Koreaner" (Mitt. med. Fakult. Kaiser-Univ. Tokio, Bd. xii, 1913).
<table>
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<tr>
<th></th>
<th>Chinese of Manchuria</th>
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<th>Shantung</th>
<th>Kiangsu</th>
<th>Chekiang</th>
<th>Anhwei</th>
<th>Kwangtung</th>
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<td></td>
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<td></td>
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<tr>
<td>Height of Head</td>
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<td>133.6</td>
<td></td>
<td>135.4</td>
<td></td>
<td>134.1</td>
<td></td>
</tr>
<tr>
<td>Ear Length</td>
<td>96</td>
<td>63.6</td>
<td></td>
<td>64.7</td>
<td></td>
<td>63.7</td>
<td></td>
</tr>
</tbody>
</table>

A Statistical Study of the Chinese Head. 109
Mean values of certain samples from Northern Asia and China (Shirokogoroff). The Chinese groups are obtained by pooling together some of the provincial means given by Shirokogoroff.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  Mean</td>
<td>N  Mean</td>
<td>N  Mean</td>
<td>N  Mean</td>
<td>N  Mean</td>
</tr>
<tr>
<td>Head Length</td>
<td>141 183·1</td>
<td>81 181·9</td>
<td>297 187·8</td>
<td>365 186·4</td>
<td>330 185·2</td>
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<tr>
<td>Head Breadth</td>
<td></td>
<td>153·7</td>
<td>80 151·3</td>
<td>148·3</td>
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<td>Bregmomatic Breadth.</td>
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<td>79 140·3</td>
<td>140·5</td>
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<td>Nasal Height</td>
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<td>Nasal Breadth</td>
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<td>81 37·9</td>
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<td>37·3</td>
</tr>
<tr>
<td>Cephalic Index</td>
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<td>83·7</td>
<td>80 83·5</td>
<td>79·1</td>
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</tr>
<tr>
<td>Nasal Index</td>
<td></td>
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<td>81 83·0</td>
<td>89·9</td>
<td>87·3</td>
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<td>Morphological Facial Index.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Frontal Diameter.</td>
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<td>79 83·9</td>
<td>295 83·9</td>
<td>81·7</td>
<td>81·6</td>
</tr>
<tr>
<td>Bigonial Diameter</td>
<td>140 112·3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological Face Length.</td>
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<td>79 188·3</td>
<td>296 192·1</td>
<td>186·6</td>
<td>183·6</td>
</tr>
<tr>
<td>Internal Ocular Breadth.</td>
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<td>33·9</td>
<td>81 34·1</td>
<td>34·3</td>
<td>34·9</td>
</tr>
<tr>
<td>External Ocular Breadth.</td>
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<td>95·3</td>
<td>93·5</td>
<td>95·6</td>
<td>92·2</td>
</tr>
<tr>
<td>Height of Head</td>
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<td>134·5</td>
<td>132·6</td>
<td>134·6</td>
<td>134·3</td>
</tr>
<tr>
<td>Ear Length</td>
<td>141 63·9</td>
<td></td>
<td>65·0</td>
<td>64·1</td>
<td>61·2</td>
</tr>
</tbody>
</table>
3. We shall first test whether the different provincial groups may be considered to be samples drawn from the same general population, or whether they must be considered to be statistically divergent, i.e. belonging to different populations. I have used Prof. Pearson's $C^2$ test for this purpose\(^2\), and I give the values of $C^2$ for the 45 different pairs of groups in Table II.

The mean value of $C^2$ for two groups which belong to the same population is zero with a probable error of $\pm 0.67449 \sqrt{\frac{2}{p}}$, where $p$ is the total number of characters. In the present case $p=16$, and therefore the probable error $= \pm 0.24$ approximately in every case.

The test therefore consists in comparing the observed values of $C^2$ with a theoretical value of $0 \pm 0.24$. If the observed value does not differ from zero by more than say 0.72, then the two groups may be considered to be drawn from the same general population; on the other hand if the observed value is greater than 0.72, then the chances are that the two groups belong to different populations.

A glance at Table II will show that all the coefficients are significantly greater than 0.72, with only two exceptions, namely, Chihli and Shantung with a coefficient of 0.65 $\pm 0.24$; Kiangsu criminal and Chekiang criminal with a coefficient of 0.54 $\pm 0.024$. We also notice that comparatively high values of $C^2$ occur several times in Table II, e.g., 53.79, 45.04, 45.78, etc.

We conclude that speaking generally the different provincial groups must be considered to be significantly differentiated from one another.

<table>
<thead>
<tr>
<th></th>
<th>Manchuria (96)</th>
<th>Chihli (113)</th>
<th>Shantung (184)</th>
<th>Kiangsu</th>
<th>Chekiang</th>
<th>Kwantung</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manchuria (96)</td>
<td>...</td>
<td>5.55</td>
<td>11.05</td>
<td>6.46</td>
<td>8.66</td>
<td>6.46</td>
</tr>
<tr>
<td>Chihli (113)</td>
<td></td>
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<td>0.65</td>
<td>12.97</td>
<td>11.70</td>
<td>6.10</td>
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<tr>
<td>Shantung (184)</td>
<td>11.05</td>
<td>0.65</td>
<td>...</td>
<td>16.45</td>
<td>13.11</td>
<td>6.05</td>
</tr>
<tr>
<td>Kiangsu “non-selected” (162)</td>
<td>6.46</td>
<td>12.97</td>
<td>16.45</td>
<td>...</td>
<td>3.84</td>
<td>1.08</td>
</tr>
<tr>
<td>Kiangsu “criminal” (113)</td>
<td>8.66</td>
<td>11.70</td>
<td>13.11</td>
<td>3.84</td>
<td>...</td>
<td>1.71</td>
</tr>
<tr>
<td>Chekiang “non-selected” (62)</td>
<td>6.51</td>
<td>6.19</td>
<td>6.05</td>
<td>1.08</td>
<td>1.71</td>
<td>...</td>
</tr>
<tr>
<td>Chekiang “criminal” (44)</td>
<td>9.66</td>
<td>10.35</td>
<td>9.97</td>
<td>4.99</td>
<td>0.54</td>
<td>2.58</td>
</tr>
<tr>
<td>Anhwei (44)</td>
<td>6.46</td>
<td>9.22</td>
<td>12.40</td>
<td>2.85</td>
<td>1.83</td>
<td>...</td>
</tr>
<tr>
<td>Kwantung “non-selected” (110)</td>
<td>43.78</td>
<td>45.04</td>
<td>53.79</td>
<td>33.30</td>
<td>28.37</td>
<td>10.17</td>
</tr>
<tr>
<td>Kwantung “criminal” (220)</td>
<td>37.48</td>
<td>34.60</td>
<td>38.50</td>
<td>23.67</td>
<td>18.91</td>
<td>10.20</td>
</tr>
</tbody>
</table>

Probable error is in every case $= \pm 0.24$ approximately.
4. I shall now proceed to discuss the actual magnitudes of the divergence between different groups. I have used for this purpose a certain coefficient of divergence defined by the following equation:—

\[ D^2 = \left[ \frac{T}{\hat{p}} \sum \frac{(M_p - M'_p)^2}{\sigma_p^2} \right] - \frac{(n+n')}{n.n'} \] .... (1)

with a variance given by

\[ \Sigma^2 = \frac{4}{\hat{p}} \left( \frac{n+n'}{n.n'} \right) \cdot \hat{D}^2 + \frac{2}{\hat{p}} \left( \frac{n+n'}{n.n'} \right)^2 \] ....... (2)

where \( M_p, M'_p \) are the observed mean values of the pth character in two groups of size \( n, n' \); \( \sigma_p^2 \) is a reliable value of the variance of the pth character which is kept constant throughout the whole series of comparisons, and \( \hat{D}^2 \) is the mean value of \( D^2 \). The summation extends over all characters, the total number of which is given by \( p \). ('}

Table III gives \( D^2 \) (together with the probable errors) computed in accordance with the above formulæ. I have used the standard deviations of a long Korean series for \( \sigma_p \) in equation (1), and observed values of \( D^2 \) for mean values \( \bar{D}^2 \) in equation (2).

I need hardly mention that \( D^2 \) measures divergence between two groups, i.e., the greater the value of \( D^2 \) the greater is the divergence, while the smaller the value of \( D^2 \) the greater is the resemblance between the two groups.

5. The “non-selected” (i.e. hospital and asylum inmates) and the “criminal” groups from the same province all give very low co-efficients. For example, Kiangsu .071±.017, Chekiang .094±.024, and Kwangtung .074±.011. The divergence is statistically significant but small in magnitude in every case.

(1) The theoretical foundations of equations (1) and (2) have been discussed by me in a separate paper which will be published shortly.
<table>
<thead>
<tr>
<th></th>
<th>Manchuria (96)</th>
<th>Chihli (113)</th>
<th>Shantung (184)</th>
<th>Kiangsu &quot;non-selected&quot; (102)</th>
<th>Kiangsu &quot;criminal&quot; (113)</th>
<th>Chekiang &quot;non-selected&quot; (62)</th>
<th>Chekiang &quot;criminal&quot; (44)</th>
<th>Anhwei &quot;non-selected&quot; (110)</th>
<th>Kwangtung &quot;non-selected&quot; (220)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchuria (96)</td>
<td>...</td>
<td>107 ± 017</td>
<td>...</td>
<td>081 ± 015</td>
<td>168 ± 020</td>
<td>173 ± 024</td>
<td>334 ± 037</td>
<td>215 ± 029</td>
<td>935 ± 046</td>
</tr>
<tr>
<td>Chihli (113)</td>
<td>107 ± 017</td>
<td>...</td>
<td>010 ± 006</td>
<td>237 ± 023</td>
<td>207 ± 021</td>
<td>158 ± 023</td>
<td>327 ± 036</td>
<td>353 ± 011</td>
<td>843 ± 042</td>
</tr>
<tr>
<td>Shantung (184)</td>
<td>175 ± 018</td>
<td>010 ± 006</td>
<td>...</td>
<td>251 ± 021</td>
<td>188 ± 018</td>
<td>131 ± 019</td>
<td>281 ± 031</td>
<td>...</td>
<td>746 ± 035</td>
</tr>
<tr>
<td>Kiangsu (102), &quot;non-selected&quot;</td>
<td>081 ± 015</td>
<td>237 ± 023</td>
<td>251 ± 021</td>
<td>...</td>
<td>071 ± 017</td>
<td>030 ± 013</td>
<td>162 ± 027</td>
<td>...</td>
<td>630 ± 037</td>
</tr>
<tr>
<td>Kiangsu (113), &quot;criminal&quot;</td>
<td>168 ± 020</td>
<td>207 ± 021</td>
<td>188 ± 018</td>
<td>071 ± 017</td>
<td>...</td>
<td>047 ± 013</td>
<td>018 ± 013</td>
<td>059 ± 018</td>
<td>497 ± 018</td>
</tr>
<tr>
<td>Chekiang (62), &quot;non-selected&quot;</td>
<td>173 ± 024</td>
<td>155 ± 023</td>
<td>131 ± 019</td>
<td>030 ± 013</td>
<td>047 ± 013</td>
<td>...</td>
<td>004 ± 024</td>
<td>003 ± 025</td>
<td>484 ± 038</td>
</tr>
<tr>
<td>Chekiang (44), &quot;criminal&quot;</td>
<td>334 ± 037</td>
<td>327 ± 036</td>
<td>281 ± 031</td>
<td>162 ± 027</td>
<td>018 ± 013</td>
<td>004 ± 024</td>
<td>...</td>
<td>...</td>
<td>314 ± 026</td>
</tr>
<tr>
<td>Anhwei (44), &quot;non-selected&quot;</td>
<td>215 ± 029</td>
<td>353 ± 011</td>
<td>350 ± 011</td>
<td>033 ± 021</td>
<td>059 ± 018</td>
<td>093 ± 025</td>
<td>083 ± 026</td>
<td>...</td>
<td>446 ± 041</td>
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<tr>
<td>Kwangtung (110), &quot;non-selected&quot;</td>
<td>935 ± 046</td>
<td>843 ± 042</td>
<td>746 ± 035</td>
<td>630 ± 037</td>
<td>497 ± 018</td>
<td>484 ± 038</td>
<td>314 ± 036</td>
<td>...</td>
<td>087 ± 011</td>
</tr>
<tr>
<td>Kwangtung (220), &quot;criminal&quot;</td>
<td>563 ± 031</td>
<td>464 ± 027</td>
<td>360 ± 020</td>
<td>342 ± 036</td>
<td>212 ± 018</td>
<td>204 ± 022</td>
<td>102 ± 020</td>
<td>227 ± 028</td>
<td>...</td>
</tr>
</tbody>
</table>
6. Chihli and Shantung are both situated in the north, and naturally enough they have a coefficient of only \( +.010 \pm .006 \) which is negligibly small. We have also seen that as judged by Pearson's \( C^2 \) test these two groups may be considered to be drawn from the same population. I have therefore clubbed them together to form a single "Northern Chinese" sample for later comparisons.

7. The 5 samples from the eastern provinces of Kiangsu ("non-selected" and "criminal"), Chekiang ("non-selected" and "criminal"), and Anhwei ("non-selected") all with one exception give coefficients less than .100 (values of \( C^2 \) less than 5.0), and therefore exhibit comparatively high association or resemblance with one another. The case of Kiangsu "non-selected" and Chekiang "criminal" with a coefficient of \( +.162 \pm .27 \) \( (C^2 = 4.99) \) is the only exception; but even here the value of \( D^2 \) is not significantly greater than \( +.100 \).

All these groups may therefore be considered to belong to a slightly generalised "Eastern Chinese" population, and I have accordingly pooled them together to form one such group.

8. Kwangtung (which lies much further south) appears to be definitely divergent from the other northern provinces. Here I have clubbed together the "non-selected" and "criminal" samples (with a small coefficient of \( +.074 \pm .011 \)) into one single group of "Southern Chinese."

In this connection I may note a curious fact that Kwangtung "criminals" show distinctly greater resemblance than Kwangtung "non-selected" with every other sample. Prof. Karl Pearson to whom I had shown this
result suggested as an explanation that "the "criminals" in this case included a larger proportion of men from other provinces (who for some reason or other wanted to keep dark their real province of origin), just as a large proportion of the criminals of London are foreigners."

9. I shall now compare the Manchus (80), the Koreans (141), and the Chinese of Manchuria (96) with the pooled samples of "Northern" (297), "Eastern" (365), and "Southern" (330) Chinese.

Table IV gives the observed values of Pearson's $C^2$. The theoretical value (on the assumption of no divergence) is $0 \pm .24$. It will be noticed that all the coefficients are significantly greater than zero, showing that all the groups may be considered significantly divergent.

**Table IV. — Value of $C^2$ for Chinese samples.**

(Probable error $= \pm 0.24$.)

<table>
<thead>
<tr>
<th></th>
<th>Koreans (141)</th>
<th>Manchus (80)</th>
<th>Chinese of Manchuria (96)</th>
<th>Northern Chinese (297)</th>
<th>Eastern Chinese (365)</th>
<th>Southern Chinese (330)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koreans (141)</td>
<td>...</td>
<td>18.10</td>
<td>3.97</td>
<td>20.68</td>
<td>25.37</td>
<td>75.75</td>
</tr>
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<td>18.10</td>
<td>...</td>
<td>5.89</td>
<td>17.71</td>
<td>13.12</td>
<td>43.58</td>
</tr>
<tr>
<td>Chinese of Manchuria (96)</td>
<td>3.97</td>
<td>5.89</td>
<td>...</td>
<td>10.45</td>
<td>11.64</td>
<td>49.19</td>
</tr>
<tr>
<td>Northern Chinese (297)</td>
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<td>17.71</td>
<td>10.45</td>
<td>...</td>
<td>32.75</td>
<td>80.64</td>
</tr>
<tr>
<td>Eastern Chinese (365)</td>
<td>25.37</td>
<td>13.12</td>
<td>11.64</td>
<td>32.75</td>
<td>...</td>
<td>49.58</td>
</tr>
<tr>
<td>Southern Chinese (330)</td>
<td>77.75</td>
<td>43.58</td>
<td>49.19</td>
<td>80.64</td>
<td>49.58</td>
<td>...</td>
</tr>
</tbody>
</table>

10. Table V gives the values of $D^2$ together with corresponding values of the probable error.

*Koreans* show very great resemblance with the Chinese of Manchuria (.070 ± .013), and moderate
<table>
<thead>
<tr>
<th></th>
<th>Koreans (141)</th>
<th>Manchus (80)</th>
<th>Chinese</th>
<th>Manchuria (96)</th>
<th>North (297)</th>
<th>East (365)</th>
<th>South (330)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koreans (141)</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Manchus (80)</td>
<td>...</td>
<td>0.348 ± 0.028</td>
<td>...</td>
<td>0.070 ± 0.013</td>
<td>0.217 ± 0.016</td>
<td>0.284 ± 0.018</td>
<td>0.767 ± 0.029</td>
</tr>
<tr>
<td>Chinese Manchuria (96)</td>
<td>...</td>
<td>0.070 ± 0.013</td>
<td>0.136 ± 0.020</td>
<td>0.144 ± 0.015</td>
<td>0.154 ± 0.015</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Northern Chinese (297)</td>
<td>...</td>
<td>0.217 ± 0.016</td>
<td>0.280 ± 0.023</td>
<td>...</td>
<td>0.200 ± 0.012</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Eastern Chinese (365)</td>
<td>...</td>
<td>0.284 ± 0.018</td>
<td>0.199 ± 0.018</td>
<td>0.154 ± 0.015</td>
<td>0.200 ± 0.012</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Southern Chinese (330)</td>
<td>...</td>
<td>0.767 ± 0.029</td>
<td>0.675 ± 0.035</td>
<td>0.664 ± 0.018</td>
<td>0.517 ± 0.019</td>
<td>0.285 ± 0.013</td>
<td>...</td>
</tr>
</tbody>
</table>
but quite appreciable association with the Northern (.217±.016) and Eastern (.284±.018) Chinese. The difference between the two latter coefficients (.067±.025) is not significant, which is not surprising since these two regions are actually contiguous.

Manchus (.348±.028) are substantially differentiated, while the divergence from the Southern Chinese (.767±.029) is still more marked.

11. Manchus show fairly close resemblance with the Chinese of Manchuria (.136±.020). Association with the Northern (.280±.023), and the Eastern (.199±.018) Chinese is also quite appreciable, the difference between the two latter coefficients (.081±.029) being again negligible. Divergence from the Koreans (.348±.028) is moderate, but is pronounced in the case of the Southern Chinese (.675±.035).

12. The Chinese of Manchuria show great resemblance with Koreans (.070±.013), suggesting strong intermixture or intense convergence, and very appreciable resemblance with Manchus (.136±.020), Northern Chinese (.144±.015) and Eastern Chinese (.154±.015). The Chinese of Manchuria would thus appear to have been derived largely from the Northern and Eastern provinces. They show marked divergence from the Southern Chinese (.664±.018).

13. Northern Chinese. Resemblance is greatest with the Chinese of Manchuria (.144±.015) and is fairly close with the Eastern Chinese (.200±.012), Koreans (.217±.016) and Manchus (.280±.023). But divergence from the Southern Chinese (.517±.019) is again quite marked.

14. The Eastern Chinese occupy an intermediate
region and quite naturally show fairly close resemblance with all the other groups. Association is closest with the Chinese of Manchuria (‘154±’015), and is almost equally great with both the Northern Chinese (‘200±’012) and the Manchus (‘199±’018). The resemblance with Southern Chinese (‘285±’013) and the Koreans (‘284±’018) is only a little less in degree, but is still quite pronounced.

15. The Southern Chinese are markedly divergent from most of the other groups. They are almost equally differentiated from Koreans (‘767±’029), the Manchus (‘675±’035), and the Chinese of Manchuria (‘664±’018), and only to a slightly lower degree from the Northern Chinese (‘517±’019). They show however an appreciable degree of resemblance with the Eastern Chinese (‘285±’013), which is not surprising as the eastern provinces are situated fairly close to the province of Kwangtung from which the southern group is drawn.

16. We thus see that all the Chinese groups from the northern provinces e.g. the Chinese of Manchuria, Northern Chinese and Eastern Chinese are closely associated with one another, and all show fairly close resemblance with both Manchus and Koreans who also come from the north. The Southern Chinese on the other hand are clearly differentiated from practically all the northern groups, with the single exception of the Chinese from the eastern provinces (which are adjacent to Kwangtung) with whom they show fairly close association.

Koreans and Manchus, although both show appreciable resemblances with all the Chinese groups from the north, are distinctly differentiated from each other.
They however resemble each other more closely than either of them resembles the Southern Chinese.

17. If we confine our attention to the Chinese samples and look at Table V as a whole and compare it with a map of China, we perceive a very simple relationship between geographical proximity and physical resemblance: the smaller the distance between any two regions the greater is the resemblance between the inhabitants of those two regions, or the greater the distance between any two regions the greater is the divergence between the inhabitants of those two regions.

The Northern and Southern populations are in fact highly differentiated from each other, the change occurring gradually through the eastern provinces lying in the centre.

18. It will be interesting to compare how the different characters vary from group to group. One way of doing this would be to determine the inter-class (or “extra-group” as it may be more conveniently called) standard deviations for the whole family, and compare these inter-class standard deviations with the corresponding intra-class S. D.’s.*

* The inter-class (or extra-group) variance is defined for any particular character by

\[ \Sigma^2 = \frac{1}{q} \sum (M - M_g)^2 \] ...............................(3.0)

where \( M \) is the average for the whole family, and \( M_g \) is the mean for the \( q \)th group, and the summation extends over all \( q \) groups. It will be seen from the above definition that \( \Sigma_p \) represents the average separation (for the \( p \)th character) of each group-mean from the general mean. If we denote by \( \sigma_p \) a reliable intra-class standard deviation, then it represents the average separation of an individual from its own group-mean. \( \Sigma_p \) thus represents the variation from group to group, while \( \sigma_p \) represents the variation within the group. As already mentioned I have used throughout Korean values of intra-class variances.
Table VI gives the average value of the ratio $2 \Sigma^2/\sigma^2$ for each character separately (for all the 12 provincial samples discussed in the present paper). Remembering that the mean value of $(M-M')^2$ is simply $2 \Sigma^2$, we notice that $2 \Sigma^2/\sigma^2$ will give the mean value of $D^2 = (M-M')^2$ for the whole family for any particular character. The quantity $2 \Sigma^2/\sigma^2$ therefore gives the average value of the coefficient of divergence (neglecting the small correcting term for the size of the samples) for any character for the family as a whole.

Table VI.—Inter-class and intra-class standard deviations.

<table>
<thead>
<tr>
<th>Character</th>
<th>$\Sigma^2$</th>
<th>$\sigma^2$</th>
<th>$\sigma^2$</th>
<th>$2 \Sigma^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intercalar variance</td>
<td>Intracalar variance</td>
<td>$\Sigma^2$</td>
<td>$\sigma^2$</td>
</tr>
<tr>
<td>Head Length</td>
<td>4.823</td>
<td>50.341</td>
<td>5.219</td>
<td>0.191</td>
</tr>
<tr>
<td>Head Breadth</td>
<td>5.167</td>
<td>31.066</td>
<td>3.007</td>
<td>0.333</td>
</tr>
<tr>
<td>Morphological Length</td>
<td>4.436</td>
<td>34.137</td>
<td>3.849</td>
<td>0.260</td>
</tr>
<tr>
<td>Bizygomatic Breadth</td>
<td>3.541</td>
<td>24.346</td>
<td>3.439</td>
<td>0.281</td>
</tr>
<tr>
<td>Nasal Height</td>
<td>2.154</td>
<td>10.774</td>
<td>2.500</td>
<td>0.400</td>
</tr>
<tr>
<td>Nasal Breadth</td>
<td>0.028</td>
<td>7.949</td>
<td>142.857</td>
<td>0.007</td>
</tr>
<tr>
<td>Cephalic Index</td>
<td>3.311</td>
<td>24.663</td>
<td>3.723</td>
<td>0.269</td>
</tr>
<tr>
<td>Nasal Index</td>
<td>10.779</td>
<td>58.777</td>
<td>2.727</td>
<td>0.369</td>
</tr>
<tr>
<td>Morphological Facial Index</td>
<td>1.199</td>
<td>19.192</td>
<td>8.000</td>
<td>0.125</td>
</tr>
<tr>
<td>Minimum Frontal Diameter</td>
<td>0.892</td>
<td>20.322</td>
<td>11.389</td>
<td>0.087</td>
</tr>
<tr>
<td>Bigonial Diameter</td>
<td>5.170</td>
<td>33.014</td>
<td>3.187</td>
<td>0.313</td>
</tr>
<tr>
<td>Physiological Face Length</td>
<td>14.749</td>
<td>47.594</td>
<td>1.614</td>
<td>0.610</td>
</tr>
<tr>
<td>Internal Ocular Breadth</td>
<td>0.392</td>
<td>7.873</td>
<td>10.040</td>
<td>0.090</td>
</tr>
<tr>
<td>External Ocular Breadth</td>
<td>10.876</td>
<td>17.970</td>
<td>0.827</td>
<td>1.210</td>
</tr>
<tr>
<td>Height of Head</td>
<td>2.086</td>
<td>46.529</td>
<td>11.161</td>
<td>0.089</td>
</tr>
<tr>
<td>Ear Length</td>
<td>3.985</td>
<td>20.442</td>
<td>2.566</td>
<td>0.390</td>
</tr>
</tbody>
</table>
19. Looking at Col. (5) in Table VI we notice that
the variations of Nasal Breadth (‘007), Minimum Frontal
Diameter (‘087), Height of the Head (‘089) and Internal
Ocular Breadth (‘090) are extremely small, and therefore
these characters remain practically constant for the
whole family.

Morphological Facial Index (‘125), Head Length
(‘191), Morphological Face Length (‘260), Cephalic Index
(‘269), Bizygomatic Breadth (‘281), Bigonial Diameter
(‘313), and Head Breadth (‘333) are moderately variable,
while the greatest variations within the family occur in
Nasal Index (‘367), Ear-Length (‘390), Nasal Height
(‘400), Physiological Face Length (‘610), and to a much
more pronounced degree in the External Ocular Breadth
(1·210).

20. A glance at Table I(B) shows that among the
Chinese there is quite a gradual decrease in the External
Ocular Breadth (from 95·6 mm. to 88·1 mm.), Physiolog-
al Face Length (from 192·1 to 183·6), Ear-length
(from 64·1 to 59·6), Morphological Face Length (from
117·8 to 112·5), Bigonial Diameter (from 109·2 to 105·3)
and Head Length (from 187·8 to 185·2), as we pass from
the northern to the southern provinces. Koreans fall
in line with the Chinese for every character except the
Head Length, while Manchus differ only in Head
Length and Physiological Face Length.

21. The present study indicates therefore that Nasal
Breadth, Minimum Frontal Diameter, Height of the
Head, and Internal Ocular Breadth are constant or
family characteristics for the provincial samples dis-
cussed here, while the variation within the family is
most strongly marked in External Ocular Breadth,
Ear-length, Morphological Face Length, Bigonial
Diameter, Physiological Face Length and Head Length.
II. INDIAN AND ROMAN MARRIAGE CEREMONIES COMPARED

By S. S. Mehta, B. A.

If we trace the history of marriage among the Hindus to the remotest RigVedic period, it will be easy to note that from the very dawn of civilization the Hindus have considered marriage as a unifying act, not for merely conjugal relations but for life-time. The restraint of sexual faithfulness or what is termed in popular language as chastity came to be put on the sexual desire of the married couple. In the West in the primitive stage, observes Spencer, there was no marriage institution and the sexual union was a matter of passing desire free from all sorts of permanent obligations. In the primitive society of the then flourishing Indians—Aryans—promiscuous intercourse was not the rule but a stray feature. The Mahabharata, no doubt, puts forth the instances of Kunti and Draupadi, from which some critics might be felt inclined to draw some unwarranted conclusions; but so far it is true that in the Epic period of Indian—Aryan—Civilization propagation of race was a predominant idea; and a woman could be permitted to have children begotten in her by the best specimens of the race, as required by the principles of Eugenics. Kunti allowed herself to be treated by the best specimen of Truth and Purity to have Yudhishthira begotten in her; by the best specimen of Heroism to have Arjuna
born in her; and so on; and so also did Draupadi marry actually the five brothers—the best specimens of the race.

Moreover, in the marriage songs that are sung, we find three ideals treated as worth imitation:—Siva and Pārvatī; Rāma and Sītā; and Krishna and Rukmini. It would be a lengthy treatment ending in tediousness if attempts were made to explain why Krishna and Radha are not chosen as the subject of marriage songs but Krishna and Rukmini; for there are many reasons for it; suffice it however to state that Krishna and Rukmini were legally and religiously married in a sense. Choice-marriage prevailed in some castes no doubt; and Rāma and Sītā afford a perfect ideal of the type. Arjuna and Draupadi are a result of self-chosen marriage with a stake that had to be carried out; and so was the marriage of Rāma and Sītā; but that of Rāma and Sītā was hallowed with the highest type of Purity and Chastity, whereas Draupadi married all the five brothers. Again the choice-marriage of the Aryans has not much in common with the Love-marriage of the West till we come down upon the times of Dusyanta and Sakūntala, where few traces of the latter type are found as predominant, under Gāndharvā Vivaha.

Marriage, in all the eight time-honoured forms, is a sort of limitation imposed upon sexual relations. There is no reason to repudiate the result arrived at by Western thinkers that as soon as men, in the primitive stage of civilization, began
to live in groups or families as we might call them now, they fell to fighting and that stage is known as the stage of strife; and by experience they must have learnt that internal unity in a group could be preserved by custom. Organic unity secured, marriage must have proved as a means to raise groups to higher positions.

In the next stage, according to the West, again men came to treat women as slaves; and in the third stage women must have commanded respect from men so as to make Love-marriage possible. In the East however all the eight forms of marriage have been treated of as permissible; and they include Love-marriage or Gândharva Vivāha; of course Svayamvara being in some respects different from Gândharva Vivāha, as suggested above. The Sūtra-kāras, the eminent Law-givers, specifically mention the following eight forms but prefer the first four to the last four; their names are:—Brāhma, Daiva, Arsha, Prājāpatya, Gândharva, Asura, Rākshasa and Paisāch. To try to define and explain each one of these forms would be to tire the reader out of patience, and it is but befitting to presume that many by this time have grown familiar with them. The hint given by one of the learned critics is important and it can be laid down here also by observing that the last form in the list denotes the most primitive form of civilization and the order from bottom to top is the order of ascent in civilization, till we reach the highest stage of Brāhma Vivāha, which is superior to all the rest.
Side by side, moreover, it will not be out of place to make a few remarks on matrimony among the Romans. Prof. W. B. McDaniels, Ph. D. of Pennsylvania University says:—"The institution of marriage among the Romans at least enjoyed as much respect as it is now accorded in the United States, and no people have ever regarded the rearing of children as more essential to the civic and religious interests of the State... A Roman union was a marriage *de convenance*, so that, as in Latin countries still, the bride and the groom often had to depend upon post-marital propinquity to develop a love that may safely be assumed to precede most American marriages."

Among the ancient Romans, the three forms of marriage that prevailed were the following:—a Sacramental ceremony, the "*confarreate*" wedding, which was so called because the couple ate together a cake of spelt as a sacred offering to Jupiter. Since presumably the God was once thought to reside in the cake, this was really a communion service as well as a mystical initiation of the woman into the religious life of her husband's family. As a matter of fact, the "*confarreate wedding*" was as impressive and binding as any that sacerdotalism has ever evolved. It was the exclusive privilege and affliction of Patricians. Another method of marrying, Plebeian in its origin, was simpler, being effected by a fictitious sale of the bride to the groom in the presence of five witnesses and of a person who
held a pair of scales, not as symbolizing the justice that should control matrimonial relations, but as a relic of the day when money was not minted but had to be weighed. Simpler still and apparently the earliest was the third process of constituting wedlock which demanded nothing but a year of uninterrupted living together. Moreover, in this type of union the wife might conserve her wedlock and continue under the same control as before marriage by merely absenting herself for a period of three nights in that annual term. In other words, this might be regarded as a sort of trial marriage to fix upon one's choice of Paterfamilias.

Here it will not be difficult to trace some points of resemblance between the early Aryan and Roman marriages. The last form being peculiar to Rome, similarity in some respects becomes striking in respect of the two first forms. There was no betrothal among the early Romans. Among the Italians in an American city, betrothal is a purely parental affair. The girl often does not even know whom she is to marry, until the matter is all settled. In Italy and in America, the arrangements were made by the fathers or guardians of the couple who might at the time be of any age over six. The pledge of the groom to the bride might be of iron; since fashion sanctioned an iron engagement ring which the maiden wore on the third finger of her left hand, from which it was believed a nerve ran straight to her heart. This shows that even the Indian Aryans regarded the left part of a woman's body
holier than the right side; and the third finger was regarded as more suited to the growth and steady nourishment of love. In later Roman folk-lore, the same link is called not a sinew but the "Vena amoris".

With regard to the age of the couple, it was provided by Law among the early Romans that a girl could marry at 12 and the boy at 14; the girl usually waited to at least the latter age and the youth to his twenties. As a matter of fact, unmarried women with records of long expectancy have always been as rare in Rome as child mothers are common, and among the ancient Romans they seem to have been as phenomenal as in all ages among the Jews.

In India nothing can be said about the rites and ceremonies of marriage; in some castes some of these are performed and in others, other sets are performed; but there are certain common features that go to distinguish a Hindu marriage from a non-Hindu marriage. The ages of marriage moreover, are characterised by a difference; some castes adopting one age and others another age as standard age. Sacred rites, Scriptural ceremonies cannot differ; but customary practice is different as prevailing in different classes.

The institution of marriage was looked up to with as much respect among the early Romans and in the United States of America as perhaps among the Hindus, both ancient and modern. The original idea of the root of marriage as understood by the Aryans and modern Hindus is to emancipate from the bonds of births and re-
births their own ancestors by the procreating and rearing of sons. The laws of Eugenics were well known to the Aryans as discovered from Charak and Susruta about which some stray suggestions have come to be made in their proper places above. It was and is more a religious interest inspired and religious merit accrued that can be deemed to be the prevailing idea of the Hindu belief; whereas the rearing of children was regarded as more essential to the civic and religious interests of their States by the aforesaid two Western nations.

"A Roman marriage was a *marriage de convenance* so that as in Latin countries still, the bride and the groom often had to depend upon post-marital propinquity to develop a love that may safely be assumed to precede most American marriages", as observed by W. B. McDaniel. The three elaborate forms of marriage among the early Romans were:—(1) the sacramental ceremony or the *conferreat* wedding, which was so called because the couple ate together a cake of spelt as a sacred offering to Jupiter. It was regarded as a communion service as well as a mystical initiation of the woman into the religious life of her husband's family. (2) The second method of marrying was Plebeian in its origin being effected by a fictitious sale of the bride to the groom in the presence of five witnesses and of a person who held a pair of scales not as symbolizing the justice that should control matrimonial relations but as a relic of the day when money was not minted and had to be weighed. (3) The third
method required a year of uninterrupted living together. This can be considered as a kind of trial marriage to fix upon one's choice of *Paterfamilias*.

Moreover, betrothal came into vogue in later times. "Even among the Italians in an American city, it may be [still] a purely parental affair. The girl often does not know whom she is to marry, until the matter is all settled." So it is remarked by Park and Miller in "Old Traits Transplanted". There were again spousal gifts such as a ring and other things. The maiden wore it on the third finger of her left hand from which it was believed that a nerve ran straight to her heart. In later folklore, this link is called not a sinew but the "*Vena Amoris".*

Legally among the early Romans a girl could marry at 12 and a boy at 14; but in practice, the girl usually waited at least till the latter age and the youth to his twenties. Again for the marriage, the question of lucky and unlucky days was as important as among the meticulous of to-day. It has been observed that a ban is laid on Tuesday and Friday. Again the month of May is only preserving its old disrepute while June which is now in such high favour as "the month of brides" used to be in its first half just as bad as May. It was April that most enjoyed the grace of Venus.

Further it is easy to note some striking similarities as in the case of (1) Parental accord, (2) consent of the bride and the groom to their
contract, and (3) the joining of right hands in the presence of witnesses, and (4) by the escorting of the bride to the husband’s home in procession. All these are treated separately prevailing among the early Romans and not all of them combined among the Hindus both of old and present generations. Another noteworthy factor is the bridal costume which was tied with a “true lover’s knot of Hercules a trusted protection against the magic of an envious glance”. In respect of her garment again another peculiarity is noticable which is capable of being gathered from a Latin expression:— “to take the veil” which meant for the woman to take the vow of matrimony and not of celibacy. The groom in more civilized times used to divide the girl’s hair into six tresses with the point of a spear-like implement. Among the Hindus into three tresses from the day of marriage, the girl’s hair is divided; and a widow’s hair into one tress.

There are still further some points of similarity that deserve attention: (1) A garland of flowers the bride must wear during the matrimony; (2) the opening scenes of marriage ceremonies were all at the house of the bride’s father among the Romans also; (3) A professional diviner (astrologer) ascertained the omens; (4) In the case of 

comperate and Coemption weddings, the woman uttered an ancient formula of words that (using typical names, as we may say “John Doe”) declared her Gaya where or when her husband was Gaius;
A matron friend of the bride next brought the two together for the solemn clasping of their right hands”;

(5) The celebration was brought to the fall of night, so that when the evening star rose, the torchlight procession would form to escort the bride to her new home. This is strikingly similar to the Hindu marriage custom, and especially the Brāhman marriage tradition; (6) To quote the words of Prof. Macdonnel, it can be said that there are well recognised customary rites performed as a mere form among the Hindus perhaps slightly varied as in some cases:—“Again in simulation of that primitive (a) marriage by capture, the girl was torn from her mother’s arms with a feigned force. Her escort to the music of pipe players would include besides the guest the usual uninvited multitude of the curious. As the parade proceeded (b) there were cries to the marriage god, much singing of course, satiric songs and (c) scramble for nuts which the groom was expected to shower among the omnipresent small boys. Originally, like the rice that is thrown to-day, this fruit of a prolific tree symbolized fertility.”

A page used to walk on each side of the bride, a third boy carried before her a torch of white thorn as an averter of evil;—with this we have to compare the so-called Halaman Divdo—a quaint-looking lamp of seven wicks of the Hindus. They also displayed in the parade the girl’s distaff and spindle. This is also kept for a similar purpose at the bride’s house, whose mother shows it over to the bridegroom. Having arrived at
the house they anointed the door posts with oil as a symbol of fat days to come and wound them with woolen fillets as a token of her own household occupations, unless perhaps these acts were merely dedicatory rites to the deity. She made her first entrance by being lifted over the threshold either to guard against the ill omen of a stumble, or as a reminiscence of the days when exogamy even at the cost of violence was the marriage practice and the bride went in kicking and struggling in her captor's arms. The rite similar to this among the Hindus is what is termed "Mobha-Vadhavavo"—meaning to say to adore and worship the long and strong central beam of the middle hall, wherein reside the god of welfare, Ganesh, with other minor deities.

In this paper, only one point deserves more careful attention. It is the Sayamvara or self-choosing marriage i.e. when the bride, as a rule, selects her own husband. In this choice marriage, there are two modes of selecting the husband for the bride. The bride is either allowed to go round the high mandap,—something like an amphitheatre,—wherein are seated according to their ranks and dignities the rulers of kingdoms, small and great, in response to invitations which they received from the father of the bride, the self-choosing girl; or the bride waits till the result of some valorous deed to fulfil the pledge made or the stake made by the bride's father was announced duly. Under the first heading, fall the choice marriages of Indumati and Damayanti; and under the second,
fall those of Sita and Draupadi. Sakuntala was married to Dusyanta, in a still different way and that is called the Gandharva form of marriage, in which mere meeting one another attracts the heart of one to the other, and develops the passion of love which culminates eventually into the few rites essential to marriage with the formal sanction of the father or the guardian. In the first noted two forms, the bride is exercising her choice under the protecting care of the father. But all these were prevalent among the warrior or Kshatriya class and never among the priestly class or even the Vaisy class.

Sita and Draupadi were bound down to the results of pledges or stakes laid down by Janaka and Drupada respectively; whereas Indumati and Damayanti were free to make their own choice irrespective of any restriction in their way. Each ruler was introduced by woman who was quite familiar with the dynasties of all and the self-choosing bride went round the whole theatre with her if she was not prepossessed in favour of any one or prejudiced against some. In the case of Damayanti, she had already plighted her love to Nala, and Nala had expressed his yearning desire before the Royal Fleming to marry none but her; whereas in the case of Indumati, it was a formal and regular introduction of all the assembled rulers that resulted ultimately in her choice of Aja, whose famous exploits as well as other merits were greatly sung by some bards previously so that till she approached him she underwent all the formalities and did not proceed
further for being introduced to other princes beyond. So, this was one mode of choice marriage.

In the case of Sūtā and Draupadī, however, stakes were made and it was formally announced from the very beginning that he who would wield or break the bow of Siva should marry Sūtā; and that he who would pierce through the Fish revolving overhead only looking at the shadow reflected in a reservoir of water below, should marry Draupadī.

These two therefore have been known to be the characteristic modes of celebrating the choice marriage. It is very striking that many forms of marriage among the ancient Romans were similar to those among the Hindus; but the choice marriages prevailing among the Hindu military classes have not been mentioned in those books on Roman laws and customs that I have been able to lay my hands upon.

So far as marital relation is concerned, two ideas are involved in its proper functioning among mankind, here, there and everywhere, viz. the element of physical necessity and that of spiritual need. The former alone is recognized and forms the basis of modern society in the West. Marriage is taken to be a civil contract, more or less binding on the parties according to the requirements of the society to which the wedded couple belong.

True marriage, however, signifies more than the above, viz., the union of souls for uplifting the condition of the bride and the groom towards
their mutual spiritual advancement. They are inspired with the common idea of co-operating with the laws of Nature. Jesus Christ, too, has observed, "Again I say unto you, that if two of you shall agree on earth as touching anything that they shall ask, it shall be done for them of my Father which in is Heaven". Who can doubt the spiritual efficacy of such a spiritual union of the participants, when all the most powerful psychic forces of both the husband and the wife are directed towards one common end? It is in respect of such marriages that one thinks:—Marriages are made in heaven; those whom God has joined, let no man put asunder". (Mark X 9). *

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* This paper was read before the section of Anthropology of the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
III. MARRIAGE CUSTOMS IN SOUTH INDIA.

By G. Ramadas, B. A., M. R. A. S.

In these days when the Social Reformers demand the law to restrict the marriageable age of the Hindu girls and the orthodox Hindus oppose it on the strength of the Sāstras, it is but necessary to study some of the customs and practices that are followed during the time of matrimony. Not only those functions that are prescribed in the books but others as well, are found in practice amongst the wedding ceremonies; the latter have the support of traditional custom, and they are observed side by side with those that are ordained in the religious codes. These traditional operations when studied in the proper light reveal to us their significance and I propose to expound some of these that are witnessed amongst the marriage ceremonies in Southern India.

It is said that the Sāstras of the Hindus ordain that girls should be married before they attain puberty. But this law seems to have been strictly followed by the Brāhmans and other classes that claim equality with them. So far as I know Śvishṭi-Karanams, Kōmatis and the Kamsalis are the other castes that observe the custom of child marriage. All other castes marry their daughters at an age when the responsibilities of wedded life are understood by the maid.

In either kind of marriage, a function takes place on the last day and with it close all the wedding ceremonies. Though the real significance
of the ceremony is not understood, it is performed because it is the custom. Before the meaning of that function is discussed it would be necessary to give a short description of it here.

On the last day of the wedding, the bride and the bridgroom are given a bath and they are made to change the cloths which they were wearing on the previous days of wedding. Then they are made to give some offerings to the minor gods. They are then seated on a bed spread on a cot, and they then distribute pānsūpāri (betels and betel-nuts and fruit to elderly couples. These preliminaries being finished, the bride is made to serve pān sūpāri to her groom. While it is going on a cloth is hung in a loop just over and above the heads of the wedded pair and in it is placed a piece of sandalwood. The loop of cloth represents the cradle and the sandalwood is the infant. Then commences the ceremony of putting the infant in the cradle. All the matrons gather round and sing songs of lullaby rocking the loop to and fro. After sometime the piece of sandal-wood is taken out and is given into the arms of the bride, the mother of the make-believe infant. Then she is instructed to hand it over to the bridgroom saying, ‘I have to attend to household duties. Kindly have the child until I finish them.’ Then the bridgroom is instructed to return it back saying, ‘I have to attend to office I cannot waste my time here with this infant’. Thus the function ends. This is how it is observed in the Telugu country in the wedding of immature girls.
I learn that a similar custom exists in the Tamil country also. Amongst the Orijyas who religiously follow the custom of child marriages, the bride and the bridegroom, from the time the panigrahanam is finished, are, either made to sleep in one room, or, the bridegroom stands for a few minutes with his two feet on the bed in which the bride is lying and then goes away to sleep in a different place in that very house. Thus for six days, from the second to the 7th days, they live together.

What is the significance of these customs? The serving of the pānsūpāri, the rocking of the supposed infant in a cradle, the dispute for the child, the three main features of the ceremony observed in the Telugu country, the bridegroom sleeping in the same room as the bride, or standing on the bed of the bride, the custom followed in the Orijya country,—are not these, though differently operated, one and the same in idea and significance? Do they not clearly show that these practices are an imitation of the nuptials that would have happened had the bride been a woman and not a child? It is exactly what happens in the case of post-puberty marriage ceremonials. Nuptial ceremony closes the wedding. But in the child marriages this pseudo-nuptials had to be instituted since no wedding is complete without nuptials. From this we may infer that in ancient times it was the law to marry the girls only after they attained an age when they could understand the duties of wedded life. These child marriages must
consequently be later innovation. When this custom came into vogue it is difficult to say; but how it came may be guessed.

In ancient times only those boys that were found unfit for any other profession were trained as priests and they were given the initiation (upanayanam) in their eighth year, i.e., when the 8th year was current. In course of time a priestly class was formed and the girls also of that class had to undergo this initiation ceremony. Being girls they were declared to be unfit for it. So wedding and initiation were combined. The girl at the time of her marriage is invested with mounji, just as the boy at the time of upanayanam wears the mounji. The boys were given upanayanam when the 8th year of their age was current:—That was the law. So the proper age of marriage for the girls of this class was also fixed at eight. At this age the girl is known as Kanyā; at nine she becomes Rohini; at ten Gouri; afterwards she is a Rajasvalā or matured girl. So she must be given away so that the giver might gain salvation, when she was only 8 years old, i.e., when the 8th year of her age was current. That was the age fixed for ‘Kanyā-dānam’ one of the most meritorious gifts prescribed in the Hindu Śāstras. As a last function of this gift of the girl, her parents thrice place her hand dipped in milk, in the hand of the bridegroom while the purōhip repeats the following verse:

\[ \text{Ashta-varsha bhavet kanyā, putravat-palita mayā,} \\
\text{Idanim-tava dasyami datta smēhena pālyatam.} \]

At the eighth year [of her age] she becomes a
Kanya.—Till now I brought her up like a son. Now I give her to you to serve you. Treat her kindly, and as your friend.

Thus we see that the marriage of girls was instituted in imitation of the upanayanam ceremony of the boys. But it does not stop with it. The ancient custom of uniting the bride and the bridegroom in nuptial knot could not be avoided; and imitation nuptials got into vogue. That is the reason why the above described ceremony has been adopted in all communities which religiously follow the custom of child marriage.

We have seen how child marriage came into vogue first in the priestly class. In course of time other classes that claim equality with the Brähmans adopted child marriage as well as the upanayanam for their boys.

So far the custom prevalent in the Telugu country alone is considered. Similarly, in Orissa there are certain castes that follow the system of marrying their girls before puberty. Here also, the Brähmans are the first to follow this custom. The panigrahanam ceremony amongst the Oriyas takes place on the second day of marriage. After this ceremony the boy and the girl are made to sleep in one room; or, the bridegroom, before he retires to bed, must stand with his two feet on the bed in which the bride is lying. Thus every night till the 7th day of the marriage, they are made to behave as if they live together.

These customs show clearly that in ancient times the marriage ceremonies ended with nuptials
in all classes in Southern India. But when the system of child marriages was instituted, the nuptial ceremony was reduced to a mere shadow, and it is that shadow that is observed both in the Telugu country and in Orissa. Since no marriage can be said to be complete unless it is ended with pretended or real nuptials, it is better to put off the marriage of girls until they attain the age of discretion. I believe, that even the Sastras do not forbid keeping the girls unmarried until they grow up to that age.

Just as the nuptials that consummate the marriage is reduced to a mere shadow, there is another function religiously observed which has also become a shadow of the original custom necessarily observed in the old forgotten days. A short description of it in its modern form may elucidate its real features in the old days.

The function is known in the Telugu country by the name of 'Stealing frolic'; and it is observed on the last but one night of the marriage. At about 3 A.M. on that day, the bridegroom goes to the house of the bride and offers the last oblations to the fire and the fire is put out. When he comes out, a silver cup with a cake in it is placed on the sill of the gateway that leads out of the house. The bridegroom runs away with it to his lodging. This is the main feature of the function. That every member of the bridegrooms' party may have some enjoyment of the game, it is extended to the whole party from sunset to sunrise: every member of the
bridegroom's party is privileged to take away unobserved any thing he could lay his hands on in the house of the bride. All such things are secured in the house in which the bridegroom and his party are lodged during the days of wedding; and they are all returned after the wedding ceremonies are finished. This does not form a part of the function. The real function is the bridegroom running away with the cup. While he so runs away, the brother and the cousins of the bride try to obstruct and catch hold of him. He must escape and reach his lodging.

This very function is differently operated in Orissa. On the seventh day, for the Oriyas celebrate the marriage for nine days, the bridegroom gets up at about 4 A.M. before any other member of the household wakes up, goes to the marriage pedestal, breaks the pūma kūmbha placed there and runs away with a book or a vessel or gold ornament also kept on the pedestal for the purpose. He runs away to a house a little way off from the wedding house and spends the 8th day there.

This function of stealing is observed in the Telugu, Oriya and Tamil countries; though it is the same in idea, it is differently operated by these peoples. The nuptial ceremony, whether real or imitation, comes immediately after this 'stealing frolic.' So it appears that this frolic had, in former times, to do much with the consummation of marriage. Abducting the girl from her home and marrying her must have been the ancient custom. This kind of marriage is in Sanskrit
called the *Rākṣasa Vivāha*. We read of Krishna marrying Rukmini after taking her away from her father's house. Prithvi Raj married Sanjukta similarly. Many other examples of marriage by abduction may be observed in our stories and *Puraṇas*. But in these stories it is said that the cause of abduction was that the parents of the bride did not consent to the union, though the bride loved the youngman. The 'stealing frolic' in the marriage is observed even when the girl is voluntarily given away. Even amongst those classes who perform post-puberty marriages, this frolic is observed. Then how did this custom came into vogue? A study of the matrimonial customs still practised by some of the aboriginal tribes will reveal the origin of the stealing frolic.

The Khonds or Kuis, Gonds and Koyas are the tribes that are, on linguistic grounds, classed among the Dravidians. Amongst all these people marriage takes place by abduction. The youngman selects a maid from amongst the young virgins of a totem different from his own and proposes to marry her. Having obtained her consent, he sends some of his relatives to the parents of the maid to propose marriage. Thus negotiations are carried on thrice, and each time presents are sent. At last the parents and relatives of both parties sit together and settle the bride-price. Then the bridegroom lies in wait to catch hold of his intended bride when she is alone, and unaccompanied by anyone else. Finding such an opportunity, he catches hold of her and carries her away to his
house. The girl resists much, yet yields at last. Hearing of this, her kith and kin armed with sticks and bludgeons run to her rescue and are met by the youth's relatives similarly provided with sticks. A scuffle ensues and at times ends in a little bloodshed. After the first ebullition of anger is appeased, both the parties sit together and spend the time in eating, drinking and dancing. Cloths are given to the parents of the bride, and the bride-price, if it has not been paid already, will be paid then. Nuptials take place and the bride's relatives return home.

If the abducted maid does not like to marry that youth, she goes away during the time of the scuffle or after it. The previous negotiations are cancelled. If the girl likes to marry the young man, and if her parents and relatives do not approve of the match, all negotiations take place only after the maid is carried off to her sweetheart's home. Here is the custom of forcibly carrying away the maid in any case.

As these tribes rise in civilization, the severity of the scuffle decreases and the mirth and formalities during the time of negotiations increase. The nucleus of the whole marriage ceremonial is carrying away the maid forcibly from her parents' home; and this amongst the most civilised tribes is reduced to a mere frolic; and the bridegroom is made to run away with a silver cup, instead of with the bride. The fight between the parties is represented by the jest of the little resistance offered to the bridegroom by the brothers and
cousins of the bride. Majority of even the more advanced tribes still observe the custom of paying the bride-price. In these days it has gone up to thousands. Thus among such tribes civilisation has tended to enable the bride's parents to acquire wealth. In such families it is considered to be a blessing to have female children. The payment of a price and then carrying away the girl has been the custom in India amongst some aboriginal tribes only; and a study of such customs show their ethnological kinship.
IV. SOME ANTHROPOLOGICAL PROBLEMS IN INDIA. *

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Writing in the year 1908 Dr. John Beddoe, one of the most eminent English anthropologists of his generation spoke of the "the enormous and almost incalculable mass of anthropological materials that India offered to the student". ¹ During the decade that has followed Dr. Beddoe's writings a considerable mass of valuable information has been gathered both by Government initiative and private enterprise, but the work done has been chiefly of the 'Survey' kind. Such a Survey is essential as a preliminary step for furnishing the first general outline of the entire field of operation but its value depends not so much for the picture it offers, which by reason of its covering a large ground is apt to be superficial, but for enabling us to realise the gaps in our knowledge and directing our attention to the spots where deeper and more exact enquiries are likely to be most successful. And no properly planned anthropological research can be said to be complete until this work of reconnaissance is followed up by intensive investigations. The great work of the Sarasin

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* Being the Presidential Address of the Anthropology section of the Fifteenth Annual meeting of the Indian Science Congress, held in Calcutta in January 1928.

brothers on the Veddas may be cited as an example of what a study of this kind ought to be. In India proper a survey of the physical characters of the population has been undertaken by Risley, Thurston, Waddel, and in a few instances more exact and definite enquiries have also been made, such as those of Ujsalvy and Stein in North-western and Lapicque and Schmidt in Southern India. Due, however, to the lack of specially trained men and want of proper appreciation of the value of such work intensive studies have not yet taken place in India in any systematic manner, with the result that our knowledge of the somatic characters of her people is seriously defective. Fortunately at present there are signs of a better understanding of the importance of such studies in this country and a more fully equipped agency for the work is also available. In order, therefore, the investigations conducted in future should bear the utmost result, it is first of all necessary to know the main desiderata in the existing data and understand the problems that have been brought to the front for solution. Consequently it will be my endeavour in the present address to set forth the chief gaps in our knowledge and bring to your notice the points which hold the keys as it were to the entire question.

The materials at our disposal regarding the physical characters of the people of India concern almost exclusively the living population. Of the races that lived during the long prehistoric period, revealed by extensive finds of artifacts through-
out the country, we know practically nothing. In taking stock of our knowledge it will be necessary at the start to confine ourselves to the former and then determine how far its final solution depends on a proper unfolding of the racial history of the past.

The outstanding problems concerning the former are: 2 The correct affiliation of the aboriginal population of India. There seems to be a general agreement regarding the dominant type among these people, which is characterised by long head, flat broad nose, short stature, wavy to curly hair and very dark complexion. The eye is open and round and the face orthognathic. The researches of the Sarasin brothers in Ceylon, of Rudolf Martin in Malay Peninsula, and of Dr. Fritz Sarasin in Celebes, have shown that it is racially akin to the Veddas, the Sakais, and the Toalas of the above-mentioned regions and together with the Australians form a very primitive and extensive racial family which at one time occupied a great part of the Southern world. Judging from its areas of occupation which are either marginal or inhospitable hills and forests, to which it must have been driven by invading races—there is no doubt that the race is very old in India. We have, however, no positive archeological evidence of its earliest occupation—the only early site which has definitely disclosed this type does not go beyond the stage of iron in Southern India. The point that has to be considered, is, as to

2 The People of India by Sir H. Risley p. 15.
whether these people really form a homogeneous race in spite of linguistic and cultural differences or whether there are more than one racial type concealed among them.

The presence of a Negrito element in the aboriginal population of India has been suspected for a long time but no definite evidence of its existence has so far been found. Thus in the opinion of the Sarasin brothers, "no one has yet succeeded in finding wooly hair in India" (Ergibinissi natur-wissen chaftichen torschungen out Cylon Bd. III p. 355), a view which has also received the support of Turner (Trans. Roy. soc. Edin. vol XI p. 114) Lapique (Rev. Scientifíc VI July 1906,) Thurston (Tribes and Castes of S. India, vol I, Introduction,) and Risley. To quote the last-named author, 'although the terms,' "woolly" and "frizzly" have been loosely applied to the wavy hair, not uncommon among the Dravidians, no good observer has as yet found among any of the Indian races a head of hair that could be correctly described as wooly.'

While the general type is certainly wavy or curly, instances of wooly or frizzly hair may actually occur (though not found so far *) among some of these people or as is likely their reported presence may really be due to superficial observation and the failure to distinguish between extremely curly and genuine wooly or frizzly hair. The question,

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* Since writing the above I was fortunate enough in finding a genuine Negrito tribe in the interior of Cochin Hills (Nature, May 19, 1928) and Dr. J. H. Hutton has also discovered traces of the same in the Naga Hills of Assam. (Man in India, December, 1927).
however, cannot be decided, until samples of these hairs are collected and submitted to microscopic examination by competent persons. Regarding the presence of a Negritoid element in the Indian continent, it has been further argued, and with a certain amount of plausibility, that even if the present, inhabitants do not show any such trait, its presence in the Andaman islands is a strong point in favour of its having been in India at one time. A careful enquiry among the Andamanese tribes, however, does not show any relic of migration from India; all the evidence strongly pointing to their movement from Further India where in the Semaugs we have still living a kindred tribe. To settle the question beyond doubt, a search for communal cemeteries and other possible ancient sites in India is necessary, to find out if there is any skeletal remains which show definite Negrito characteristics.

Aside from the question of the existence or otherwise of the Negrito element in the aboriginal population of India, so far as the two main linguistic divisions of these tribes are concerned, namely the Austric and the Dravidian, all the evidence available, in my opinion, go to support Risley's contention of their fundamental Somatic unity. There is no important physical character in which the Austric-speaking tribes of this group differ from that of the Dravidian-speaking ones. Consequently, it would considerably clear up the issue if the Somatic and Ethnic characters of these people are not mixed up, but are treated independently. It will in that case not only narrow down our field of enquiry and effect a simpler solution of the entire problem of
their cultural origins, but may possibly also supply us with important materials regarding their migrations and contact with other races.

2 A more intricate problem however is the settlement of the so-called Dravidian question. To put it briefly, are there sufficient materials for us to ascribe definite physical type to the people that may be supposed to have introduced Dravidian languages in this country? At the present time the Dravidian-speaking peoples are concentrated in Southern and Central India with the exception of the Brahmuis who are physically akin to the other tribes of Beluchistan. Leaving them aside, therefore, the former present at least three distinct racial elements, namely dolico-platyrrhine or Veddah-Australoid type, a dolico-leptorrhine or Mediterranean type and a brachy-leptorrhine or Alpine type.

The measurements published by Thurston and others comprise 120 Tulu-speaking people from South Canara, 550 Malayalam-speaking people from Malabar, 571 Tamils from Madras and Tinnevelley, two Canarese groups of 410 and 290 individuals from Mysore and the districts of Bellary and Karnool respectively, 356 Telegus from the same districts, 147 men from the Nilgiri Hills and 385 people belonging to the various jungle tribes. Analysis of the above data on regional lines shows that the main concentration of brachy-cephaly is in the North-western part of the Madras Presidency, between latitudes 16 and 12 North and up to longitude 78 E; South of latitude 12, on the Western Coasts and the Nilgiri Hills the people
appear to be predominantly dolico-cephalic; on the East from Madras downwards dolico-cephaly is dominant again. In other words, the Deccan proper or the tableland between the two Ghats seems to be characterised by brachy-cephaly, whereas in the region south of it, including the two coastal strips, dolico-cephaly is supreme. In the Northern brachy-cephalic region there is either a predominance of or a tendency towards leptorrhiny. In the dolico-cephalic western region leptorrhiny is dominant but in the south-western part the tendency is towards platyrrhiny—a characteristic marked in the lower classes throughout the Presidency and is most strongly emphasised among the jungle tribes. In short, the dominant type in the North-west appears to be brachy-leptorrhine, in the South-west dolico-leptorrhine, whereas in the South-east it tends to be dolico-platyrrhine.

In discussing racial affinities, language is not regarded as a safe guide, but in the present case a consideration of the physical data in the light of linguistic affiliations of the different groups considered, yields certain interesting results, as it shows that the languages, which indicate the greatest influence of Sanskrit, are spoken by people exhibiting marked differences from those whose languages reveal much less evidence of such influence. Thus Tamil, which is certainly least influenced by Sanskrit and is the oldest of the Dravidian tongues is spoken by the people in the south-eastern part of the Madras Presidency, from Madras to Cape Comorin and extending on the west as far as the Nilgiris and
who are on the whole, among all the groups of whom we possess metric data, the nearest approach to the dolico-platyrrhine type dominant among the jungle folks.

When we come to Telugu, which is the second most important Dravidian language and shows a comparatively larger Sanskritic influence, we find it to be spoken by people between Madras and Ganjam up to latitude 18 North and extending as far as the Bellary and Anantpur districts or longitude 78 on the West who are much more brachy-cephalic and leptorrhine. A comparison with the Tamil-speaking people shows that the mean cephalic index of 358 Telegus is 77.9, or 2.7 units higher than the mean index of 571 Tamils, which is 75.2 only. If, however, a comparison is made with the Canarese and the Marathi-speaking peoples of the same districts, whose languages show either a marked influence of or is derived from Sanskrit a striking contrast is at once noticeable. The mean cephalic index of 290 Canarese is one unit and that of 90 Maraths 3.5 units higher than that of the Telegus. On the other hand, the mean Nasal Index of the latter are 8 points and 1.6 units higher than those of the Canarese and the Maraths. Lastly, Malayalam which also shows strong influence of Sanskrit is spoken by people in the South-western coastal belt of the Peninsula, who are markedly dolico-leptorrhine. Similarly, within each linguistic division if the Brahmans are compared with other groups, the former are found to be much more leptorrhine than the rest.
Taking the two factors together it shows:

(i) an increasing association between brachycephaly and leptorrhiny accompanied by a falling tendency towards platyrrhiny, and

(ii) a close association of Samskritic influence with leptorrhiny.

We have unfortunately no metrical data east of longitude 78 but a consideration of them shows, that the southernmost extension of the brachy-leptorrhine type goes as far as latitude 12 or roughly the point where the Ghats merge into the Nilgiri Hills, forming the southern boundary of the Deccan proper. Whether the movement of this type reaches as far as the Ghats on this side we are not certain. North of latitude 16, along the western littoral we find the extension of this type upto Guzerat. Whether there has been a gradual deterioration of this type (as is probable) in this southward movement, our materials are not enough to come to a definite conclusion, but, there appears to be no doubt that in its movement from the West to the East there has been a gradual falling off of this type. In the light of the deductions mentioned above we may reasonably infer that this falling off in the brachy-leptorrhine type has been due to the miscegenation with a dolico-platyrrhine element with which it increasingly came in contact. We may take it, therefore, that the brachy-leptorrhine type is an intrusive racial element from the North-west moving along the margin of the
Western Ghats up to latitude 12 and has gradually diminished as it progressed southwards, when the fundamental type presumably has been dolicocephalic.

This would bring the original somatic characters of the Telegu and Tamil people into one group, the former losing its characteristics gradually towards the west, as it came into contact with the broad-headed invaders, the latter, except in isolated classes, preserving its almost native purity to-day. In the course of his investigations Thurston observed this difference of head-form among the inhabitants of Southern India,—for writing in 1909 he remarked, "whatever may have been the influence which has brought about the existing sub-brachycephalic or mesaticephalic type in northern areas, this influence has not extended southward into the Tamil and Malayalam land where Dravidian man remains dolico or subdolico". We have seen the light thrown by language on this question, which is supported by our regional analysis of the existing materials and which, therefore, may be regarded as the probable reason. It cannot, however, be considered as beyond doubt, until the anthropometry of the Telegu country east of longitude 78 as well as the skeletal materials in the numerous prehistoric sites in the Deccan confirm it. It is fortunate that under the leadership of Mr. Ghulam Yazdani who is energetically excavating the ancient archaeological remains in the Nizam's Dominions, we may soon

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The Tribes and Castes of Southern India Vol. I. Introduction.
be able to find some human crania which will supply conclusive evidence for the solution of the whole problem.

Similarly though the association of leptorrhiny with Sanskrit language is indicated, the presence of the dolico-leptorrhine element in Malabar as the result of this influence, cannot be regarded as certain until the excavations of prehistoric sites of this region reveal human crania which support the above hypothesis. The skulls found by Mr. Rea at Adittanallur, in the Tiunevalley district, however, show a distinct tendency towards platyrhiny, as well as a low cranial vault and prominent supra-orbital regions characteristic of the Vedda-Australoid group. Material help can be furnished here by trained philologists, if they have the hardihood to undertake field-investigations of the languages of the aboriginal tribes of Southern India who are reported to speak corrupt forms of Dravidian languages in the same way as has been done in the Red Indian languages of North America. For the researches undertaken by the pupils of Pater Schmidt in the Australian languages just before the war, indicate the possibility of a relationship between the Dravidian, Papuan and Australian languages, though nothing positive can be said till intensive investigations take place in this country. If such a relationship can be shown to exist by future researches the entire Dravidian problem will be solved, as a

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4 *Die Gliderung der Australischen Sprachen, Anthropose*, p. 151. 1912.
definite correlation will then be established between it and the Vedda-Australoid race. The evidence of physical anthropology (on existing data) as indicated above tend on the whole to support this view, which was first propounded by Risley and Turner. The Mediterranean affinities of the Dravidian culture, disclosed in recent researches in that case can be regarded as due to culture migrations without connoting anything about the race. Whether such a theory is borne out or not, there is no evidence either somatic or archeological for the view that has lately become fashionable in India and which seeks to make the Dravidian man responsible for the Indus civilization as well as that of Sumer, for both of whom are, intimately associated with brachycephalic people as the recently discovered skulls in the Pre-Sorgonic sites at Kish and El-abaid and Mohenjodaro indicate.

3. The third problem deals with the existence of the 'Aryo-Dravidian' race. In describing the population of the United Provinces of Agra and Oudh, Risley, called them 'Aryo-Dravidian' i.e. the result of the admixture of the Aryan and Dravidian speaking races, on the ground that the data published by him, show the preponderance of a type marked by dolico-cephaly and increased Nasal Index. In studying the distribution of racial types in the North-western part of India, the available metric data indicate that the dominant element in this region is characterised by dolico-

cephaly and true leptorrhiny, which is present throughout Northern Rajputana, the Punjab and Kashmir, also probably including Afganistan and extending in varying proportion as far north as Yarkand. The skulls found at Sialkot, and the recently excavated sites of Nal and Mohenjo-daro reveal the same characteristics. So the present racial element may be said to be the continuation of the type dominant from the earliest known times. As disclosed in Risley's measurements there is a sharp break in the eastward extension of this type which does not go beyond the boundaries of the Punjab, to any appreciable extent. The question, therefore is whether this represents the real state of things, or, the break is to be regarded as unreal, considering the known facts of history? Now, the anthropometrical measurements published in Risley's name were actually taken by Mr. Chandi Singh, a clerk in the office of Mr. J. C. Nesfield, then Inspector of Schools, who supervised him. In the year 1896, however Surgeon Captain Drake-Brockman, F. R. C. S., M. D., took a large series of measurements of the various castes in the United Provinces, under the auspices of the local Government. The detailed individual measurements are not available but the averages have been published by Sir William Crooke. So far as the stature and cephalic index are concerned, there is not much difference between the two series, but when the nasal index is considered a great difference is at once noticed. The mean

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*Preface to Tribes and Castes of Bengal—Anthropometric data Vol. I. 1891.*
nasal index for 420 Rajputs and 455 Brahmans as measured by Dr. Brockman are 63.8 and 59.1 respectively whereas the average nasal index for 106 Rajputs and 100 Brahmans published by Risley are 77.7 and 74.6 respectively. In attempting to determine the comparative reliability of these conflicting sets of measurements, not only the high medical qualification of Dr. Drake-Brockman and the much larger series examined by him have to be taken into consideration but also the fact that neither Mr. Nesfield nor his assistant Chandi Singh can in any way be regarded as having had training in anthropometry; and it is well-known that the correct measurement of the nasal length requires considerable anatomical experience. On the other hand, it may also be possible that the technique employed by Dr. Drake Brockman in his measurements was somewhat different. The only skull of known antiquity found at Bayana near Agra tends to support Dr. Brockman's conclusions rather than those of Risley. It is time therefore that the importance of this question is realised and an intensive investigation is undertaken into the racial composition of the people of this region, as Risley's current theory as shown above is open to serious doubt. Besides, as definitely determining the limit of the eastward extension of the racial type dominant in the Punjab, such an enquiry will clear up many obscure points in the racial history of the entire Northern India.

4. The fourth problem is the distribution of the Brachy-cephalic Alpine type. A survey of the physical characters of the present population of
India shows that along the entire Western littoral from Guzerat down to Coorg we find the continuation of the brachy-cephalic Alpine type. This element is dominant among the Guzrati, Marathi and the people of Coorg. As we have already seen, in the south it does not extend beyond latitude 12, and beyond longitude 78 E in the Deccan, as far as our present knowledge indicates.

In Upper India, however, from Benaras eastwards up to Behar we find the gradual increase of a broad-headed element whose maximum intensity is seen in the population of Bengal. In Bengal proper dominance of brachy-cephaly is associated with leptorrhiny specially among the upper classes where the leptorrhine element is greater than in any other part of India outside the Punjab, if the data published by Risley are to be trusted. In accounting for this brachycephalic factor in Bengal, Risley supposed the influence of a Mongolian race seen on its outskirts. An examination of the Mongolian tribes along the boundaries of Bengal shows that they are not homogeneous. The brachy-platyrrhine element is predominant in the south-eastern part bordering on Burma, whereas in the Brahmaputra valley it strongly inclines towards the dolico-plo-tyrrhine, the brachyleptorrhine type being dominant only along the Sikkim and Nepal borders. In Bengal, on the other hand, the main concentration of the brachy-leptorrhine element is in the southern or deltaic region with gradual decrease towards the north and the east. Besides, the Bengali type is differentiated from the Lepcha and kindred tribes, in whom alone of
all the Mongolian types a marked presence of leptorrhiny is found by having a more prominent nose. In studying the racial anatomy of the nose it is not enough to rely on the relation of the length and the breadth of the nose, the prominence or otherwise of the entire nasal skeleton has to be taken into account. Risley was therefore right in making the latter as the deciding factor in comparing the nasal characters of the Mongolian and other races. In this measurement of the Bengali people, however, the test by which the prominence of the nasal skeleton could be judged, namely the biorbito-nasal-index was not taken except in the case of a solitary group. In the absence of this test, consequently, his conclusion of the Mongolian origin of the Bengali people was not justified on the basis of his own data. Prof. D. R. Bhandarkar has shown, in his interesting account of the cultural affinities of the Brähmans of Guzerat with the Kayasthas of Bengal the identity of a large number of surnames of these two groups. A comparison of the anthropometry of these two, therefore, is instructive. The average stature of the Nagar Brähmans as given by Risley is 1643 m. m. against 1636 m. m. of the Bengali Kayasthas. The average Cephalic and Nasal Indices of the former are 79·7 and 73·1 against 78·2 and 70·3 of the latter. The average biorbito-nasal-index of the Nagar Brähmans is 116·7 but in the case of the Bangali Kayasthas the figure is not available but judging from that

7 Indian Antiquary pp. 7-37. 1911.
of the Chaṇḍāls of Bengal (one of the lowest classes of the population) which is 114.0, the value of this Index in the case of the Bengali Kāyasthas could not be much different. Further, when the data are analysed it is found that 63% of the Nagar Brāhmans are brachy-cephalic and 53% are leptorrhine against 60% brachy and 75% leptorrhine in the Bengali Kāyasthas. It is, therefore, difficult to understand how the one could have 'Scythic', and the other Mongolian origin. Besides as Rai Bahadur Ramaprasad Chanda ⁸ has pointed out, —and he incidentally was the first to show the weaknesses in Risley's theory—that the typical Mongolian characteristics such as the presence of an epicanthic fold, and the absence of bodily hair are not to be found among the Bengalis. This must not be taken to mean that Mongolian admixture is denied altogether in Bengal,—it is simply meant that it is not sufficient to explain the dominant type in Bengal; the only way it seems to account for it is to link it up with that of the Western Littoral through Central India, of which as we have already noticed there is some probability judging from the identity of surnames. It is in the central region, therefore, that investigation is necessary to find out how far the continuity of type exists from Bombay to Bengal. The origin of this brachy-cephalic Alpine type in India was hitherto unexplained. The recent discovery of brachy-cephalic crania in Sindh has lent some

⁸ The Indo-Aryans part 1, pp. 69-70.
probability to the theory of a very early migration of this element in India. But its extension both in the South and in the East will never be fully understood until archaeological excavation of the numerous prehistoric sites yields skeletal materials showing these characteristics. The excavation of the Copper Age remains in the Chota-Nagpur districts discovered by Rai Sarat Chandra Roy Bahadur would be of great significance as they may not improbably throw some light on the racial origins of the people of Bengal.

From a consideration of the foregoing facts it would appear that the greatest necessity in the field of Indian anthropology is the excavation of the archaeological sites in search of remains of prehistoric inhabitants, for not only the racial history of ancient India cannot be reconstructed without its aid but it also holds, as already stated, the secret of the somatic relationships of the present population of India. In the long history of this country whose true antiquity is being revealed, the only document that we possess bearing on the physical constitution of its past inhabitants are the two skulls from Bayana and Sialkot, the skulls from an Iron age site at Adittanallur and the recent finds in the Indus Valley. Outside of these we have no materials for our guidance. In his account of the first two of the above skulls, which constitutes almost our sole literature on the subject, Sir Arthur Keith has remarked,—"There is no anthropological problem more in need of investigation than that of
the prehistoric inhabitants of India. We all wish to see applied to India the methods which have brought to light the ancient races of Europe. Nor is there any reason to doubt that there are hidden away in more recent deposits of river valleys and caves, in prehistoric isolated interments and communal cemeteries, records of the ancient races of India. They have not been seen nor found because they have not been patiently and systematically looked for". It is true as Sir Arthur Keith has noted that no systematic search has been made for the skeleton remains of the prehistoric races of India, and considering the vast number of ancient sites in this country and their accessibility, the lack of interest in these explorations is certainly deplorable, but, what is worse and inexcusable is the irresponsible manner in which such materials were treated, when luck put them in the hands of our explorers. A great part of literature on the pre-historic and early historic sites in India is tragic reading, but not a trace of them could now be found anywhere in this country. In his account of the excavation of the Great Temple mound at Indrapura in the Gorakhpur district which roughly corresponded to the ancient Kingdom of Kosala and assigned to the 4th century A. D., Mr. Carlileyle, late of the Archaeological Survey, writes "I have called

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this, a 'skeleton mound', because I found five human skeletons in it. One of the skulls found had a very projecting jaw exactly like that of a Negro. This belonged to the skeleton of a male nearly 6 feet in length; but close alongside of it I found the skeleton of a female, 5 feet 6 inches in length, the facial part of the skull of which had a straight even profile. Another skeleton was placed across or upon the doorway of one of the temples. Four of the skeletons had their heads placed towards the north but the fifth was placed the reverse way". In another part of the same temple, the writer observes, "A human skeleton lay across the doorway. Two more human skeletons of a male and a female lay nearly side by side, while a fourth skeleton lay just beyond the wall toward the west."

Similarly in his excellent work on the Indian Prehistoric and Protohistoric Antiquities, Bruce-Foote records the discovery of a human skeleton lying in a flexed position in a large stone circle in Central Mysore near Savandurga rock. In describing the cairns numbering over 268 at Jewurgi in the Shorapur district in the Madras Presidency, Meadows Taylor mentions the discovery in one of them of numerous human skeletons 'which are mostly of small size as to height but having bows of unusual thickness and strength'. In a Neolithic tomb in South Mirzapore, Cockburn

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found 'the complete fossilized skeleton of an adult male'.

Not a trace of the skeleton mentioned above, and many more recorded in the accounts of the excavations of the prehistoric sites of India not mentioned here, could be found at present. One would naturally like to know what has become of them—these documents that are of priceless value in the reconstruction of our ancient history. It is unfortunate but nevertheless true, that hitherto archeology in India meant only the reading of some Sanskrit inscriptions and the preservation of ancient monuments. While they are undoubtedly necessary they are only some of the means to an end which is the reconstruction of the ancient history of a particular land and people. In Europe as well as in Central America, not to speak of Egypt and the Near East, the unrecorded history has been unearthed by its aid, but in order to be able to do so the fundamental unity of archeology and anthropology has first to be realized. Neither in Europe, nor in Egypt or America such splendid work would have been possible if the help and co-operation of anthropologists were not sought, for the culture or civilization of a people is a complex whole and its full study involves the researches of different lines of workers.

Actually how much can be achieved by the combined efforts of scientists with pure archeologists is to be seen in Pumpelley's excavation of Anau where the teamwork of geologists, anthropologists, zoologists and archeologists added so
much to our knowledge of the ancient civilization of South-western Siberia. In the excavation of our archaeological sites, this aspect of the question has to be more fully recognised than it has hitherto been in this country not only for the completeness of the work, but also for the proper handling and preservation of such of its finds—specially the bones—which require special treatment in the hands of experts if they are not to be irreparably damaged. Fortunately the discovery of the Indus Civilization has aroused keen interest in the importance and urgency of archaeological studies, and in Sir John Marshall we have a man of wide learning and experience who can be depended upon to direct such investigations on truly scientific lines. We may, therefore, confidently hope that the neglect and irresponsibility shown in the past which led to the loss and destruction of much of the discovered skeletal remains of India's prehistoric inhabitants, will not be repeated in future but a more systematic search will be made for them. In that way we will be able gradually to add to our knowledge of the physical characters of the prehistoric inhabitants of India, which alone will enable us to understand her present racial affiliations.
V. LAWS OF EUGENICS & THE INSTITUTION OF MARRIAGE AMONGST HINDUS.

BY S. S. MEHTA, B. A.

Eugenics is the Science of Race-Culture. It is easy to see that the agriculturist aims at the improvement of his corn; and the Eugenist in a similar way aims at the improvement of the human race. The main object of the agriculturist is to produce the best kind of corn and that of the Eugenist is to produce the best species of mankind, that is to say, men who would be both sound in body and mind. He tries to examine, regulate and reform as well as improve in reforming, everything pertaining to Man such as his form, his colour, his habits and his performances i.e. everything pertaining to Man as an individual as well as a species in the kingdoms of nature. And although man is the highest and most important of the known living creatures on the earth, yet very little attention appears to have been paid to this important branch of study, till our eyes were opened to the various ways in which most of the leading principles of Eugenics appeared to have been applied in practice by Hindu Legislators. The Vedic times, the Epic age and the Rationalistic period all tend to show how the principles of this useful Science were observed in ancient times, ceremoniously by the Hindus who have handed down the tradition to the generations of the civilized twentieth century, when Science in all its branches is making rapid
strides, in order to cope with the varying needs and exigencies of the hour.

At the present moment, moreover, Europe and America have begun to realize the importance of Eugenics; and yet there is no legal sanction or no tradition that enforces the application of Eugenic Laws upon the people of the West in our times. The ancestors of the Hindus, however, were the first to realise the grand truth and the most important efficacy of these laws and, by legislation, they applied them to the Social Organism; so that for ages together i. e., the three ages noted above, there was peace, prosperity and further progress all round.

Now it is a truism that the foremost thing in the development of the race of man is the seed. The Hindu story of creation as a whole starts with the Golden Egg—"Hiranyagarbha"—Brahmanda or the Supreme Egg. Sukra and Virya are other terms meaning semen. So Virya or human seed is the first subject of study in Eugenics. Our Hindu scriptural texts have laid strict injunctions for the observance of Brahmacharya; and what is Brahmacharya itself when interpreted in brief? It is a vow of celibacy, no doubt; and it is nothing but the method of preserving and maturing human seed. It was in ancient India alone that student life during celibacy was held in great sanctity; and a Brahmachari was looked upon as the great future hope of the race. He underwent Tapas or austerities in order to obtain Right Knowledge, to train and subdue passions
and become fit to produce a healthy race by entering the life of a Nāgarika or Citizen full-fledged—that is to say, a Grihasth Nāgarika—a house-holder or Citizen.

Again, great respect was shown to the man who preserved Brahmacharya for the longest period. An Aditya-Brahmachāri who preserved his seed for the whole of his life was admired the most; and he that observed Brahmacharya up to the 48th year was considered as one best suited for entry into Grihasthāsrama. So, it is easy to see that 25 years was the minimum age at which a Brahmachāri might enter into matrimonial life. Consequently, it is clear that great care was taken in the Hindu Society of earlier days to preserve and ripen the human seed, so that it might beget a healthy human race. On the other hand, again, a Brāhmaṇa, or a Kshatriya or a Vaishya—was considered to have degenerated and become a Sudra, if he failed to enter into the order of Brahmacharya in time; in fact, delay in so entering condemned a twice-born man to be a Sudra. In the Upanishads there is a story about the father of Swetaketu, who neglected and delayed the act of initiating the son into the order of Brahmacharya, by making it late for him to be invested with the Sacred Thread; and his son had to suffer; as a consequence of it, a regular degradation.

The next point of moment in Eugenics is Mating. The Hindu Legislators enjoin that
persons of unsound mind or suffering from diseases that are capable of being communicated from parent to progeny, shall not marry, i.e., persons suffering from leprosy, syphilis, gonorhea, consumption, rheumatism and such others shall not be allowed to produce their kind, and thus pollute the race. A Brahmachari who had passed the required period of time in ripening the semen, was not allowed free choice of mating and was restricted from sowing the seed in any soil indifferently. In fact, he too, was not to be guided by the dictates of his juvenile passions.

The whole Hindu Society was thus based on the laws of heredity. The legislation, too, proceeded on the line of believing that the seed imparts not only the physical but even the intellectual and moral qualities of parents to their progeny; and that inherited proclivities were perfected by practice, and become ingrained in the coming generations. Castes were originally meant to be marriage groups; and as such they were intended to carry on the same profession by marrying among themselves. Thus the threads of different professions were carried on unbroken. For instance, the Brähmana would choose, under normal conditions, his spouse from the caste to which he belonged; and his children would bring to perfection the same vocation for which he was trained; a man of warlike pursuits would do so in his own caste; and similarly also, a trader too in his own caste. Castes, however, were not a small group; and notwithstanding this, there was a fear
of inbreeding proving a source of weak progeny by the law of heredity. To ward off this evil effect, marriages among "Sapinpas" i.e. the issues of the same fore-fathers were prevented; and among higher classes, marriages among "Sagotris" were prohibited, i.e., among the descendants of the same Rishi; and among still higher class Brâhmans, the same were banned as occurring among the descendants of four Gotras viz. that of the groom's father, of his mother's father, of the father of his mother's mother and of the father of his father's mother.

On the other hand, it will be seen from numerous instances that new blood was imported from distant places. Evidence is not wanting to show that Hindu Kings married the daughters of Greek Kings; some of them married the daughters of Pâtala Loka, i.e., the inhabitants of Peru, Mexico and such other places; and marriages between Indians on the one hand, and Nepalese, Tibetans, Kabulis and Persians were of frequent occurrence. Kaikeyi, one of the queens of King Dasharatha was the daughter of the King of Kabul. Instances could be multiplied from the Râmâyana and the Mahâbhârata as well as from the great writings of Kalidasa, the poet of poets.

This observance of Eugenical Law was meant for the propagation and perfection of the race. On the other hand, what is known as Varna Sankara or sensual inter-mingling of different castes was looked down upon, with an eye of contempt. Manu encourages even this Varna Sankara only
for the purpose of raising the race, so that he has been ever careful and cautious about permitting the bringing in of the seed of a more learned, more valorous or more intelligent person. This is not freely allowed nor indulged in. For instance, a hero like Arjuna bewails the evil fate of the army on the battle field of Pānīpat, which was impending upon them as a consequence of the devastating war that would bring in its train mixture of castes and would eventually destroy the traditions of the race.

At this stage, it will not be out of place to tackle the word Eugenics and examine it to some length, in the light of what is written above and also what is understood at present by the enlightened world of Science. Sir Francis Galton, it is said, used the word in 1884; and in 1904, he delivered a lecture on the subject in the course of which he defined it, gave its scope and aim and treated it in a lengthy manner, before the Sociological Association of London. It is the study of agencies under social control that improve or impair the racial qualities of future generations, either physically or mentally.

Here it can be explained by observing that all matters in regard to which the Hindus of earlier days practically followed the principles of Eugenics, were put under religious injunctions. In case of marriage, heredity and environment were the chief factors to determine the fitness or otherwise of the race; and so, the laws forbidding marriage in certain cases as well as those enjoining marriage,
have been directed towards improving heredity as well as environment. In our days, somehow or other, these are not regularly observed in all the various forms and to the greatest possible extent to which they were observed in ancient times. During the Vedic period, the period of law-givers and the Puranic times these principles of Eugenics had made their mark; and the Aryans of earlier days had already exercised full vision and deep insight into the laws and customs relating to matrimonial alliances. Even medical works such as those of Bagbhatita and Sushruta and Charaka contain profuse remarks to show the validity of Eugenical laws and their application. Learning was promoted and it was one of the main factors to constitute the fitness of children in becoming good citizens; Brahmacharya came next. Sattvic food, such as milk, rice, wheat, potatoes, fruits and such other substances, contributed to the growth of fit and healthy citizenship. Brahmacharya or celibate student's life was passed in a forest hermitage or in any open place where sanitary conditions were of the best. The very Hymns composed by the Vedic Sages and selected for being recited at the time of celebrating the various marriage ceremonies go to prove that the Eugenic laws have been duly applied at every step of the procedure in marriage. In fine, the marriages of clean, healthy, intelligent and virtuous couples have even been regarded as the only producers of a great fit Race. Ours is all symbolical; and yet the Vedas as well as all other Scriptural Texts from which recitals are made at the time
of celebrating the marriage, purport to state that
the selection of men and women physically
sound and strong, intellectually developed
and morally high, as well as abiding by all
the prevailing ethico-social code, must be made
for the sacred nuptial tie. Legislators such as
Manu and Yajnavalkya were rigidly scrupulous
about begetting good and well-fitted citizens, but
the Brāhmans, Kshatriyas and Vaisyas followed
their precepts as rigidly for a few generations;
and as time glided by, some of them grew loose
and the selection failed to be made with the
same rigid scrupulousness as before. Mixture of
blood was the result to a large extent, and mixture
of blood increased with enormous bounds a little
prior to and during the so-called Middle Ages.
In fact, the evils of society against which Eugenics—
both Science and Art—is trying to take steps by
way of remedying ill-assorted marriages as well
as the so-called Birth-control by means of physi-
cal and surgical appliances, had never existed in
Hindu Society up to the time of the Mahābhārata
and later Purāṇas. The healthy effects and con-
sequences of observing Eugenical laws existed in a
prominent way, and made themselves manifest in
different forms. In the meantime, Yoga and Yogic
practice in the forms of abstemiousness, self-
abnegation and the like came to the help of marriage-
laws based on Eugenics; and Birth-control could
be effected without much trouble as well as without
opposing the workings and functionings of Nature
in the human organism.
Gotras and Pravaras, be it repeated for the sake of emphasis, were taken into consideration. Marriages were celebrated between the bride and the groom in the same caste and in the same place of residence as far as possible; but if the selection was not likely to be a happy one, the same caste in a distant place offered scope for selection. But for the purpose of avoiding the evils arising out of consanguinity of blood, the same Gotras were avoided, but not the same Pravaras. It will be a little out of place to explain what these two terms signify; suffice it to observe that persons born in the same family could not marry, at seven, ten and even fourteen pedigrees remote. The Aryans of India were all regarded as born of the same seven or eight great Rishis or Sages who gave their names to the Gotras and Pravaras; and up to date men and women are prohibited from marrying if they belong to the same Gotras; or if they are Sapindas or common ancestor descended from the great importance of this rule—which is purely an Eugenical rule lay in the fact that if marriages would be cemented among such, the issues would be quite effete and they would not constitute good citizens, even as Western science has proved in our days of progressive civilization.

It may be noted, again, in passing, that during the Vedic Period, Brahmans and Kshatriyas were not rigid castes but mere social classes and they could intermarry, if the latter had undergone certain purificatory rites, such as composing Vedic
Mantras and others as well as of performing certain deeds that were calculated to give them a higher lift in the social order of classes. On the other hand, since there are instances of Brāhmaṇs having been degraded into the Kshatriya class—such as the instance of Bharadvāja becoming a Kshatriya, it can be concluded that if Eugenical laws were not observed with a clear understanding that would not have been the case. For the welfare of society, intellectual fitness, was regarded as more momentous than mere physical fitness, and hence the Brāhmaṇs came to be considered as superior to the Kshatriyas.*

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* This paper was read before the section of Anthropology at the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
MISCELLANEOUS CONTRIBUTIONS.

I. THE PONDANS OF CALICUT.

The Pondans to whom Thurston in his classic work ‘The Castes and Tribes of South India’ devotes a short paragraph with a quotation from H. A. Stuart’s Census report, form a small caste whose name and traditional occupation are little known even among their near neighbours. They were brought to the author’s notice in the course of an investigation into the peoples of the West Coast, whose occupation to-day is palanquin bearing, which is traditionally said to be one of those originally assigned to the maritime community of fishermen. The Palanquin or Manchal is a kind of hammock slung on a pole and carried by 4 bearers, 2 at each end who intone musically ‘Eh Hoom, Hoom Hoom’ as they trot along. Originally manchals were ‘a distinguished means of conveyance reserved, only for chieftains’. Later Brähmans and Kshatriyas only could use a manchal; the usual palanquin bearers for these high castemen were, as to-day, the Pallichans or the Parappur Nayars, to give them their more honorific designation. Nowadays the use of the manchal especially in certain places along the coast or in the interior where other modes of transport are neither easy nor available, is general, not being restricted to any caste, and the bearers employed belong to the fisherman class—among
the Mukkuvas there is no special section for this work though among the Mogayas there is one called the Boyis (both Hindu and Christian); Nasrani and Chettan xians too and the tapper class (Thiya, Billava, etc), are so employed. In fact taking to this occupation to-day is a simple question of wages and not a matter of caste or tradition.

The Pondans are not Pallichans—the sight of whom according to a Malayalam proverb brings on pain in the limbs and suggests a ride in the manchal—and do palanquin duty for the Zamorin only during his visits to the Temple and not for any other chieftain or Kshatriya or Brahman. Most of the Pondans are now doing ‘petty business’, their occupation to-day being ‘trade’. The women sell sundry articles of food and some men tend cattle. Their number nearly 36 years ago was 38 and has not undergone any marked decrease; there are to-day only 5 families and about 26 adults. Due to the abandonment of the original occupation—only 2 families are now occupationally attached to the Zamorin—and the natural changes brought on by time and other factors in the Zamorin’s court, the caste is likely to get lost as an entity in the near future. The Pondans are in receipt of a fixed monthly allowance of grain and other requirements from the Zamorin. Many years ago 22 families of Pondans with two leaders were brought away from the ‘Pandya Rajyam’, 11 of which with one leader stopped at Cochin as intended, for rendering palanquin service to the Raja of Cochin—my Pondan informant assures me their descendants live to-day at Thirupanithura—
the other 11 with the leader coming to Calicut for service under the Zamorin. The Pondans, according to my informant, are of ‘Vellala caste’, of ‘Aya Kulam’ of ‘Sri Krishna Varggam’ and the descendants of Nandagopan and Devaki. The name was not newly bestowed on them after their arrival on this coast and so may be a corruption of ‘Pogondans’ understood by Stuart, to be the palanquin-bearers of the Idayans of the East coast. That shepherds of the East coast did send out waves of migrants to the West coast is a traditional claim more likely based on fact. e. g. Mr. Kannan Nair states in the Malabar Quarterly Review (1903) that the Gopas, a section of Nayars living in the southern part of Kerala and the Konars of Poondurai near Erode, belong originally to the same tribe. The Pondans however have no connection with the Nayars while the Pallichans belong to a subsection of Nayars. In fact my Pondan informant took a pride in comparing his people to the ‘Tamil Brāhmans’ (Pattars) of Malabar whom they resemble, in spite of many differences, more than any one else. In personal appearance they are like the Pattars down to the east coast chignon but they sport a moustache. Their marriages are of the pre-puberty kind and the customs observed during pregnancy, childbirth, marriage and funeral are all like those of the Tamil Brāhmans. The wife is taken to her house for child-birth and returns to her husband’s home only after all the delivery rites are over. The Pondans do not wear ordinarily the sacred thread though they do so on marriage and funeral
occasions. Among the festivals they observe the important are the Karthigai, the Makara Pongal and Deepavali. As regards their food, they do not exclude fish and flesh from their dietary. The inheritance is according to the usual East-coast 'Makkathayam' i.e. the succession is in the male line. Their everyday language is a mixture more of Malayalam with mutilated Tamil words, a sort of Tamilo-Malayalam. Though not considered 'high' in social status they do not pollute the higher castes by their proximity. There is no distance pollution in their case; the Zamorin who is ordinarily polluted by the touch of any Tamilian has granted them from the beginning this special privilege. *

S. T. Moses, M. A., F. Z. S.

* This paper was read before the section of Anthropology at the fifteenth session of the Indian Science Congress held at Calcutta in January, 1928.
II. STREE-ACHAR IN WEST BENGAL.

Everybody knows that Hindu Marriages are performed with shastric rites and incantations of Mantras. But there is also another side of the shield. Along with these shastric rites, a body of customary rites, known as stree-achar have grown up, which varies from place to place, from district to district. In the following lines we have tried to give a fairly accurate description of Stree-achar, as it obtains among the upper castes of West Bengal.

The day before the marriage, the Barankula, the welcoming winnow fan and the Barandala, the welcoming shallow basket have to be arranged. This is the starting point of Stree-achar. The Barandala contains a little Ganges mud, a small stone, a conch shell, collyrium, turmeric, a small mirror, a comb, a small pradip or earthen lamp, vermilion, sandal wood, white mustard seed, Masikalai, a kind of pulse, rice, Issarmul (a kind of root), myrobalan, a bunch of ripe plantain, curd, unhusked paddy, Dubgrass, flowers, a small knife, a bit of copper, a little ghee, and Sastik or rice paste made into a little heap. The winnowing fan is also similarly arranged. It contains a little unhusked paddy spread out on it, an unpeeled plantain, and four little earthen pots, each containing rice, maskalai, and turmeric. These small earthen jars or ghat are smeared with turmeric. The whole thing is covered with a silken cloth. After the bridegroom has taken his bath, he is
made to stand on a little dais, specially erected for the purpose. The winnowing fan is moved before him in a graceful arc by a sadhaba, a woman whose husband is alive. Then the Barandala is raised up to him and each particular article that it contains is touched on his forehead. A tika or mark of sandal and curds is put between his eyebrows. This may be called the inaugural ceremony of Stree-achar, the first recognition of the man as a bridegroom. He has no other function to perform the whole day. The bride-groom is smeared with turmeric before his bath. After the bath is over, turmeric, oil and sweets are distributed among the neighbours. This is said to ensure a happy married life and healthy progenies. The bride has to go through a similar ceremony.

The next ceremony of Stree-achar is performed in the early dawn of the marriage day in the bride's house. Some sadhabas or married women sit together in the early morning and cry ulu, ulu, an auspicious ejaculation of joy. The conch shell is blown, and tom-toms and shanai strike up a joyful tune. Curds, Chira (a preparation of rice), and sugar are mixed up together and three or five sadhabas are fed with it by another sadhaba. After the feeding is over the whole company take a good repast and disperse. This is called Dadhi-mangal ceremony, or the auspicious ceremony of curds.

Next we come to the day of marriage. The bride-groom arrives in the evening. Some hours before many sadhabas go to fetch water. This is
called *Jalsadha* ceremony. They take a little water from the house of the bride and go on collecting water from the houses of three or five neighbours, and last of all, they go to a neighbouring tank or river to make the pitcher full to the brim. A winnowing fan and a small shallow basket is taken on the head to the river-bank. The lady who goes with the winnowing fan on her head puts on a trail of a new napkin smeared in turmeric. This is called *Sohag-lotan*, or the trail of love. After she returns from the river side, her husband comes to her and cuts off the trail with one stroke of the axe and carries it home in a basket.

The bride is taken out and is made to place her left foot on a flat wicker work, specially made for the purpose. A *sadhaba* or a married woman also places her left foot on the wicker work. A bundle of straw is then taken and lighted. It is taken three times round the left foot of the bride, and then three times round the left foot of the *sadhaba*. The bundle is then spread out, and the bride stretches her hand to the fire and feels its heat while taking the name of the bridegroom. Then she is bathed in the water that was collected in the evening. She then changes her cloth and goes to her chamber. A red thread with *Mona muni* (a kind of fruit) is put on her neck. After retiring to her chamber an earthen *handi*, full of water is placed before her and she weighs the water out in a small bamboo basket, as big as a man's hand, which is
called pāli. Two arica nuts are placed in her mouth, one on each side, but she should not chew them.

We have described the welcoming fan and the welcoming basket. Another important article of welcome becomes necessary after the arrival of the bride-groom in the bride's house. It is called Sree, or representation of good fortune and beauty. It is a small temple shaped heap placed on a disc, made of a mixed paste of rice and maskalai. It is beautifully decorated, and oil is poured on its head. The sil, the pounding slab of the household is placed on the floor and four plantain trees are placed on its four corners. The bridegroom is marched on to this sil by a bevy of ladies, and he stands on it in an erect posture. He is then given a welcome by the barandala and the sree by some married woman, preferably an agnate relation of the bride. The fruits of the Dhatura tree are cut into two and their stones are taken out carefully without injuring the pericarp. Twenty eight such cup-shaped fruits are then arranged on a disc and a lighted wicker is then placed on each of those. The disc with its lamps of Dhatura fruits is then thrown over the head of the bridegroom. An earthen lamp with its covering disc, is also waved before the bridegroom. Fourteen threads each to the length of the bridegroom from the crown of his head to his toe are then put tightly round his right wrist. A paste of Heghamla a mixture of spices, is applied on his breast. A shuttle is put in his hand, and he is asked to bleat like a lamb. A
pad-lock and key is handed over to the bridegroom and he is asked to close the lock. After the lock is closed, it is thrown into water. This is symbolical of the closing of the mouth of the bridegroom, so that he may not quarrel with the bride in after-life. The bridegroom's hands are then tied with a piece of creeper by a lady. The bridegroom's party pays a ransom to her and makes the bridegroom free. The bridegroom then washes the hands of the lady who tied him up with the creeper. The bride is then seated on a wooden plank and carried seven times round the bridegroom. The bride and the bridegroom are then seated face to face, and the latter is allowed to exchange looks with the bride. This finishes the 'stree-achar' prior to the actual marriage ceremony. The marriage ceremony proper begins now; and the priest offers the bride to the bridegroom with due incantations and shastric rites. The bridegroom accepts the offer and undertakes to maintain his wife. He has not to utter a useless formula as in Christian marriages, that he should love his wife and none else during coverture. After the marriage is over, the wearing cloths of the bride and the bridegroom are tied up with another piece of cloth.

The bride and the bridegroom retire to their sleeping chamber for the night. Ladies gather round them, and make themselves merry in all imaginable ways; jests, mirth and songs go round freely. The bride and the bridegroom play with
kouris by tossing them up in the air and catching them in the palm of their hands. The barankula is then brought up, and the bride takes out the four little pots, containing rice and maskali. She throws out their contents with her left hand, and the bridegroom has to refill them with his right hand. The sara or disc that served as a covering to the auspicious lamp, used during marriage, is then brought to the bridegroom and he has to cover it with the cloth that he wears. He has then to take the name of his wife and make a promise, three times, that he would try to cover all faults and blemishes of his wife. No one is free from faults. It is not for the husband to expose his wife before other members of the household or neighbours. The bridegroom carries a Janti, the familiar nut-cracker, in his hand. The bride has also to carry a Kajallata, or collyrium-holder. The betel nuts that the bride carried in her mouth during the early part of stree-achar are then cut with the Janti of the bridegroom. He is given some pieces out of them inside a betel leaf, folded and dressed in the ordinary way. It is believed by taking the nut that the bride carried in her mouth, the bridegroom becomes partial to her and begins to dote upon her from the very moment. It must be remembered in this connection that the bulk of the stree-achar ceremony takes place in the bride's house after the arrival of the bridegroom in the evening of the marriage day. The bride's party have the upperhand over the bridegroom. It is said that a bridegroom is no better than a chore or a
thief, that is to say, the bridegroom should not assert himself in any way. He should not wrangle. He should put up with everything quietly as though he has come to the bride’s house like a criminal, the whole of the stree-achar ceremony is directed with one end in view to rivet the affection of the bridegroom on the bride, and to make him subservient to her.

Next morning some shadhabas go to the bridal chamber to take out the bridegroom’s bed. They charge a small fee from the bridegroom for doing the work. The bridegroom then goes to the parlour and is allowed to take a little rest. Just before taking their bath, the bridegroom and the bride are made to stand on the sil as in the night previous. The bridegroom takes a little vermillion on the little finger of his right hand, and describes a small image on the back of the bride. The bride does the same on the back of the bridegroom with the little finger of her left hand. A little water is then put on their head, and they take their baths separately. After their bath is finished they perform kusundika ceremony if they happen to belong to a twice-born caste. In Sudra marriages kusundika ceremony does not take place, the kusundika is a purely shastric ceremony. It occupies some hours. Its duration depends upon the Veda according to which it is performed. Many mantras or incantations are uttered during kusundika and a Yajna or burning of clarified butter takes place according to shastric rites. The kusundika sets the final seal of the shastras, as it were, to the marriage and makes it valid and binding on the
parties. Although marriage without kusundika is no marriage at all, yet if a bridegroom dies before kusundika the bride is doomed to perpetual widowhood.

There is a ceremony called kanakanjali. It is performed just when the married couple are about to depart for their home in the afternoon or evening of the day after marriage. The bride winnows the earth, thrown out before a hole in which mice live, and takes a rupee, and offers them both to an elderly member of her house. The bride and the bridegroom are then seated together and baran is made in the usual way. This is the parting ceremony and it is similar to the welcome baran. The lady, who gives the parting to bride, wipes her feet with the end of her cloth.

We next come to the bridegroom's house. The married couple have come and there is great rejoicing in the household. Ladies flock to the outer door. A pitcher of water is thrown under the conveyance, be it a palanquin or a carriage, that has brought in the married couple. A little milk and alta, a solution of lac, are put into a stone plate. The bride stands with her left foot on this plate. The bridegroom places his left hand, palm uppermost on the head of the bride. The bride then holds a pitcher full of water in her left arm, and a fish with scales and a little ball of powdered rice paste in her left palm. The baran is then made to the married couple with the winnowing fan and the welcoming basket.
The bridegroom holds on his palm which he has put on the head of the bride, a small basket for measuring rice and a vermilion holder. After the baran is over some sweets and pan are given to the married couple. A cloth is spread right up to the room where the married couple are to sit. They walk slowly over it, just before entering the room, the bride groom throws down the basket used for measuring rice, and the vermilion holder. The married couple are then seated on a mat, the ladies of the bridegroom's family put a little honey on to the ears of the bride, so that their words may sound sweet to her.

The third night after marriage is the night of Fulsajya or flower bed. On that night the married couple are left to themselves, although eavesdropping goes on freely.

Satindra Narayan Roy, M.A., B.L.
III. ON TWO RECENT INSTANCES OF EXORCISM FROM SOUTHERN AND EASTERN BENGAL.

(I)

Primitive men believe that they are surrounded on all sides by a ghostly company of invisible beings who are ready to do them good or to inflict evil on them. They can either cause misfortunes to them or inflict on them all sorts of diseases and ailments. Consequently they believe that diseases can be cured if the spirits, which cause them, can be expelled or exorcised away. There is a certain class of professional men among them who are believed to be well up in the arts of sorcery and charming. They believe that it is they who by means of their charms and spells can drive away the disease-demons or disease-spirits.

Sir James Campbell says that "The unwilled is the Spirit-caused", that is to say, the unwished-for diseases and ailments are caused by spirits which enter the victim's body and that the remedy for curing these diseases is the exorcism or expulsion of these disease-spirits by flogging the patients so that the said spirits might leave the victims' bodies and pass on to some other receptients, which are then driven away or destroyed. These practices are very commonly resorted to in different parts of the Bombay Presidency.

A remarkable instance of the practice of exorcising away disease spirits by flogging the patients has been recorded by Mr. R. E. Enthoven, who says that while he was a junior magistrate at Dharwar, in the Bombay Presidency, about 30 years ago (i.e., 1894 A. D.) he investigated a case of murder in which a girl named Giddwa was killed under the following circumstances:—The girl complained of a pain in her back, which was supposed to be caused by an evil spirit named Uzzi which had entered her. There-upon a Muhammadan exorcist named Tamal Din and two Hindu exorcists named Mudewala and Adevi were called in. These men at first made the girl to lie flat on the ground and commenced to tread and jump on her body. Then they flogged the girl with a stick asking the evil spirit Uzzi to leave her. Being unable to bear the pain of the beating the girl fled crying out that the spirit was leaving her. Then more flogging followed. The result of this was that the girl became unconscious and died. *

Even in modern France, the common people believe that certain persons can league themselves with the Devil and by means of sorcery can throw spells over other persons and that the proper way of exorcising away the aforesaid Devil or Demon is to flog the supposed sorcerer so that the Devil may leave him. This will be evident from the undermentioned account of a witchcraft trial which is taking place in France and causing

* Obiet pages 9 and 10.
the greatest sensation there:— "Charges of witchcraft were made in the Palace of justice at Melun when the Abbe Denayers, of the little village of Bourbon, who was recently beaten by people who accuse him of sorcery, faced them in open court.

The accused, ten women and two men, belonging to the Society of "Our Lady of Fears", maintained that the abbe was a sorcerer and had thrown wicked spells over Marie Mesmir, founder of their sect.

A municipal employee at Bordeaux named Froges declared, with great solemnity:—"I struck the abbe with that same discipline (whip) which I have used on myself for the last 15 months for mortification. I was a soldier against one who represented the army of the devil. I did not want to kill him, but to punish him severely and drive the demon out of him."

Traces of this animistic belief still survive among the womenfolk of the country side in Southern Bengal. These women believe that diseases are caused not by the violation of the laws of health but by the mischeivous propensities of invisible spirits who are hovering about in the air. These spirits are under the control of the goddess Kali who lets them loose to torment a particular person who might have offended her dietyship. If the goddess can be propitiated by suitable sacrifices and offerings, by appropriate

* Vide the article entitled "Witchcraft Trial" published in the Calcutta Daily Statesman of the 21st February 1926.
prayers and incantations, she can be so far placated as to withdraw her myrmidons—the diseases demons—and thereby to free the offending patients who have offended her.

A recent instance which illustrates in a remarkable manner, the prevalence of the afore-mentioned belief among the ignorant womenfolk of Southern Bengal occurred sometime ago in a village in the District of Howrah and of which an account appeared in the Bengali Daily Newspaper "The Dainik Vashumati" of Thursday the 28th Jaistha 1332 B.S. corresponding to the 11th June 1925. In this case, a woman who was a veteran swindler, defrauded the ladies of certain families of their ornaments by representing to them, that she would cure the sick members of their families by propitiating the goddess Kali (the patron deity of disease demons and disease-spirits) by making suitable offerings and by appropriate prayers to her. She took advantage of the credulity of her victims who laboured under the impression that the sickness of their relatives and children, had been caused by the wrath of the goddess Kali who had let loose the disease-demons to torment the latter. So they readily agreed to the swindler woman's false assurance that she would cure the patients by propitiating the offended goddess.

The full details of this interesting case will appear from the following account (in Deva-nagari script) which has been published in the afore-
जाल विवाहर प्रस्थावः

खैं लोकें प्रद्धति प्रवृहणः

हुर्गामियी वनाम सुरवाला एकाद बादाज़ी रसिन्नी। ताहार च्यांरे नाम कुलम, च्यार एकाद नाम कौर्चिन्नी। कह क्रम भर शे जेल ख्याभियहँ, शेषसारे ताहार भाल बतुर चन्द्रर कारागहोख चुण। हदालिंगा गोपेःन्ना पुलिश बनना हुर्गामियीके प्रसार करियहँ। हुर्गामियी हदा०ज़ा जिलार खुब दरवारवाद ग्रामे गिया शेणलोकेरे सहित सातालु करित। शे दमन समय याहित, यवन बाड़ीते कोन पुराव लोक याहित न। शे एक दिन एक एक बनचात लोकेर बाड़ीते गिया चेह बाड़ी खैं लोकिकोन बलित, शे ताहारङ भरूङ शो नोड़र नामे हुङ्गृट नालनीर विवाह दिवार जन्म पात्र खुजितें। शे यह विवाह बेश भाल रकम एक दिवें। तारपर शे शेष सम्बन्ध लोकेर बाड़ीते राखिते याहित, शे भावार्थः खैं कोन प्रकाश रोग यवन्ना दैखिले बलित, शे गौड़ीर राघः काली पूजा किया चेह रोग वाराज्या दिते पारी। बाड़ी तोलिका कालियुक्तवा ब्राह्मण श्रो भेद्युपुरेर रोग मुक्त ब्राह्मणाय ब्रह्मण मयोर प्रस्थावे सम्बन्ध दुःखें। तारपर हुर्गामियी बाडिया दिया एकटा कालीः दूःखित तैयारी किया एकटा बृहत्तर पात्र, गंभीराज, बल श्रो तिकु राशिका चारित। एकजुली ताहारे देविया दुःखें, शे बल श्रो ब्राह्मण एकटा सेते पात्र पुरित। पांडरित बुध दृष्टिया ताहार कालियुक्ततीत समयोर साधित, तारपर बुधकृ ध्वन्द्वया शे कालियुक्ततीत समयोर नाचित। तिकुदाब नाचितार पर शे बाड़ीर भलिजाविके दण्याग्र हरे पाठाद्या दिया पात्र भव्य ब्राह्मण एक एक खानि किया वाहिर किया जिंद्रे कापूर भव्य ब्राह्मण दुःखिते बांधित। एक भाने बारंबार शे महालागांवार दण्याग्र हरे पाठाद्या एक एक ब्राह्मणुद्धर धातिकात चित। तारपर बाड़ीर भलिजाविर दित शे, तिनिसे दिने मध्ये येन ताहारा एक पात्र ना खुलें, खुलिले रोगी मारा गाडने। राघः प्रमाण हशें शे चलायुक्त दिके दिम प्राप्तिचे, एक मतिष्ठा किया वाहिर हशें। तिनिसे चलायुक्त दिके शे अखान्नो किया याहित ना, ताहार महाने भांले-पत्रे देर्दिपान नाह।
ENGLISH TRANSLATION.

"Fraudulent Proposal of Marriage".

Wonderful Cheating by a woman,

A Bengali woman named *Durgāmayī* alias *Surabāla* possessing two other aliases also, viz *Kusum* and *Kīrthidāsī*, had been previously convicted six times and sentenced to imprisonment. On the last occasion, she was sentenced to 7 years' rigorous imprisonment. The Detective Police of Howrah has recently arrested *Durgāmayī*. She used to go to the distant villages in the district of Howrah and to interview the womenfolk there, just during those hours when the male members used to be absent from their homes. Everyday she used to visit some respectable family and to tell the female members thereof that she had come in search of bridegrooms for her two granddaughters named *Sarayū* and *Nīhar*, and to say that she would pay handsome dowery to them. Then she used to pass the night in the house of that family. If she found any member of that family suffering from any disease she would say that she would cure him by worshipping the goddess *Kālī*. The female members of the household, being
anxious for the recovery of their relatives and children, used to agree to her proposal. Thereafter she used to make a clay image of the goddess Kālī and to ask for an earthen pot, a little Ganges water, some flowers and a few ornaments.

When these were given to her, she used to place the flowers and the ornaments within the earthen pot, and then covering it up with a lid, placed it before the image. Thereafter, stripping herself naked, she used to dance before the goddess. After she had danced for sometime, she used to send away the ladies of the family to another room. Then she would take the ornaments one by one from inside the earthen pot and hid them in a bundle kept within her sūri. In this way she repeatedly sent away the ladies to another room and stole the ornaments one by one. Then she used to tell them not to open the earthen pot until after the expiry of three days, and that if they would act contrary to this direction, this patient would die. When the day dawned, she used to promise that she would come back again on the 4th day, and saying this, she used to leave the house. But she never went back to the house on the 4th day. On her non-appearance, the ladies used to open the earthen pot and found that the ornaments had disappeared therefrom.

"ENQUIRY BY THE POLICE".

After enquiry, the Police has come to know that in this way, this woman has defrauded many families in the villages named, Majū, Balarāmpur, Bāgnān, Āmtā and other villages in the district of
Howrah, and in the village Haripal in the district of Hooghly and in village Budge-Budge in the district of 24 Parganas. She is now in the custody of Police, and further investigation is being made.

Now from the preceding account we find that the woman, pretending to be the propitiator of the offended goddess Kali, stripped herself naked and danced before her dietyship's image.

So the question arises: why did she dance before the image of the goddess? The answer to this question is not far to seek, for we know that in ancient times, "dancing was a form of worship". We further know that among peoples in a low plane of culture, the medicinemen or the priests dance before their gods. Among the ancient Israelites, this was also the custom, for King David danced before the Lord with all his might (Second Book of Samuel VI. 14). Among the ancient Greeks, the Romans and the Babylonians, the same custom prevailed, for their ancient writings tell us how processions of worshippers, singing and dancing, went to the temples of their gods. This custom also prevails even at the present day among the civilized nations of Europe. On the occasion of the festival of Corpus Christi which is held in Seville in Spain, a ceremonial dance is performed before the high altar of the Cathedral of that city. Then again, at Echternach in Germany, people dance in the streets once every year to celebrate the introduction of Christianity by Saint Willibrond. Even in Bengal at
the present day, the crowds of worshippers and votaries dance in Vaishnaba processions to the accompaniment of singing and the playing of musical instruments. On the occasion of the Chait Sankranti Festival, which is celebrated about the middle of April every year, the votaries who have taken vows to perform the Gajan” in honour of the god Siva, dress themselves in the guise of various characters and go about in procession, dancing to the accompaniment of the beating of drums and tom-toms.

Now another question arises:—What was the object of the rites which the woman pretended to perform—Was it to propitiate the goddess Kāli or was it to exorcise away the disease-spirits? I am inclined to think that the object of the rites was to exorcise away, by an indirect method, the disease-spirits which had inflicted the diseases upon the sick members of the households, which she defrauded; now the goddess Kāli presides over the spirits and demons who inflict the diseases upon sick persons, and can let them loose or withdraw them at her own sweet will and pleasure. So it was believed not only by the swindler woman but also by those ladies when she defrauded that if the goddess was propitiated by the making of suitable offerings and prayers that she would relent so far as to withdraw the disease-spirits and thereby to relieve the patients of their sickness.

II.

Now we come to the subject of the exorcism of ghost. A case recently occurred in the Munshi-
ganj Subdivision in the District of Dacca, where-in a person who was believed to be possessed by a ghost, was repeatedly plunged into the water of a tank under the belief that the ghost possessing him would be expelled or exorcised away. But it turned out that on account of the repeated dunking, which the possessed person had to undergo he died. The persons who dunked the possessed-person have been arrested and sent up for trial on a charge of man slaughter, before the Sub-Deputy Magistrate of Munshigunj as will appear from the following account of the case which has been published in the Bengali Daily Newspaper "The Anandabazar Patrika" of Monday the 22nd Ashadha 1332 B. S. corresponding to the 6th of July 1925:

अन्त संस्कारेय फल।

चौकिदार प्राणनाथ।

मुन्मोन्स्य मदुक्कर साधु दिपुदीर चलासे एक छेंबू मंडले सहु छेंबू छछायहै। प्राकाश में वाघु चौकिदार नामक जनेक प्राण्य चौकिदार एक दिन रात्रिते ताहार कार्य करिवार समय भय पाय। प्रामवासिग्राम भावे ये, ताहारो सूदूरे पाटवाहै। तबन ताहारा भूत क्षड़ाइवार जच्छ सहुको एकट पुक्केर सबै निया बारबार जखेरे सबै ठबिया घरे। फले लोको भारा गिराहै। प्रामवासिग्राम जामो चुड़ाम वरियाहै।

ENGLISH TRANSLATION.

The aftermath of a Superstition.

Death of a Choukidar.

A curious case has been instituted in the court of a Sub-Deputy Magistrate in the Munshiganj Sub-Division (of the District of Dacca in Eastern Bengal). It is stated that a village Choukidar,
named Sadhu while he was on his duty, one night, got frightened (by seeing something). The villagers thought that he had been possessed by ghosts. Thereupon, for the purpose of exorcising away the ghost, they took him to a tank and repeatedly plunged him in the water thereof. As a result of this ducking, he died. The accused have been released on bail.

Now the question arises: why was it believed by the people of the Munshigunj Sub-division that the ghost would leave the person if the latter were repeatedly plunged in the water? The answer to this question is not far to seek. It is popularly believed that witches and spirits, cannot cross running water. This idea has originated from the primitive belief that the souls of diseased persons have to undergo great difficulty in crossing rivers while on their way to the other world. A well-known example of this belief will occur to those who have read the legend of "Tam O' Shanter". It will be remembered that as soon as Tam has reached the "Key-stane O' the brig" he is beyond the pursuit of the witches. "A running stream they dare na cross".

I am inclined to think that the people of the Munshigunj Sub-Division superstitiously believe that ghosts and other malignant spirits have an antipathy to water and cannot endure being plunged therein. It is under the influence of that belief that the illiterate villagers repeatedly duck the person; whom they suppose to be possessed by a ghost, in the water of the tank so that the ghost might leave him.
This doctrine of Antipathy lies at the root of many quaint beliefs about certain objects possessing properties of expelling or driving away ghosts and malevolent spirits. On this subject Miss C. S. Burne says:—“Some would add Antipathy to this list (Sympathy, Symbolism or Minietic Magic) as the basis of Charming or "benevolent magic" "Bell makee sing, debbil no come,” said a man to Dr. Hildburgh in Shanghai. “To hate as the devil hates holywater,” is an Irish saying, "Rowan-tree and red threed put the witches to thier speed", a Scotish one.

But these things may equally be interpret-ed merely as overcoming the enemy by the exhibition of superior magical force as the rival magicians of folktales vie with one another and outwit one another. The sounding bell, the holy water possess power superior to that of the demon. The sacrificial hue of the red berries and the red thread surpasses the resources of witchcraft; and the silver bullet that slays the witch probably exhibits the superiority “of white” to “black” magic. *

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SARAT CHANDRA MITRA, M. A., B. L.

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† This paper was read before the section of Anthropology at the thirteenth session of the Indian Science Congress held at Bombay in January 1926, and has been subsequently enlarged.
IV. SOME PLACE-NAMES IN PALAMAU.

The southern portion of the district of Palamau is extremely hilly and is covered by dense jungles. The inhabitants are chiefly Khairwars and Cheros with a sprinkling of Korowas, Uraons, Birjias and Mahomedans. There are no Mundas here now.

The people live by agriculture and the villages are therefore situated on some suitable upland near river-courses. Such sites are never very wide in extent and hence villages with more than twenty houses are rare. Sometimes the peasants fail to save their crops from the depredation of bison and deer and migrate to more hospitable regions. New settlements are soon made and soon deserted. Under these circumstances, old place-names are seldom met with; and the names now in use are mostly in the language spoken by the present inhabitants. However some names in former languages have survived and they tell us something about the people who lived here in former times.

The country was originally occupied by the Mundas, who have migrated about eighty miles to the east into the district of Ranchi. It is a custom with the Mundas to raise stone-monuments over their dead. And if the Mundas move away from a place, these monuments remain there to indicate their former presence. But in this particular part of Palamau, such monuments are rare. I have come across only two examples beside the road Gāru to Mahuadānr. The absence of
memorial stones may be due to several causes. The Mundas might have lived here in very small numbers like the Kairwars, so that they could not gather a sufficient number of men to handle big blocks of stone; or, they might have tarried in this country for a short time on their way from Rohtas to Ranchi; or, they might not have acquired the habit of erecting stone-monuments when they were here. However that may be, the fact that they lived here for sometime is proved by the survival of a number of Mundari names.

Dalsadôm—dal, to beat and sadôm, horse. The name of a steep climb on the edge of a plateau.

Hesûtv—hesa, the pipal tree and hâtû, village. The initial ha is similarly dropped in the names of two other villages in the district of Ranchi, viz. Patrûtu and Baratûtu. Patrû is a reserved piece of land where sal saplings are either planted or else allowed to grow up freely; so that Patrûtu would mean a village near a patrû, Bûria is two so that Baratûtu means the twin villages.

Hendehans—may have come from hende, black and hâsa, earth. It is probable that the word hâsa was changed into hans, duck, by the later Hindi-speakers.

Hesâdi—probably from hesâ, the pipal tree and Hindi (?) di or dihi, upland. The word would then mean upland where there is a pipal tree.

Serendag—The meaning is not known, but the latter half of the word is also found in the names Ichadág, Lohardagga, where it is developed
from \textit{da}, water. \textit{Ichha} is the name of a plant, the flowers of which are used to prepare a cooling drink; hence, Ichdag. Similarly Lohardagga comes from \textit{Lor}, streamlet and \textit{da}, water. It is therefore probable that Serendag comes from \textit{Seren} (=?) and \textit{da} water. It must be noted however that \textit{da} does not always change into \textit{dag}, e. g. in Doranda from \textit{durang}, to sing and \textit{da}, meaning the water of river which sings.

The transformation of the final \textit{a} into \textit{ag}, as in Ichadag, is perhaps responsible for the village-name Hesag, which may have been derived from \textit{hesa}.

The tribe of Mars probably occupied the land after the Mundas. An incident connected with their presence is preserved in the Hindi village name Maromar, from \textit{marna} to beat and \textit{Mar}.

The present Khairwars and the Cheros all speak Hindi and names of villages and jungles or of prominent places are therefore mostly in Hindi. Villages are generally after some striking natural object near by. The following examples will make the point clear.

\textit{Mahuadanr}—from \textit{mahua}, the name of a tree and \textit{danr}, upland; the upland with the \textit{mahua} tree.

\textit{Dumarkona}—\textit{dumar}, fig and \textit{kona}, corner. Similarly, Jamunkona, the corner with the \textit{jamun} tree.

\textit{Banjhabaher}—from \textit{banjha}, barren and \textit{baher}, the name of a tree; meaning the place where a barren \textit{baher} tree stands.
Balahikusum—from balu, sand and kusum, the name of a tree; meaning place near which there is a stretch of sand with a kusum tree in it.

Koinari—The place which is famed for the edible koinar leaves.

Maonadhonrha—from maona, a tree and dhonrha, a sreamlet, the place where a maona stands beside a stream.

Joladhonrha—Jolha is a Mahomedan weaver. The word means a place where a weaver lives by the side of stream.

Kandagarha—kanda, an edible tuber and garha, a streamlet.

Sālēgarha—the streamlet with the sālē tree near by.

Parāspani—The place near the stretch of water close to the paras tree.

Nāgrāpāthal—from nāgrā, drum and pāthal, stone. The place where the stones are shaped flat like drums.

Palamau—from pāla, hoar-frost and mou, shortened form of mouja, a zamindari division; meaning the mouja where hoar-frost falls much.

Names also come from some important event connected with the locality. We have already noticed an example in Maromar. We shall proceed to study a few more like this.

Korinduba—Korin, a Korwa woman and dubna, to sink or drown. It is the name of a waterfall where a well-known Korwa woman was drowned.

Bharatdera—Bharat was the name of a prominent local mutineer, and dera, home. The name is that of a cave in which Bharat lived.
Mayūri—mūr, head and kānā, to cut. The place where the head was cut.

Jogimanda—from jogi, an ascetic and māṇḍā, a cave; the cave where an ascetic lived. Cf. Jogimāra cave in the state of Siriguja, which is situated very near this portion of Pālamāu.

Bagdhari—from bāg, tiger and dharmā, to catch. This is a very recent name and has come into use after an unfortunate accident last year. This piece of forest was formerly called Maonadhoṁrha after a neighbouring village of that name.

Villages are again named after the inhabitants. Thus, Birjiatola comes from the name of a certain tribe and tola, a quarter of a village, or a village. Aheerpurwa comes from the caste of Aheers and pur, city or place. The final wa is often added in Hindi. (Cf. Korwa and Korin, a female Korwa. It would appear that the tribe is really called Kor or Kol, whence Hindi Korwa). New settlements are simply called Nawatola from nāwa, new and tola.

Besides the names we have already discussed, there are a large number of which no satisfactory derivation has been found, e.g. Gart, Rud, Betla, Ker, Ladi, Labbar, Doram, Dabari, Puri, Samsihari, Chatam and so on. It is likely that a number of them are Uraon names or are Mundari names altered beyond recognition. We shall end here with a very interesting case of such change in the town of Hazaribagh. There is a hill which is said to have been called Seta-garha from Mundari seta, a dog and garha, a
river. There are no Mundas near that place now and the Hindi-speaking inhabitants have altered the name into Sitagarh, meaning the fort of Sita. It may be that some of our mystery-names in Palamau have gone through similar transformations and have ended in being names which, unlike Sitagarh, bear no meaning at all.

NIRMAL KUMAR BOSE, M. A.
V. ON TWO MORE SANTALI FOLKTALES OF "DER MANN UND FUCHES" TYPE.

In my article entitled "On A Santali Ætiological Folktales of The "Mann Und Fuchs's Type" which has been published elsewhere * I stated that up to the time of writing that paper, 103 folktale's of "The Mann Und Fuchs" Type, were known to me. But since the publication of that paper, I have come across two more Santali Folktales of the aforementioned type, which have not yet been discussed from the Storiologist's point of view. For this reason I wish to give in this paper, abstracts of these two hitherto undisussed stories and deal with the same from the folklorist point of view.

The first of these folktales is entitled "Leopard Outwitted" and its leading incidends are briefly stated as follows:—

A man-eating leopard, while trying to escape from some hunters, met a merchant and urged him to save him from the latter. The merchant having agreed to do so on condition of his not eating him while he would be let loose, opened a sack and shut up the leopard inside it. After taking him to some distance away from the hunters, the merchant untied the sack and let loose the leopard. Thereupon the leopard was about to eat the merchant.

But the merchant reminded the leopard of his promise not to eat him. After much discussion it was decided to refer the matter to the decision of arbitrators as to whether or not the leopard's action was fair. The leopard having agreed to do so, a neighbouring stream was asked whether it would be fair for the leopard to kill the merchant, after the latter had saved the former's life. The stream said that it would be fair, as men were ungrateful and washed all manner of filthy things in its water. Thereafter the dispute was referred to a tree which also opined that it would be fair for the leopard to kill the merchant as men were ungrateful and cut down trees, although the latter gave shade to men. Then the dispute was referred to a jackel who, having wanted to see how matters originally stood, the leopard entered the sack which was tied up immediately and taken to a ravine. After having arrived there and according to the jackal's instruction, the merchant killed the leopard by battering his head with a stone; and the jackal fed upon the leopard's carcase.

In the foregoing tale, the leopard has taken the tiger's place; whereas a new arbitrator viz a stream, has been introduced therein.

There is another Santali Folktale, entitled, the "Ungrateful Snake" wherein the tiger's place has been taken by a snake, but the remaining incidents of the second variant are almost identi-

cal with those of the preceding one, with this much difference only viz. that the ungrateful snake is killed by means of magic spells, which he had taught to his intended victim's wife. The chief incidents of the second variant are stated as follows:

A prince saved a snake from being burnt to death in a field of thatching grass which was on fire, on condition of the latter granting him a boon. After he had saved the snake's life, he demanded the boon from the snake. But the snake not only refused to grant him the promised boon but also wanted to eat him up. Thereupon, it was decided to take the opinion of a banian tree, a cow, and water as to whether it would be fair for the snake to eat the prince, after the latter had saved the former's life. The banian tree said that it would be fair for the snake to eat the prince as men were ungrateful and cut the branches of the banyan tree although the latter gave them shade. The cow was also of the same opinion, as men were ungrateful and overworked and illtreated cattle, although the cows gave them milk. The water was also of the same opinion as men spat upon the water and washed dirty things therein, although men lived by drinking this water. But subsequently the prince's wife learnt from the snake an incantation for making charmed dust whereby men and animals could be killed. After learning this charm the prince's wife blew the charmed dust upon the snake and killed the latter thereby. Thus the prince's life was saved.
In this last mentioned tale, the dispute is not decided by a jackal; and the incident of “Inside again” does not occur therein. But the death of the ungrateful snake is brought about by the wife of his intended victim by the use of the very same incantation which had been taught to her by that ungrateful reptile.

In Indian folklore, the jackal is depicted as an examplar of cunning and trickery. Many of the Indian folktales describe how the jackal, by his trickery and cunning gets the better of men and other animals. The Indian folktales of the “Man und Fuchs” type describe how the dispute between the man and the ungrateful beast, viz, the tiger or the leopard is decided by the jackal acting as a judge therein. In these cases, the jackal, cunningly wanting to see how matter originally stood, cajoles the ungrateful beast to go into his former position again and that, as soon as this is done, the latter is again shut up or entrapped and then belaboured to death.

It is interesting to note that in many other Indian folktales also which do not belong to the “Man Und Fuchs” types the jackal by reason of his cunning, acts as judge and decides many naughty problems, as will appear from the three Santali Folktales entitled (1) The Changed Calf” (2) “The Magic Cow” and (3) “The Widows’ Son.”

In the first story entitled “The Changed Calf” it is stated that an oilman misappropriated the calf belonging to a cowherd saying that his own bull had given birth to it. This led to a dispute between the oilman and the cowherd, which was
ultimately referred to the arbitration of the villagers. They relied on the oilman's statement and awarded him the calf. But being dissatisfied with this decision, the cowherd again referred the dispute to the decision of a night-jar and a jackal. The villagers were again summoned to an assembly whereby the night-jar and the jackal sat and pretended to be asleep. When, at the request of the villagers, the beast and the bird were awakened and called upon to decide that case, the night-jar said that he had been dreaming a dream wherein he saw one egg sitting upon another egg, and that no bird was sitting upon them. He, therefore, asked the villagers to explain the meaning of this dream and that if they would be unable to do so, he would decide the case in favour of the cowherd and award the calf to him. On waking up the jackal said that he too had been dreaming a dream wherein he saw that the sea was on fire, the fishes were getting burnt and that be was feeding upon the burnt fishes. Thereafter he called upon the assembled villagers to explain the significance of this dream, saying that if they would be unable to do so he would decree the cowherd's case and award him the calf.

But the villagers on hearing this, said: "How is it possible for the sea to take fire and for an egg to sit upon another egg? The dream is an absurd one and we are unable to explain it." Thereupon the jackal retorted by saying: "If it is impossible for the sea to take fire and for an egg to sit upon another egg, how is it possible
for a bullock to give birth to a calf? Your decision is a wrong one. We therefore decree the case in favour of the cowherd and award him the calf." So the calf was given to the cowherd.

Here we see the cunning jackal proved the absurdity and the falsity of the villagers' decision by calling upon the said villagers to believe the truth and possibility of another absurd and false event and by their refusal to believe it to be true and possible.

Then again in the Santali folktale of the "Magic Cow", a thief stole a Magic Cow belonging to the hero named Kara and substituted therefor another cow belonging to himself. When Kara discovered that his magic cow had been stolen and another had been substituted in her place, he accused the former of having stolen it. But the thief persistently said that the magic cow belonged to himself and not to the claimant Kara. Thereupon a great dispute arose between them, which was referred to the decision of the villagers. But the thief managed to bribe them who decided in his favour.

But being dissatisfied with this decision, Kara went to a he-jackal and she-jackal and brought them as arbitrators to decide the case anew. When the villagers were assembled, the jackals went there and said: "If a judge takes a bribe his descendants for several generations shall eat filth in this world and the next, but if he make

* For a fuller version of this Santali folktale, see Folklore of the Santal Parganas, By O. H. Bompas, pp. 49-51.
public confession, then he shall escape this punishment. This is what our forefathers have said and the man who defraud another shall be thrust down into hell, this also they have said. Now all of you make honest enquiry into this matter. We will swear before God to do justice and the complainant and the accused shall also take oath and we will decide fairly*. Thereupon the head man and the villagers admitted having taken bribes. But the thief still persisted that the magic cow belonged to himself. On this both the he-jackal and she-jackal went to the herd of cattle and readily picked out the cow which was claimed by Kara thereupon the villagers cried out that this was a right judgement. So the cow was given back to Kara. *

In this case also, the jackal decided the dispute rightly by means of his cunning and shrewdness.

The incident of the jackals cajoling the villagers to confess that they had taken bribe, by stating that the bribe-takers have to eat filth, also occurs in Santali Folktale entitled "The Widow's Son". In this story, a widow's son named Bhagrai, accompanied by his neighbour—a black-smith, went to a distant village to sell a cow. While going thither, night overtook them, and they took shelter in the house of a villager.

At dead of night, the house-owner, stole Bhagrai's cow and substituted for her an old and worthless one. When morning broke, Bhagrai discovered the theft and claimed his own cow.

* For a fuller version, vide. op. cit., pp. 81–81.
But the houseowner persisted in saying that she belonged to him. Thereupon a great dispute arose which was referred to the villagers for arbitration. But as the houseowner had bribed them previously, they decided that the cow belonged to him and not to Bhagrai.

But being dissatisfied with this decision, Bhagrai called a he-jackal and a she-jackal to decide the case anew; when they arrived at the assembly of villagers, and when Bhagrai was engaged in stating his own case, the two jackals pretended to fall asleep. When the villagers taunted them with being asleep, while the case was being stated, the jackals replied, “We have not been asleep but have been following the case. I and my wife have a dispute of our own. You should first of all decide our dispute and then we should decide the dispute about the cow”.

The villagers having agreed to do so, the jackal said: “I and my wife always go about together, we eat at the same time and drink at the same time and yet she drops dung twice a day while I do so only once; what is the reason of this?

But the villagers were unable to solve this problem. Thereupon the she-jackal was asked to explain it. On this she said: “Yes it is true that I drop dung twice to his once, there is an order laid on me to do so: I drop dung once at the same time that he does, that excrement falls to the ground and stays there: but the second time the excrement falls into the mouths of the ancestors of those men who take bribes and do
injustice to the widow and orphan and when such bribe-takers reach the next world they will also have to eat it.

If however they confess their sin and ask pardon of me they will be let off the punishment: This is the reason why I have been ordered to drop dung twice”.

On hearing this, the villagers admitted having taken bribe from the houseowner and said that the cow belonged to Bhagrai and should be given back to him. Whereupon the beast was restored to the latter. *

In this case also, the jackal by his cunning and trickery decided the case justly.

I have stated above that the two aforementioned Santali versions viz. “Leopard outwitted and the Ungrateful Snake”, have brought the number of the folktales of “The Man Und Fuchs” type to 105. Now these 105 variants are current in various parts of India and in other parts of the world.

Therefore the question arises how the similarity between the aforementioned 105 variants to be accounted for? Have the peoples among whom they are current, borrowed the stories from each other, or whether have they been evolved independently? I am of opinion that they could not have been borrowed from each other, as the peoples among whom they are prevalent, are separated from each other by vast oceans and unsurmountable mountains and could not therefore have

* For a fuller version of this folktale, vide, op. cit, pp. 276-281.
had access to each other. Take the case of the world-famed and truly popular folktale named "Cinderella", of which 400 variants are known and which are current in different parts of the world. The Folklore society of London, by means of making charts and careful study of the different versions, tried to trace the story to its original home from where it was borrowed and transmitted to other peoples. But the society failed miserably in its attempt. So the inference is that the stories must have been evolved independently.

For this reason also, I am inclined to think that the 105 versions of "The Man Und Fuchs" type were evolved independently; and the similarity between them can be explained only by Franz Boas's Theory of the "Parallelism of Cultural Development" which, to quote his words, has been expounded as follows:—"Different groups of mankind started at a very early time from a general condition of lack of culture; and owing to the unity of the human mind and the consequent similar response to outer and inner stimuli, they have developed everywhere approximately along the same lines, making similar inventions and developing similar customs and beliefs". *

SARAT CHANDRA MITRA, M.A., B.A.

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† This paper was read before the section of Anthropology of the thirteenth Session of the Indian Science Congress held at Bombay in January 1926.
INDIAN ETHNOLOGY IN CURRENT PERIODICAL LITERATURE.

In *Man* for April 1928, Mr. G. D. Hornblower, notes the similarity in the ceremonial acts preceding a wrestling bout in India with similar preliminary ceremonies that he witnessed in a wrestling bout in Egypt over thirty years ago.

In *Man* for July, 1928, Mr. H. W. Seton-Karr writes a *Note on Prehistoric Implements in some Indian Museums*. These Museums are the Prince of Wales’s Museum in Bombay, the Madras Museum, the State Museum as Jhulrapatam in the Jhullawar State in Rajputana and the Gaikwar’s Museum at Baroda. The writer also refers to the pigmy macroliths of quartz crystal and large scrapers and side-choppers of quartzite in the Museum at Colombo.

In the *Journal and Proceedings of the Asiatic Society of Bengal*, Vol. XXIII, 1927, No. 1, issued in July 1928, Prof. D. N. Majumdar gives *A Few Types of Ho Songs (recently) composed by a Ho School-master* with a view to introduce social and religious reform amongst his tribe-fellows. In another paper Prof. Majumdar gives an account of *Death and Connected Ceremonies amongst the Hos of Kolhan in Singbhum*. In the same number of the *J. A. S. B., Mrs. C. De Beanovir Stocks gives some Afghan Stories from the Lolab valley in Kashmir*, and Mr. W. Jvanow contributes *Notes on Khorasan Kudish*, and also gives, *Some Persian Darwish Songs*. 
The Journal of the Anthropological Society of Bombay, for the year 1927, contains three papers by Dr. J. J. Modi, one on Cultural Anthropology as observed in a Government House Reception, another on Zest in Life, a third on Was there Any Institution in Ancient Iran like that of Caste in India, and a fourth headed Anthropological Scraps. In the same number, Mr. S. S. Mehta continues his account of Some Marriage Rites among the Hindus, Mr. R. K. Dadachanji contributes the first part of an article on The Anthropological Method of Interpretation of Avestic and Vedic Texts, Ideas and Usages, Rev. Dr. Enok Hedberg gives some Proverbs and Riddles current among the Bhils of Khandesh with an interesting Introduction, Translation and Notes.

In the Journal of the Bihar and Orissa Research Society for June 1928, Mr. S. C. Mitra contributes Notes on the Tree-cult in the District of Patna and South Bihar. In the Visva-Bharati Quarterly for July 1928, Mr. Rames Basu contributes an interesting paper on The Culture Products of Bengal.

In the Cosmopolitan for April 1928, Mr. E. Gilchrist contributes a paper on Tomb-lore in China and Egypt.

In the Cosmopolitan for May, 1928, Prof. Panchanan Mitra and Mr. P. C. Bose, contribute an article on Race and Temperament.

In the Cosmopolitan for June, 1928, Mr. Biswanath Chatterji writes an article on The Festival of Charak. In the July number of the
same journal, Dr. Radhakamal Mukerji contributes an article on the *The Sociology of Race*, and Mr. Provash Chandra Basu on *The Caste System of India*.

In the *Quarterly Journal of the Mythic Society* for April, 1928, Mr. L. A. K. Iyer contributes an article on *The Malayarams of Travancore*, and Mr. S. C. Mitra continues his *Studies in Bird-myths*, and contributes a paper on *Studies in Plant-myths*. In the July (1928) number of the same Journal, Mr. S. T. Moses, contributes a paper on *Ants and Folk-Beliefs in South-India*, and Mr. S. C. Mitra continues his *Studies in Bird-myths*. 

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NOTICES OF BOOKS.

The Clash of Culture and the Contact of Races.—By George Henry Lane Pitt-Rivers (London: Routledge, 1927) pp. XIV+312. Price 18 s. net.

In this volume we have an excellent anthropological and psychological study of the laws of racial adaptibility, with special reference to the depopulation of the Pacific and the government of subject Races. The author brings out ample data and cogent considerations for ascribing the decrease in the population of the Pacific, mainly to the interference by the white man under the influence of Christian Missionaries with indigenous customs. Most field-ethnographers will agree with the author that "Christian proselytism has done irretrievable harm to native races by disintegrating their culture", and that "we do not need to destroy native customs, even though they may appear unpalatable, that is, if it can be shown that these customs are indispensable for the integrity of native culture", for "the surest promise of their own racial achievement" will be found in "whatever is sound or beautiful in their own racial achievement in place of blindly following the lead of people whose proferred cultural gifts they can never truly make their own".

The need for a profounder psychological understanding of the marriage systems of the lower culture, and their sexual life and social custom is appropriately stressed, our author's masterly study of the problem...
of depopulation of the backward races through contact with civilized peoples and consequent clash of culture should prove of intense interest not only to the anthropologist but also to the administrators of backward races.


The twelve chapters which make up this book were originally composed, as the author tells us in the Preface, as informal talk for students at a Training College. The book will form a good introduction to the psychological study of myths. The first chapter gives a short history of folklore and in the second chapter the author discusses the psychological elements that may have contributed to the formation and development of myths. In subsequent chapters the author discusses different classes of myths, taking his illustrative examples mainly from the Iliad, the Odyssey, the Beowulf and certain versions of Icelandic myths or sagas.


The social customs and peculiarities of the insect world are delineated in this delightful book
with a wealth of interesting details and with a deep insight and sympathy born of intimate acquaintance and close companionship. In reading the book one hardly suspects that it is a translation. The book is intensely interesting from cover to cover.


In this book the translators give a selection of some of the most striking chapters in passages in Fabre's "Souvenirs Entomologiques" on the wonderful phenomena of instinct in the insect world. The selections have been judiciously made, and the translation is clear and lucid.


In this book, the author who is intimately acquainted with the economic and political problems connected with agriculture in England, considers the previous surveys of the present position in the matter and discusses the various proposals for the future with a due sense of proportion, and gives
his own analysis of the causes of agricultural prosperity and adversity in the past and suggests certain measures for securing the further agricultural prosperity of the country.

According to our author the most important step in all agricultural policy is for Government to guard against increased depression by securing international action to stabilize the general price level. For the enrichment of the social and economic life of the village, the author suggests that besides organization and financial support given through the Ministry, the Universities and the Colleges, to agricultural research and education, measures should be adopted to ensure a further increase in the number of holdings, graduated in size; credit facilities for those qualified men who might otherwise be unable to work them; the organization of large forms on a profit-sharing basis; the mutual support and intercourse that agricultural co-operation with its many possible forms may give; the establishment, when possible, of industries other than agricultural in the country; and the development of the village school, and perhaps in the future the village College, into a real centre of country life. Although opinions will differ as to one or more of the remedies suggested by the author, the book is undoubtedly a suggestive contribution towards one of the most pressing problems of the day.

In this fascinating volume we have a most charming and illuminating account of Egyptian civilization from the age of the "Divine Dynasties" down to the Persian conquest. The most noteworthy feature of the book, from the anthropologist's point of view, is the use the author has made of totems and name-ensigns in his reconstruction of the history of ancient Egyptian culture. Down to the end of Egyptian civilization, the ensigns of the names, as our author shows, keep the ancient patrons of clans alive, in their revered traditional form, in the great public ceremonies, and many of the gods appear in the living form of a sacred animal. The learned author finds that there were three stages of the development from spirit to god, in ancient Egypt.

"In the protohistoric period, the monuments show only totems on stands, in the form of animals, plants, or objects. About the beginning of the 1st Dynasty, human arms grow from falcons, fish, and even from the staffs of ensigns. At the end of the 11th Dynasty the first hybrids appear, human bodies with the heads of the old totems, which have become anthropomorphic gods. From the 11th Dynasty onwards, the development towards human form becomes general and gains in speed. The society of true gods living in heaven is created, and in the sanctuaries, beasts
and fetishes surrender the first place to the new divine beings, born of more highly developed religious ideas”.

The reader of this fascinating volume is forcibly impressed with the fact that inspite of its retention of such primitive ideas as those of magic and mana, religion was the ruling moral force in the life of the people of ancient Egypt.

**Contributions to the Ethnology of the Kwakiutl.—By Franz Boas. (New York: Columbia University Press, 1925).**

This is the third volume of the Columbia University contributions to Anthropology, edited by Franz Boas. The book contains Kwakiutl texts (with English translations side by side). Pages 1-5 deal with dreams and the remaining pages with information relating to the social organization of the tribe and the acquisition of names. The book is replete with interest.

**Some Present-day Superstitions.—By P. N. Bose, B. Sc. (London). (Newman, Calcutta 1927).**

This a well-written and thought-provoking book from the pen of one of the most thoughtful and cultured sons of Mother India. The key-note of the book is contained in such passages as the following: “If Hindu Civilization is to survive at all, it should survive as a distinct entity. It has been an important factor of advancement of humanity in the past, and may yet prove a not unimportant factor of such advancement in the future......It would be futile to attempt the conversion of the Hindus into a military, industrial and predatory people likeers the Western. Although many readers of the book may not see eye to eye with the author in all his arguments and conclusions, the book deserves to be carefully studied and pondered over by educated Indians.
BOOKS FOR SALE.

at the "MAM IN INDIA" office,
Church Road, Ranchi.


SOME OPINIONS.


.........I find it characterised by the same high qualities as mark your former monographs on the Mundas and Oraons. You have rendered a valuable service to anthropology by placing on record the customs and beliefs of a very primitive tribe about which very little was known before and which, but for your careful and prolonged observations, might have passed away practically unknown. As in your former volumes I admire the diligence with which you have collected a large body of interesting facts and the perfect lucidity with which you have set them forth. The book is a fine specimen of a monograph on an Indian tribe and must always remain the standard authority on the subject. I congratulate you heartily on your achievement, and earnestly trust that you will continue your valuable investigation and give us other similar accounts of other primitive and little known Indian tribes.

SIR ARTHUR KEITH, M. D., F. R. C. S., L. L. D., F. R. S., Conservator of the Museum and Hunterian Professor, Royal College of Surgeons of England, writes:—

.........You have done a splendid piece of work—one which will make Europe indebted to you........

DR. A. C. HADDON, M. A., SC. D., F. R. S., Reader in Ethnology, of Cambridge, writes:—
Your accustomed excellent work. It is a most useful contribution to Indin Ethnology.

DR. ROLAND B. DIXON, A. M., PH. D., Professor of Anthropology in the Harvard University writes:

You are certainly doing work to be proud of in the studies you have published of the Chota-Nagpur tribes, and all anthropologists are in your debt. If only we could have similar studies of all the wilder peoples of India, how fine it would be!

THE NATURE, (London: September 19, 1925):

Students of Indian anthropology are deeply indebted to Mr. Roy for the light he has thrown on the past and present culture of the Chota-Nagpur plateau. In the Bihar and Orissa Research Society's Journal he has opened up new ground in the archaeology of his area. His monographs on the Mundas and Oraons are classics. "The Birhors" is yet another first-rate study, a study not merely of an obscure tribe but also of the workings of that mysterious complex of thought and feeling which go to make up human culture. Mr. Roy is never a theoriser or a partisan; his diction is simple and precise, his inspiration comes straight from the hearts of the humble folk he has made his friends.


Ethnologists throughout the world will be glad to see a successor to Rai Bahadur Sarat Chandra's previous monographs on the Mundas and Oraons. As is to be expected, the book is first-class and deserves a place in every library where such subjects are encouraged at all. It will be found very interesting and pleasant-reading by the non-expert, and for those to whom ethnography is business or hobby, it is only necessary to say that the author is one of the very few Indian scholars whose writings are read outside India.


The researches of Rai Bahadur Sarat Chandra Roy are universal among the most backward groups of savages. The contact with civilization is exterminating the aborigines, and the author has done a real service to the cause of knowledge.
by his well-gleaned contribution. The author's interest in Ethnography is praiseworthy. No department of the life of the Birhors has escaped the eagle eyes of the author. How they live, what ceremonies they observed, what sufferings they bear, what feasts they are inclined to, how they thing and what is their outlook on life have been very interestingly noted. The illustrations make the book doubly delightful. . . . We have every reason to thank the Rai Bahadur for this excellent monograph on the Birhors of Chota-Nagpur.

THE MADRAS MAIL, (May 22, 1925).

There is no science which affords more opportunity for first hand research work, and none much more neglected in India than the science of Anthropology. The author of this splendid work is one of the few faithful men who are devoting themselves to making records of the customs and lore of tribes which are fast disappearing. His works on The Oraons and The Mundas have already put the workers in that field under deep obligation to him. And his well-conducted Journal, "Man in India" is also performing a valuable service to the science. In the present volume he maintains the high standard of scholarship which he has happily attained in his previous works. The work contains an amazing amount of information about this muchneglected tribe, and must have required years of patient labour to collect. It is made the more valuable by copious illustrations representing the people and their modes of living.

One of the interesting sections of the book deals which folk-lore, than which there is no surer index to a people's psychology. Primitive man lives in a world in which nothing is possible. He has no scientific world-view which precludes the possibility of miracle and magic. The Birhor's folk-tales disclose the typical world-view of primitive man, such world-view as we see still reflected in the fairy tales which our children love to hear.

It is impossible to give a really adequate review of this interesting and scholarly book. But we must commend it to all who are interested in anthropological matters and express thanks to the author for giving to the world this excellent record of the Birhors.

Price—Six Rupees.

SOME OPINIONS.

Sir J. G. FRAZER, D. C. L., L. L. D., Litt. D., F. B. A., F. R. S., Professor of Social Anthropology in the University of Liverpool, writes:

It is a work of great interest and high value as a full and accurate description of an Indian Hill-tribe. I congratulate you on having produced it. You must have given much time and labour to the researches which you have embodied in this book. But the time and labour have been well spent. The description seems extremely clear and well written in the simple language which is appropriate to the theme, and the translations of the poetry are charming.

Dr. A. C. HADDON, M. A., Sc. D., F. R. S., University Reader in Ethnology, Cambridge, writes:

*** Students have long wanted an authoritative account of this interesting people, and now you have supplied it.


*** A work of real importance. It is a great aid to a scientific knowledge of the races of India to have a work like yours dealing with the subject.

Sir EDWARD GAIT, K. C. S. L., C. I. E., Ph. D., I. C. S., formerly Census Commissioner of India, writes:

*** It is a most valuable contribution to Indian Ethnography.

THE SPECTATOR (London) :— Anthropologists will welcome this careful account of the Mundas: The first part of the book is occupied with a history of the tribe and an attempt at solving the difficult problems that surround its origins. But possibly its most interesting section is the Ethnographical one, in which the tribal customs are described in detail.
THE REVIEW OF REVIEWS (London, Sept., 1912), under the heading 'Notable Book' of the Month, writes:—

Mr. Chandra Roy is intensely interested in the task he has set himself. ** The history, accurate and legendary, and ethnography of this interesting people are given in great detail by Mr. Roy. ** *

THE STATESMAN (Calcutta, Aug. 7, 1912) writes:—

An exceedingly attractive volume from the pen of Mr. Sarat Chandra Roy of Ranchi. ** *

THE ENGLISHMAN (Calcutta, July 22, 1912) writes:—

The book before us is, we believe, the first attempt to put together a connected history of this interesting people, Mr. E. A. Gait, I. C. S., the Census Commissioner, himself an acknowledged authority on Indian Ethnology, has written a learned introduction to the book, of which he expresses a very high opinion. ** *

THE INDIAN WITNESS (Calcutta, January 28, 1913) writes:—

It is a genuine pleasure to welcome so thorough study of the Mundas as is found in these pages. Mr. Gait, in the illuminating introduction to the book, writes concerning the chapter on Ethnography:—"This chapter contains a full account of the daily life of the Mundas, their dress, agriculture, tribal organization, social and religious ceremonies, folklore and song. It has evidently been written in the light of a close personal knowledge of the people and deep and sympathetic insight into their feelings, mentality and views of life." ** This book will fill a much-needed blank on the shelves of those who are engaged in a study of India's peoples.

THE HINDUSTHAN REVIEW (Allahabad, July 1912) writes:—

The work under notice is an instructive sketch of the people, historical, descriptive, ethnological, sociological.
It is a mine of valuable information on all matters relating to the Mundas. It is a valuable contribution to such sciences as Ethnography and Sociology. The style is very pleasant. Altogether Mr. Roy’s book is of absorbing interest.

THE MODERN REVIEW (Calcutta, June, 1912) writes:

This neatly printed and well-bound book is a storehouse of information regarding the Mundas and the Country they inhabit. The author has looked up carefully all available records and has executed his self-imposed task with scholarly ability. It is a pity that such a capable man as the author is, could not devote his whole time to the work of ethnological research in India, for which there is a pressing need in this country. Mr. Gait, who is now undoubtedly a great authority on the subject of Indian Ethnology, has written an introduction for the book which is by itself an interesting and instructive study.

THE INDIAN WORLD (Calcutta, September 22, 1912) writes:

The author collected, collated and systematised the vast materials at his disposal with a care and devotion that must be the ambition of all students of history. His insight into the true life and spirit of the people is not born of dilettante interest but of close acquaintance with their manners and customs. The chapter on the Ethnography of the Mundas is worth its weight in gold......In a word, the book is an invaluable contribution to the Ethnological literature of India.

Also highly spoken of by such papers as the ATHENÆUM (Aug. 10, 1912), the ANTHROROS (Jan., Feb., 1913), and the CATHOLIC HERALD (June, 1912).

8. THE OBRAONS OF CHOTA-NAGPUR. With numerous illustrations, and an Introduction by Dr. A. C. HADDON, M. A., Sc. D., F. R. S.

Price—Eight Rupees.
SOME OPINIONS.

Sir James Frazer, D. C. L., LL. D., Litt. D., F. B. A., F. R. S.:

The book is full of very valuable and interesting information. I cordially congratulate you on your success in collecting so much anthropological information concerning the tribe, and on the admirable lucidity and terseness with which you set forth the facts carefully distinguishing them from inferences which you have drawn from them. The inferences seem to me for the most part just and probable.

Your work on the Oraons promises to rank with the very best monographs on Indian tribes.

The Spectator (London, Jany. 29, 1916):

In Bengal, at least a genuine interest in the Anthropology of the province has led to the writing of books of real merit and importance by Bengalis. Such was Mr. Roy’s own account of The Mundas and Their Country. Mr. Roy now gives a careful description of another of the aboriginal tribes of the Chota-Nagpur plateau, with numerous illustrations and a map. Dr. Haddon’s introduction surmises with his wonted skill and learning, the most interesting and significant of the writer’s observations and discoveries.

The Times (London, January 6, 1916):

Sarat Chandra Roy has given us much valuable information in this book, and we hope that, his fine example will be followed by some of his fellow-countrymen.

4. PRINCIPLES AND METHODS OF PHYSICAL ANTHROPOLOGY, Patna University Readership Lectures.

Price,—Five Rupees.

SOME OPINIONS.

Sir James Frazer, D. C. L., LL. D., Litt. D., F. B. A., F. R. S., Professor of Social Anthropology in the University of Liverpool, writes:—
......I admire the range of your knowledge and intellectual interests, the sobriety and soundness of your judgment, and the lucidity and succinctness of your exposition. The book seems to me to deserve a wide circulation not only in India but wherever the English language is spoken, for, so far as I am aware, * * * there is no book on the same broad philosophical lines in English. Hitherto by your monographs on the Mundas and Oraons and your other writings you have proved yourself a first-rate field anthropologist, in your new book you have shown powers of higher quality and wider range. India is to be warmly congratulated on possessing in you an anthropologist of a very high order, and I am happy to know that the authorities have had the discernment to appoint you to the first teaching post of anthropology in the University of Patna. I could envy India your possession, for good anthropologists are too rare anywhere; but I am satisfied that for the advancement of our science you are far better situated in India than you would be in Europe, seeing that India includes such an immense diversity of races and cultures, from low savagery up to high civilisation. * * *


The Lectures form one of the best introductions into the study of anthropology in the English Language.

Dr. R. R. MARETT, M. A., D. Sc., Reader in Anthropology in the University of Oxford, in The London Mercury (June, 1931)—* * *A most learned and lucid epitome of the methods and results of the study of man, prehistoric and present, considered on his physical side. * * *

Dr. A. C. HADDON, M. A., Sc. D., F. R. S., in Folk-Lore (London, Sept. 1931).—* * *The author is quite up-to-date in his reading......The book gives an accurate epitomised survey of our presents knowledge of the subject treated. Indian students are to be congratulated on having an instructor so learned, broad-minded and sane.
Writes:—

........I have read your book with care and find it a very
learned and interesting contribution to our knowledge of the
subject........

DR. RONALD B. DIXON, Ph. D., Professor of Anthro-
Pology in the Harvard University, Conbridge, Mass., writs:—
........It seems to me that you have admirably covered the
ground of a preparatory statement for beginners and have
presented the major facts in such form that they should be
certain to arouse the interest of students, and lead them to
wish to take up the study of man. We here in America labor
under the same difficulties in not having any adequate book
which can be used as a text book, and have much felt the need
of something of the sort you have so well provided for
students in India........

MAN IN INDIA.

A Quarterly Record of Anthropological Science with
SPECIAL REFERENCE TO INDIA.

EDITED BY THE AUTHOR.

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20 Shillings (foreign). Single Copy (Quarterly issue)—
Two Rupees Eight Annas (India), Five Shillings
(foreign). Half-yearly—Five Rupees (India),
10 Shillings (foreign).
I. PREHISTORY OF ASSAM. *

By


The material for the pre-history of Assam is very scant in records as owing to the great humidity of the climate all objects other than stone perish very fast, and consequently wherever we have no stone records we have to supplement what we know by inferences from ethnological evidence and from the survivals which exist. There has been little change fortunately from the time of Megasthenes in the Naga Hills. Pliny writing before the beginning of the Christian era mentions the Abors of Assam. Ptolemy writing later mentions the Nagas and locates them where they are now.

Of records in stone there is practically nothing existing but celts, i.e. stone adzes or axes and a few pre-historic Megalithic monuments. Of the celts there are 3 types. One is long and narrow and in shape like an isosceles triangle. The second,

* Being the summary of a lecture delivered in the Lecture Theatre of the Indian Museum, Calcutta on the 17th of August 1928.
is more or less rectangular and the third is shouldered. The long and narrow one is practically identical in type with celts found in dolmen graves in South India. The rectangular one is very rare and as far as I know, there are only 3 or 4 specimens out of some hundreds. It was probably hafted in the Polynesian manner between two layers of wood lashed together. By far the commonest type is a slightly shouldered type derived from the Irrawady or Mon Khmer. Mon Khmer forms also survive in language and folklore throughout Assam. The adze type is found in the Ganges valley and was probably brought by the emigrants from the east. To return to the narrow celt of south India, we find celts of this pattern occurring in Assam, and we also find dolmen burials very similar to those discovered by Rai Bahadur Sarat Chandra Roy and Professor Mitra in Central India and similarly associated with pot burials. We also frequently find pot burials in the Naga Hills without dolmens.

We have certain pre-historic monoliths in Assam which are in themselves unique as far as we know. At Dimapur close to Manipur Road Station on the A. B. Railway there are a series of monolithic erections which take the form of the lingam and yoni, but are unlike anything else in India. The nearest parallel is perhaps found again in Malaya, if we exclude a few isolated specimens depicted by Dalton from Chota Nagpur. Further we have a similar group of monoliths but much later in date and bringing us down nearly to the Ahom
period in Assam. Other evidence links up these monoliths at Dimapur and Jumuguri with existing monoliths in the Naga Hills, but the latter are always of rough stone. One point may here be noticed. The rough stone monoliths are apparently derived from originals of wood. We have, in fact, a series of Megalithic work forming a chain from the most primitive type of monuments right down to the present day, and we get a similar series in the Jaintia Hills: rough stone dissololiths, then bridges built of huge stones and finally the Hindu temples of Jaintiapur and Thuljar. In the Assam valley we get a similar series, for instance, the Sil Hako Bridge and the ruins of Nimaligarh temple and the old temple of Kamakhya.

Assam is known as the location in particular of Tantric forms of Hinduism. It would appear that this Tantric form is probably due to the incorporation into Hinduism of a fertility cult which preceded it as the religion of the country. The monolithic structures in the East have been associated by some writers with what is called the Heliolithic diffusion from Egypt, but there is no trace whatever of this association in the monuments of Assam, except certain figures of heavenly bodies which are still used as decoration on houses and which are always described as moons. The dolmens possibly suggest distribution from South India, but, if so, the probable course was across the Bay of Bengal and then back again westwards from further Asia. Possibly the origin was from Indonesia whence apparently the use of the supari—areca nut—spread to India as well
as the Pacific. The true significance of these stones is to be inferred from existing cults. First of all we find that stones are erected always in pairs because the pair is the natural unit in nature. They are associated with water and clearly, therefore, with some fertility cult. They are also intimately associated with the dead and are the vehicles by which the soul fertilizes the soil. This is to be seen clearly in the theory of the soul as stated by the Karens. The soul is material, and, when the body dies, pupates, as it were;—this pupa ultimately falling to the ground passes into the vegetation, overgrows into seed and is again absorbed by men or animals which eat the fodder or the grass, and passes again into the semen, thus making a continual cycle of life. The cult of the stone age in Assam, therefore, may be best described as ancestor worship. This theory incidentally accounts for the practice of head-hunting. The head is taken in order to obtain soul matter, which is thus transferred from the village of the enemy to that of the head-taker who thus succeeds in increasing the amount of soul matter and consequently the fertility of his own village at the expense of another's.

The method of erection of monoliths is very important as it throws some light on the erection of pre-historic monoliths in other parts of the world. Assam and Madagascar are the only remaining parts of the world ¹, I believe, where the practice

¹ The Mundas and the Hos of Chota Nagpur also erect rough stones in honour of the dead. I have also found similar (though smaller) stone slabs erected in memory of the dead by the Porojas in the Jaypore Agency of the Madras Presidency.—Editor.
of erecting rough stones still continues. There are two methods of transporting stones to the sites, one of which is to tie the stone to an enormous framework which can be lifted on the shoulders of some 60 men and carried. The other method is laying the stone on a shed, and by dragging with ropes the end of the stone is lifted by inserting wedges. The top is then harnessed and dragged from the opposite side as well as lifted with wooden levers from below. The foot is kept in place by a gang who press against it with a long pole to prevent its slipping. When the stone is raised to the erect position all the workers rush in with outstretched arms and hold it erect. The importance attached to monoliths is not restricted merely to the rough stones but it extends to built-up stonework as well. We get the type of stone erections which are found in other parts of the world in tombs and pyramidal structures, the latter being built over the graves of the ancestors of the clan. The origin of this stone cult is of course uncertain, but it appears to me that it is to be mainly imputed to the Mon Khmer intrusion from the east.
II. MARRIAGE AND KINSHIP AMONG THE JUANGS.

By NIRMAL KUMAR BOSE, M. A.

It is well-known that the Juangs form a branch of the Pre-Dravidian peoples, among whom we count the Mundas, the Santals, and other inhabitants of the north-eastern high lands of the Deccan. Culturally, also, they show a close relationship to the above tribes. In the present paper we shall describe a part of the social organisation of the Juangs, who live on the slopes of Malyagiri in the State of Pal Lahara in Orissa. It may be noted in passing that some of the women in the Juang village where I lived still wear leaf-aprons.

Marriage.—We shall here consider the institution of marriage only in its social and economic aspects, and shall deal with the ritual side of it in a future paper.

It is usual for a man to choose a bride for himself within the prescribed limits. A man can take a bride in his own village, or as well may not. In some cases, the father chooses a bride for his son, but more often he does not interfere in the matter.

Purchase is recognised to be the most honourable form of marriage. The usual bride-price in the eastern portion of Pal Lahara is a sum of twelve rupees (16 s. nearly); but if a man is unable to pay so much, a more moderate sum may be considered sufficient. A girl does not usually desire to marry a widower, so the latter
may have to pay a price as high as twenty rupees (28 s. nearly). A widow cannot marry. Under exceptional circumstances, a man may be exempted from paying bride-price. Thus, Kanhei of village Kantala married the daughter of a woman who had nobody to look after her. Kanhei instead of living elsewhere, settled in the house of his mother-in-law. He did not pay any bride-price.

I do not know if marriage by exchange takes place or not. Mani married Jagala’s sister and the latter did likewise. The first event took place long before the second. Both paid the customary bride-price, so this was not a case of exchange. The purchase of a bride is attended by many ceremoniés.

When a man fails to gather the bride-price, he resorts to theft which is recognised as the second form of securing a bride. He chooses a girl, and when the nightly village-dance is in progress, either he himself or the womenfolk of his family suddenly catch hold of the girl and carry her off to their own home. No resistance is offered by the onlookers, and the girl remains alone in a room in her future home for the night after which the pair is married before the village elders with due ceremonies.

Once married, a woman may not marry again. Divorce is not recognised. A widower has the right to second marriage.
Genealogical tables and Kinship terms.

Table I. Relations through self *

Name not known

\[ \begin{array}{c}
\text{(Sāru)} \\
\text{(Sāga)} & \text{Kāndru} & \text{(Jambira)} & \text{(Jithu)} & \text{(Dengala)} \\
\text{m. to Singa} & \text{w's name} & \text{m. to Sukur} & \text{died} & \text{m. to} \\
\text{not known} & & \text{unmarried} & & \text{(Tengere)} \\
\text{(Khādi)} & \text{(Jamuni)} & & & \\
\text{Mangali} & & & & \\
\text{Mani} & \text{Kalía} & \text{Munia} & \text{(Ambuli)} \\
\text{m. to Sapati (1)} & \text{w's name} & \text{m. to Sapati (2)} & \text{m. to (Jagala)} \\
\text{not known} & & & \\
\text{Dinā} & \text{Sarenga} & \text{Marga} & \text{Gola} & \text{Budhia} \\
\text{Kuja} & \text{Subuni} & \text{Marga} & \text{Kandru} & \text{Soru} \\
\text{m. to} & & \text{Kambalā} & & \\
\end{array} \]

* Bracketed represent dead; underlined represent females.
The relationship terms used by Mani in reference to the previous list and also their reciprocals are given below.

<table>
<thead>
<tr>
<th>Formula*</th>
<th>Name</th>
<th>Relationship</th>
<th>Term of Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. F.</td>
<td>Sāru</td>
<td>Aja</td>
<td>E ajā !</td>
</tr>
<tr>
<td>Z. Z.</td>
<td>Mani</td>
<td>Nātiā</td>
<td>E natiā !</td>
</tr>
<tr>
<td>F. S.</td>
<td>Sāga</td>
<td>Apā</td>
<td>E sāsā !</td>
</tr>
<tr>
<td>B. Z.</td>
<td>Mani</td>
<td>Gabale</td>
<td>E gabale !</td>
</tr>
<tr>
<td>F. S. H</td>
<td>Singa</td>
<td>Māmu</td>
<td>E māmu !</td>
</tr>
<tr>
<td>W. B. S</td>
<td>Mani</td>
<td>Gabale</td>
<td>E gabale !</td>
</tr>
<tr>
<td>F. elder B</td>
<td>Kandru</td>
<td>Hātit (Hātit?)</td>
<td>E hātit !</td>
</tr>
<tr>
<td>Younger B. Z</td>
<td>Mani</td>
<td>Buçu</td>
<td>E buçu !</td>
</tr>
<tr>
<td>F. elder B. W</td>
<td>Name unknown</td>
<td>Hatirāi</td>
<td>E hatirāi !</td>
</tr>
<tr>
<td>H. Younger S. Z</td>
<td>Mani</td>
<td>Buçu</td>
<td>E buçu !</td>
</tr>
<tr>
<td>F.</td>
<td>Jambira</td>
<td>Bā</td>
<td>E bā !</td>
</tr>
<tr>
<td>Z.</td>
<td>Mani</td>
<td>Landa</td>
<td>E landa !</td>
</tr>
<tr>
<td>M.</td>
<td>Sukuru</td>
<td>Buāing</td>
<td>E buāing !</td>
</tr>
<tr>
<td>F. Younger B</td>
<td>Jithu or Dengala</td>
<td>Dādi</td>
<td>E dādi !</td>
</tr>
<tr>
<td>Elder B</td>
<td>Mani</td>
<td>Putirā</td>
<td>E putirā !</td>
</tr>
<tr>
<td>F. Younger B. W</td>
<td>Tengene</td>
<td>Sānbui</td>
<td>E sānbui !</td>
</tr>
<tr>
<td>H. elder B. Z</td>
<td>Mani</td>
<td>Landa</td>
<td>E landa !</td>
</tr>
<tr>
<td>F. elder B. Z</td>
<td>Khāri</td>
<td>Kā</td>
<td>E kā !</td>
</tr>
<tr>
<td>(older than speaker)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. younger B. Z</td>
<td>Mani</td>
<td>Boko</td>
<td>E boko !</td>
</tr>
</tbody>
</table>

* F, father; m, mother; b, brother; s. sister; z, son; d, daughter; w, wife; h, husband.
Table II. Relations through one’s mother.

\[\begin{array}{c}
\text{Sukuru} \\
\text{m. to (Jambira)} \\
\text{Mani & others}
\end{array}\]
<table>
<thead>
<tr>
<th>Formula</th>
<th>Name</th>
<th>Relationship</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. F.</td>
<td>unknown</td>
<td>Ajā</td>
<td>Ẹ ajā!</td>
</tr>
<tr>
<td>D. Z.</td>
<td>Mani</td>
<td>Nātia</td>
<td>Ẹ nātia!</td>
</tr>
<tr>
<td>M. B. W.</td>
<td>Budana</td>
<td>Sāsu</td>
<td>Ẹ sāsu i</td>
</tr>
<tr>
<td>H. S. Z.</td>
<td>Mani</td>
<td>Gable</td>
<td>Ẹ gable i</td>
</tr>
<tr>
<td>M. B. Z.</td>
<td>Nari &amp;</td>
<td>Ka</td>
<td>Ẹ ka!</td>
</tr>
<tr>
<td></td>
<td>Kura (younger than speaker)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. S. Z.</td>
<td>Mani</td>
<td>Boko</td>
<td>Ẹ boko!</td>
</tr>
<tr>
<td>M. elder S</td>
<td>nil</td>
<td>Ḥatirai</td>
<td>Ẹ Ḥatirai!</td>
</tr>
<tr>
<td>Younger S. Z</td>
<td>nil</td>
<td>Buçu</td>
<td>Ẹ buçu!</td>
</tr>
<tr>
<td>M. younger S</td>
<td>nil</td>
<td>Sānbi</td>
<td>Ẹ sānbi!</td>
</tr>
<tr>
<td>Elder S. Z</td>
<td>Mani</td>
<td>Ländā</td>
<td>Ẹ ländā!</td>
</tr>
<tr>
<td>M. S. H.</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>W. S. Z.</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

Table III. Relations through the wife.

Kurpa

\[
\begin{array}{c|c|c}
\text{Kurpa} & & \\
\hline
\text{(Khutu)} & & \text{(Madulia)} \\
\hline
\text{m. to Saibani} & & \\
\hline
\text{(Jagala)} & \text{Sapati} & \text{Budhu} & \text{Sankara} \\
\hline
\text{m. to (Ambuli)} & \text{m. to Mani} & \text{m. to Rugi} & \\
\hline
\end{array}
\]

<table>
<thead>
<tr>
<th>Formula</th>
<th>Name</th>
<th>Relationship</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. F.</td>
<td>Khutu</td>
<td>Kuinkar</td>
<td>Ẹ kuinkar!</td>
</tr>
<tr>
<td>D. H.</td>
<td>Mani</td>
<td>Arām</td>
<td>Ẹ arām!</td>
</tr>
<tr>
<td>W. S. B</td>
<td>Madulia</td>
<td>Kuinkar</td>
<td>Ẹ kuinkar!</td>
</tr>
<tr>
<td>B. D. H.</td>
<td>Mani</td>
<td>Arām</td>
<td>Ẹ arām!</td>
</tr>
<tr>
<td>W. M.</td>
<td>Saibāni</td>
<td>Māmi</td>
<td>Ẹ māmi!</td>
</tr>
<tr>
<td>D. H.</td>
<td>Mani</td>
<td>Arām</td>
<td>Ẹ arām!</td>
</tr>
</tbody>
</table>
Formula | Name | Relationship | Address
---|---|---|---
W. younger B. | Budhu or Sankara | Inib, Bhenei | E inib!
Elder S. H. Mani | Bou | E bou!
W. younger B. W. | Rugi | Bokorai | E bokorai!
H. elder S. H. Mani | Kā | E kā!
W. elder S | nil | Ajikat | nil
Younger S. H | Arām | nil
W. Younger S | nil | Salirai | E salirai!
Elder S. H | Bou | E bou!
W, S. H (elder or younger) | nil | Buñhitār | E buñhitār!
W. S. H | Gable | E gable!
W. B. Z | Mamu | E mamu!
F. S. H | nil | Bhaniji | E bhaniji!
W. B. D | Mamu | E mamu!
F. S. H | " | " | "

Relations through the husband.
(see former tables)

Formula | Name | Relationship | Address
---|---|---|---
H. F | Jambira | Kuṅkar | E kuṅkar!
Z. W | Sapatī (1) | Buirāi | E buirāi!
H. M | Sukuru | × | ×
Z. W | Sapatī (1) | Buirāi | E buirāi!
H. M. B | Rugu | Kuṅkar | E kuṅkar!
S. Z. W | Sapatī (1) | Buirai | E buirai!
H. elder B | nil | × | ×
Younger B. W | Munia | Boko | E boko!
H. younger B. W | Sapati (2) | Kali | E kali!
H. younger B. W | Sapati(2) | Bokorai | E bokorai!
H. elder B. W | Sapati (1) | Aji | E aji!
Relations through one's son.

(see former tables)

<table>
<thead>
<tr>
<th>Formula</th>
<th>Name</th>
<th>Relationship</th>
<th>Address</th>
</tr>
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<tr>
<td>Z. W</td>
<td>Kambala</td>
<td>Buirai</td>
<td>E buirai !</td>
</tr>
<tr>
<td>H. F</td>
<td>Mani</td>
<td>Kuinkar</td>
<td>E kuinkar !</td>
</tr>
<tr>
<td>Z. B. W</td>
<td>Ram</td>
<td>Aram</td>
<td>E aram !</td>
</tr>
<tr>
<td>S. H. F</td>
<td>Mani</td>
<td>Kuinkar</td>
<td>E kuinkar !</td>
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</tbody>
</table>

Some inferences.—The following facts will be evident from a consideration of the tables of relationship and kinship-terms listed above. The same term is used for M. B. W. and F. S. and consequently the terms for M. B. and F. S. H. are identical. This would tend to prove that cross-cousin marriage is in vogue amongst the Juangs. On putting the question to the headmen of Juang society at village Kantala, it was clear that such marriages do take place occasionally; but in case a girl is married to a different person, the cross-cousin is not entitled to any compensation. In other words, a person has no inalienable right to marry his cousin, but he may do so if he likes.

A note on Dr. Rivers' theory.—It will be seen from a consideration of the above tables that the same term is used for (1) H. F. and H. M. B. (2) B. and F. B. Z, (3) F. S. and M. B. W. and so on. It is quite clear that the persons concerned in the first two cases cannot be identical, unless a man marries his sister in the first instance or is considered to be the husband of his brother's wife in the second. Unless we get certain proof that
such customs existed among the Juangs (which we have not been able to procure), it would be safer to explain the identity of these terms by saying that a Juang holds his son and his brother’s son in the same sentimental relation and uses the same term for both of them. Similarly a Juang woman holds her husbands’ father and his maternal uncle in the same respect. In the third instance cited above, namely the identity of terms with respect to F. S. and M. B. W., it might be argued that marriage by exchange perhaps used to take place generally. But in that case a woman would not be prohibited from seeing, touching or speaking to her younger sister’s husband, for he would be the same as her husbands’ younger brother, with whom she may mix freely. But, as a matter of fact, in Juang usage, the two relations Younger S. H and H. younger B are treated very differently. We cannot therefore accept the first inference arrived at according to Rivers’ theory, but should rather seek for support from independent sources. In case such evidence is lacking, it would be better to explain the identity of terms by saying that the persons concerned are held in the same sentimental relation by the speaker; such identity of sentiment having been occasioned by unknown causes.

Kinship usages.—

(1) It appeared from a conversation with the Juangs that they jest with the relations of a man with his mother-in-law. As a matter of fact, I was myself subjected to such a jest on one occasion.
(2) A man should on no account, touch, see or speak with the wife of his younger brother.
(3) A woman again should never touch, see or speak to the husband of her younger sister.

The family tie.—It is evident from the foregoing tables that the family bond is a strong bond with the Juangs. Kinship is counted bilaterally and a man may strengthen the ties with his mother's clan by marrying his mother's brother's daughter. A man inherits his father's property, but not those belonging to the relations through his mother; so that, of the two strands of kinship, a person is bound more strongly to the line of his father than to that of his mother. This is expressed more emphatically by the custom that a man belongs to the sib of his father and not to that of his mother. Moreover a woman on marriage leaves her father's sib and enters that of her husband. This leads us on to the question of Associations into which the Juangs range themselves, and which hold them in ties which are weaker than those of the family, but which are nevertheless strong and operative in other spheres of life.
III. A HO FOLK-STORY.

BY KANHU DEOGAM (Hô).

Miad tuyu simkoe jomteya Kahani.
one fox fowls eating his Story.

Miyad Gutu-re miyad tuyu taikena.
one hill on one fox was.

En gutu japa-re miad hatu taikena.
That hillock near one village was

Musing betarang en tuyu miyad dama-e
One day that fox one drum
nam keda.
found.

Ente-e urukeda Chi nen dama te
Then he thought that this drum with
haturen ho ko boroichi ke koete
village of people causing fear by
simko-ing jom koa.
fowls I shall eat

Ente nidapa senehante hutu kuti
Then at night going village out-skirts
kuti te tupu tupu tan dama-e ruiya
along (sound of the drum) drum he beat
ondo-e euiya chi.
and also would cry out that—

"Rajako dara, Rajako dara, goe
Kings are approaching, kings are approaching, kill
peyako, goe peyako, nir pe nir pe.
you all, kill you all, Run you all run you all."

Ne eu ayunkete en haturen
This shout hearing that village of
hoko boro-te akoa oa bagekete
people fear through their houses leaving
pite ko nira.
outside they flee.

Free Translation.

The Story of a fox eating fowls.

There was a fox on a hill.

There was a village near that hillock.

One day the fox happened to find a drum.

Then he thought,—
"By frightening the villagers by means of this drum, I shall eat their fowls."

Then at night he went to the village, and along its out-skirts he beat the drum to the sound of ‘tupu tupu’, and shouted out,—

"Kings are coming, kings are coming. They will kill you all, they will kill you all. Flee away, flee away."

On hearing this shout the villagers fled out of their houses through fear.
Tuyudo oako te huju-lente simkoe Fox houses to coming fowls he jomkoa. eat.

En leka te jaoge simkoe jom joma. In this way daily fowls he ate at will.

Chanabo ho-koko skoa skoa o ren Afterwards people their respective house of simkoko huringotan-kok akakar keda. fowls decreasing they came to know.

Ente ko kapajiana "Ateya ale oar Then they talked to one another, 'Oh our house ren simkodo dimsi dimsıte ko huringo- of fowls day by day are tana decreasing.

Mido meneya, 'Ale oar ren ko geda' one said 'Our house of also.

Ondo mido meneya 'Ale oar renko geda,' Another said, 'Our house of also.

Enika saben hoko kaj lekeda. In the same way all people said.

Ente mido buriera men keda, Ama! Then one old woman said, Oh! en ayub pang eugeya teran huju- that night time probably lente simkoe idko. Ama! buri coming fowls carries Well! old deng buriyan, going reo geda, as I have become, killing me there's no harm, holoi ang tabu. Neliang, okoe I shall lie in wait for him. I shall see, who hujaa. comes.

"Acha mar" en redo ko metaya. Well, begin then they said.

Ente en buri-era hora re Then that old-woman way on duba kanete nel huju-taana. sitting see coming.

The fox then comes to the houses and eats the fowls.

In this way he daily devoured the fowls at his own sweet will.

Afterwards the people came to know that the fowls of their respective houses were decreasing.

Then they talked to one another, 'Oh! the fowls of our houses are decreasing day by day'.

One said, "The same is the case with our hens".

Another reported, "The same is the case with our hens."

In the like manner all reported the same thing.

Then an old woman said, Probably then sheater at night comes and carries away the fowls. Well, as I have become old, there is no harm if I be killed by him. So I shall lie in wait for him. I shall see who comes.

"Well, then do as you like" and swept they.

Then the old woman sitting on the way waited for the coming of him,
Man in India.

Chanab do tuyu jaolekage dama
Afterwards fox as usual drum
ru rute eu-hujue tana.
beating crying was coming.

Haturen ho ko do sabe ko nireyana.
Villagers all fled away.

Horare dubakan buri-era doe
On the way sitting old-woman
beta taya.
met.

Tuyu ente buri-era dama danda-
Fox then old woman drum sticks-
ko-te data koetunj rapud kiya.
with teeth struck broke.

Setapang ho ko huju-ura lente
At day break, people coming back
buri-era-ko kuli-tana, ’Chiya buri-era,
old woman asked, ’well, old woman
okoe huju-lena? Buri-era men keda
who came Old woman said
’Suen, Suin’. Ho ko ondo ko
Suen Suin’. People again they
kulia chia buri-era, okoe huju lunena?
asked well old-woman who came?

Okoe chikaked meya?
who what-done to you.

Buri-era menkeda “Suiu, Suiu”
Old-woman said “Suiu, Suiu”.

Ente ko nelitana chi data tay
Then they saw that teeth her
banoa.
were-not.

Menkedako chi data banote kae
said-they that teeth not-existing not
kaji dia. Acha, situad kote
say can never-mind bees’ wax with
data ki tebu kaji ichia, Ente
making teeth her we make her speak Then
situad te ko data kiya.
bees’ wax with they teeth made.

After some time the fox as usual came beating the drum and shouting.

All the villagers fled away.

The fox met the old-woman sitting on the way.

The fox then broke the teeth of the old woman with the strokes of the drum-sticks.

At day break the people coming back asked the old woman, “Well old-woman, who came?” The old woman replied, “Suiu, Suyu”. The people again asked her, “Well, old-woman, who came?”

Who did what to you?

The old woman uttered, “Suy-u, Suyu”.

Then they saw that she had no teeth.

They said that she could not speak on account of being teeth-less. They said, “Well, we shall make her [new] teeth with bees’ wax and make her speak [properly]”. Then they made her teeth of bees’ wax.
Chanab ko kuli ki redoe kaji-keda
After wards on being asked she said
"Aetya tuyu cha' hujua, ini cha tabu
"Oh it was a fox who came it is he who our
simkoda jom chabako tana.
fowls eat finishes them.

Ena ko ayum ked redo ho-ko esuko
That heard having people very
kur kureyana,
angry became.

Enteko men keda chekanabu chikaiya ?
Then they said what should we do to him?
Sano ataia-bu.
nothing; but we shall glue him.

Chilikate ata joro hundi kete buri
Any how glue collecting together old
era leka-bu bai-kete tuyu huju-seno
woman like we making fox coming-going
hora re-bu dub-ta,
way on we shall place.

Ente popoe buri era leka ko bai kedte
Then gum old woman like they making
hora reko dub tada,
way on they placed.

Ayub pang tuyu dama rurute en hujue tana
At night fox drum beating crying came.

Hatun ren ho ko ka ko nirayana.
Village of men not they fled away.
Hapate danang ete ko nel tana.
Silently hiding place from they looked at.

Tuyu hatu-kute seter lena.
Fox village-skirts reached.
Buri-era leka duba-kani-e beta kaya.
Old woman like sitting one he met.

Ente horae atom ichi tanna Ocha buri-
Then road remove cause-did away old-
era hora atomayn me, sari buri-era
woman road remove thou, really old woman,
sari, kam atomeya ?
really won't you remove yourself ?

Alom kurkur irina he! dama-danda koteng
Don't anger me oh! drum-sticks with I
hurula meya.
shall hurl (at) you.

After this on being asked by them,
she said, "Oh, it was a fox who came, it is he who eats away our
fowls."

On hearing this
the people became very angry.

Then they thought, "What should we do to him?"
The only thing we shall do is to make an image
of her with a sticky substance.

"Anyhow we shall collect glue, and
make an image resembling the old
woman and place it on the road that
the fox frequents."

Then they made
with glue a figure resembling the old
woman and placed it on the way.

At night the fox
came beating the
drum and shouting.
The villagers did
not flee away, but
silently looked on
from a hiding place.

The fox reached
the out-skirts of
the village. He
met the image like
the old woman
sitting.

Then the fox
asked the old
woman to move
away from the
road.
Ho rechaee atomaiya,
Person (if she) had been (then) would have removed
bapui!
the poor thing!
Ente dama-danda te-e hurla kia.
Then drum-stick with he hurled her.
Dama-danda en bya kan buri-era re
Drum-stick that old-woman on
dobeyana.
stuck.
Tuyu do ho-ge mene tana.
Fox for a man took it.
Ente dama-dandae asi urayi tana “Da
Then drum-stick asked her to return. “Give
buri-era tanj dama-danda em-uranj me.
old-woman my drum-stick return me.
Da emanj me.
Give me.
Ho rechaee kaji-halaiya
Person (if she) had men would have replied,
bapui!
the poor thing!
Ente ondo kurkureyante ondo miad dama-
Then more becoming angry another drum-
danda-te-e hurla-kia.
stick with hurled.
Ena da juahyana.
It became stuck.
Ente dama-te hurla kiya.
Then drum with hurled her.
Ena o juahyana.
That too became stuck.
Ayer leka ge asi uriya,
As before asked her to return, then too
en reo
did not give.

Then he hurled a drum stick which
stuck in the image
of the old woman,

The fox took it
for a man, asked
it to return the
drum-stick,—“Give,
old woman, my
drum-stick back.

Do give it to me.”

He became more
angry and hurled
another stick at it.

It also stuck.

Then he hurled
the drum also
which too stuck
in the image,

The fox as before
asked him to return
it but it did not.

Afterwards he ran
to the image, slap-
ped it, kicked it,
and bit it and was
stuck in it.

The people came
running and
cudgeeled the fox
to death.
IV. ON A FAR-TRAVELLED STAR-MYTH.

By Prof. Sarat Chandra Mitra, M. A., B. L.

A very popular nursery-rhyme about the stars opens with the following lines—

"Twinkle, twinkle, little star,
How I wonder, what you are,
Up above the world so high,
Like a diamond in the Sky".

The composer of the aforementioned verse, imaginatively placing himself in the position of a child, has given vents to his feelings of wonder as to what they are—whether they are inanimate objects shining like diamonds in the Sky, or whether they are anthropomorphic beings residing high up in the Sky.

Primitive men or those who are in a low plane of culture are, so far as their mental equipment is concerned, in the position of children.

"At an early time man began to think and ponder about the phenomena of nature. Everything appeared to him in an anthropomorphic form of thought, and thus the first primitive concepts regarding the world came into being in which the stone, the mountain, the heavenly orbs, were viewed as animate anthropomorphic beings endowed with will power, and willing to help man or threatening to endanger him". * Under the influence of this mode of thought, primitive men considered the Sun, the Moon, the Stars to be

anthropomorphic beings endowed with human sentiments and activities and possessed of a will power.

Having arrived at this stage of thought, they saw that the Sun shone during the daytime, the Moon rose in the evening and poured forth her beams in the night time, while the Stars appeared in the heavens after dark nightfall and twinkled with brightness all through the night. The sight of all these natural phenomena filled him with feelings of wonder, and perplexed him greatly about the origin of these phenomena.

It is to remove this perplexity and to solve this problem of their origin, that the primitive makers of myths began to invent stories whereby they could solve this problem. Several tribes have fabricated myths or stories accounting for the origin of the aforementioned natural phenomena, which they witnessed daily.

Among these tribes are the Santals who are a Dravidian people living in the Santal Parganas of Bihar and the district of Manbhum in Chota-Nagpur. The Santal myth-maker has fabricated the following myth to account for the fact as to why the Stars appear in the heavens and shine during the night.

When the Santals lived in Champa, the Kiskus were their Kings. The Santals were very simple and religious and worshipped Thakur Baba. Then rice grew unhusked in the fields, the cotton plants bore cloths ready-made for women, men did not have to pick the lice out of each other's hair, men's skulls grew loose and each man could lift off his own
skull and clean it and then replace it. But all this was spoilt by the misdeeds of a serving girl of one of the Rajas. When this girl went to the fields for purposes of nature, she would pick the rice and eat the same, she would clean her hands dirtied with cow-dung by wiping the same in her own cloth. So angered by these dirty habits, Thakur Baba deprived mankind of the benefits he had conferred upon them, so that rice began to grow in husks and the cotton plants only produced raw cotton and men's skulls became fixed so that they could not be removed.

In those old days, the sky was quite close to the earth; so Thakur Baba used to visit the habitations of man. The ancestors of the Santals used to say that they should not throw their dirty leaf-plates to the front or back of their houses, and that they should not keep their brass plates and dishes unwashed at night. For if they did so, Thakur Baba would be angered by seeing them when on a visit to men's houses. One day a woman threw her dirty leaf-plates to the front of her house. Seeing this, Thakur Baba became angry, and made up his mind not to remain any longer near men and so he removed the Sky to its present hieght above the earth.

Thakur Baba is the Sing Chando or the Sun, and the Moon is his wife. At first, there were as many stars by day as there were by night. These stars are the children of the Sun and the Moon and they had divided them between themselves. So Sing Chando resolved to destroy all
mankind and therefore blazed with a fierce heat till men and beasts writhed under the torture of it. Seeing their sufferings, the Moon besought her lord to spare them. But Sing Chando said that the utmost he would do would be to spare one or two men so that they might be the progenitors of a future race.

So Sing Chando chose a young man and a young woman and hid them in a cave and covered up its mouth with a hide. Then he rained fire from heaven and killed every other living being on the earth.

Although the young man and the young woman had been spared to raise up a new race, Ninda Chando, the Moon, feared that Sing Chando would again get angry and destroy the new race of human beings. Therefore she made up her mind to trick Sing Chando. Consequently she covered up her children (the Stars) in a large basket and smeared her lips and mouth with red, and going to Sing Chando, told him that she had eaten up every one of her children, and proposed that he should now eat up his own children.

At last Sing Chando was persuaded by his wife to devour his own children except two whom he would spare to play with. These two are the Morning and the Evening Stars.

The Sing Chando was deprived of the power of again burning up the earth. But, when that night, Ninda Chando let out her own children from under the basket, she warned them to beware of the wrath of their father, when the latter would find out the trick that had been played upon him.
When Ling Chando saw that Ninda Chando's Children were still alive, he flew to her and her children in a towering rage. At the sight of him, Ninda Chando scattered all her children in every direction, though at first they were all in one place; That is why the Stars are now spread all over the Sky. Although the Stars escaped, Sing Chando attacked the Moon and cut her into two pieces; and that is why the Moon waxes and wanes every month. At first she was always full like the Sun.

Some men say that the man and the woman when Thakur Baba hid in the cave, were Pilchu Haram and Pilchu Budhi and they had twelve sons and twelve daughters from whom mankind is descended and has increased and filled the earth.*

Then proceeding to Chota Nagpur, we find that a similar Star-Myth is current among the Mundas who are another Dravidian tribe living in that province. This primitive people explain by the following myth, the natural phenomena which they observe daily, viz, the facts that no stars are seen during the day time and that the moon waxes during one fortnight and wanes in another:—

The Sun and the Moon were two sisters and the Stars were their children. The Sun's children were very bright and hot like their mother. But those of the Moon were less bright and cooler than the Sun's children. The rays of the Sun and of her children were so scorching that nothing

would grow upon this earth. So for the purpose of making the earth suitable for habitation for living beings, the Moon concocted the under-mentioned plan. One night she lit a fire and seizing the Sun's children, burnt them in it, and made a good meal of a portion of their roasted flesh. Then taking the remainder of the roasted meat, she went to her sister the Sun—and said "Sister, here are some fine sweet potatos (Sakar Kand) which I have burnt; they are very sweet and I have roasted some, here I have brought some for you". Saying this the Moon made over to her sister—the Sun—the remainder of the roasted flesh of the latter's children which the latter unknowingly ate up under the belief that it was burnt Sakarkand. When the day dawned, the Moon, fearing that her sister would wreak vengeance on her for her act of treachery, concealed her own children.

When, after sometime, the Sun's and the Moon's children did not appear in the sky and shine brightly, the former enquired of the latter "Sister, why are our children so late in coming?" To this query, the Moon gave an evasive reply, on which the Sun became suspicious and made a careful search for her children but found no trace of them. At last, the Moon made a clean breast of the whole affair and admitted having killed her Sister's children. This enraged the sun so much that, taking a sword, she pursued her sister and overtaking her, cut her into two pieces. The Moon however fled away with her body cut into two pieces.
When the Sun retired in the evening, the moon brought out her own children—the stars which are now seen at night. They played and gambolled around her. When dawn came, the Moon concealed her own children for fear of the Sun. To this day the moon every day, conceals her own children at-day break, so that when the Sun appears in the morning, the Stars disappear from the Sky, and the Sun deprived of her own children, shines alone in the Sky. The slashed appearance of the Moon has been caused by the wound which has been inflicted upon her by her sister. Though this wound heals up at times, it reappear periodically in obedience to the decree of Sing Bonga so that the inhabitants of the earth may see the punishment that has been meted out to the Moon for her act of treachery and murder.

This is why the Sun shines alone, and no Stars are visible in the day time and the Moon waxes and wanes periodically; and thus existence has been made possible on earth. *

Then proceeding to Malayan Peninsula, we find that a similar actiological myth is also current among the aborigines inhabiting there, the occurrence of a lunar eclipse greatly perturbs the mind of these primitive peoples. They narrate the following myth whereby they explain the occurrence of this phenomenon,

On account of an ancient grudge, which the Sun bears against the Moon, these two heavenly bodies are on inimical terms with each other. In

* Vide Man in India. Vol. II. pp. 76-77.
ancient times, both of them had many children. One day the Moon said to the Sun:—Men can not endure the heat of your children. If you will eat yours, I will eat mine.' Accordingly the Sun ate up his own children but the Moon hid her progeny (the Stars). She subsequently brought them out of their place of hiding and refused to carry out her own part of the bargain.

It is for this reason, that the Sun is angry with the Moon, and fights with her when they meet, thereby causing an eclipse.*

On comparing the aforementioned three Star-myths, we find that:—

(I) In the Santali-myth, the Sun and the Moon are related to each other as husband and wife; in the Munda legend, they are sisters; and in the Malay aboriginal myth, the Sun is a male being and the Moon a female one, but the relationship between the two is not stated.

(II) In all the three Star-myths, the Stars are stated to be the children of the Sun and the Moon.

(III) In the Santal and the Malay aboriginal myths, the Moon plays a deceptive trick upon the Sun and persuades the latter to devour his own children, the Stars. But in the Munda legend the Moon kills the Stars who are the children of her sister—the Sun, by telling a false story, deceives the latter into eating a portion of the flesh of the latter's own children.

(IV) In all the three star-myths, the Stars together with their father (or mother)—the Sun, are stated to be very hot and scorching and, between themselves, made the earth uninhabitable by living beings and would not allow any vegetation to grow thereupon.

In order that the earth might become suitable for the habitation of mankind or for the growth of vegetation, the Moon killed the stars.

(V) In the Santali and the Munda legends, it is stated that when the Sun discovered the treachery that had been committed by the Moon, he (or she) attacked the latter and cut her in twain. This is the reason why the Moon waxes and wanes every month. While in the Malay aboriginal myth it is stated that when the Sun came to know of the Moon’s act of treachery and murder, he became angry with her, for this reason, whenever the Sun meets with the Moon, he fights with the latter in order to wreak vengeance upon her. This is the reason why the lunar eclipse takes place.

(VI) In the Santali and the Munda legends, it is stated that the Moon, hides her children (the Stars) during the day time, because she fears that if the Sun who rises at day-break, would kill the latter. This is the reason why no stars appear and shine in the sky during the day time.

From the foregoing remarks, it would appear that the three star-myths, narrated above, are almost similar in many respects. Specially the
Santali and the Munda legends are exactly parallel except in one or two points, now the Santals live in the Santal Parganas which are contiguous to Chotanagpur in which the Mundas live. So it might be argued that the Santals borrowed the myth from the Mundas, or the latter assimilated it from the former. But the question of borrowing cannot arise in this case, because the two myths differ from each other in one very important point, which is mentioned below.

It is very note-worthy that, in the Santali myth the Sun and the Moon are stated to be husband and wife. But in the Munda legend they are related to each other as sisters. So had there been any borrowing by one of these tribes from the other, the relationship of the Sun and the Moon would have been similar in both the myths. Under the circumstances, I am, of opinion, that the similarity between the Santali and the Munda legends cannot be due to borrowing.

Then again the aboriginal tribes of the Malayan Peninsula live at a great distance from the Santal Parganas and Chota Nagpur and are separated from the Santals and the Mundas by a long expanse of land and ocean. Moreover, there is no evidence to show that the former ever came in contact with the latter.

Therefore the question arises: how is the similarity between the aforementioned three Star-myths to be accounted for? I am of opinion
that this similarity can be explained by Franz Boas's theory of the Parallelism of Cultural Development which to quote his words, has been expounded as follows:—“Different groups of mankind started at a very early time from a general condition of lack of culture; and owing to the unity of the human mind and the consequent similar response to outer and inner stimuli, they have developed everywhere approximately along the same lines, making similar inventions and developing similar customs and beliefs”.

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*** This paper was read before the Section of Anthropology at the thirteenth Session of the Indian Science Congress held at Bombay in January 1926.
V. AN ABSTRACT OF THE ANNALS OF
THE NAGBANSI RAJ FAMILY OF
CHOTA NAGPUR.

[This paper contains the substance of the family
chronicle called, Vams'abali of the Chôta Nâgpur
Raj. The late Mr. Râkhâl Dâs Hâldâr who was
for sometime Manager of the Chôta Nâgpur Raj
had access to the original Hindi manuscript of
which he made an abstract in English. The pre-
sent paper is practically a reproduction of that
abstract with some verbal alterations and the
omission of long geneological tables and of several
passages containing the reflections of the original
Nâgbams'i chronicler on the character of individuals
and communities. The Editor is indebted to Mr.
Sukumar Haldar, B. A., for having kindly
permitted him to edit and publish the
account.]

Pundarika Nâg, having escaped from the
Sarpasatra sacrifice celebrated by Râja Janamejaya,
took the shape of a Brâhman, and found refuge
in Kâs'i (Benâres) in the year of Kaliyug, 3044. At that time, the sun of (prosperity of)
the Kuruvams' (the dynasty of the Kouravas) had
set, and in Avantishaka (meaning Kota or Sikavati?)
Bundi, reigned Raja Vikramadityya. Pundarika
lived in the house of a Brâhman as a student,
and, in course of time, was married in the
Gândharva form to his Guru's daughter Pârvati.

He always slept with his back turned towards
his wife. In the year of Kaliyug, 3165, and
Vikramaditya Samvat 121, Parvati was with child. On one occasion, while husband and wife were asleep, Pundarik chanced to turn his face towards his wife, and his breath, hot as fire, awakened her. She observed that her husband had a pair of tongues. Feeling much alarmed at this unusual circumstance, she awakened Pundarik, and enquired earnestly who he was. The Nāg said he would divulge the secret after visiting the Jagarnath temple at Puri. To Jagannath both husband and wife went, and the Nāg informed his wife that the secret which she was so anxious to know, would be divulged in Jharkhand. While there Parvati forgot to enquire about the secret. Passing through Jharkhand, they arrived in a jungle near the Sutiaamba hill. Then Parvati’s pregnancy had advanced 10 months and 10 days. She was soon in labour, and happened to recollect the secret which she was so anxious to know. On her asking the Nāg again about it, he assumed his own proper shape and after telling his wife who he was, he vanished by entering into the Tank of Banasur, close by, which was constructed in one month, that is in one dark half and one bright half of the moon. Parvati, in her grief, was delivered of a boy, and placing him on the ground, erected a funeral pyre, and burnt herself. The child’s cries attracted Pundarik on to the surface of the water. He came up to the child, found that his wife was no more, and was aggrieved. He prepared a temporary bed, in which he laid the
child and spread his hood over him and thus protected him from the sun.

It came to pass that a Sakadwipi Brähman from Magadhades, by name Janardan happened to arrive where the child was. He had a stone image of the sun with him, and came to Jharkhand with the idol. He went to drink water in the tank, leaving the idol on the bank, but on his return he was unable to raise the image from the ground. Feeling much surprised, he began to look around when lo and behold—he saw the Nāga with the child under his hood. The Nāga then uttered certain prophetic words to this effect: “O Sakadwipi Brähman! I am Pundarika Nāg, and this child is my son, he shall be known as Kasyapa Santan Nāgavansavatānsa Phanimukta Raif, he shall be Rāja of Nagpur des; and shall live in Satiambā; the Surya (Sūn) shall be his Auld-devatā; and you shall be his family-priest. The Nāga having delivered several other secrets, which are recorded in another book and not fit for the ears of other men, disappeared.

The poor Brähman, having taken charge of the boy, came to Sutiambā. Numerous families of Mundaś had previously come from Pipra and Pāligarh and settled in Nagpur. There had also come the Uraons from Jaipurgarh, Ruhidasgarh, Chitorgarh, Simaliagarh, and from other countries among the Mundas. There was one Munda by name Madra who was a Rāja of 12 villages. The Brähman took and delivered the boy to him. Madra and his brother Hangra gladly took charge of the child, and made
him over to the Rāni, (Madra’s wife) who had an only son. The boy (Phanimūkūṭ) would not suck the Rāni’s breast and consequently Madra was obliged to make over the child to his Dewan, (Prime Minister), Yudhisthira Dubey by name, who lived in Kunki to be suitably brought up. Agreeably to the Mūnda’s order, Yudhisthira took the child, and Janardan also lived with him. The boy was suitably educated, he was handsome, with marks of a hood and a trace of tongues on his head. When Phanimūkūṭ Rāi was grown up and the Mūnda’s son too, Madra took counsel of the Purushit Janardan and the Dubey whether his own son, or Phanimūkūṭ Rāi should succeed him as Rāja. The Purushit and the Dubey advised him to hold a Panchāyat of his friends and kinsfolk.

In those days the Mundas had pārhās or different inter-village organisations. Madra and Hangra were chiefs of Pārhās. Twelve or more villages made a pārhā. The different villages forming a Pārhā federation were styled by different names respectively, such as were (1) the Rāja, (2) the Dewan, (3) the Pāṇḍey, (4) the Sipahi, (5) the Kōtwar, (6) the Suar (cooks), (7) Bugati, (8) Khanpā-bahne-wāla, (9) Gorgārikaranewala, (10) Sakhiya, (11) Mayaparaha, * and (12) Handiadenevala; * When any dispute arises, these officers assemble and decide the dispute, agreeably to the dictates of justice and ancient custom, which was established by Madra, and still prevails. In some parganas,

* These names are no longer in use.
were ‘Ditya Rajas’ as in Siri-Choranda pargana, Udaipur pargana, Sonepur pargana, Bundu pargana, Korambe pargana, and others. Vanquishing robbers, cattle-lifters and others the Teli Rajas came into power; vanquishing the Teli Rajas in their turn, the Rakhsel Rajas flourished. Madra invited all the Mundas, Orãons, the Rajas named above. The Mundas belonged to the following clans or gotras:— (1) Nagadwar, (2) Tudawar, (3) Sapuwar, (4) Diuri, (5) Tiriki, (6) Tapno, (7) Kachchhapa, (8) Karkta, (9) Tamgoria, (10) Non, (11) Koya, (12) Tewan, (13) Rundu (or Runda), (14) Kamal, (15) Lohra, (16) Jamtute, (17) Jhora, (18) Kaua (crow), (19) Tuti, (20) Nag, (21) Bedeya, (22) Birhor, (23) Gola sanga, (24) Surahi Kapali, (25) Baghaot, (26) Muri, (27) Pio, (28) Aind, (29) Kado-sag, (30) Karkasa, (31) Dumariar, (32) Hasiaiar, (33) Bhringa-raj, (34) Sangwar, (35) Kaitha (or Raitha?) (36) Hansa, (37) Barha, (38) Kujari. Accordingly the Uraons have various gotras.—The Uraon, Khari, and the Kols, and the Ditya Rajas, and the Rakhsal rajhas and the other Rajas were invited to form a Panchayet. The question was put by Madra and Hāngra to the Panchayat assembled,—“We have one son, and also this son of Nāgvana, which of them shall be the Raja of Sutiambā”? Under a Jām tree north of the hill sat the Panchayat, and they answered,—“He alone should be the Raja, that is fit for such a position. Let the two boys bathe, eat, and ride. Let their demeanour in speaking, in the treatment of others and the general behaviour be watched and whoever shall excel the other,
shall be the Rājā," Then Madrā gave two dhōtis to the two boys, and told them to bathe and return to the assembly properly dressed. Both the boys went into the tank; the Nāgvansi boy having taken his bath wiped his body, made pūjā, etc, and returned to the sabhā, (assembly). Madrā's son on the other hand, bathed with great difficulty, did not wipe his body, slovenly put on the dhoti, and came to the assembly. Then dinner was ordered to be spread out. Goat's meat, fine rice, with various viands cooked by a Brāhman were placed on plates, and near these were placed buffalo meat, coarse rice and other inferior eatables cooked by a Munda. Madrā's son with much deliberation took the latter place and dined, the Nāgvansi boy took the former. After dinner, the Nāgvansi washed his mouth, the other did not wash. The former chewed his betel, the latter after chewing a little, threw the residue in the midst of the assembly. The former took his seat in the assembly like a polished gentleman, the latter behaved in a clownish manner. Both were then ordered to ride horses. The Nāgvansi boy without any ceremony, jumped up and took his seat upon the horse, Madrā's son made a ladder of a piece of Bel wood (Bel tree even now florishe near the Suryamandah at Satimba), in order to mount upon his pony. Madrā took his son by the hand and prevented him from mounting. The verdict of the Panchāyat was that the Nāgvansi boy should be installed as Raja and that Madrā's son should carry burdens.
Accordingly Madrā gave the sovereignty to Phanimukūt Rāi, and made his son a carrier of burdens. Phanimukūt began to rule at Sutiamba as Maharaja, having got the Tilak and Tika at the hands of Yudhishthir Dubey, and Janardan Purohit in the presence of the Panchayat. Yudhishthir Dubey became Diwan, and Janardan Sakadwipi Purohit. Afterwards Madrā, after some search, found resident of Belkapak by name Bhaonra, whose name was changed to Bhauna Rāi and who was made a Kayasth, and appointed Daftaria Pandey.

In Nagpur des, Madra established or sanctioned Bhari, Khāri, pawa, Kanwa, Kāni, Adhakāni, Dand, bāri, pargana, Gaonbasti, Jungle, patra, ḍūg, bāg, bāgicha, gāchh, māchh, jalkar, bankar, gārhā, dhōrha, uthati, part, zamin, gāon, gūonha praja, pur, chatur simān, ātho dāsā (i.e. East, west, north, south, northeast, northwest, southeast, southwest), gram-deōta, deōta, dārha, kudārā, Deswali, Čhaṇḍi, Betal, Brahmpisach, Mūndahar, Barpāhār (marāngbūru) which have been brought by the Oraons, from Rōhidās, Jāhir, Bishnapat, Kōnkpat, from which the Mundas are derived and by which name the Mundas are known to this day.

The story goes that in former times 12 Deotas, who were brothers fought desperately with 13 Asūrs, who were brothers likewise. There lived an old Mundā couple named Latkum harām and Latkum būrhi, at whose command Khasrā kōrā sānī Toro koda had reclaimed 82 Pinī loyang Garha (lowlying fields for wet cultivation of rice) and 83 Pinī bāid chāura lands (uplands where wet cul-
tivation is not possible). Even now when the “Bhelwā phari ceremony is performed to cut the evil mouth and the evil teeth, the story is recounted. And the 12 brother Deotas and 13 brother Asūrs, and Lūtkūm Hārām, and Lutkūm Buṛhi, and Khāsra korā sani Toro kara etc. are remembered in the month of Agra-hāyan every year.

The names of Orāons and Mūndās, and of Bhūts, and their appropriate offerings were fixed and the Pāhān was appointed to make sacrifices. In the Navarātri Dasami the Purōhit and Maharāja Phanimukūt, were to worship the gods. All this is laid down in the book of Bhauā Rai Pândley, of which the title in the Dafter, is Madra pānji. That book contains wonderful things, but during the Badshahi (or Sepoy Mutiny of 1857) Ganpat Rai Pândey is said to have done away with it.

After sometime Phanimukūt invited Brāhmans, Kshātriyas, Vaisyas and Sudras to the country, and made them settle at Pithauria in Sutlamba and gave them Jagīrs. For the Kuladevta or family god, Surīya, the village of Pusti was granted as Deethān by a copper plate grant to Janardan; by another copper plate patta, the village of Kunki was granted to Yudhisthir Dubey. When Phanimukūt was 16 years of age, no Chhatri nor Raja would give him a daughter in marriage, as he believed to have been a Munda’s son. Then Madra, Yudhisthir, Janardan, and Bhauā Rai went to Pat Jhalda, where the Sikhār Raja lived. The Sikhār Maharāja was Jagat Deo, of Gabhivans, a
Chhatri of the Pramara clan. On mentioning the object of their mission, the messengers were told by Raja Jagat Deo, that if he was satisfied as to the image of Phanimukut, he would give his daughter in marriage. He sent his Purōhit, one Chakravarti, with Mādra and others to Nāgpur for the purpose of ascertaining the facts. On the arrival of Chakravarti at the court of Phanimukut, the latter felt alarmed and almost despaired of obtaining the hand of the Sikhar Raja’s daughter. With the advice of Janardan however he fasted and stayed at the temple of Surya. And then—lo and behold!—the Nāg appeared and promised to be visible to the Chakravarti purōhit. The Nāg added that the Chakravarti should see that Nāg with one eye only, but if he looked at it with both his eyes, he would get blind of both eyes. The Nāg further said after that he would not be visible at all, but directed that he be worshipped on the 5th day of the bright half of the moon in Sravan every year and such worship would do good to the Nāgvansi family. Phanimukut Rai returned to the fort and on the following morning took Chakravarti to the “Andhari, injari” Tank, and then the Chakravarti covered his whole body with clothes and beheld with one eye the Nāg who assured him that Phanimukut was his (Pundarik’s) son, and then disappeared and Chakravarti had the satisfaction of losing his eye. Chakravarti returned to Sikharbhum, and informed the Rājā of his having seen the Nāg and lost his eye-sight. The Sekhar Rājā was satisfied,
and made Phanimukut his son-in-law.

When Maharaja Phanimukut returned to Sutiamba garh with his bride, he invited there Madra Muntha and others, all the Munthas, Oraons, Ditya Rajas, and Raksal Rajas;—all men, women and children of Kolhan (the land of the Kols or aborigines) were invited to Sutiamba, and entertained. He fed them with buffalo-beef, and they drank the rice-beer very freely, and quarrelled and fought among themselves. As the people of the Kolhan were turbulent, the assistance of the soldiery belonging to the Maharaja, the Ditya Rajas, and the Raksal Rajas, were employed to put down the row. At midnight Phanimukut ordered that excepting the family of Madra and Hangra, and such Oraons as were members of Parhas, and boys under 12 years of age, the rowdies must be massacred. The order was carried out; those who survived, were made prajas, jotdars, and—parha mankis. The Kolhan was thus subdued.

Phanimukut began to rule the country with great wisdom.

One day Phanimukut being seated on his throne asked Madra and Hangra to ask any boon in the shape of Jiban britti (life-grants) and they said that they and their family hoped to be fed, clothed, and maintained by Phanimukut, and they wanted nothing more. Phanimukut said if they would not accept any Jiban britti, he would renounce the Raj, go to the Jungle as a sannyasi.
Then Madrā and Hāngrā, fearing lest they would lose Phanimukūṭ, consented to accept a Jīban-bṛitti and a title; and asked they might be called "Bhuinhār". — The Maharājā asked Yudhishthir Dubey, and others what the meaning of "Bhuinhār" was. And they all said "Bhuin" means, the earth, and "hār" is the name of Mahadev, and also the name of the plough. So "Bhuinhār" means one who ploughs the earth through the grace of Mahadeo. It means a Jōtdar, one who takes "dam aur kam" from the Prajās on account of the Maharaja". Phanimukūṭ enquired if they would take this title or any other. Madrā and Hāngrā said they would be content to take this title only, for their ancestors who lived in Pipra and Pali-garh were always known as Bhuinhārs and they would retain and preserve the title of their ancestors. Phanimukūṭ asked Madra: "O Barā (Uncle)! you belong to a different country! how could you then become Rajās of the 12 villages?" Madra replied, "When Lori Sanwara and Beranath Rani and Mundi Bīr, and Uraon Bīr had fought desperately with each other, some fled from Jaipur garh, Chitor garh, Similia garh, Ruhidas garh, and their own country to Jhārkand Nāgpur. My ancestors Kansrāi Munda, (who also came to Jhārkhand) was engaged as a cook to one Biraja Dom. Long after that the Lord of Lanka, Rāvana had become master of the three worlds, and was reigning over Mrityubhum, and 33 crores of Deotas were confined in prison in Lankapuri. Rāvan gave Jambudwip to Biraja Dom and all the Domra or Dom people used to gather and beat the Naubat
in Lankapuri. Then came the Avatar of Rām who was born in Ayodhya and became king, and Kekai Rāni instigated Dasaratha to send Ramchandra to the forest so that the Asurs might be destroyed and the 33 crores of Deotas released from confinement. This was done as has been described by Valmiki and Tulsidas. Then Ramchandra was returning from Lanka to Ayodhya having destroyed Ravana, my ancestor Kansrai was a cook to Biraja Dom.—When Ramchandra came near, Biraja Dom fled through fear. All the Doms belonging to different classes such as (1) Raj dom, (2) Tirlaka dom, (3) Ghor-Khaya-dom, (4) Pataria-dom, who eat frogs, (5) Meram dangia-dom, (6) Halal khor dom, (sweepers), (7)—dom, executioner, all these fled. Biraja, before flying, made over his Raj temporarily to my ancestor Kansrai, but each of them was Raja of 12 villages. We follow the custom of our former home, Pipra and Pali des”. Hearing this, Phanimukūṭ caused a perpetual pattah to be engraved on a copper plate, and gave it to Mādṛā and his brother Hāṅgrā, making them Bhūṁhārs of 12 villages, and gave them pāṃra. Their 12 villages, are still known as “Baragaian” pargana in Sutiāṃbā.

In course of time, Phanimukūṭ demanded the imperial revenue (due to the Badshāh) from the Ditya Rajas and the Rakṣel Rajas, and they gave a flat refusal. Then Phanimukūṭ, with the assistance of the Raja of Sekharbhum waged war against these refractory Rajas and subdued them. Up to this day the debris of these forts and
ruins of bricks can be seen in various places, in banks of rivers such as the Suvarnarekha, etc. In the Tajna river, there is still a place called Ranidah, where the RANIS had drowned themselves. A family of DITYA Rajas still is in occupation of Patkum.

In those days in Korambey existed the family of the son of Raksel Ghatotkach Hirimb. A family of Kuruvasi Bhua by the Rakshasi lived in Surguja, as Kshatri Rajas. War was waged between them and the Nagvansis. The former being vanquished took refuge in Surguja, and that Raksel family still reigns. Korambey and all the parganas came to the subjection of Maharaja Phanimukut. The total number of parganas including Sutialamba brought under subjection was 44. The 22 parganas of Ghatwal Rajas were included under his sway. He collected revenue from all, by force of arms, and paid it to the Badshah, who was greatly pleased.

One day an utkal Brahmman or an Oriya PANDA from Purushottam Kshetra came to Phanimukut and blessed him with some mahaprasad. After conversation about Jagannath, Phanimukut wanted that the god should be brought to him for the purpose of worship. The PANDA robbed somebody of the image of Jagannath, and brought the same to the Maharaja, who received the idol with great ceremonies. In a similar manner, the idols of Balabhadra and Subhadra were brought and placed with Jagannath. Temples were erected and Mahugaon and Saranda villages were granted for
the support of the gods. So the image of Bhavānī was made and dedicated, and village Hulso was given in jaghir; and Lakshminarayan was subsequently dedicated and a village granted. All these villages were Deo Har grants.

Phanimukut got a son named Mukut Rai, and a daughter Durga Babi. When Durga was 5 years of age, she was sitting in the mahal, with Raja, Rani, and others, and she saw a kite falling upon a bird and began to laugh. On being asked what induced her to laugh, she said that in her former birth, she was a kite and had placed a “Khāṇḍā” (scimitar) on the Mundahār pāhār in Khukhra. The Raja and Rani and others accompanied Durga to Mundahār pāhār and brought out from a fissure in the rock the “Pāt Khāṇḍā” and gave the same to the Raja. Durga said that the Khāṇḍā belonged to Bānasur. When Krishna cut off Bānu’s hand, she (Durga) as a kite took the hand with the Khanda over the air and having eaten the hand deposited the scimitar in this fissure. The Babi directed that the Khāṇḍā should be worshipped every day by a Sudra, and that during the Dasahara, the Sakadwipi purōhit and the Mahārājā should worship it. A village was granted as jaghir for the worship of the Khāṇḍā. Thus Mahārājā Phanimukut gave away many villages as jaigir brits and caused the pottahs to be engraved on copper plates with the Nag santak and after reigning 98 years died, and his wife performed his ‘birkhod’. In this “birkhod” the Brāhmans had to find a suitable person to receive the gifts, and accordingly
one Rajnath Dhobi (washerman) was invested with the poita and made a Brähman to receive the gifts. The family of that washerman still exists at Jhikojhatty where they pass for Kanaujia Brahmans, and are called “Dan patra” or Mahapatra, they now form marriage alliances and eat on the same table with veritable Kanaujia Brahmans.

Before Maharajá Phanimukut, there existed in Nagpur des, the Kukhra garh 18 parganas, Doesagarh 18 parganas, Jarapigarh 18 parganas, and 22 parganas belonging to Ghätwali Rajás, total 76 parganas and Mukut Rai became Maharaja over these. And he reigned 59 years. The third king was Madan Rai, who reigned 57 years. The fourth king was Prataprai, who removed his seat from Sutiamba to Chutia and then invited Brahmans from Kasi, Nadiya, Santipur, etc. and the 36 castes to settle in Nagpur. Chutia was established in 1742 sambat? After a reign of 29 years he died. The 5th king was Udaimani Rai, who reigned 27 years. The 6th was Jaimani Rai, reigning 31 years. The 7th was Srimani Rai reigning 38 years. The 8th Phani Rai, reigning 59 years. The 9th Ahindra Rai, reigning 24 years. The 10th Jayendra Rai who reigned 17 years; the 11th Hari Rai, 42 years; the 12th Gajaraja Rai, 25 years; the 13th Sundra Rai, 46 years; the 14th Mukund Rai, 37 years; the 15th Udadai Rai, 51 years; the 16th Kanchan Rai, 42 years; the 17th Kandarp Rai, 21 years; the 18th Magan Rai, 41 years; the 19th Jagan Rai, 39 years; the 20th Gajadanta Rai, 41 years; the 21st Mohan Rai, 24 years; the 22nd Gajaghanta Rai,
50 years; the 23rd, Chandan Rai, 33 years; the 24th Anand Rai, 18 years; the 25th Navanand Rai, whose public work was the Sangit-mandir of Khireswar Mahadeo in Kospur, on the road to Balea Badam, reigned 20 years. The 26th Sripati Rai, reigned 53 years; the 27th Jagadbandhu Rai, 19 years; the 28th Bhim Karam younger brother of Shyam Karam, who did not like the cares of this world and stayed in the forests of Gorra where he lived as an ascetic. Bhim left Chutia, built the fort of Khukhra and lived there with many people of the Rai family of the Nagbansis. The several tanks and topes of trees attest to the fame of the Rais. The Rais still live in Simla and other places. During this reign, the Raksel Raja of Surguja came to plunder Nagpur, and having placed Sri Basudev Rai Deota on an elephant, pitched his tent in Karambe with 12,000 horses. The Maharaja Bhim having taken with him Chahuwan, Parihar, Sulankhi and other warriors, and 400 selected horses, fell upon the enemy at noon of one day; the enemy got dispirited and fled to Barway, where Bhim followed him, and in a skirmish cut off his head, and conquered the Barway country, and carried away the idol Basudev. Bhim returned to Khukhra garh with 150 sawars alive.

Among the Nagbansis, some fought, some fled, some settled in Chainpur, some in Nagpur des, some in Khairagarh in Bara Nagpur. Among those who removed to Khukhra garh, one went to Gola-Chitarpur, and some lived in Kairo. The Chawhan Chhatris of Chainpur are not Nagvansis; but they
are Kutumbas. The Nagbansis are worshippers of Sakti etc. Maharaja Bhim Karan subdued Palamau but subsequently made a treaty with the Raja of that country who was made a tributary. Bhim reigned 10 years and was succeeded by the 29th king Jashkaran, who reigned 21 years. The 30th was Jaikaran, who reigned for 60 years. The 31st King Gokuran reigned 49 years; the 32nd Hari- karan reigned 19 years; the 33rd Sibkaran reigned 42 years; 34th Benukaran, 23 years; the 35th Phenu karan, 61 years; the 36th Tipulkaran, 38 years; the 37th Sivadas karan, 29 years; the 38th Udal karan 33 years; the 39th Prithwi karan, 26 years; the 40th Pratapkaran, 9 years.

During the reign of Pratapkaran, the Ghätwal Rajas became rebellious, and refused to pay the customary tributes. The most refractory was the Raja of Tamar, who came as far as Khukhra garh and threatened the Maharaja. Pratap having made a Khairwar called Baghdewa as Raja in the Barka Karo (?) parganas sent him as Faujdar to Tāmar, and the Khairwar cut off the then Tāmar Raja’s head and made the son of the Tamar Raja succeed his father.

Subsequently one Kapardeb, the Raja of Karanpura, did not for three years pay the tribute and render the customary services. And Baghdeo the khairwar Raja was ordered to punish him. Similarly other refractory Rajas were punished and Baghdeo was installed as sole Raja of the Ghätwals. His descendants still occupy the Ichak garh. Kapardeb or Kappardeo previously lived in Mahadi-
Pratap Karan reigned 9 years. The 41st. King was Chhatrakaran who reigned 23 years, the 42nd Bairat Karan, 7 years; the 43rd Sindhu Karan, 13 years; the 44th Bairisal, who went to Delhi, and fought with Mahammad Shah Badshah. Bairisal broke the chain of an elephant, and by showing other feats pleased the Badshah, who granted him pargana Saharghati (Sherghati). Bairisal returned home, and settled in Doesagarh and reigned 14 years. The 45th was Durjansal, who did not pay the customary revenue to the court of Delhi. So Nawab Ibrahim Khan came with 20,000 horses to Nagpur, and subdued Durjansal who was imprisoned. An offer of 86 Crores of Rupees was made to Ibrahim, but he still took Durjansal to Delhi. The Badshah put on him new fetters and shackles and placed him in an iron cage, and kept him confined for 12 years in Gwalior. For non-payment of revenue several Eastern Rajas were in confinement in Gwalior. Many Rajas were huddled together in the same prison.

At that time it so happened that two diamonds had been brought to Delhi and the question arose which of the two was best. Durjansal was called to give his opinion and he pronounced that to be the best which the jeweller had thought inferior. Durjan got the diamonds tied on the horns of two sheep, and as they struck each other the diamond which was pronounced inferior by Durjan, broke into pieces. The Emperor was highly pleased with Durjansal at this and released him from confinement and allowed him to return home. On
the Emperor inquiring if Durjan had any boon to ask, the latter requested that his fellow prisoners, the Eastern Rajas, might be released from confinement. The Emperor commanded the release of these Rajas, and conferred the title of "Shah" on Durjansal. Since then his descendants have been called "Shahs".

During Durjan's absence the family of Shyamkaran had taken possession of the whole of Nagpur. On his return he was assisted by the Rajas who were released from confinement through his intercession, and he conquered Nagpur again. Of the family of Shyam Karan, some fled to Sikharbhum, some to Bhojpur and some to Biwar Bandh. Some who were pardoned by Durjan, lived in Nagpur, such are the Rai brothers in Similagarh, the Karan brothers in Mahuajadi and Khijri. In 1898 samvat the main line of the Karan families of Mahua jari and Khijuri became extinguished.

Durjan got four sons, (1) Madhukai Shah, (2) Jay Shah, (3) Boijai Shah, and (4) Ram Shah. Durjan reigned 41 years and was succeeded by his eldest son Madhukai Shah. The three younger brothers became Thakurs and lived in Udaipurgarh. Madhukai Shah was the 46th king. He installed the deity Sham Rai and dedicated a temple to that god. His son was Dewa Shah, who was 6 months old when Madhukai died after a reign of 18 years. Dewa Shah's uncle Thakur Jai Shah engaged the mother of Dudhghaia Nandan Ra as a nurse for the child Dewa Shah who was duly brought up. When he came of age he began to quarrel
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with his uncles, and appointed Nandan Rai as his Dewan. Several battles were fought between the nephew and the uncles at Udaipurgarh, in the last of which both Jai Shah and Boijai Shah were killed. Dewa Shah’s youngest uncle Ram Shah fled and took shelter in Karanpura. There he met with one Harinath Deo Brahmachari a Siddhe- swar Maharashtrya Brahman in Badam forest, and made him his Guru. The Raja of Badam, Himmat singh, took Ram Shah under his protection.

Dewa Shah, the 47th king, began to reign in Doesa Garh. He having been versed in the art of divination, told Nandan Rai one day that Nandan’s wife had on her left thigh a wart, which brought her husband the good fortune of being the Dewan of the Maharaja. Nandan Rai suspected something wrong, and when he found an opportunity murdered Dewa Shah, and went to Badam where he found Ram Shah, and induced him to reign in Doesa.

Ram Shah (48th king) having consulted his Guru the Brahmachari, came to Doesa, and after a little while caused the death of Dewan Nandan Rai, and appointed his son Jagannath Rai his Dewan. At that time, the Badshah had waged war for 12 years against Palamau garh. For a time Palamau had been subjugated. But the Raja of that country again proving troublesome, the Badshah ordered Ram Shah to punish the Palamau Raja, so in an auspicious moment indicated by the Guru Brahmachari, Ram Shah attacked
the Palamau fort and having struck it with a cannon ball demolished it. After this victory, Ram Shah went to Delhi, where the Badshah was very much pleased with him. At that time the Badshah had a war in hand with Baghelkhand, and took Ram Shah with him to Lampur where he met the Raja of Riwan. On arrival it was found that on an elephant the Lakhauri flag was hoisted and the Baghel Raja of Riwan ordered the flag to be taken possession of. The Badshah forbade it, but the two Rajas did not desist from endeavouring to get possession of the flag. The Badshah then commanded the two Rajas to fight and after one vanquished the other to take possession of the Lakhauri flag which was flying on elephant. So in Baghelkhand battles took place between the Baghel Raja and the Maharaja Ram Shah. The Baghel Raja was vanquished and obtained pardon from the Badsha. The Badsha reconciled the two Rajas, and made them Kutumbas by marriage alliances. The Badshah returned to Delhi dismissing the two Rajas. Marriage took place between the youngest son of the Maharaja (Aini Shah) and the daughter of Baghel Raja (Badan Kunwari). In that marriage Maharaja Ram Shah made a present of a “Tasbadla” tent to the Bhat, who did not accept it through fear of the Baghel Raja. So the tent was burnt, and lo! 14 paseris weight of gold and silver came out which the Bhat gladly took.

The Raja of Singubhum was a Rahtor Chhatri named Jagannath Singh. He did not cause the
Dola to arrive with the bride at Nagpur. He said that he would respect the Maharaja in a variety of ways but would have nothing to do with the carrying of the Dola on occasion of marriages. Ram Shah got incensed, and attacked Jayantgarh, the then seat of the Singhbhum Raja. He burnt the town several times; still Jagannath Singh as a Rahtor Chhatri did not consent to carry the Dola. However a treaty was concluded. Jayantgarh was called Porahat, Jagannath's two sisters were married by Ram Shah who returned to Nagpur. Maharaja Ramshah got 10 sons, namely 4 by the eldest Rani and 6 by the other two Rânis (3 by each). These were (1) Raguhnath, (2) Kunwar Indra Shah, (3) Thakur Chandar Shah, (4) Chota Thakur Aini Shah, (5) Jyoti Shah, (6) Shyam Shah, (7) Sankar Shah, (8) Raghubar Shah, (9) Gopal Shah, (10) the last died young.

Raghunath Shah was the 49th king. He at one time gave over the whole of Nagpur to Hari Nath Deo Brahmachari, who was in possession for three days only, and then gave the country back to Raghunath. At one time, the Brahmachari advised Raghunath to take possession of Patna or Azimabad country. The Maharaja said he would consult his brother and friends before venturing upon attacking so powerful a country. The Brahmachari got incensed at this, and threw a copper vessel at the Maharaja, and the vessel on striking him became golden. The Maharaja was surprised and fell at the guru's feet. The guru said that
the auspicious moment, which transformed the copper into gold would have made Raghunath a great Raja, but was let slip by Raghunath consulting his brethren; however the transformed golden vessel was something to be preserved in the Maharaja’s house. The guru directed that the god Chintamani should be placed on this vessel and worshipped. Since then the golden vessel and Chintamani idol have continued in the possession of the Maharajas.

It happened during this reign that the Palamau Raja Ranjit Rai, and the Ramgarh Raja Dalel Singh, and Khanezad (the Badshah saheb’s beta) attacked Doesagarh. Raghu Nath’s brothers, Indra Shah, and Raghubar Shah were killed in the battle that took place. Raghu Nath wanted to make peace but to no purpose. Then after invoking the blessings of his guru Harinath Deo, Raghunath fell upon Khanezad and cut off his head. Raghunath took the tanga or sword from the waist of Khanezad, and that sword is still worn by the reigning Maharaja. On one occasion Raghunath Shah went to Delhi to pay revenue. On his way back, he pitched his tent at Benares, where Captain Camac Sahib Bahadur who had come from the island of England in Europe met him, and was much pleased with him. The Maharaja invited Camac Sahib to come to Nagpur at his leisure. In the course of conversation Camac Sahib said that there was often warfare in Nagpur. The Maharaja replied, “Yes. We are often molested by Mahrattas and Bargis, and there are internal feuds also. And thus there
is no security of peace and contentment in Chota Nagpur”. Camac Sahib said, “If you would but give me the revenue of Nagpur—Rs. 6000/-, I would secure peace and contentment in Nagpur”, Raghunath agreed and it was settled then and there.—On return home Raghunath told his friends that he had agreed to make over the government of Nagpur to a White man. The courtiers replied it was written in Valmiki’s Uttarakanda, that “the sons of Tzijata Rakshas would be white people born in an island, that in Kaliyuga, they would be masters of the world, that they have many virtues and many vices as well”.

Sometime after, Camac Sahid came with soldiers. Raghunath met him on the border of Ramgarh and brought him with great pomp to Doesagarh. In the course of the reception, Camac Sahib finding that the Maharaja’s pagree had a great many diamonds proposed that according to the custom of England, when friendship took place between two great men they exchanged their pagrees. Saying this, Camac Sahib took off his hat, and placed it on the Maharaja’s head and took the Maharaja’s pagree himself. Shortly afterwards the Sahib went back to Calcutta. Of the ten sons of Ram Shah, Raghu Nath became Maharaja, the others were Kumars. The tenth Aini Sah settled in Udaipurgarh alias Barkagarh, Bansgarh or Basargarh. Ainishah had several sons. By the 1st wife Badan Kunwari he had 10 sons. (1) Rudra Shah, (died heirless), (2)

Jagannath Shah had 4 sons. One of whom Maharaja Deonath Shah married in 1867 Samvat (1810 A. D.) Sankar Kunwari, of the house of Ujjain Chhatris of Nokha Jagdishpur, but had no issue. He next married in 1871 S. (1814 A. D.) Taramani Kunwari, daughter of Ghasirai Kunwar of the Chhatra pat, a Chhatri family of Bundu in the Gandharba form. This marriage was celebrated by Radhanath Purohit of Hatia, Sambhunath Purohit of Lodhma, Rajguru Sakhanath Deo Babaji Dudea, Nankuram of Hesag, Puran Dube of Hesag, Musa Pande of Hatia, Nankuram Upadhyaya of Hatia, Jhopa Pande of Chutia, Radha Misir of Hatia, Kinu Misir of Tupudana, Sahaju Tewari of Hesag, Pritiram Pande of Hatia, Pramathnath Pande of Hatia, Sibcharan Pande of Hesag, Gangaram Pande of Chutia,
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Debaraj of Tupudana, and Lala Pande of Tupudana, Jogindra Pande of Hatia, Premdas Mahant of Hatia, and many other Brāhmans. The marriage took place with their sanction. The kinsmen who were present on the occasion of the marriage were Lal Bhawani Shahī of Hesaland Masu, Lal Suvaru Shahī of Tupudana, Lal Udainath Shahī of Gutua, Lal Phaninath Shahī of Gutua, Lal Gobind Shahī of Dumri, Lal Lohru alias Beechan Shahī of Dumri, Lal Sambhunath Shahī of Khijri, Lal Baijan Shahī of Hethu who with 200 hundred men had constructed the Dola and taken it to the place where marriage was celebrated, Lal Bijinath Shahī of Hethu, Lal Harihar Shahī of Latme, Baijnath Bhaia of Barigawan, Dukhna Bhaia of Labed, Sankar Shahī of Barkagarh, Mangal Shahī of Barkagarh, Bishun Shahī of Barkagarh, Kanhai Shahī of Barkagarh, Ganes Shahī of Barkagarh, and several others. The match-makers were Bandhunath of Patkum, Akal Shah Pradhan of Gola, Kartaram Akhauri of Hatia, Khudi Kotwar of Rangamatia. The marriage expenses were recorded by Maganram of Hesag, Gangaram of Hesag, Motiram of Hesag, and Jaimangal Singh Ohdar of Hesag. The earthen vessels etc. were supplied by Ghasiram Ohdar of Tupudana, Chamru of Tupudana, Khudi Singh of Hesag, Bhukhal singh of Hesag, Sitaram of Tiril, Sahib Ram Lohandia of Ubaria, Sibram Lohandia of Ubaria, Sriram Kumhar of Chandaghasi. The “Manik tham” of the Mandapa was constructed by Karamat.
Khan, Sewa Nawa of Hesag, and they were engaged as general servants during the ceremonies. Chamra Ahir of Hesag supplied “Dahi”. Mani Ghasi of Kute acted as musician. The names of the invited people were written by Rupchand Sahu of Hesag and Khedu Chaudhuri of Hesag. Dukhi Sahu of Hesag supplied provisions. The “Patmari” was erected by Jitu Nawa of Tupdana, Bhinak Nawa of Chutia, and Rupram Dhobi of Hesag. The “Maur” was supplied by Phekan Mali of Hatia, Bhinka Laheri of Hesag supplied “Lahathi” (lac-ornaments); Jamir Darji of Hesag supplied clothes, and many men and a few women were present. The marriage was celebrated by exchanging flowers (“Phul-biha”), and was one of the 8 kinds of marriages. The annalist adds that the sons of such a marriage are legitimate. After marrying Taramani Kunwari, Debanath lived in Hesag Chatti (where the marriage had taken place). He was too much afraid of Dukhan Shahi to remain at Barkagarh. His first wife, Sankar Kunwari, was prevented from bearing children by means of conjuration and shampooing of her abdomen by certain women. Deo Nath lived with his two wives at Hesag. He got no children, and then requested his paternal aunt, the Thakurain of Chatakpur, to repair to Kasi, there to make “Dharna” before Biswanath Mahadeo for the purpose of Deo Nath’s obtaining children. The Thakurain went to Kasi, made the Dharna, and got the boon. Children born from Taramani Kuwari were—
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Biswanath, Kasinath, Baidya Nath, Prayag Nath, Ramchandra Nath, Raghu Nath, and Biswanath’s sons were Lachhu Nath, Surya Nath, Chandra Nath.

In 1882 S. Taramani Kunwari got a serious disease. Some years after she told Deo Nath, “I have no hope of living long. My sweet rival Sankarkunwari died in 1890 S. and in your old age you will require a wife to serve; so marry again”. Deonath despatched Sibcharan Pande, Nathu sahu, and Dharmadas Goswami to Singhbhum, and after the preliminary settlements married Shyam Kunwari, sister of Rāthor Chhatri—Chakradhar Singh, in 1896 S. (1839 A. D.) Lal Deo Nath built a house at Butio, where he lived. He gave Shyam Kunwari 4 khari don land in Dhurua for her maintenance. On 10th Jeth Sudi Tuesday 1900 S. died Taramani Kunwari and on 11th Jeth badi Monday 1905 S. died Deo Nath Shah at the age of 85. Deo Nath’s younger brother was Ajainath, whose son was Gopinath who had two sons Jainath and Lachhhminath.

Ram Shah Maharaj’s son Aini Shah’s public works are the Jagannath idol and the temple, and Math, Lākh-amrai or mangotopes, the tank of Udaipur, brick-built house and the stone gate, which fell down in Asarh 1912 S., the Bansidhar idol etc. Aini shah’s son Balabhadra Thakur “Siri pargana ka bhaye” in 1829 S., assisted Maharaja Jadunath of Doesagarh in his fight against the Maharathas, and became victorious. Jadunath gave Manatu village as Deottar to Bansidhar Deota and made Balabhadra trustee. He again assisted Maharaja Sibnath against Mahrattas, and routed
them. The Maharaja gave Soparam village as a jaghir to him.

At one time, Bishun Singh Raja of Ramgarh had to fight with Rohilla Maujam Khan, at Sademgarh, and was taken captive. On his application Balabhadra went to his succour, and released him. Maharaja Sibnath, hearing this, felt very pleased, and granted Kutiatu village as a Deottar to Bansidhar Deo, and made Balabhadra trustee. At another time Maharaja Udaanath had to fight with the Barghis, (Marhattas), and Balabhadra again routed them, and got Madhukom village as a Jaghir, but through the machinations of a Dewan of Maharaja Jagannath, the village passed out of the possession of the descendants of Balabhadra. Nagpur was in those days a notorious place for theft, robbery, murder, waylaying, plunder, prostitution, procuring miscarriages, affrays, burglary, witchcraft, poisoning, killing by tigers etc. People used to commit frequent murders, and to throw the corpses in the jungles and to report that the men were killed by tiger. Incendiarism, sudden attacks by the Marhattas, and such-like calamities existed. Nagpur was inhabited mainly by such tribes and castes as the Mundas, Khandhars, Lohras, Gorais, Baikars, Doms, Naivas, Jhoras, Rajputs, Kaseras, Sonars, Thatheras, Dobbies, Rautias, Ghasis, Panars, Baraiks, Ahirs, Gosains, Bhiyiyas, Barhais, Rajwars, Bhogtas, Jolhas, Doshads, Bhednaj, Keots, Chamars, Meochis, Bhats, Kamkars, Rauniars, Baniaas, (Nuniar baniaas), Turis, Deoris, Darihars, Kunnhars, Binjhis, Kaneths, Khatris, Musalmans, Brahmans, Mdars,
and some Nagvansis. Thakur Balabhadra shah was on his saddle all day and night, now vanquishing foes in Dundigara in pargana Siri, then clearing the country of Chors from Udaipur Khukhra. He used to receive "dām" (rent) and Kām" compulsory labour from people. He died in 1819 S. Agrahayan at the age of 83.

Then Srinath was appointed Thakur and Commander by Maharaja Diripanath. He fought with Thakur Mohān Shah, and demolished Ardhgarh. Dirip Nath being pleased, gave him village Doranda. Deo Nath Shah succeeded in getting possession of the village. In 1893 S. Deo Nath gave to his six sons Biswanath and others 10 villages, that they might learn how to manage Zamindari affairs. It is the custom in the family of the Maharaja. For instance, Thakur Doman Shah gave to each of his 3 sons Dukhan, Debnath, and Ajainath 6 villages as life-grants for that purpose. After Doman's death each got 35 villages: Their respective shares were sanctioned by Firanj sahib and Degli sahib i.e. of the Sherghati Court and Ajimabad appellate court. The 10 villages mentioned above included Doranda where a military cantonment was established.

By order received from Calcutta, dated 18th September 1835, a rent of Rs. 158/10/7 is paid by Government for the lands taken in Dorunda. From 1906 Sambat, Shyam Kunwari managed to get for herself this rent: In 1820 Sambat, Vaisakh, Abhinath, and in Sravan his brother Srinath died. Doman Shah became Thakur at the age of 9. Some time after one Piari Shah among the des.
cendants of Chandra Shah Thakur of Sonpur had a quarrel with Maharaja Durpanath. The latter, wishing to punish Piari Shah sent Thakur Doman Shah who got a Jaghir of 12 villages (Khunti and others,) built a fort at Dahugutu and fought well. Pairi Shah burnt many villages of Sonpur which was granted by Darpanath to his second son Harinath Kunwar, who built his fort in Govindpur.

During the time of Thakur Doman Shah there lived in Kutiatu a robber by name Matnu Lohra, called Matnu Sardar, who committed great depredations in the country. By order of Maharaja Darpanath, Doman fought with him and killed him and his head was despatched for the Maharaja's inspection. Darpanath was very much pleased with Doman, and ordered him to govern the country. Doman visited every village, routed or killed all bad characters and brought peace into the country. At the age of 27, in 1838 Sambat Kartik, Doman was assasinated. Thakur Doman had 4 sons,—Dukhan, Debanath, and Ajainath and another who died young. Dukhan became Thakur and fought with Bhupnath Shah, Thakur of Tilmii. He took and retained possession of 25 villages of Jamtoli from Bhupnath. Maharaja Deo Nath assisted Bhupnath by lending him soldiers, under Sib Singh Parganait of Pithouria Swarap Nath Shah Thakur of Kairo, Narauli jangli of Lohardaga, Mukund Singh of Chorea, Newal Singh Resaldar of Kotpali, etc. A battle took place at Dundigarh (Siri) in which Maharaja's 72 men died in the battle field. Then the Maharaja tried to make peace with Dukhan Shah, who did not consent to part with Jamtulli.
Some time after the Bara Thakur of Udaipur Dhirij Nath Shah died, and a quarrel took place between Dukhan Shah and Bar Thakur Nathan Shah. Dukhan took all the effects of Nathan Shah. It was long after this that the Maharaja induced Dukhan Shah to give up Jamtulli to Bhupnath thakur, and to restore also all the property to Nathan Shah.

In 1864 Sambat Russell Sahib came with troops to Tamar. Dukhan despatched his brother Lal Debnath to receive him. Then Russell Sahib came to Barkagarh and forbade all fighting with swords, bows and arrows, and ordered people to seek their rights in courts. The Sahib advised Nathan Shah and Dukhan Shah not to keep any soldiers who held service tenures, and said that the English Government would secure internal peace in the country, and that therefore the services due from the tenure-holders might be commuted to money rent. Nathan Shah and Dukhan Shah did not agree to this, and replied that before giving any final answer, they should consult the Maharaja. Then Russell Sahib asked Lal Debnath Shah to give Nathan and Dukhan some good advice. This Debnath did. Then Mr. Russell posted 200 sepoys under a Subadar at Barkagarh and took Lal Debnath with him to Maharajgunj. Maharaja Deo Nath did not meet Mr. Russel who thereupon despatched Lal Debnath to him, that the Maharaja might come to some terms with the Sahib. The Maharaja did not consent either to go or to hold any communication with
the Sahib. Some time after, by negotiations, Lal Debnath made the Maharaja and Russel Sahib friends, and since then the Raj of the Company Bahadur is supreme in that land. In 1865 Sambat, a Magistrate was appointed by the English Government; he came to Barkagarh and increased the revenue of Nagpur from Rs. 6000/- to Rs. 14000/- (Benarasi rupeya). He established Police thanas at various places.

Some time later, Nathan and Raghunath (father of Thakur Biswanath?) sent Dukhan for recovery of their property in the Court of Chatra-Sherghati zillah Ramgarh. While the case was pending Nathan died, but Raghunath fought the suit up to the High Court at Calcutta and got a decree and became Thakur and got back portion of his property. Some time after Thakur Raghunath brought a suit against Dukhan Shah whose villages were attached by order of court. Of these 22 were found to belong to Jaghirdars; and were consequently released from attachment. The 13 remaining villages were kept under attachment. In 1867 Sambat Dukhan drove away Lal Debnath and his brother Ajainath from Barkagarh. In 1888 Sambat Kumar Gopinath Shah, Kumar Srinath Shah, Sadasib Rai Dewan, Ganpat Rai Pande, Gulab Rai Pandey, Thakur Maninath Shah, Lal Baijnath Shah, Thakur Biswanath Shah, Parganait Jaisri Singh and Jaimangal Singh, Mukund Singh, Lal Loknath Shah, Lohar Singh Baraik, and many Nagvansi, Chahuwan, Baraiks, Brativas, Zamindars Mundas, Pahans, and Mankis (excepting Maharaja...
Jagannath Shah, Lal Jitnath Shah, and Lal Debnath Shah) formed a conspiracy to subvert the Government: The people (Mundas) who took a conspicuous part in the general confusion that took place in consequence were—Jenga Sardar of Chaulikocha, Achal Singh of Jojohatu, Sagar Sardar of Janumpuri, Bagh Rai Sardar of Gutuhatu, Lepe Sardar of Sarsom, Rai Singh Sardar of Sarsom, Lalsai Sardar of Sarsom, Turi Sardar of Sarsom, Rewa Sardar of Huididih, Mochi Rai Sardar of Huididih, Mangru Sardar of Dangiadag, Jagannath Sardar of Dangiadag, Tribhuvan Sardar of Dangiadag, Daru Sardar and Hindu Sardar of Remta, Narain Singh Sardar of Deogain, Bhuiyan Sardar of Deogain, Biru Khanghar of Bandaba, Lakho Sardar of Hethbandi, Guru Sardar of Barkibum, Magan Bhogta of Dundidih, Govind Sardar and Babu Sardar of Turjus, Ganga Sardar of Sirigarh, Jerka Sardar of Butio, Thibu Sardar of Botio, Mangta Sardar of Butio, Bangra Sardar of Hatudami, Dama Sardar of Hatudami, Jairam Sardar of Hatudami, Gopal Sardar of Hatudami. These men however submitted to Captain Wilkinson, battles having been fought in Bamni and Saridkel. Subsequently Singbhum was attacked, the Mahâ Patro was confined, the Khara Patro fled and took refuge with Ganga Narayan of Barabhum. Subsequently Chaitan Singh, Thakur of Kharsawan (who was Debnath’s maternal aunt’s son) cut off
Ganganarain's head, and gave it to the Sahib. In 1889 Sambat, Dōranḍā was made a military cantonment and Courts were established at Ranchi. In 1905 Sambat, in the month of Jeth, Debnath Shah died. In 1904 Sambat Christian Missionaries first visited Chota-Nagpur.

In 1914 Sambat, 11th Sravan, Saturday, the Sepoys mutinied. In 1915 Sambat, Vaisakh 3rd, Friday, Thakur Biswanath and Ganpat Rai Pande were hanged.
INDIAN ETHNOLOGY IN CURRENT PERIODICAL LITERATURE.

In the September (1928) number of Man, Mr. K. V. Krishna Ayyar contributes a note on "Chathan: a Devil or Disease?" Chathans are spirits, twelve in number, who have no will of their own and the absolute slaves of those who have them in their power. From the stars the astrologer finds out which particular Chathan has been set in motion to commit mischief, and by whom, and who can expel it from the house where it is found to commit various mischievous and obnoxious pranks. Certain families of Malabar are credited with special influence over spirits. The writer adduces certain reasons for the inference that an inmate of the house, under the influence of some nervous disorder, is responsible for the pranks popularly attributed to Chathan.

In the November (1928) number of Man, Mrs. H. G. Durai describes a South Indian women's game known as Pallanguli or "Mayholes", which is played by players with stones of the tamarind or any pebbles or small couri-shells which are placed by each of the players on each of the holes on his side of the playing-board and moved in a "counter-clockwise" direction.

In the American Anthropologist for October-December 1928, Mr. Milton Katz contributes a highly interesting article on Genna in South-eastern Asia. The writer shows by four maps the distribution of the three discrete elements (the Kenna-penna, the social genna, and the erection of
memorials) of this socio-religious complex in south-eastern Asia including Assam and Burma and suggests a history of Genna and memorials in South-eastern Asia.


In the *Quarterly Journal of the Mythic Society*, for October 1928, Mr. L. A. K. Iyer, continues his article on “The Malayarayans of Travancore”, Mr. K. Krishnamacharya on “Varna-Dharma vs. Asrama-Dharma”, and Mr. S. C. Mitra continues his “Studies in Bird-Myths” and “Studies in Plant-Myths”.

The *Visva Bharati Quarterly* for October, 1928, reproduces portions of an article on “India: the Cradle of the World Civilisation” by Sir Arthur Keith.

In the *Cosmopolitan* for August, 1928, Mr. Biswanath Banerji contributes an article on “Primitive Idea of Self” and Mr. P. K. Majumdar on “A Short History of the Human Race in Hindusthan”.

In the *Cosmopolitan* for October, 1928, Mr. P. V. Balkrishna Iyer, I. C. S., contributes an article on “Panchayets in the Past”, and Mr. Biswanath Banerji contributes the first part of an article on “Culture Problem of India”.

NOTICES OF BOOKS.


We heartily welcome this masterly work on the Building of Cultures. In this volume, the distinguished author begins with a discussion of the significance of environment and the character and limits of its influence upon cultural trails. He next proceeds to inquire into the phenomena of discovery and invention which lie at the bottom of the whole question of cultural origins. He then follows cultural traits in time and space as they grow old within the area of their birth and as, by the process of diffusion, they spread first among neighbouring peoples and then farther and farther over the world. After a study of concrete examples of diffusion, Prof. Dixon tackles the problems presented by the existence of cultural parallels in widely separated areas. Finally he examines the two main current theories of diffusion which endeavour to explain the maze of varied cultures as due to the worldwide wanderings of groups of people who each carried with them a characteristic culture-complex. These two theories, the culture-strata theory of Graebner and Schmidt and the heliolithic theory of Elliot Smith and Perry, Prof. Dixon finds, on examination, to rest “on too precarious a basis of established fact” and to outrage “not only the true principles of diffusion, but also the dictates of common sense”.

The author shows that environment supplies
the material basis upon which every culture had to draw. "The culture-traits drawn by each people from the opportunities and limitations of their habitat formed the basis of their culture, its warp, stretching between themselves and their environment. Across it the moving shuttles of diffusion spread the weft of exotic traits derived from far and near, combining warp and weft into a pattern which the genius and history of each people determined for itself. Thus each ecological area, each region possessing an environmental character of its own, begot a culture area, in part correlated with it, and comprising a larger and smaller series of individual cultures, each the product of a people's genius, but all expressive, in varying degree and sometimes in varying fashion, of that common back-ground shared by all". "If to the fabric of culture, environment may give the strength, and diffusion bringing in exotic traits give richness, it is the genius and intellectual quality of a people which in the main decrees its pattern".

By the example of the diffusion of the alphabet, Prof. Dixon shows that the centre of origin of any cultural trait is not a source from which the later specializations flow. On the contrary, the areas of increasing specialization and development are mainly marginal where the advancing trait meets new environments and new cultural types and patterns, to which it has to conform in order to be accepted. The widest changes, the most striking specializations take place, as a rule, at the very end of the diffusion stream. The history of
the diffusion of the alphabet is the most precise evidence of the cumulative character of the changes undergone in protracted diffusion, and shows that "the marginal forms of the trait (Ugham, Manchu, Korean, Pali, Ethiopic) do not in any sense represent the primitive form".

The present volume will form a standard work on the origin and development of cultures.


In this book we have a careful and illuminating account of the Rossel Islanders whose reputed craving for anthropophagy has long spared them close contact with civilized man. Comparatively little was known of the island and its inhabitants previous to Mr. Armstrong's visit. In this general survey of the culture of the Island, the author has concentrated much of his attention on the unusual and complex system of currency. Indeed most of the features of the social organization of the Rossel Islanders, in marriage rites, mortuary rites and many other ceremonial activities, an important economic element enters in the shape of monetary payments. The Relationship System of the Islanders has also been specially studied by Mr. Armstrong by the genealogical method. The Rossel Islanders are found to have a 'classificatory system' as distinct from a 'class system'. The author regards the Rossel system as a later stage
of the breakdown of a class system than is the case with those parts of Melanesia (Banks Islands) where marriage with the mother’s brother’s wife or widow occurs at the present day. That the break-down of the classificatory system is of a greater degree in Rossel than in Southern Melanesia is shown by the fact that a number of the relationship terms are not classificatory or are only incompletely so. An illuminating Introduction is contributed by Dr. Haddon. After an examination of the physical anthropology of the Massim area, Dr. Haddon briefly considers the culture and particularly the mythology of the area, and concludes that “the mythology belongs to a group or groups which introduced into Rossel a higher culture with a definite social system, and that it had the essential characteristics of that remarkable culture which has left such clear traces of progress throughout Melanesia and over a great part of New Guinea. The existing evidence seems to point to successive spreads of a fairly uniform basic culture into Melanesia, and we may find that the more complete forms of it have survived in remote spots or in those more difficult of access while in other areas it has been subject to partial disintegration owing to ‘disturbing factors’.”

In this book, the learned author sums up the results of his studies and investigations into the early history and archaeology of London. By coordinating anatomical, archaeological and historical data, the author has constructed as true and life-like a picture of the early days of London and its people as is possible in the present state of our knowledge. The various sources from which the population of the British Islands has been derived are traced in features that still persist. The general character of the population the author finds to be essentially Nordic. Professor Parsons is an authority on his subject which he has handled in a masterly and most interesting manner. Among the particularly interesting features of the book, one of the most important is the scientific account of the skulls, measured by the author, of some of the earlier neolithic inhabitants of Britain. The book will prove highly interesting and instructive not only to the general reader but to the student of anthropology as well.

The Beginnings of Man.—By E. O. James, (Hodder and Stoughton, 1928). PP. XIX+260. Price 2 s. 6 d. net.

In the first three chapters of this book, the author presents a popular summary of up-to-date
scientific data regarding the beginnings of man as a product of mammalian evolution.

In Chapter IV., he seeks to trace the evolution of the man as a rational being from the earliest times and to understand in some measure the complex working of his mind which is the hallmark of human distinctness. In Chapter V, headed 'The Making of Man', the author considers the principles governing human emergence and attempts a correlation of archaeological and anthropological evidence with values and realities outside the dominion of scientific method. In Chapter VI, which is the last chapter of the book, the author seeks to fit in the Christian doctrine of man with the hypothesis of evolution. The glossary of archaeological terms given in the book will be a help to the lay reader who desires to gain a general idea of the ancestry, origin and early types of man.


In this thought-provoking book, Dr. Hertz combats the theory of innate racial superiority of particular peoples and attributes the late Great War to the obsession of such a theory. The author holds that practically all differences in racial characteristics as well as in culture are due to differences in environmental influences and that all races are potentially capable of the same cultural attainment. The
fertility of inter-racial marriages is pointed out as a proof of the ultimate unity of all mankind. It is also pointed out as a significant fact that centres of culture have generally arisen at meeting-places of racial strains. The author concludes that prejudice is at the bottom of all race-theories, and that the moral and political consequences of such theories of innate racial superiority are most dangerous to the peace and progress of the world. The book deserves careful perusal not only by anthropologists and sociologists but by politicians and administrators as well.


Dr. Hearshaw who in his younger days felt the fascination of socialistic doctrines and has for the last forty years made a careful study of socialism in its theoretical and practical aspects, attempts in this volume to analyse the nature of socialism and arrive at its essence, to trace its origin and development, and to criticise its main principles and conclusions.

The essence of socialism, according to our author, is the advocacy of the following six principles:

I. Exaltation of the Community above the Individual.

II. Equalisation of Human Conditions.

III. Elimination of the Capitalist.
IV. Expropriation of the Landlord.
V. Extinction of Private Enterprise.
VI. Eradication of Competition.

By applying these criteria, the author in Part I (Analytical) of the volume distinguishes socialism from systems or movements with which it is often confused, in particular from communism, which is more than socialism, and from collectivism, which is less. In Part II (Historical), Dr. Hearnshaw examines the literature of earlier ages and shows that although some of the features of socialism are discernible both in ancient writings (E.g. Plato's Republic) and in historic institutions (e.g. mediaeval monasticism), "Socialism in its full complete form is a phenomenon uniquely associated with the modern, and still unfinished, industrial revolution".

In Part III (Critical) of the volume the author discusses the merits and defects of socialism in its six essentials, and comes to the conclusion that although it has rendered some useful service to the cause of humanity by its vivid description of existing social evils, and by its passionate appeal for their removal, "these services are a totally inadequate compensation for the incalculably great injustice that it has wrought by means of its false diagnosis of the diseases of society, and its prescription of a corrosive and paralysing poison in place of an effective remedy". Thus socialism, according to our author, is the way not of progress but of reversion to primitive barbarism.
In the closing section of his work the author suggests for the future well-being of the community three reforms, within that economic sphere which is socialism's chosen field of operation. These are,—(1) in the sphere of production, unrestricted output stimulated by all the possible incentives which individualism can suggest, and assisted by all the aids which science and invention can supply; (2) in the sphere of distribution, a vast addition to those free gifts which nature bestows upon every man (air, light, water, etc.) in the shape of other necessaries and comforts which increased productivity places in practically limitless profusion at the disposal of the community; and (3) in the matter of population, a reduction in the quantity, together with an improvement in the quality, of births. But, says Dr. Hearnshaw, "Before any of those three steps can be taken the spell which socialism has cast over labour must be broken, and the menace of communism be removed".

The book is a careful and critical compendium of the history and the various phases and forms of socialism, and the student of sociology who cannot afford to neglect a working knowledge of this most noteworthy feature of the world-politics of the moment, cannot be referred to a more comprehensive and succinct survey of socialism than is presented in this volume by Dr. Hearnshaw,

This is a very interesting book in which the author breaks new ground. It is a valuable introduction to an important field of applied psychology which has hitherto been unduly neglected. This book contains a selection from the lectures dealing with Psychology in relation to military problems delivered by the author in the Cambridge University when, after the Great War, courses of Military Study came to be re-organised. Of the three parts into which the book is divided, Part I. deals with psychology in its relation to the technical problems (tests of special senses, intelligence and special abilities) involved in the selection and training of the recruit; Part II. deals with some of the problems of social psychology directly connected with the organisation and efficiency of an army, such as discipline, authority and punishment, the basis of leadership, the development of morale; Part III, deals with the causation and treatment of nervous and mental disease in warfare in so far as a knowledge of these matters is necessary and helpful to the the ordinary military officer.

As a result of his brief review the author comes to the following important conclusions: that training in psychology should form a part of any general scheme of preparation for a military career; that an officer can better handle any group of men if he takes trouble to understand the determination of conduct in and by
society, and that it is most desirable that any person who takes up a professional career should have some lively interest, outside of the mere routine work of his profession, but if possible bearing upon this, which he can prosecute throughout his life; and that for a soldier there is nothing better in this way than psychology or a study of how human conduct is determined. Psychology is peculiarly suited to provide a soldier with that interest which is at once a relief from regular duties and an enormous aid to their satisfactory performance.


In this book, Professor Hattersley seeks to trace the origin and growth, in its essential features, of modern European civilization. In outlining the upward trend of man's development from the earliest Stone Age to the present day, and his increasing control over the forces of circumstances and over tradition, the author has sought to give an impression of the unity of history, and of the growth of humanity, and to display the processes by which civilization has been fashioned. Past conditions, rather than events, have received attention. Owing to the modest scale of the book, only the main channels of the history of civilization have been sought to be pre-

The history of ancient commerce between India and the Roman Empire is a subject of great interest to cultured men in general and Indians in particular. Mr. Warmington’s book is a most valuable contribution to the study of the subject. The book is divided into two parts. Part I is headed ‘The opening up and Progress of Rome’s Commerce with India’ and Part II. “The Substance of Rome’s Commerce with India”. The First Part deals with the trade-routes, both sea-
routes and land-routes; between Rome and India at different periods and the nature of the trade that flowed along those routes from the reign of Nero to the death of Marcus Anrelius. The discovery of the Monsoons by Hippalos and the developments of trade that followed rapidly on that momentous discovery are discussed in a Chapter II of fifty pages. The Second Part of the book gives an exhaustive survey of the articles of merchandise, animal, vegetable and mineral, which the Romans imported from India and such imperial products as the Romans sent to India on return, and the exportation of Roman specie which was adopted in order to make up the balance of trade. The full details given in this Second Part of the book are brought together for the first time in this volume by collecting all available sources. From his survey of the Indian Commerce of the ancient Roman Empire, the author comes to the conclusion that this traffic had no influence upon the institutions or habits of the Roman Empire or India. It is a significant fact that whereas Roman subjects constantly visited India, Indians seldom visited the Roman Empire (except Alexandria and Asia Minor). "Almost the only traces of Indian influence upon the West are the adoption of the Jataka stories, the presence of Indian elements in Manichean, Gnostic, and especially Neo-Platonic tenets and possibly the presence of grotesque "grylli" as Roman talismans and amulets. Indian elements are found in Roman work of silver and ivory, and in Egyptian fabrics. Traces of Roman influence upon India are more sub-
stantial, but even many of these are doubtful. Thus the Krishna legend seems to owe something to the West; the visit of Pantaenos, alleged by Eusebius and Jerome, possibly influenced Tamil philosophy and the debt of India to Alexandrian merchants for Greek astronomy was a real one, as is shewn by the titles and contents of five early Indian writings on astronomy; the influence seems to have reached China and the Jewish calendar of the week-days was brought to India from Syria. In the matter of literature, there are distinct traces of Greek influence in the ancient Indian drama and theatre, but the resemblances occur mostly in one play. In art we have the "Gandhara School" of sculpture in North India and influences upon Indian building elsewhere, the surest evidence being the presence of the "Composite" Roman Capital at a place where Roman coins have turned up. Again, Indian filigree workers retain to this day the same patterns as the ancient Greeks devised, and Indian jewellers imitated Greek styles. Lastly, the Roman connexions influenced the Indian system of commerce. In the North the coinage was affected, since the Kushans and the Guptas struck coins of equal weight to the Roman, and in the fifth century A.D. the word "dinar" (denarius) was being used in Indian records; the gold coin of the Ganges region was struck perhaps under Roman influence. In the south, Roman law and procedure influenced the Tamils of Malabar, and the Greek troy scales of weight perhaps reached India and China."
Concerning Man’s Origin.—By Professor Sir Arthur Keith (Watts & co. 1927). PP. V+54 Price 7d. net.

Darwinism and What it Implies.—By Professor Sir Arthur Keith, (Watts & co. 1928). PP. VII+56. Price 7d. net.

The first of these two books contains the Presidential Address which was given to the British Association at its annual meeting at Leeds in 1927 besides certain essays dealing with various aspects of the problem of Man’s Origin. The second book may be regarded as a sequel of the first, and is concerned the implications of Darwinism and the Nature of Man’s Brain. In it the distinguished author applies Darwinism to the interpretation of the basal elements of man’s mental nature and criticises some Modern critics of Evolution. No one is entitled to speak with greater authority on the all-important question dealt with in these books than Professor Sir Arthur Keith. And notwithstanding what Daytorians and the class whom Sir Arthur calls “Daytonian Darwinists” may say to the contrary, “all the evidence at our disposal” as Sir Arthur Keith says, “supports the conclusion that the biological factors which raised the anthropoid brain from that of a lower ape were also those which ultimately transformed an anthropoid brain into man’s master-organ”. Professor Keith confesses that we do not know as yet what those brain-expanding factors are. “To ascribe them to a miraculous intervention is one way of solving the
problem, but it is not one which will be accepted by men who have resolved to find out the kind of universe we live in and the kind of being man is by the resolute prosecution of scientific inquiry”.

Messrs Watts &Co. have been doing a great service to Science by popularising it through this brilliant series of little books of the Forum series and by their equally splendid Popular Science Series.


It was a most happy idea of the Museum Board of the native territories of South Africa to combine the artistic talents and photographic work of Mr. A. M. Duggan-Cronin with the ethnological knowledge of Mr. G. P. Lestrade, Ethnologist in the Native Affairs Department of the Union of South Africa. As a result of this happy co-operation we have in this Part twenty portrait-studies of considerable ethnological value depicting Bavenda life and an illuminating introductory article. Each Plate is preceded by a short descriptive note, and the volume begins with the introductory article on the Bavenda, a Bantu-speaking people who form about one-third of the
native population of the Zontpansberg District, Northern Transvaal. Should the present publication receive sufficient support, it is proposed to follow it up by other parts, each dealing in like manner with a particular branch of the Bantu peoples, and reserve for a separate volume a similar collection of Bushman studies. In consideration of the great value of such studies of these fast changing African tribes, it is expected that adequate support will be forthcoming. The books of the series will, we are sure, meet with a warm welcome at the hands of anthropologists.

Ceremonials of the University of Cambridge.—By the Rev. H. P. Stokes, (Cambridge University Press, 1927). P.P. X+87. Price 7 s. 6 d. net.

In this handsome little volume, the author supplies an exceedingly interesting account of the ceremonial procedure of the University prior to 1 October 1926 and briefly refers to the changes brought about by the new Statues. The get-up of the book is very nice and the illustrations are excellent.
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SOME OPINIONS.

SIR JAMES G. FRAZER, D. C. L., L. L. D., Litt. D., F. B. A.;
F. B. S., G. M., Professor of Anthropology in the Trinity College,
Cambridge writes:—

........I find it characterised by the same high qualities as
mark your former monographs on the Mundas and Oraons.
You have rendered a valuable service to anthropology by placing on record the customs and beliefs of a very primitive tribe
about which very little was known before and which, but for your careful and prolonged observations, might have passed
away practically unknown. As in your former volumes I
admire the diligence with which you have collected a large
body of interesting facts and the perfect lucidity with which
you have set them forth. The book is a fine specimen of a
monograph on an Indian tribe and must always remain the
standard authority on the subject. I congratulate you heartily
on your achievement, and earnestly trust that you will continue
your valuable investigation and give us other similar accounts
of other primitive and little known Indian tribes.

SIR ARTHUR KEITH, M. D., F. R. C. S., L. L. D., F. R. S., Con-
servator of the Museum and Hunterian Professor, Royal College
of Surgeons of England, writes:—

........You have done a splendid piece of work—one which will
make Europe indebted to you........

DR. A. C. HADDON, M. A., Sc. D., F. R. S., Reader in Ethno-
logy, of Cambridge, writes:—

........Your accustomed excellent work. It is a most useful
contribution to Indin Ethnology........
Dr. Roland B. Dixon, A. M., Ph. D., Professor of Anthropology in the Harvard University writes:

..........You are certainly doing work to be proud of in the studies you have published of the Chota-Nagpur tribes, and all anthropologists are in your debt. If only we could have similar studies of all the wilder peoples of India, how fine it would be!............


..........Students of Indian anthropology are deeply indebted to Mr. Roy for the light he has thrown on the past and present culture of the Chota-Nagpur plateau. In the Bihar and Orissa Research Society's Journal he has opened up new ground in the archaeology of his area. His monographs on the Mundas and Oraons are classics. "The Birhors" is yet another first-rate study, a study not merely of an obscure tribe but also of the workings of that mysterious complex of thought and feeling which go to make up human culture..............Mr. Roy is never a theoriser or a partisan; his diction is simple and precise, his inspiration comes straight from the hearts of the humble folk he has made his friends.


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Sir J. G. Frazer, D. C. L., L. L. D., Litt. D., F. B. A., F. B. S., Professor of Social Anthropology in the University of Liverpool, writes:

It is a work of great interest and high value as a full and accurate description of an Indian Hill-tribe. I congratulate you on having produced it. You must have given much time and labour to the researches which you have embodied in this book. But the time and labour have been well spent. The description seems extremely clear and well written in the simple language which is appropriate to the theme, and the translations of the poetry are charming.
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