

Chapter IV, p. 154. "Sosnorski believes that the origin of the word "Doongan" relates to the commencement of the rising of the Chinese Musalmans in the year 1861. According to him the insurrection first began in the neighbourhood of fort Doongan, which is situated in the province of Shen-Si."

Chapter IV, page 154, "Fort Doongan." The rebellion began in the city of Lin-Tong east of Sigan.

6. *Notes on Akas and Akaland.*—By MAJOR C. R. MACGREGOR.

(Abstract.)

The history of the tribes on the north-east frontier is very obscure, and that of the Akas (or Hrusso clan) is no exception; they assert that they came originally from the south-east of the Assam valley, and this is not improbable, when the fact that their language assimilates more with that of the tribes bordering Manipur than with that of their immediate neighbours, the Dufflas and Bhutias, is taken into consideration. The Akas also assert that they are of noble origin, and every free Aka considers himself more or less a 'Raja'; the manner and bearing of the free Akas is certainly in favour of their claims, as they assume a very bold and dignified air; '*Noblesse oblige*' is clearly marked in their deportment, if not in their conduct.

The Hrusso clan is divided into two sections, and locally called Kapachors (thieves of cotton) and Hazarikhawas (eaters of a thousand [hearths]): the above-mentioned names were bestowed by the Assamese, and are now adopted by the Akas themselves, who are rather proud than otherwise of the appellations. The Akas, like most of our mountain tribes, delight in terrifying the dwellers in the plains, on whom they look with the greatest contempt. I was informed by an Aka Raja (so called) that the Kapachors had divided the mouzah of Balipara among themselves, and to each "Raja" was apportioned a certain number of houses, the inhabitants of which were bound to give lodging and food gratis to their respective feudal lords (and their followers) whenever it might please them to visit the plains. The inhabitants are also expected to present a yearly tribute in the shape of pigs, fowls, and silk cloths.

In 1829 (four years after the British assumed the Government of Assam) a Chief of the Akas called Tagi (the father of Mehdi, the present Chief) was lodged in jail at Gauhati and released in 1833; four years of captivity did not improve the Chief, for in 1835 he connived



at, if he did not actually join in, an attack on a guard of the 42nd Regiment, A. L. I., at Balipara. On that occasion seven sepoy with their families were "cut up." In 1840 the Akas captured three natives of Balipara, and in 1841 Tagi was induced by the astute Political Officer to surrender himself. Before his surrender, Tagi, however, wisely released all the captives. On his surrender he was pardoned, and a pension of Rs. 20 conferred on him. In 1844 this pension was doubled, and in 1848 was raised to Rs. 520. Since then the Kapachors have received that sum yearly; the Hazarikhawas receiving a yearly sum of Rs. 180.

About 300 years ago the Akas, under a Raja called Bam, were settled on the right bank of the river Bhoroli near Balak Pung, and to this day there are evidences (in the shape of masonry, &c.), which bear witness to the occupation of that site. In those days the Akas evidently built themselves (or made their slaves build for them) more substantial houses than they do now. The only specimen of a stone house which I have seen in Aka land was one to the west of Laby's village. This house was built at the instigation and for the accommodation of a Buddhist priest from Thibet, who about half a century ago used to pay the Akas yearly visits for the purpose of converting them to Buddhism. I believe that as long as the priest was with them they adopted the tenets of Buddha, but directly the man died they resumed the old demon worship of their fathers.

In considering the political relations of the Akas with the British, I should mention that it was in 1868 the Akas first became alive to the fact that they possessed a valuable and marketable commodity in the form of rubber. It is really to the rubber question (*i. e.*, whether the Akas have the right, which they claim to have, to cut rubber down to the Bhoroli or not) and the action taken by the Forest Department with reference to the claim that the late misbehaviour was principally due.

The Akas intermarry with the Meri-Akas to the east and with the Mijis to the north; but seem to have no social relations with the Daphlas or with the Bhutias.

The country inhabited by the Akas (of which there are two clans, *viz.*, the Kapachors and Hazarikhawas) is situated on the Sub-Himalayan Range to the north of the district of Darrang on the right bank of the Brahmaputra in Assam.

Roughly speaking, the Aka country lies between the parallels of 27° and 28° north latitude and 92° and 93° east longitude.

The *Kapachors* are bounded on the north by the Mijis and Diging River; south by the Darrang District, Assam; east by the Phusung River and Meris; and on the west by the Hazarikhowa-Akas.

The *Hazarikhowas* are bounded on the north by the Bhutias and Mijis; south by the Darrang District, Assam; east by the Kapachor-Akas, and on the west by the Tenga River.

The principal rivers in the Aka country are the Bhoroli and Maj (Middle) Bhoroli, Phusung (or Bichung), Tenga, Diyu, Diging and Kameng (the last-named is to the north-west of the Meri-Aka country).

The boundary line between the Darrang District and the Aka country crosses the Diyu about $3\frac{1}{2}$ miles to the north of the Mukh. This boundary line was settled by the Civil Officer of Darrang with the Aka Chief Mehdi in 1872.

There are two passes into the Aka country from the plains, *viz.*, the *Bhoroli* and the *Balakpung*. To reach Mehdi's village, using the former pass, the Bhoroli River has to be crossed twice, at Diyu-Mukh and again at Maj-Bhoroli, and the Tenga River has to be crossed once. When the Balakpung pass is used, the only river of any size to be crossed is the Tenga, and this stream, which is only knee deep (in the cold season), is crossed near its junction with the Shooshung stream. The river Tenga bifurcates at the place where it is crossed in the Balakpung, Jameerigaon route, and an island is formed, which makes a capital site for a camp.

The Akas are demon worshippers, *i. e.*, they believe in the existence of various good and evil spirits, who, if not propitiated, will harm them. Hunter mentions the names of three gods, Fuxu, jungle god, Feiran, war god, and Situ, household god; but I could get no definite information about these three deities—in fact, an intelligent Aka, whom I interrogated on the subject, said he had not heard of them. Once a year the Akas pay a visit to the Maj-Bhoroli River, and a sacrifice consisting of 2 mithun, 2 she-goats, 2 pigs, and 2 cocks is made to propitiate "the spirit of the waters." If a person falls ill, pigs and fowls are sacrificed (and eaten by the relations and friends of the sick person!) and invocations are made. A few simple herbs are used as medicine, and for all stomachic disorders ginger is freely used. The Akas call their principal deity "Karza," the day god is called "Ju" = sun, the night god "Hubee" = moon, the stars "Neitzi" are minor deities. Some years ago a Buddhist priest from Thibet visited the Akas. This man seems to have had but a very partial and temporary success in inculcating the teaching of Buddha. The visits of the priest were repeated for several years, but in 1870 he died. During the time that the visits were made, Buddhism was perhaps dominant, but on the expiration of the visits the Akas lapsed again into the old spirit worship. A stone hut on the ridge to the north-west of Laby's village remains as the sole memento of the Buddhist's visit. At Khowagaon, a village to the north

of Mehdi's, some flags were found, supposed to be relics of Buddhism. The Akas usually consult omens before going on the war path, &c., and sacrifice pigs, cocks, and goats to propitiate the spirit of war. Mithun are but rarely killed on these occasions, as they are considered too valuable. On the capture of the forest Babus by the Akas, the omens were consulted as to their fate. The decision was both for and against their murder; so I imagine that the Akas, like the Nagas, interpret their omens to suit their own purposes, and have no faith whatever in the auguries.

Corpses are buried, not burnt; a small square stone building about 4 feet high is sometimes erected over the body. A species of altar of split wood, streaked with blue dye and smeared with fowl's blood, is placed near the body, which is always interred with the clothes worn by the individual when alive. Brass cooking utensils are (when the deceased was fortunate enough to have possessed them) placed in the grave.

Among the Akas women are respected. The forest Babus who were domiciled during their captivity in an Aka household said that nothing astonished them so much as to see the respect paid to the women. When there are guests of both sexes in the house, the women are served first. The high estimation in which the Aka male is said to hold his better-half does not, however, prevent his using her for all the hard work in the fields, whilst he stays at home and looks after the children. Marriage is a question of mutual liking (men generally select their brides with reference to their physical qualities). The ceremony of marriage generally takes place when the girl has attained her 14th year. Should the union not be a fruitful one, the man is at liberty to take another wife. A young girl (*mimsa*) paints her face before she becomes a married woman. A young man (*mim*), who (as is usually the case among hill tribes) is far vainer about his personal appearance than a young woman, also paints his face, mere smudges, not in the artistic manner the Eastern Naga paints. At a marriage, mithun are generally killed, and a feast is given. The bridegroom gives mithun and pigs to the bride's father as a dowry. After the feast, the young man takes his bride to his father's house, and she becomes an inmate of the common dormitory. Although privacy in the married life of an Aka is unknown, yet the marriage tie is usually kept unbroken. Husband and wife eat from the same plate (a plantain leaf generally) together. Children are fed separately; the mother cooks the food for the household and feeds the children.

In the evenings, when seated round the hearth (which is placed in the centre of the room), young men and girls dance in turn, moving their hands and feet with a kind of cadence, a small drum being beaten

by one of the spectators during the performance. At the end of the entertainment the old women dance to the music of a fiddle. The Aka fiddle is a curious kind of instrument, hairs from a mithun's tail serve as strings for the bow and fiddle, and a piece of skin, well stretched, covers the bamboo cup which is used for the bowl; the rosin with which the bow is occasionally rubbed is attached in the most convenient manner to the side of the bowl. I must say that the sound produced is of the mildest description, but I am told that the Aka will listen to it for hours with the greatest pleasure. During the dances every one, down to the smallest child, drinks the rice wine, which is luckily not of an intoxicating nature.

There is very little crime among the Akas; thefts are very rare, there being hardly anything to steal which is not common property. Murders are also of very rare occurrence. Should a man kill another, a "*punchayet*" is held in the village, and the punishment awarded is generally that the murderer should pay a fine in mithun to the relations of the deceased, and that he (the murderer) should be banished from the village. I was informed that on one occasion a Miji had killed a Kapachor, so three men of the Kapachors went to the Miji village where the murderer dwelt, took him outside the village, and put him to death with their swords, the other inhabitants of the Miji village approving, or at any rate not preventing, the deed.

The Akas are very hospitable, and guests are treated to the best of everything, even children (who are very obedient) are taught to be hospitable. The houses are substantial erections, the sides of which are planked; they vary in size. Laby's house, an average one, was 63 feet long by 15 feet wide, the height the machan (*i. e.*, floor) is from the ground, depends on the slope of the ground—it may be 2 feet at one end and 6 feet at the other. One of the houses in Mehdi's village measured 140 feet in length and 22 feet in width. In the large houses there are partitions and swing doors; the fireplaces are usually in the middle of the dormitory, and round this all the members of the family, both young and old, sleep. The roofs are formed at a good angle for running the rain off, by placing mats over the bamboo frame-work and covering them with cane leaves; the canes reach to the machan. There is very little attempt in decorating the front of the house; a few horns of the mithun, &c., are sometimes put up. Pigs and poultry live under the floor. Sanitary ideas do not exist in the Aka mind.

The Akas wear a kind of toga made of rough Assamese silk or of Bhtia blanket cloth. Leggings are also worn; these are tied at the knee and folded round the leg, giving them the appearance of trousers. The arms are bare, and they do not wear shoes. Their head-covering

consists of cane hats like those worn by the Daphlas, or rough felt skull caps similar to those used by the Bhutias. Occasionally a three-decked cane hat, like those used in Thibet, is worn; but the use of this hat is, I believe, confined to the Chiefs. Ear-rings and beads, of which the Akas (in common with all the tribes on the north-east frontier) are inordinately fond, complete the costume. A *kamarband* in which a sword is placed, is usually part of the dress. The women are decently clad, generally in Eria silk clothes; they wear necklaces of beads, and some of them carry about egg-shaped silver cases obtained from Bhutan. These silver ornaments are much valued, and worn only by the wives of Chiefs.

The principal weapon of the Aka is a long sword, the blade being 4 feet long and handle about 4 inches. Near the hilt the sword is not sharpened, and often a piece of cloth is folded round, so as to enable the owner to use the sword in a two-handed fashion, and in this way the weapon is generally used. The bow and arrows constitute, however, the most effective weapon of the Akas; the bow is an ordinary one (I did not observe any cross bows), the arrows, some of which have iron barbs, are usually poisoned with aconite; the aconite is mixed up with some kind of adhesive substance, and stuck on to the arrow head. The poison is obtained from the Mijis, who get it from the higher ranges behind them. I was informed by an Aka that it was expensive, a pig being usually the price of a very small piece. Immediately a wound is received, it should be well scoured out with a knife, well washed with water, and if the wound is in a limb, a bandage should be tightly tied above; stimulants should also be given to the wounded man. Some Gurkhas used the bark of a tree, which they first chewed into a pulp. When a man was hit, some of this pulp was given to the man to chew and some forced into the wound. The bark had a smell like lemon. I saw this used in two cases, one of which was fatal and in the other the wounded man recovered—the recovery was, I think, due to the skilful treatment of the wounded man by the surgeon and not to the supposed antidote. I only mention the use of this bark as an antidote believed in by the Gurkhas, as any information bearing on the subject may be useful.

The Akas possessed a few old muskets and a few guns, which they had looted from Balipara (these were, however, all given up before the expedition left the hills).

“Panjis” (sharp pointed pieces of bamboo hardened by being half burnt) are placed in the ground to retard the advance or stay the pursuit of an enemy. They are very good obstacles against men who are not well booted. A collection of rocks placed upon a kind of scaffolding

of bamboos and held in position by single canes, which can be severed at a blow, are, owing to the precipitous nature of the hills, most formidable obstacles. These obstacles, commonly called "booby traps," are usually placed so as to command a path ascending a steep hill side; and as the path generally zigzags, the rocks, when liberated from the cage, strike it in several places before finding a resting-place at the bottom.

The stockades of the Akas are strong and well-built; they are constructed of double rows of bamboos placed upright in the ground. In the middle earth and stones are placed to a height of about 4 feet; the stockades being 10 or 12 feet high, a perfect *chevaux de frise* of pointed bamboos are firmly secured in the stockades (so firmly are the pointed bamboos secured that it takes one a considerable time to cut a way through). These stockades are constructed near the summit of a hill and in such a position that it is almost impossible for a two-legged animal to "turn" them. The Akas keep a good supply of large stones behind the stockades, to hurl at an advancing foe.

In my opinion the Aka does not take kindly to the war path. A thieving expedition, where there is a minimum of danger and a maximum of *loot*, is more in his line. In the late expedition, the Akas relied to a great extent on the (supposed) inaccessibility of their country, and this, combined with their ignorance of the nature of the troops they were to meet, gave them a certain amount of confidence. At the action at the Tenga River on the 8th January, they blew horns and kept up a peculiar kind of war chant; this was done probably with the object of encouraging each other and of striking terror into the hearts of their foes. This method of fighting is quite opposed to their usual one, which is essentially a system of ambuscades and surprises, and in this system they excel. Small bodies of men will crouch quietly for hours in the jungle, hiding themselves with the aid of leaves and bushes, which they plant in front of them, and wait for the arrival of a convoy, into which they will fire a volley of poisoned arrows and decamp down the hill side.

The Akas do not, so far as I am aware, mutilate the slain, nor do they torture a prisoner.

When the Aka is on the war path he must, of course, have his provisions with him; these are generally carried by one of the slaves, and consist of rice (cooked), rice wine, Indian corn, &c. The cooked rice is carried in long bamboo tubes; several of these are placed in a basket and carried on the slave's back; thus one slave can carry the provisions for three men for about a week. Nearly all the inhabitants of Ramdagaon, on the south (right) bank of the Tenga River, are slaves to the Akas. Whenever Mehdi, Chundi and Co. wish to make a raid, the Ramdagaon men are ordered to send a contingent to act as coolies and fighting men.

Bridges.—These are of two kinds, *viz.*, the cane cradle suspension and the *hako*. The former, which is used when the river is very deep and rapid, is formed by one or more long and strong canes, which are stretched from bank to bank; they are attached at either end to a kind of scaffolding of bamboos, which is kept securely in position by the aid of large stones piled round it. If there is a convenient tree, one end of the cane is attached to it. Round the thick cane three or four thin cane loops are attached, and to this is fastened another cane, which is used as a pulley; the voyager seats himself in the cane loops, throws his head well back, grasps the cane above him, throws his legs over the cane, and allows himself to slide down the cane. Up to his arrival at the centre the work is easy, after that he has to haul himself up-hill, using his hands and feet, his body being supported in the small cane loops. This is a very fatiguing process, and a severe strain on the muscles. When women and children are obliged to use the cradle bridge (and all must use it in the rains), they are hauled across by means of the pulley, and in this way nearly all the stores for the advanced party were crossed over the Maj Bhoroli. A cradle basket capable of holding two maunds was constructed by one of the Survey Officers, and in this provisions and baggage were pulled across. The width of the River Maj Bhoroli where the Aka cradle bridge is constructed is about 65 yards, and the water rushes below in a regular torrent. The other description of bridge is called by the Assamese a *hako* bridge; it is somewhat like a trestle bridge; the roadway is made of bamboos, and the whole structure, which is rather infirm, is tied together by cane lashings and creepers.

The Akas trade with Bhutan to the north-west, and with the plains of Assam to the south. From Bhutan the following articles, *viz.*, clothing, warm blankets, daos, swords, and silver ornaments, are obtained, and rupees, which are got by the sale of rubber to the Kyahs in the plains, are given in exchange.

From Assam the Akas procure rupees, iron, salt, cotton, and silk goods. Rubber is the chief source of wealth of the Akas. Good rubber (*i. e.*, not rubber shells filled up with mud, a common trick of the simple savage) is worth about Rs. 60 a maund. At present the rubber supply is large; but the "feckless" way in which the Akas treat the trees will probably soon lessen their source of supply. The social status of the Aka is generally estimated by the number of mithun (semi-domesticated bison) which he is the owner of. The value of these animals averages about Rs. 90; they are used only as an article of food, and are not used for agricultural purposes, neither are they milked (the Akas, in common with all the hill tribes on the north-east frontier, look upon milk as an unclean article, and never use it). Mithun are given by a bride-

groom to the bride's father as a dowry. Mithun are killed and eaten at feasts, and sometimes they are killed as a sacrifice. Pigs and fowls are also very largely consumed by the Akas. The chief article of food is, of course, rice; millet, Indian corn, yams, Job's tears, and a large species of bean (which is very palatable, when smoked over an aromatic wood fire) supplement the rice supply. Chillies are abundant, and largely used as a condiment. Tobacco is also grown extensively.

The Akas consume a large quantity of fish, which they procure from the large rivers, the Bhoroli, the Phusung, and the Tenga. The manner in which the fishing weirs and nets are constructed is very ingenious. The system of "jhuming" (*i. e.*, clearing and burning the jungle and digging up the ground with a short hoe) obtains in the Aka as well as in all the Sub-Himalayan hills. The Akas do not, like the Angami Nagas, take the trouble to make terrace cultivation, probably owing to the precipitous nature of the hills. The water-supply, which is managed so scientifically by the Nagas, would be difficult to arrange for. The crops are biennial: rice and "makai" (Indian corn) are sown in February and reaped in June. Another sowing takes place in August, and the reaping at the end of December. The same ground is not generally cultivated more than two years running; but after an interval of ten years they return to the old ground. The Akas only cultivate as much rice as is necessary for their own consumption.

Near Mehdi's villages there are a few pines (*Pinus longifolia*), laurels, bays, and other deciduous trees. Between No. 1 Camp (or the Diju River) and Maj-Bhoroli, plantains, orchids and epiphytes of various kinds abound. Bignonias, rhododendrons, oaks, and chestnuts are found more to the north. Bamboos are rare on the left bank of the Maj Bhoroli River, though they are found in great quantity on the right bank. On the range between the Maj Bhoroli and Tenga rivers, I have noticed canes of enormous length and thickness. These are commonly used by the Akas in constructing their cradle bridges. A creeper (*Taderia fetida*), which is common in the Aka hills, is very useful as a tie for hutting purposes; but when it is used, the unfortunate occupant of the hut has a bad time of it, as it is the most evil smelling plant I have come across. A species of small palm with large, long leaves is found in the hills and used by the Akas for thatching purposes. Mosses and ferns are found in great quantities in the ravines which intersect the country. The rubber tree is found at the foot of the hills, and is the most valuable of all. The Aka hills are singularly destitute of animal life. Elephants (as far as the Maj Bhoroli), monkeys, deer, tigers, and leopards are found, as also are wild pigs, jungle fowl, deoderrick, and wild pigeons.

The country of the Akas is but sparsely inhabited. The numbers are these—

<i>Tribes.</i>	<i>villages.</i>	<i>houses.</i>	<i>inhabitants.</i>
Kapachor Akas	6	51	510
Hazarikhowas	4	38	304
Mijis	14	580	5800
Total,	24	669	6614

I have not included the Meri-Akas in the above, as, although they are closely allied by marriage, &c., with the Kapachors, yet their interests are not so identical with the Kapachors as are those of the Mijis.

AKA VOCABULARY.

English.	Aka.	English.	Aka.
Hand ...	Grzhai.	Woman ...	Mimi.
Nose ...	Nishu.	Girl ...	Mimisa.
Eye ...	Ni.	Boy ...	Urgossa.
Leg ...	Kohzhi.	Virgin ...	Mimikiri.
Water ...	Hoo.	Married woman ...	Ziddo.
Fire ...	Mi.	Ear ...	Fu.
Earth ...	No.	Good ...	Choway.
Pipe ...	Muksumi.	Clothes ...	Gieh.
Dog ...	Sulien.	Blanket ...	Liamha.
Man ...	Nenna.	Dao ...	Vetz.
Bird ...	Ph lungam.	Gun ...	Suru.
Hair ...	Kairehu.	House ...	Nieh.
Teeth ...	Tuh.	Tree ...	Shir.
Blood ...	Schee.	Cow ...	Philhoo.
Come ...	Agoway.	Mithun ...	Phu.
Go ...	Kahoway.	Pig ...	Vhoo.
None ...	Kunnio joway.	Fowl ...	Jieu.

AKA VOCABULARY—concluded.

English.	Aka.	English.	Aka.
Sleep ...	Jumoway.	Deer ...	Kishee.
Dhan ...	Oo.	Pipe ...	Mukhsuri.
Elephant ...	Atche.	Plates ...	Gashi.
Paddy ...	Afo.	Pots ...	Guri.
Rice ...	Algi.	Stone ...	Sheo.
Indian corn ...	Sibay.	Stick ...	Di.
Ginger ...	Tikriu.	Pine tree ...	Moofoh.
Dal ...	Labunshu.	Salt ...	Ro.
Mat ...	Richu.	Pig ...	Vhoo.
Pillow ...	Dihru.	Goats ...	Kishi.
Sleep ...	Jimuay.	Brother ...	Aluay.
Cloth ...	Ghiay.	Woman ...	Mimi.
Clad ...	Battisi.	Moon ...	Hubbee.
Sepoys ...	Begla.	Water ...	Hoo.
Tobacco ...	Mukshoo.	Dog ...	Shilhouay.
Cup ...	Bálá.	Cock ...	Jio.
Tiger ...	Schi.	Eat ...	Chaday (?)
Father ...	Aoay.	Stand ...	Moloy.
Man ...	Nuni.	Give ...	Juay.
God ...	Kárza.	Far ...	Arrah.
Star ...	Neitzi.	Near ...	Arisa.
Cow ...	Phulhoo.	What ...	Há.
Cat ...	Asha.	I ...	Nau.
Go ...	Chou (?).	They ...	Noxi.
Come ...	Agonay.	Foot ...	She.
		You ...	Joxi (plural).

AKA VOCABULARY—continued.

English.	Aka.	English.	Aka.
One ...	A'.	Two ...	Xi.
Three ...	Zi.	Four ...	Phiri.
Five ...	Poom.	Six ...	Bua.
Seven ...	Mio.	Eight ...	Siggi.
Nine ...	Sthi.	Ten ...	Bh.

The words in the above vocabulary down to the word Elephant I obtained from an Aka, called Dapho, the others were given me by one of the captive Babus. I append a list of Daphla words which I took down from a Daphla in 1875, during the Daphla expedition. It will be seen that the Aka language is very different from the Daphla.

DAPHLA VOCABULARY.

English.	Daphla.	English.	Daphla.	English.	Daphla.
A bear ...	Sutum.	Door ...	Arap.	Foot ...	Lechu.
Deer (big) ...	Sacha.	Sword ...	Chinge.	Arm ...	Lapo.
Deer (little) ...	{ Sudum. Sibi.	Waistband ...	Upe.	Hand ...	Lakchum.
Porcupine ...	Sisi.	Beads ...	Tesin.	Nail ...	Lakfin.
Cat ...	Soncha.	Ear-ring ...	Rangbin.	Nose ...	Nipun.
Pig (tame) ...	Erik.	Bracelet ...	Ko-je.	Knee ...	Lenbung.
Pig (wild) ...	Sarao.	Anklets ...	Lenku.	Ankle ...	Lengtu.
Mithun ...	Siba.	God ...	(N)egun.	Thigh ...	Fapo.
Goat ...	Sabin.	God (of good)	Alu.	} * Arm (broken)	Lagdám.
A bird ...	Pata.	God (of evil)	Karu.		Skin ...
Tree ...	Siran.	Father ...	Abo.	Flesh ...	Surdin.

DAPHLA VOCABULARY—continued.

<i>English.</i>	<i>Daphla.</i>	<i>English.</i>	<i>Daphla.</i>	<i>English.</i>	<i>Daphla.</i>
Hill ...	Mordi.	Mother ...	Ann.	Bone ...	Solam.
Valley ...	Morte.	Husband ...	Nagbo.	Blood. ...	Oi.
Road ...	Lamte.	Wife ...	Dongne.	Chest ...	Habo.
Earth ...	Kede.	Brother (elder)	Tete.	Breasts ...	Acho.
Water ...	Tsi.	Brother (younger).	Pai.	Hair (woman)	Dumpla.
Wood ...	Tsing.	Little girl ...	Niga.	Good ...	Alu. }*
Rain ...	Yeddo.	Dead man (killed).	Mempe.	Bad ...	Karu. }
Sunshine ...	Doyne.			Big ...	Porte.
Rice ...	Aping.	Dead man (na- tural death).	Sido.	Little ...	Michu.
Salt ...	Alo.	Mouth ...	Agam.	Strong ...	Oiye.
Paddy ...	Um.	Ear ...	Narang.	Weak ...	Ojab.
Rice (un- cooked).	Umbing.	Chin ...	Chapla.	Red ...	Lengohu.
House ...	Ugo.	Teeth ...	Api.	Black ...	Kola.
Beat out (paddy).	Changpo.	Hair (in front of head).	Padam.	Blue ...	Ye.
A stick for beating out }	Fangi.	Hair (on top of head).	Dumi.	Yellow ...	Minchit.
Wine ...	Upo.	Eye. ...	Enik.	White ...	Pundhu.
Crooked ...	Kanje.	Pretty ...	Oiye.	Straight ...	Dinde.
High ...	An.	Ugly ...	Karu.	To kill ...	Pato.
Low ...	Kochi.	A little ...	Michu.	„ fasten ...	Leto.
Narrow ...	Bichu.	Great deal ...	Kori.	„ eat ...	Do-do.
Broad ...	Fakta.	Lame ...	Ladak.	„ sit down...	Dongto.
Near ...	Taiyan.	Blind ...	Niglu.	„ get up {	Darapto. Gurapto.
Far ...	Ado.	Deaf ...	Rangbi.	„ lie down ...	Kato.
Wet ...	Kache.	To shut ...	Chaktumto.	„ hide ...	Huso.

DAPHLA VOCABULARY—*continued.*

<i>English.</i>	<i>Daphla..</i>	<i>English.</i>	<i>Daphla.</i>	<i>English.</i>	<i>Daphla.</i>
Dry ...	Sindo.	To open ...	Kurko.	To run ...	Fato.
Middle ...	Bangto.	„ call ...	Sabo.	„ swim ...	Haturo.
Quickly ...	Arib.	„ give ...	Keke.	„ call ...	Gokto.
Slowly ...	Asu.	„ drink wine	Achit dedno.	„ play ...	Sonto.
Many ...	Achima.	„ look ...	Mato.	„ jump ...	Purto.
Few ...	Akin.	„ ascend.	Chato.	„ fall	{ Geddo. Dekto.

NUMERALS.

<i>English.</i>	<i>Daphla.</i>	<i>English.</i>	<i>Daphla.</i>	<i>English.</i>	<i>Daphla.</i>
One ...	Akin.	Eleven ...	Lakin.	Twenty ...	Aiyang.
Two ...	Ene.	Twelve ...	Laine.	Thirty ...	Chamang.
Three ...	Am.	Thirteen ...	Lam.	Forty ...	Chample.
Four ...	Ape.	Fourteen ...	Lape.	Fifty ...	Chango.
Five ...	Unyyo.	Fifteen ...	Lango.	Sixty ...	Chanke.
Six ...	Ake.	Sixteen ...	Lake.	Seventy ...	Kane.
Seven ...	Kanu.	Seventeen ...	Kano.	Eighty ...	Pine.
Eight ...	Penu.	Eighteen ...	Punon.	Ninety ...	Kaiya (?)
Nine ...	Kaiya.	Nineteen ...	Kaiyar.	One hundred	Trang.
Ten ...	Ailu.				

All the Daphla words are written according to the Hunterian system, and should be pronounced accordingly.

The following reply by MR. A. N. PEARSON on the remarks made upon his paper read at the last meeting, was read:—

With reference to Mr. Blanford's criticisms, I would emphasize the statement made in my paper, that it is not one isolated fact which presents itself, but several accordant ones. This is strong evidence to my mind that the data dealt with are fairly valid; and I think there can be

little doubt that the relations pointed out by me did really exist as a physical fact during the years treated of in Mr. Hill's original paper.

With regard to Mr. Blanford's refinement of the process of smoothing, I think Mr. Hill carried the process far enough for most practical purposes, and little advantage can be gained by further refinement. When there are only few minor period oscillations to a major one, much smoothing is unnecessary; it appears to me that it is only in cases where the small period oscillations or irregularities crowd numerously into the larger period ones, and are of such amplitude as to almost completely mask the larger period ones, that it is necessary to increase the number of terms of the smoothing formula.

The PRESIDENT explained that Mr. Pearson had misunderstood what he had said at the last meeting with reference to Mr. Pearson's method of smoothing the results of meteorological observations.

LIBRARY.

The following additions have been made to the Library since the meeting held in November last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

- Baltimore. Johns Hopkins University,—American Journal of Mathematics, Vol. VII, No. 1.
- Bombay. Indian Antiquary,—Vol. XIII, No. 163, November, 1884.
- Calcutta. Indian Meteorological Memoirs,—Vol. II, Part 3.
- Edinburgh. Royal Society of Edinburgh,—Proceedings, 1881-83.
- . ————. Transactions,—Vols. XXX, Parts 2, 3; XXXII, Part 1.
- Lahore. Anjuman-i-Punjab,—Journal (English Section), Vol. IV, Nos. 44—47.
- London. Academy,—Nos. 650—653.
- . Athenæum,—Nos. 2973—2976.
- . Nature,—Vols. XXX, Nos. 781—783; XXXI, No. 784.
- . Royal Astronomical Society,—Memoirs, Vol. XLVIII, Part 1.
- . Royal Geographical Society,—Proceedings, Vol. VI, Nos. 9, 10, September and October, 1884.
- . Royal Society of London,—Philosophical Transactions, Vol. CLXXIV, Parts 2, 3.