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THE CENTRAL ARAWAKS

BY

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PREFACE

The material presented in the following pages was collected during the first year of field work of the University Museum's South American Expedition, 1913–1916. The work was done under the supervision of Dr. G. B. Gordon, Director of the Museum, and with the assistance in the field of Dr. Franklin H. Church, Sr. Joaquin Albuquerque and Mr. John Ogilvie.

The Arawak tribes, whose culture, somatic characteristics and language are here recorded, are in contact with numerous other tribes whom we visited and whose study will be presented at another time. As this is the first time that any detailed account of this group of tribes has been attempted, no doubt many mistakes have been made which will remain for future students to correct. The somatic data and much of the ethnological and linguistic material are based upon personal observation: the rest of the material was obtained from Mr. H. P. C. Melville and Mr. John Ogilvie or through them as interpreters. Mr. Melville has lived among the Wapisianas and Atarois for twenty-five years, Mr. Ogilvie for fourteen; both know the Indians intimately, speak their language perfectly and are reliable observers.¹

¹ For other published material from this expedition see:

It gives me pleasure to take advantage of this opportunity to acknowledge my indebtedness to the following persons who contributed so largely to the success of the expedition: To Dr. G. B. Gordon, Director of the Museum, and to the Board of Managers for their liberal support and hearty cooperation; to Dr. Franklin H. Church, surgeon of the expedition, who not only looked after the health of our party but also administered to hundreds of Brazilians and Indians along the way; to Sr. Joaquin Albuquerque, who saved me money, time and trouble in dealing with the perplexing problems of transportation and labor; to Mr. H. P. C. Melville, Magistrate and Protector of Indians, for most valuable information and assistance and for many important photographs; to Mr. John Ogilvie who assisted in obtaining photographs, physical measurements, astronomical observations, language, etc., and whose knowledge of the interior made our journey to the forest tribes possible; to Mr. B. W. Merwin for working out tables and indices of the measurements and for proof-reading.

Wm. Curtis Farabee.

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GEOGRAPHICAL ENVIRONMENT

The greater number of the Arawaks of Northern Brazil and Southern British Guiana are found within a broad savannah some twenty or thirty thousand square miles in extent, reaching from near the Venezuelan boundary to the western banks of the Essiquibo River and from the Amazon forests to the foot of the Pakaraima Mountains; or from 58°1/2 to 63° W. Long. and from 1½° to 4½° N. Lat. It is a great undulating plain dotted here and there with grass-covered round-topped mountains. Besides these numerous single mountains there are also three short ranges which are somewhat forest-clad: the Mocajahi, south of the river of the same name and west of the Branco; the Moon, between the head of the Takutu and the Branco and the Kanuku, between the Rupununi and the Takutu. The latter forms a picturesque chain which continues in a broken series eastward to the Corentine.

The level plain is interrupted here and there by depressions which become shallow lakes in the rainy season. During the long dry season the waters evaporate and leave behind great meadows whose numerous narrow streams are lined with Eta palms which give character to the scenery. One of these depressions between the Rupununi and the Ireng was the mythical Lake Amucu on whose shore stood El Dorado, the Golden City of the Spaniards.

The rainfall amounts to sixty inches in the eastern savannah and only to forty-two in the western section. The rains extend over a very short period, hence the rivers cease to flow very soon after the beginning of the long dry season, leaving the
fish confined in deep pools in the bends of the rivers where the Indians secure them by poisoning the water. When the lowlands are covered with water the animals retreat to the mountains and fall an easy prey to the hunters. The grass on the plain, which grows to the height of three or four feet, is burned when it becomes dry to destroy the poisonous snakes and also to drive the deer into snares where they may be killed by men in hiding.

This geographical environment lends itself to the development of numerous small villages whose inhabitants live in the open and supplement their food supply by hunting and fishing, while their fields, their mainstay for food, are located in the nearby forests.

Originally all the tribes of this central group of Arawaks which now claim relationship must have lived near together and have been a part of one great nation. The Atarois have been absorbed by the Wapisianas, the recent invaders of their territory; the Tarumas, no doubt, moved down the Branco and the Negro, where the advance guard became extinct, while another group passed over to the Essiquibo. The Mapidians, a sub-tribe of the Atarois or a fragment of the main tribe, left the savannahs, went east and became forest dwellers. Each of these tribes will be considered separately, but the Wapisianas, the largest of the tribes, whose culture and language are best known, will be studied in detail as the representatives of the characteristic culture of the whole group.
THE WAPISIANAS

The Wapisianas were first seen by Dutch traders who made their way up the Essiquibo River to the savannah country south of the Pakaraima Mountains early in the eighteenth century. In 1738 Nicholas Horstman, a German surgeon in the employ of the Dutch West India Company, was sent up the Essiquibo to discover the city of El Dorado and to find a passage to the Amazon. He made these discoveries and crossed the divide to the Rio Negro, where he turned traitor and remained with the Portuguese. He met La Condamine to whom he gave a map he had made of the country traversed. This map was published ten years later by d'Anville, in the first great map of South America. At that time the Wapisianas occupied all the Brazilian savannahs south of the Takutu and the Uraracuera rivers.

When Robert Schomburgk first explored Southern British Guiana in 1835 he found the Wapisianas occupying the territory stretching from the forests of the Essiquibo on the east to the Parima (Rio Branco) on the west and between the parallels of 2° and 3° north latitude. They had for neighbors the Macusis on the north, the Atarois on the south and the Paranauas on the west. The region east of the Essiquibo was unoccupied, as it remains even today. The Wapisianas were regarded as intruders by the Macusis, whom they had forced northward.

Today the Wapisianas, having absorbed the Atarois, have

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1 Wapityans, Wapischana, Wabijanas, Mapisianas, Mauixianas, Uabixanas, Uapixanas, Uapichanas, Vapeschanas.

taken possession of all the savannah country in Guiana south of the Seriri Mountains. In Brazil there are a few families south of the Takutu and a few more north of the Uraracuera, principally along the Majuri River, where they depend almost entirely upon agriculture. Near the mouth of the river there is a village of fifteen mud-walled houses with a population of sixty individuals. Behind the low terrace upon which the village is built, stands a hill three hundred feet in height which was one great field of corn, mandioca, bananas, plantains, cotton and pumpkins, fifty acres or more in extent—much the largest clearing we found in the whole region.

The old men living east of the Rupununi River remember the stories their fathers used to tell about their migration from the West.

About fifty years ago a mulatto named Rogers, who died but recently, came from Demarara and settled between the Rupununi and the Cuduwini rivers, where he found the whole territory occupied by the Atarois. He witnessed the coming of the Wapisianas, who intermingled freely and intermarried with the Atarois until that tribe has become completely absorbed.

The Wapisianas speak of a number of tribes who in former times lived in separate groups but have more recently been absorbed into their own tribe by intermarriage. Among them were the Karapeiu, the bud people; Ilieu; Tarewinpidian, the bat people; Saparas, cassava cut and dried for drink; Powisien; Inkerikub, a very bad people, short and powerful; and the Paravilhanas, who lived near the Mountains of the Moon. The last member of the Paravilhana tribe, an old man, died in 1914. They were called Cilikunas by the Wapisianas and were probably a subtribe or very closely related to them.
A branch of this tribe living on the lower Branco were the first to come into contact with the Portuguese.

The Wapisianas are the most reliable and the most industrious of all the Guiana tribes. The wholesome influence of Mr. Melville, who has lived among them and has been their guardian for twenty-five years, is largely responsible for their development. He has taught them the value of continuous labor and the use of money, and has protected them from the unscrupulous exploiter. No traders or missionaries have yet established themselves among them. Hence their natural honesty, their simple purity and their primitive religious ideas have not been destroyed.

MATERIAL CULTURE.

Houses.

Their villages are composed of a few houses grouped together without regularity in the open savannah near the forests. The houses may be occupied by a single family or by two, three or four related families. They may be rectangular, round or oblong, but in any case they must have at least two doors at opposite sides or ends, one for men and one for women. There is often a small third door through which refuse is carried. Neither the grouping of the houses, the direction of the walls of a single house, nor the position of the doors seem to have any relation to the points of the compass. These things are determined by convenience only.

The houses are built with tight walls for protection against the cold nights of the dry season when the winds blow from the mountains across the flat plains. The walls are either of thatched palm leaves or of adobe held in position by wattled
poles. The accompanying ground plan (Fig. 1) and detailed description of a house at Calton will suffice to show the general type of construction.

The house is in the form of an ellipse; 30 feet wide, 46 feet long and 22 feet high. The two main posts, set deep into the earth, are 6 inches in diameter and 22 feet in height. They are forked at the top to receive the ridge-pole which is allowed to project two or three feet beyond its supports. The other eight posts are the same size and 8 feet high. They are placed 2 feet inside the wall and used to support the plates. The sixty-eight rafters are stayed midway between the plate and the ridge-pole by lashings to a horizontal pole. The roof is made more secure by having two long poles on each side placed diagonally from plate to ridge and lashed to the rafters. On either side of the gable a larger rafter is lashed to the ridge-pole. About four feet below the ridge a heavy pole, lashed horizontally to these two rafters, supports the upper ends of all the gable rafters. By this method a small triangular space is left for the escape of the smoke and for ventilation. The roof at the end of the ridge projects sufficiently to protect the smoke hole from storms. The lower ends of the rafters come down inside of the house a foot from the wall. The
laths are lashed on top of the rafters a foot apart. A foot above the bottom lath on the under side another lath is fastened. From between these two laths, rafters extend three feet over the side walls. This method of construction breaks the slope of the roof and protects the walls.

The walls are 5 feet high and 8 inches thick. Poles are set in pairs 5 inches apart and small poles an inch in diameter lashed on the outside and on the inside of these, thus leaving a space 8 inches wide for the adobe. The adobe is mixed with the feet in a hole in the ground near the house. When well mixed, it is worked with the hands into small lumps and tamped down between the poles. On the inside the wall is made quite smooth, but often the outside is left so rough that the poles are not covered. The wall is plastered up tight against the roof. The spaces left for doors are filled with a movable door of leaves. During the rainy season the doors are kept closed at night as a protection against mosquitoes. The roof is made of leaves of the aeta palm (*Mauritia flexuoso*) and put on much like any other thatch roof.

There is often a small round house nearby which is used for making farina and cassava bread. This has no inside framework or side walls, but is built of sloping poles and covered with leaves tight to the ground to keep out the dogs and other pets. The house is 12 feet high and 10 feet in diameter. The natives have chickens now and build similar houses for them.

The rectangular houses usually have higher walls, which may be made with adobe or palm leaves. They are often made of the long leaves of the cokerite palm (*Maximilian regia*) tied horizontally to the upright posts. The upper leaflets are bent down over the mid rib. The roof is often made in the same
way. Beginning at the bottom of the rafters, two or three leaves are tied to the rafters together, then another course tied six or eight inches above, overlapping the first. Another method is to plait the leaflets together. A house of this type often has a wall across the middle dividing it into a closed sleeping room and an open working or lounging room without side walls. For the walls and sometimes for the roof as well, the long leaves of the cokerite palm are used.

Temporary shelters on the river side for use when fishing or away in the forests at hunting stations are made in the form of an equilateral triangle. For one corner a tree is selected in a convenient place. For the other corners, poles are set about ten feet apart—the proper distance for the length of their hammocks. Then three poles are lashed in a horizontal position six feet from the ground. The roof is made of the long broad leaves of the troolie palm (*Manicaria saccifera*) with the stalks all centering at the tree corner. As the leaves are put on they cross on one side and the other of the tree, thus making that corner sufficiently high to run the water off on the three sides of the shelter. The cross pole at the foot extends beyond its supports and broadens the roof for the protection of the hammocks hung along the sides. This small shelter, which can be built in a few minutes, gives a space to hang three hammocks or even six or nine if desired. The fire is built in the middle and serves to cook the meal, to keep the hunters warm at night and to dry wet clothing which may be hung from the roof. It would be difficult to devise a more comfortable or a more serviceable shelter. The one necessity is the palm with a very long frond.

The larger communal houses have no inside partitions separating the family apartments. Each family has its own
private section between hammock posts and each woman has her own fireplace, but there is a common working place either in the middle of the large house or in a building outside made for the purpose. The end of the large house near the men’s door is regarded as the men’s section. Here the men hang their hammocks during the day, receive their male friends, and eat their common meal. The opposite end is reserved for the women. Men and women of the household may use either door, there is no absolute rule, but strange men or women are always taken in through their respective doors and are expected to use these doors only.

In some villages there is a wall-less house used as a men’s lounging and working place and for the entertainment of visiting men.

**Domestic Utensils.**

There are no windows in the house and the doors are low and narrow. The interior is gloomy and dark, but after a time the eye begins to distinguish objects. The floor is of mud, worn smooth by the constant tread of bare feet. The soil had been removed before the house was built. The smoke from numerous fires has blackened the framework and higher parts of the roof. These fires are kindled in the regular cooking places or under the hammocks to keep the naked sleepers warm at night. Each family has its own cooking place, about which are grouped cooking pots, storage-water pots, gourds for carrying water, food bowls and firewood. The very large jars used for storing drink are some distance away in a more secure location and are covered with leaves. Platforms are made on the crossbeams for storage purposes. High up near the ridge-pole are hung the most valuable things
or those seldom in use. Corn is stored by tying the husks together in small bunches and hanging them over the cross-beams. Bananas are seldom hung up in bunches to ripen, as is common among the whites, but are cut off the stem in hands and strung on a cord between the rafters. Bows and arrows are kept on one of the platforms or on supports stuck over a rafter into the roof. The blowgun must be looked after with great care or it will warp or twist out of line. It is never stood up on end, but is suspended either from one end or from two loops in cords properly spaced. Shoulder bags and work baskets are hung on hooks made of forked sticks and fastened to the rafters. All kinds of small articles are tucked into the thatch. The first things to attract the attention upon entering a house are the hammocks swinging between every pair of posts in the house. When the men are not at work in the daytime they are usually found resting in their hammocks, because it is cooler inside and, what is more important, the pester ing flies do not enter these dark interiors.

When the house has a wall-less room or there is an outside men's house, the hammocks are usually hung there through the day. When the nights are not too cold or the mosquitoes too numerous some of the men sleep here as well. They often prefer to sit on stools to work. These are made either of wood or a turtle shell. A short section of a small log is flattened on top and cut away below to form a leg at each one of the four corners, or a section of a tree with three branches is selected and cut to make a three-legged stool. The most common form, however, is the one made from the carapace of the large land turtle. A hole six inches across is cut in the back forming a base on which the stool stands.
The most important utensils are those used in connection with making cassava bread and farina—the baking pan or oven, the graters, strainers, sieves and trays. In some villages all these things are kept outside of the large house in a separate building erected for that purpose and used in common. There may be a small conical house used solely for the oven. The oven or baking pan can be used for making either farina or bread. It is placed in the center of the room on a permanent adobe base about a foot high, which is open front and back on account of the fire. The pan is two feet or more in diameter with a turned-up rim an inch or two high. In some places a round flat stone is used for a baking pan, and in some villages they have recently obtained metal pans.

The graters are obtained by barter from the Tarumas, who in turn get them from the Waiwais. A board 2½ feet long by 1 foot wide and 2 inches thick is cut from the broad root of the *Aspidospermum excelsum* and one side is set with small angular stones of prophyry. Holes are made with a bone awl and the stones driven in with a wooden mallet. Then the whole surface is covered with pitch to secure the stones and to fill up the open pores of the wood.

Troughs made from logs of wood are used to hold the pulp of the grated cassava and also to serve for the making and storage of drinks. The large leaf stock of the aeta palm (*Mauritia flexuosa*) is used also as a receptacle for the grated cassava and for mixing bread. It is used too in removing the pulp from the palm nuts in the manufacture of drinks.

The strainer, squeezer or press, is a wicker-woven cylinder from five to eight feet long and six or seven inches in diameter, made of closely plaited strips from the midrib of the long leaves of the cokerite palm (*Maximiliana regia*). The upper end is
left open on one side. The different strands are continued and plaited into a loop by which the strainer is suspended from a beam of the house or a forked pole set for the purpose. The lower end is closed and has a loop to receive the lever which is used to apply the pressure necessary to remove the poisonous juices of the cassava. The weight is applied by two women who sit on the lever, one on either side of the strainer; or one end of the lever is secured to the foot of the pole and a woman sits on the other end.

The sieves which are used to remove the hard particles from the cassava pulp are made by plaiting strips of the mid-rib of the palm leaf. They are usually square, with the sides raised by tying small sticks around the edges. The bread trays are made in the same way with little or no rim. The fan, made of the same material, is used to fan the fire, to smooth the upper surface of the bread while baking and also to turn the bread on the pan. Mortars and pestles are used for crushing Brazil nuts to extract the oil; for making corn meal; for pounding the dried venison, and for mixing bread and nuts together. The mortar is made by cutting and burning a deep hole in the side of a short log of wood. The short pestle is made of wood also.

The pack basket, two or three feet long by one foot broad, is used for carrying heavy loads of firewood, cassava roots, and goods when traveling. It is made by plaiting split bush-ropes or the midribs of palm fronds. The form is much like that of the North American Indian papoose carrier. The flat side, made secure by a framework of four rods, fits against the back, with the closed end down. The long rods projecting 6 inches below the basket serve as supports when the basket is removed. When the basket is filled a cord is laced back
and forth across the open side, which is often covered with a flat piece of woven basketry, to secure the contents. The tumpline made of the inner bark of a tree is fastened about one-third the way down the framework, thus allowing the top of the basket to project above the shoulders and the weight of the load to come well up on the back. For heavy packing on the trail, extra bands of bark are looped over the shoulders to take a part of the weight off the head.

For temporary use, to carry fish, game or fruit, rough baskets are made of a single palm leaf by braiding the leaflets together. The natives are experts at this kind of thing. A basket for a handful of fruit, a fish or a pig is made in a few minutes.

Special baskets are made for holding raw cotton before the seeds have been removed. A rough outside framework is woven, then thickly lined with iturite palm leaves. Near the top a hole is made through the leaves just large enough for the hand to pass. These baskets are always hung near the roof, where they are kept perfectly dry. After the seeds are removed, each little pod of cotton is strung on a stick and then worked out into rolls and spun. Small round basin-like baskets are used to hold the cotton rolls. Other larger baskets, round or square, are used for work baskets. A special form of basket is made of the same material for the storage of farina. It is loosely woven and lined with leaves to prevent the farina from sifting through. It is in the form of a short truncated cone and rests on the small end. To fill the basket, leaves are laid flat over the bottom and against the sides. When the basket is full a thick layer of leaves is laid on and strips of palm frond tightly woven over the top. Long narrow-mouthed pocket-
shaped baskets without lids are used by the women for all kinds of trinkets.

The finest example of basketwork is that of the men's shoulder basket or trinket box. The basket and its lid are the same shape. The lid, which is slightly larger, slips over the basket, covering it entirely. The material used is the split stem of the maranta plant. Some of these narrow strips are scraped and bleached while others are stained black. In weaving the two colors, various geometrical or conventional animal forms are produced. Sometimes the basket itself is made of plain strips, the lid only being decorated. A cord, fastened underneath the basket, passes around the ends and through the bottom and the top of the lid; this serves to hold the lid when removed and also for suspension over the shoulder or on a hook in the house. They are often traded from tribe to tribe and many in use among the Wapisianas are made by the Waiwais. They are usually decorated with tufts of bright red and yellow feathers. When visiting neighboring tribes a man always takes one of these with him to carry his toilet articles—comb, oil, paints and paint brushes. In it are found also some string and wax for mending or making arrows: beads, ornaments, and any little thing he fancies. The men usually do the basket-work and the wood-work.

Pottery.

The Wapisianas are not good potters, partially because there is no fine clay in the immediate region. The coiling process is used in manufacturing all kinds of pottery. The pot is built up by laying on successive rolls or fillets of clay the size of one's finger. These are pressed down and made to adhere to the layers below; then smoothed on both sides
by rubbing with a red jasper pebble and a piece of calabash. When completed the pot is allowed to dry in the shade, then burned in an open fire. A hole is dug, the vessel placed in it with the mouth down and a fire made of bits of dried palm and soft wood built over it. While the vessel is still hot, cassava juice is poured over it to fill the pores. Sometimes the clay is tempered with ashes. The cooking-pots usually hold about three gallons, but the storage pots for drink may be three or four times as large. There are also smaller cooking-pots for use when traveling.

After the pot has been thoroughly fired it is allowed to cool before being painted. A black rock called tcal is pulverized and mixed with melted gum called "diakarieib." With this the designs are painted on and allowed to dry for a time, when the pot is again fired sufficiently to melt the gum. Another gum, "gumanime," is melted and run all over the pot. When it has cooled it is smoothed and polished by rubbing.

Sometimes the ground work is a red paint made of annato (Bixa orellana) mixed with the same gum and applied in the same way. When dry, black geometrical designs are painted on the vessel, after which it is fired again.

A white slip made of felspathic clay is often used before either the red or black designs are painted on, but not until after the first hard firing.

Gourds are used entirely for carrying and storing water. Some of these are large enough to hold a gallon or more. The hole made in the side of the neck near the stem, allows the gourd to be carried by inserting two or three fingers in this opening. During the dry season it is necessary to carry water when traveling across the savannahs. For this purpose a
smaller gourd is used. The half shell of the calabash fruit \((Crescentia cujete)\) serves to make dippers and bowls for food and drink.

**Spinning and Weaving.**

Many kinds of fiber are used in making strings which are needed for a great variety of purposes. Cotton is used universally for all the finer threads, also for making hammocks, aprons and laps. The fiber of the aeta palm \((Mauritia flexuosa)\), which grows along the streams in the lowlands, is used in making hammocks, nets and bags. In earlier times probably all the hammocks were made of this fiber just as those of the forest Indians are made today. The Wapisianas learned the art of spinning and weaving cotton from the Macusis, who themselves learned it from the Arecunas. But today the Wapisianas excel particularly in the making of hammocks. Ixtle grass \((Bromelia sylvestris)\) and a variety of \((Ananas)\) are used for making bow-strings, small cords and fish lines. The fiber of the aeta palm is taken from the young leaf which grows inclosed in a spike from the center of the plant. By rubbing at the end the fiber is separated and the skin torn off. The twisting of these coarse fibers into strings of the desired size and strength is ingeniously done. The required skill comes only after long and patient practice. The required number of threads are held by the end in the left hand across the right thigh. They are then rolled down the thigh with the right hand, each strand twisting separately; then by a slight backward roll these different strands are twisted about each other into a single thread. For heavier lines or cords three strands are twisted in the same manner. The heavy leaf of the Bromilia is beaten over the rocks to soften the pulp and loosen the fiber. The leaf of
the pineapple plant (*Ananas*) is treated in a very different manner, the process being the same in all the tribes. A heavy cord is tied around a post or a tree at the height of a man's head. This cord has a loose slip knot sufficiently large to allow the end of a leaf to pass through. A leaf is split along the midrib from the bottom nearly to the top. The end of the leaf is put through the loop in such a way that each side of the loop tightens on a half of the leaf. The man, taking the tip of the leaf in his hand, gives it a sudden jerk which forces the leaf through the loop. The cord thus strips off all the soft part of the leaf, allowing only the strong fibers to pass through. The manipulation requires considerable skill. A slow pull tightens the loop on the fiber so that it cannot be pulled through, while a too violent jerk breaks some of the outside fibers at the top and they remain with the pulp. The fiber when washed and dried in the sun becomes very white and remains so. It may be used at once, but is better if allowed to cure for a few days. This makes the strongest and smoothest cord of any of the fibers. The men collect the materials and make all the coarse strings, while the women collect the cotton and do all the spinning and weaving. They make the hammocks, while the men make the nets.

The men are very apt at plaiting strips of palm leaves into a variety of playthings—squares, boxes and balls. They make their belts for supporting their "laps" (woven pieces of cloth worn between their legs) by plaiting strips of bast or bush rope. Schomburgk refers to the use of human hair or monkeys' hair for this purpose, but we found none of this kind in use.

The women do everything in connection with cotton spinning and weaving. Near every house will be found a
number of perennial cotton trees which grow to the height of ten feet. When the bolls open the women collect the cotton and store it to dry in small baskets lined with leaves which they suspend from the roof. When it is ready for use, they make a round hole through the leaves near the top of the basket just large enough for the hand, taking out whatever is needed. The seeds of a pod are removed by hand and the cotton spread out in a round flat mass, through which a sharp stick is thrust, like the method used for filing bills. When a sufficient quantity has been seeded these little pods are pulled into long loose bands. A band is then wound around the left wrist, one end being fastened to the hook of a small spindle, which is made to revolve very rapidly by rolling it with the right hand downward along the right thigh. The left hand is raised so that the suspended spindle revolves freely, while the right hand regulates the thickness of the thread. The finished thread is wound around the spindle above the whorl until it is full, when it is made into a ball. The balls are rolled up in leaves tied and tucked away until needed. It requires a long time to spin enough for a hammock. If a hammock is to be made, the threads from two balls are united and spun in the same manner as single threads. A single thread is too light for hammock making, but is used for a number of other purposes, particularly for binding arrow shafts. Fine arm bands are often woven with a single thread. Flat work baskets are used to hold cotton, spindles and yarn.

The most important use of cotton thread is in making hammocks, which today are the most valuable article used in trading with the whites. Hammocks are made in larger sizes to suit larger men. Two varieties are made; one a woven piece of plain coarse cloth with loops for the scale-lines; the
other, instead of having solidly woven woof threads, has a number of equidistant cross bars consisting of only three entwined threads in the simplest form. In finer hammocks of this class the cross bars are near together and solidly woven to the width of half an inch. No shuttle is used in making the simple type. A chain is used to lift the outer warp threads whether or not a shuttle is used to pass the woof threads. When the weaving is finished, scale lines made of coarser thread are threaded through the loops at the ends. The comfort of the hammock depends much upon the proper length of the lines and the care with which they are arranged. The outer loops of the scale lines are bound together and well wrapped to prevent wearing. The rope to swing the hammock is usually made of one of the stronger fibers by the men. The Macusis often use palm fiber for the warp and cotton for the woof in making smaller hammocks, but I did not observe this type among the Wapisianas. Very small hammocks are made of one piece of bark tied at the ends with a rope. This kind is used sometimes for the dogs.

The Indians need very little cloth, but weave a number of smaller things. The lap, or loin cloth of the men, is a woven band of cloth from one to two yards long and eight inches wide. It is passed between the legs and suspended back and front over a plaited belt. Endless bands an inch wide are woven over pliable sticks and worn on the head by young women at their dances. They also wear ankle bands which are woven in place. Baby carriers, endless bands eight inches to a foot wide, are woven of cotton. They are worn over the shoulder, the child sitting in the loop with his feet in front of his mother's hip. This leaves her back free for the
packbasket, which may be suspended from a woven tumpline over her forehead. The baby carrier and the tumpline may be made of the soft inner bark of a tree. For rough tying of whatever kind nature has provided a most excellent substitute for the manufactured cord in the pliant stems of a variety of creepers. These may be had any size or length. There everything of this kind is called "bush rope" or "sipo," while we use "vine" to cover the whole group. If one needs a rope to haul his canoe he goes into the forest and selects, of the required size, a vine hanging from a branch fifty feet above his head. It would be impossible for him to pull it down without manipulation, so he twists it while he pulls and then slackens it to allow the twist to run to the top where it kinks. Just at that instant he gives it a violent jerk; this breaks the vine at the top and falls to the ground. Vines are used to tie the frame of the house together and to tie on the roof. They are also split and used to make baskets of various sorts.

The spindle is a round stick of hard wood from eight to fifteen inches in length. Six inches from the lower end is the whorl, a disc of stone, bone or turtle shell, which holds the spun cotton in place as it is wound around the spindle and adds to the momentum of the spindle. The hammock loom is a square frame of dress bars, tied together the desired distance apart. An endless thread of warp is wound round and round the frame in a horizontal position. The frame is then turned over,—making these warp threads run from top to bottom,—and stood up against the side of the house. The women sit on the ground and put the woof threads through from side to side, two women often working at the same hammock.
PLANTING.

The fields of the Wapisianas and Atarois are situated in the forest usually at a considerable distance from their village. The open savannah land is not suitable for cultivation because the hot sun and dry winds take up the moisture, leaving the ground parched and baked before the end of the dry season. On this account the people select some location in the depths of the forest and clear a small space where the rich soil will retain the moisture because of the protection furnished by the surrounding trees. The clearing is done during the dry season. Trees and underbrush are all cut down and allowed to remain where they fall. When the leaves are thoroughly dried out the whole place is burned over. The smaller branches are all consumed, but the larger trunks are only charred. No attempt is made to collect the trees and burn them. They remain as they fell with their trunks interlocking and their branches standing high in the air. The bark soon falls off and decomposes. By this method of burning a layer of ashes is left over the whole surface of the ground which adds to the fertility of the soil. The men do the clearing, but women help in the burning and planting.

Planting is done just at the beginning of the wet season. This is the time also for making up the cassava into farina, which is stored away in baskets made for this purpose. Stems of the old cassava plant, from two to three feet long, are used in planting the new field. Hills are dug up about three feet apart several stems being inserted in a slanting position in the loose earth to the depth of a foot or more. In former times digging was done entirely with sharpened sticks flattened on one side at the point, but now the natives have iron-pointed sticks which they use in the same way. An imple-
ment of this type is much better than any kind of hoe for digging in the hard ground among the roots.

The natives usually plant sweet potatoes, sugar cane and corn in the same field with cassava. The potatoes are planted a few hills in a place in the best soil. Corn is always planted along the sides of logs, where it gets the advantage of shade from the log and continued moisture. Sugar cane is planted in the usual way by itself on low ground if possible. Cassava grows best on high ground.

Scattered about the field without regularity or grouping are planted pineapples, pumpkins, tobacco, peppers, bananas, cashew (Anacardium occidentale) and the papaya (Carica papaya). After the field has been abandoned the banana and the papaya hold their own against the wild plants for several years, and the people return periodically for fruit.

There are two distinct varieties of cassava, sweet and poisonous. The former may be used as a vegetable, boiled or roasted, but the latter contains hydrocyanic acid and must be treated in order to remove this poisonous principle. These two varieties are planted in the same field.

For cassava, very little cultivation is required, no proper cultivation is ever done. For a few months the rank weeds are pulled from the hills and the young shoots from the stumps. By the time the plants are six months old they are five feet high and their spreading branches have covered the ground. The corn has ripened and the potatoes are gone; so the cassava has complete possession, and there is no longer any danger of its being choked out by other plants. The shade covers the ground and holds the moisture. Days and nights are about equal in length so that the hot sun has no bad effect on the growing plant.
When cassava is eight or nine months old it is ready for use. It may be used earlier, but it is not advisable because it is largely fiber with little substantial pulp. When a stalk is pulled up a branch is put back in the same hole. Thus with very little labor the field is kept full and growing. After three or four years of this method of continuous planting in the same spot without cultivation or fertilization, the crop begins to fail. Then the better plants are used as needed without replanting. Weeds, shrubs and grass soon overrun the whole field so that it has to be abandoned. The two most common of the numerous plants observable in the great profusion, are several varieties of the passion flower (*Passiflora laurifolia*) and the ant wood (*Cecropia peltata*). The former mat themselves together with other plants until it is impossible to make a passageway through them. The latter is probably the most rapid grower of all tropical plants. It gets its name, ant-wood, because of its long hollow stems which are often occupied by small red ants.

The Indians understand the value of careful selection of seed when planting a new field. The men assist in planting, but the little cultivation and the harvesting are done by women.

Sometimes they have two fields: one planted in May, just before the June rains begin, and another planted before the December rains, or in November. Corn is always planted in May, but mandioca is planted in both seasons.

When Orion makes his appearance in the early morning it is time to begin clearing the underbrush which is left on the ground. This should all be done by the time Sirius rises, when the big trees are cut. After the leaves have cured, which requires about a month, the whole field is burned over and
cleaned up ready for planting. It is now about the first of November. Mandioca, potatoes, bananas and plantains are planted. The December rains give the plants a good start, and by the time the June rains begin they are ready to be used. In the meantime a new field has been planted, the clearing for which began in March, the planting being done at the beginning of the May showers. Corn is planted first and after more rains fall, melons, squashes, pumpkins, beans and sweet potatoes. Mandioca is planted among all the other things. It does not require so much care in planting or in cultivation as other crops. The corn is ready to eat green in July and dry in August. There is no star sign for harvesting corn, but it must be gathered before the appearance of the southern cross. In other words, it must be taken under cover before the rains begin or it will spoil. The men cut off the ears and the women carry them in baskets to a central cleared space where a framework is built to dry the corn. Two poles are set in the ground and one or more cross poles lashed to these. The ears are then tied together by the husks and hung over these poles. When sufficiently dry they are carried to the house and hung up in the same fashion on cross-beams.

It occasionally happens that very little rain falls in December, as was the case in 1911, so that the people are short of food until the next planting comes into use. Corn is not a very desirable crop to plant because it may be dug up, pulled up or eaten while growing or after it has matured by insects, animals and birds. It has a definite season and must be harvested when ripe. Mature seed must be preserved for planting the next crop. It requires well distributed rainfall and much cultivation. It is more difficult than cassava to prepare for food and is not so convenient for use. Cassava, on the other
hand, is a poisonous plant which nothing will eat or destroy. Its roots extend deep into the moist earth and its spreading branches make a dense shade which prevents evaporation of moisture during the long dry season. It grows from cuttings, requires little cultivation and gives the whole crop for use. It may be planted or used at any time and does not die out at the end of a season. Hence it is the most desirable of all their food plants.

**Food Supply.**

The food supply of the Wapisianas and Atarois, consisting of both animal and vegetable substances, is fairly constant and abundant. The white traveler among them finds very little that is objectionable to his taste. The food is clean and well prepared. All the cooking and care of food are looked after by the women. Fruits and nuts are eaten raw, but all meat and vegetables are cooked by boiling, baking or roasting. On the trail, where it is difficult to carry a cooking pot, food is roasted either in front of the fire or over it on a rough barbecue. It is difficult to preserve meat for any time in the tropics, but it is kept four or five days by roasting and smoking it continually.

The principal food of all the savannah Indians is the flour or coarse bread made from the roots of the bitter cassava plant (*Manihot utilissima*) which is native to tropical America. It is a perennial semi-shrubby plant with slender stem six or more feet high with long, spreading leaves which cover the planted ground with dense shade. The large tapering roots, two feet long and six inches in diameter, are filled with a milky juice containing hydrocyanic acid. The first people were taught by the Creator how to press out the juice and to dissipate this
poisonous principle by heat. This variety of cassava cannot then be eaten as a vegetable, but must first be reduced to a pulp by grating or rasping in order to extract the juice. There is another variety known as sweet cassava (Manihot aipi) which contains no poison and may be eaten as a vegetable.

The most characteristic sight about the house is that of the women preparing food by peeling, grating, pressing, sifting and baking cassava. When visitors are present the women are busy from daylight on into the night preparing food. Cassava roots are pulled up and carried home, peeled, washed and grated by the women. One end of the grater rests in a large receptacle, which may be turtle shell, leaf stock or rough box, while the other end rests against the body of the operator, who, grasping a root in each hand, rubs them alternately up and down over the sharp stones of the grater, reducing them to pulp. The pulp is then forced into the open end of the squeezer which shortens and expands to its greatest extent. When full, the loop of the upper end is hung over the fork of a pole set in the house for the purpose, and a lever passed through the loop at the closed lower end. One end of the lever is fastened to the pole, a woman sits on the other end applying her weight and stretching the squeezer downwards. The poisonous juice forced through the wickerwork, runs down into a calabash or bowl at the bottom. Sometimes, when it is inconvenient to fasten one end of the lever, two women sit on it, one on either side of the squeezer. This method was not observed among any of the other tribes.

The cylinder of dry cassava is removed from the squeezer, broken up in the hands and rubbed through a sieve to remove the coarse woody fiber. It still contains enough moisture to hold together when pressed. It is now ready for making into
farina, a coarse flour, or into bread. No doubt the making of farina has been learned from the Brazilian Indians in recent times, for, at the time of the discovery of the northern Arawaks and Caribs, these tribes were unacquainted with its manufacture. The oven has already been described. The sifted cassava is spread thick over the hot baking pan and stirred constantly to prevent burning and to break it up into fine particles. When dry and thoroughly cooked it is removed and stored in baskets for future use. In this form it will keep indefinitely.

The great advantage of the farina is that it is always ready for use and may be eaten as it is or mixed with soup.

In making bread the same or a smaller oven may be used. Although the stone oven is still used in some places, for the most part the pottery oven is used. When the oven is hot a thin layer of sifted cassava is spread evenly over the entire surface. A fan woven of palm leaves (Astrocaryum tucumoides) is used for spreading the cassava, smoothing the surface of the cake and rounding its edges. In a few minutes one side of the bread is baked, then with a very skilful movement it is turned over with the fan. The bread is now rather soft and sticky, but after being dried in the sun on the house roof it becomes so hard that it must be moistened before it can be eaten. It must be stored with care in a dry place near the roof to prevent mold. Although unpalatable to the stranger, the farina and bread contain considerable food value. Anyone who can eat grapenuts will not find farina objectionable.

Brazil nuts (Bertholletia excelsa) are also used in making bread. After being pounded in a mortar the oil is extracted by the same method used in pressing out the poisonous juice of the cassava. In making bread this oil meal may also be used, mixed with cassava or sweet potatoes. Seeds of various kinds
are sometimes pounded and mixed with the cassava, to increase the amount of bread and to give it body when the cassava is young and weak. Older cassava contains more starch and makes better bread.

If the diet is confined principally to farina it tends to distend the stomach. This is particularly noticeable among the children, but they soon outgrow it when they have a more varied diet. Photographs show men with distended stomachs. This condition is due to excessive drinking indulged in shortly before the photographs were taken.

Besides cassava, a number of other vegetables are used, but not to any great extent. Sweet potatoes are boiled with meat or roasted. Corn is rather more important, but is by no means a staple food. It is generally cooked and eaten before it matures; the ripe grain is also ground in a mortar and made into bread. Pumpkins are cut up and boiled with meat. Peppers of various kinds are used for flavoring. Cane is chewed for food or used in making drinks.

Bananas and plantains are the most important of the fruits and form a large part of the diet. The banana is eaten raw when ripe, while the plantain, either green or ripe, is roasted. Cane, bananas and plantains, comparatively recent introductions, have spread everywhere. The cashew (Anacardium occidentale) is eaten raw when ripe and is also used for making drinks. The roasted cashew nut is very delicious. The pineapple is used to eat and for making a delicious drink. The papaya, (Carica papaya) eaten raw when ripe, is frequently cooked green with meat to make the meat tender. The leaves are sometimes used for the same purpose. Of the wild fruits, the guava (Psidium pomiferum), which grows on small bushes near the river in the savannah, the abiu (Achras Cainito), which
grows on a very high tree in the forests, and a grape-like fruit called imbira are the best. The various palm fruits contain such a small amount of edible pulp that they are only used for making drinks. The heart of the Manicole palm (*Euterpe excorrhiza*) is often used as food and eaten either raw or cooked. The fruit of the rubber tree (*Mimusops balata*) is the most delicious of all, but more difficult to collect. The fruit of the bulucush palm is cut open and the milk is either drunk or dried, after which it is boiled to make soup.

The flesh of wild animals is also a staple food, being served at almost every meal. The soup, which is as much prized as the meat itself, is used for soaking the dry hard bread or for mixing with farina. All the animals except the jaguar, the anteater and the sloth are used for food. When game is killed on a journey it is dressed and half-roasted, half-smoked on a barbecue. The part to be eaten at once is thoroughly roasted, the rest is carried along and roasted again as needed. Meat thus prepared will keep for four or five days. When a man goes hunting from his home he carries the game to the house and the women dress it, and roast it either on a barbecue or else over the fire in the house, where it remains hanging in the smoke until all is consumed. Small game is dressed, boiled and eaten at once. The large black monkey is considered the best of all. It is always eaten first, even when venison or pork is served at the same time. The flesh is hard and sweet, with a very agreeable flavor. The red howling monkey (*Mycetes seniculus*) is next choice, followed by some other smaller varieties. Two varieties of deer are eaten: the small red forest (*Cervus humilis*) and the savannah (*Cervus savannarum*). There are also two varieties of peccaries com-
mon in the forest regions: the smaller variety (*Dicotyles torqualus*) being found in small groups of a half dozen or less, the other (*D. labiatus*) goes in large droves. Both are very good eating, particularly when about half grown. Small ones are often caught and allowed to grow up about the house. The tapir is not plentiful, but its coarse flesh is prized. Of the smaller animals, the paca (*Cælogenys paca*) and the agouti (*Dasyprocta aguti*) are the best for food. They live largely on roots and fallen fruits. The capybara (*Hydrochaeris capybara*), the largest of the rodents, weighing a hundred pounds, is not well liked and is eaten only occasionally. It lives along the larger rivers and eats grass. The lizard (*Iguana tuberculata*) is the "chicken of the forest." All the larger birds are used for food except falcons, vultures and domestic fowls, which are considered unclean. The birds most commonly eaten are the maam (*Tinamotis elegans*), powis or curassow (*Crax alector*), maroudi (*Penelope pipile*), trumpeter (*Psophia crepitans*). Besides these there are varieties of toucans, parrots and doves which are more difficult to kill and hence not depended upon. The muscovy duck (*Cairina moschata*) is found, but not in great numbers. The whistling duck (*Anas autumnalis*) is numerous in the lakes in the wet season. The small herons are not used for food, but some of the larger ones are. The great negroope (*Tantalus loculator*) is often eaten, but not greatly prized. The firm flesh of the jabiru (*Mycteria americana*) is almost as good as duck. Water birds are much more difficult to catch than land birds, consequently they form a comparatively small part of the food supply. Chickens are kept as scavengers and cocks are greatly desired because they crow in the early morning.
Many insects are eaten, especially when other food is scarce. Bee-grubs and beetle-grubs are a great delicacy at all times. Wasps' nests are knocked down from the trees and the grubs taken out, fried and eaten. After the first experience one finds them palatable. The grub of the palm beetle (*Calandra palmarum*) is a large yellowish-white worm most disgusting in appearance but eaten with relish by all who have made its acquaintance.

Water turtles (*Emys tracaxa*) and two varieties of land tortoises (*Testuds tabulata*), a large variety which lives in the forest and a small one found only in the savannah, all have very delicate flesh and are greatly sought after. When carried home they are usually cut up and boiled, but on the trail they are roasted whole. Water turtles are caught when they go out on the sandbars to lay their eggs. It is difficult to find the savannah tortoise except after a fire, when it may be seen at some distance. The eggs of the tracaxa are eaten either raw or cooked. They are soft, small, oval-shaped and about the size of a pigeon's egg. They have good food value, the granular yolk being very rich in oil. From fifteen to twenty eggs are found in a nest. Birds' eggs also are eaten.

Fish are very much appreciated by the Wapisianas, but not to the same extent as among the Tarumas. They do very little fishing except in the dry season, when they poison the pools, killing great quantities of fish. It is necessary to barbecue them at the river before carrying them home, where they are kept over the fire and smoked. At other times, when freshly caught, they are boiled and the soup used for soaking the bread. All kinds of fish are eaten, but the best and most common are the following: arapaima (*Sudis gigas*), the largest of all, weighing fifty pounds or more, and the aimara (*Erythinus*
whose sharp teeth and savage disposition make him a dangerous fish to handle. Neither of these is found on the Amazon side of the divide. The perai or piranha (*Serrasalmus niger*) is a small, deep-bodied fish with very sharp teeth. He is the most savage of all the fish. A trap must be used to catch him, because he cuts off the line of the hook with his saw-edged teeth. The stingray (*Trigong hystrix*) and the electric eel (*Gymnotus electricus*) are both eaten.

Before meat is dried it is often salted. The Wapisianas are fond of salt and often eat it alone. On our journey, when we could get no food the Indians would put salt in water and drink it. In former times they used to evaporate their own salt. After the December rains, the water which has formed shallow pools about the foot of Mount Seriri evaporates, leaving a thin coating of salt on the dark bottom. This is carefully gathered in baskets. Water is then poured through it and the whole evaporated over the fire.

Fire for cooking is kept burning continually in every house. Sometimes, however, it must be kindled, and most of the men know how to do it. Two methods are used, both by friction. In one case the drill is twirled between the hands and in the other a bow is used with a piece of calabash held on top of the drill. The firestick rests on a bunch of cotton. When the drill is used between the hands two men kneel facing each other and take turns, because it is hard work and must be done rapidly. The wood used is called tikere. The drill and base may be of the same wood, or when the bow is used the drill may be a piece of an arrow shaft. A pit is made in the base or firestick and a groove cut deep enough to allow the heated dust-like particles to fall through, forming a heap on the cotton against the side of the stick. When the heap glows sufficiently with heat it is
The natives are experts at making and preserving fire. They know certain kinds of wood which will continue to glow all day while on the march or in a canoe. They also have matches, often using them while on a journey, but not at home. For kindling fire or for lighting about camp at night they make use of resin from the konima tree (*Icica heptaphylla*). This resin is found at the foot of the tree in hard lumps. It burns slowly and makes a good light. On our journeys in the forest we always used it about the camp at night. A small lump held in a split stick and set up four feet above the ground gave much more light than a lantern. This resin is known as acaïara on the lower Essiquibo.

**Drinks: Their Manufacture and Use.**

The most important as well as the most intoxicating drink made by the Indians is parikari. It is the same drink that is known among the Carib tribes as paiwari and is used in the same way. It is principally used at certain dances which take on the character of drinking bouts, but it may be used at other times as well. It is not always kept on hand, because it requires time and pains to make it. For its manufacture the ordinary cassava bread is taken when fresh and hot, put into a basket and dipped quickly in and out of cold water. The bread is then spread out in a layer two inches thick and six feet across, on banana leaves or palm leaves which have been laid on the ground in the darkest part of the house. As these layers of bread are put down they are sprinkled with the pulverized leaves of the *bicawid*, a field shrub, the whole bed being then covered with palm leaves. After four or five days the leaves are removed. The layer of bread, formerly two inches thick, has fermented and is now four inches thick and covered with a heavy white mold.
In this stage it is soft and sweet and may be eaten. It is next broken up and stored in large pots for two days more, when it becomes completely fermented. It is now ready to mix with water and drink. A large trough capable of holding fifty gallons has already been made, the fermented bread transferred to it, and water added to suit the taste. A small basket is used to strain out the coarse particles. It is slightly intoxicating and at dances men drink enough to feel its effect.

Another intoxicant, called sabuer, is made of cassava bread by a different method. The bread, which is made for the purpose, is twice the ordinary thickness and baked on both sides until it is burned black. It is broken up into small fragments and mixed with water in a large cooking pot. A part of the bread is chewed by the women, and the masses, after becoming saturated with saliva, are replaced in the jar. A fire is built under the jar and the liquid brought to the boiling point. It is stirred continually to break up the particles of bread and the chewed masses. When it has boiled, it is strained into the large trough and more water is added. It is then allowed to stand for four or five days or until sufficiently fermented. The charred bread gives the drink a peculiar flavor which is very pleasing to the palate. Sabuer and parikari are made for important dances or gatherings and are not kept on hand at other times.

One may always find in a large storage jar the fermented drink called sauraura. It is made of the ordinary cassava bread, a portion of which is chewed and the whole, mixed with water. The second day it is ready to drink, the third day it becomes acid, and by the fourth day it is too sour to drink. However, it is never allowed to keep more than three days. Every visitor upon his arrival is offered a bowl of sauraura. It is a very
refreshing drink and great quantities are consumed in every household.

Besides these fermented drinks they make another of corn, called mariki, which is used before fermentation takes place. The corn is ground in a mortar and mixed with water. A few balls are made, boiled and chewed. Then the chewed mass is mixed with water and set away for three days, when it is ready for use. The coarse parts are strained out as in the other drinks. In this case a very small part of the total mass is chewed, whereas in all the others a large part is chewed. The girls whose duty it is to do the chewing are selected and marked with tattooed lines at the corners of the mouth. Before the chewing begins they scrape their tongues and saturate them with honey. Wild honey, which has an acid taste, is also mixed with water and drunk. The most pleasant drinks are those made from crushing the fruits of the cashew and the wild pineapple and mixing with water. The fleshy covering of the seeds of several palms is eaten and also used in making a thick, heavy drink. The ripe fruits are mixed with water and rubbed until the pulp is freed from seeds, after which all the coarse parts and seeds are strained off and the drink is ready to use. Often farina is mixed with it and the whole eaten with a spoon. Among the most common palms so used are the aeta (*Mauritia flexuosa*), cokerite (*Maximiliana regia*), bacaba (*Enocarpus distichus*), assaii (*Euterpe oleracis*), awara (*Astrocaryum tucumoides*).

**Tobacco.**

Tobacco is in common use among all the Indian tribes, but the uses and the methods of use differ somewhat from tribe to tribe. All tribes smoke, but some use pipes while others use cigarettes. The Wapisianas smoke and also drink tobacco.
When the leaves are picked they are hung up under the roof to dry, but before they are too dry they are spread out singly, arranged side by side and tied in small bundles. To make a cigarette the uncut leaves are stripped of the midribs and rolled in the thin inner bark of the cakaralli tree (*Lecythis ollaria*), called sumamad. A strip of bark about four inches wide and as long as the desired length of the cigarette—from six to fifteen inches—is taken from the tree; when dry it is beaten until the thin sheets are separated. Many foreigners prefer this bark wrapping to the common cigarette paper. It is more difficult to roll, but adds a very delicate taste to the tobacco. The natives smoke only when sitting about talking, never when at their work. The women seldom smoke cigarettes, but sometimes take a few puffs from one a friend is smoking. The men have no pipes and use no snuff. Tobacco is used as a drink by the medicine men in their secret performances. It is used in the same way as a medicine by the people. The finely cut tobacco is soaked and stirred in water in a small gourd which is prepared for the purpose. A gourd three inches long has a ¾-inch hole cut in the side and another bored up through the stem into the gourd. The pulverized tobacco is put inside and covered with water. After it has soaked for a time it is stirred with a stick. If one has headache or feels out of sorts generally, he places the end of the stem in his nose and throws his head backward, taking a little of the liquid into each nostril. Peppers are sometimes used in the same way for colds.

**Customs of Eating and Drinking.**

When at work the men eat three times a day: early in the morning, at midday and in the evening after dark. When not working they eat later in the morning and again in
the afternoon. If they get hungry between meals they drink a mixture of farina and water, called tcibe. They eat less than a white man at their regular meals, but eat much more on occasions when there is plenty of fresh meat after a successful hunt. The men and women do not eat together either at home or on the march. At home each woman has her own fireplace and prepares her own food. When all the food is ready the women carry it to the opposite end of the house and set it on the ground near the men's door. The men and boys all eat together, each helping himself to whatever he likes regardless of who prepared it. They sit on low wooden stools or turtle shells, or squat on their heels. There is usually one or more large cooking-pots full of meat and soup, plenty of dry bread and some fruit. The bread is so hard it must be soaked in the soup before it can be eaten. A large piece is broken from the great flat cake, held with the fingers and soaked for a short time in the soup. The moistened part is eaten and the rest dipped again into the soup. The soup is all consumed in this way. The meat, which has been cut into small pieces, is taken out with the fingers. The fruit is always eaten last, or it may be carried away to be eaten later. Any bread left over is divided and carried away by visitors for luncheon on the trail. When the men have finished their meal the women carry away the remaining food to their end of the house where they and the girls sit on their heels and eat together. The women have difficulty in keeping the hungry dogs away while the men are eating, but share with them when their own turn comes.

When men return from a hunt or a journey, or when a visitor enters the house, the women always offer at once some kind of refreshing drink and later, when it has been prepared,
bring food. The drink is usually sauraura, but never water unless it is asked for. At their regular dances great quantities of fermented drinks are used. It is marvelous to see how much the men can drink. They have the happy faculty of being able to bring up the liquor soon after it has been swallowed. The stomach is thus emptied and refilled at short intervals. While the drink contains only a small amount of alcohol, the tremendous quantity consumed allows the stomach to absorb enough of the spirits to make the dancers intoxicated. The women drink very little.

When a visitor enters the house a woman brings him a drink and offers it without any greeting whatever; he accepts it and returns the bowl without a word of appreciation. If there are several men the drink may be passed from one to the other, but the empty bowl must be returned to the woman by the man who first received it. She gives it to the leader of the party and courtesy requires that he return it even if he does not say, "I thank you." After the drink the head man sits by the visitor and engages him in conversation.

**Greetings and Salutations.**

When one man goes to visit another he announces himself by saying kaina? (How are you?) The other responds kaini'i? (Are you there?) The first says diña'a. (I am here.) Then the man addressed turns around and the conversation begins by the visitor talking without interruption for ten minutes or more, after which he stops short and the other takes his turn talking. These two formal speeches being over, ordinary general conversation is entered into after a brief period of absolute quiet.
Hunting.

The Wapisianas cannot properly be grouped among the "hunting tribes" of South America because they live more by agriculture than by hunting and fishing. The chase supplements and gives variety to their vegetable diet. Hunting is by no means a constant occupation for all the men, nor for any of them. All go hunting at times, but each man makes his own field and depends upon that for his principal food supply.

To be a successful hunter certain rites must be observed to ensure the assistance of the spirits. For each animal there is a particular charm or bina which makes its capture certain. These binas are roots or leaves of plants, usually Caladiums, which are supposed to resemble in some way the particular animal. A fragment of the leaf may resemble the ear of the animal; or the hunter may hold the leaf between his hands, and by blowing on it make a noise resembling the cry of the animal or bird. These binas may be hung about the neck or elsewhere as amulets. Sometimes it is necessary to scarify the body, usually the arms or legs, and rub the juice of the plant into the wound. Fish teeth are used to make the longitudinal cuts on the arms and legs and the cross hatching or herring bone forms on the body. Often peppers are rubbed into the scars along with the juice to make them more painful. The bina may be a part of the animal or bird which the hunter desires to kill; as, the head of the powis, or the heart of the acouri. These parts are calcined, pulverized and mixed with wild honey. Cuts are then made on the arms of the hunter with fish teeth and this mixture rubbed into the wounds. Instead of lines, small dots are often made by the same method in the forms shown in Fig. 2. all natural size.
The deer is more difficult to capture than any of the other animals and so the hunter must have a special preparation. He twists a thong of a certain fiber about three feet in length tapering from a thin thread at one end to the thickness of a lead pencil at the other, where the loose fibers hang in a bunch. He takes the fine end, passes it up through his nostril and pulls it out through his mouth; thus he brings the whole length of the string through his nostril and out at his mouth. In the same way he passes a second thong through the other nostril. Every day for a month new thongs are passed through the nostrils in the same manner. The thongs, called korotkini, are tied in pairs to a stick and hung over the door as evidence that the owner has performed the ceremony which makes him a successful deer hunter. One precaution must be taken when starting out to hunt any kind of game, particularly the deer. The hunter must not tell where he is going to look for deer because the deer would worry, become nervous and be more difficult to stalk. Stalking a deer in the open savannah requires great care. The hunter must not be scented, or seen to move. He must hunt up the wind. At sight of the deer the hunter remains motionless as long as its head is raised, but walks forward as soon as it lowers its head for a bite of grass. His arrow is held on the string with the bow erect, and this position must not be changed during the whole stalk. So he moves along two or three steps at a time until near enough to shoot. It is a long and tedious process, requiring fortitude as well as patience. All the pain of the binas, which he must bear
without flinching, may be inflicted to prepare his nerves against any involuntary movements during the long stalk. They say the thong bina improves the eyesight of the hunter and also prevents the deer from scenting him. Another bina, called kunaua, is used to assure strength and success in shooting with the bow and arrow. The bark of the tree kunaua is split in thin strips and wound around the arms for twenty-four hours. This produces a slight blister and gives the appearance of a burn.

Their dogs used in hunting for the most part are obtained from the Tarumaras, who have the reputation of breeding the best ones in the whole region. Among the Tarumaras dogs are treated with great care. They are never allowed to run loose about the house, but are kept tied on platforms when not in the chase on account of the danger to their feet from jiggers (*Pulex penetrans*). There are not so many jiggers in the Wapisiana houses, consequently the dogs are allowed more freedom. While not particularly trained for it, different dogs become better hunters for certain animals, and are known as “deer dogs” or “jaguar dogs.” The dogs are given binas as well as the men. If a dog is lazy he is taken to an ant hill and held among the infuriated ants until he howls with pain. If he has difficulty in scenting the trail of animals, his nose is held for the ants to sting. If he is slow or does not run well, ants or the extracted juices of certain plants are placed under his tail causing great pain. The dogs are most useful in hunting the tapir and the two varieties of peccaries. The tapir generally has certain regular runs which are known to the hunters. Feeding late in the evening and at night, he lies down during the heat of the day. When aroused by the dogs he always runs for the water hole where he is accustomed to drink and bathe. The dogs chase him to the water and surround him there until the
hunters kill him with their bows and arrows or short spears. The large peccaries (*Dicolytes labiatus*), when encountered, may turn and fight the dogs until the hunter approaches. He may be able to kill a few peccaries before the others scatter through the forest; some take refuge in an angle between the great roots of a tree, holding the dogs at bay until the hunter's arrow, spear or bamboo knife ends the unequal fight. The most common method used, if there is room, is for the hunter to place his short spear against the cheek of the peccary and, holding its head aside, stab the animal with a bamboo knife. The small peccary (*Dicolytes torquatus*), when chased by the dogs, plunges into hollow logs, trees or holes in the ground. The men fasten the opening to prevent its escape and make a most ingenious kind of trap. A dozen small poles are cut eight feet long and tied together in such a way as to make a long funnel. It is large enough at one end to admit the peccary and tapers gradually to a diameter of six inches at the other. The larger end is placed in the hole while the other is lifted three feet from the ground and secured to a tree or upright poles. When all preparations are completed the fastening is removed from the hole and the peccary rushes out and into the trap. His legs go through between the poles and at the end of the second jump his front feet can not reach the ground. He at once attempts to get back, but one man places a pole behind him while another hits him on the head and kills him. This is a very good trap and never fails to capture its prey because the peccary always comes out. It makes no difference how much noise the men and dogs are making, he tries to get out even before the trap is ready and the way cleared. Just why he does so, I am unable to determine.
A snare is used to catch some of the smaller animals. A loop is so placed in the runway that the animal's head passes through it, the weight of his body springs the trigger and he is lifted off the ground. In the dry season deer are often caught by stretching a net across a runway and setting fire to the grass in front. The deer run into the net and are killed by men who are hidden near by. The game in the forest is sometimes driven to the top of a mountain, where it is killed by men in hiding. Lizards climb up the bushes overhanging the river to sun themselves. The Indian passing in his canoe detects them and shoots them with a long arrow, which either catches in the branches and holds the lizard or stands up to reveal his location if he falls into the water. Land tortoises are plentiful in the forests and the Indians are expert at following their trails through the leaves. They are tied with bush rope and carried home alive. The Indians make a beehive-shaped trap of small straight sticks to catch birds of various kinds. It is one foot high, eighteen inches square at the bottom, tapering to five inches square at the top. For bait, seeds are thrown under the trap. When the birds have entered, a boy in hiding pulls a string which is attached to the support and the trap falls. (Fig. 3.)

The Indians are able to imitate the calls of all animals and birds so perfectly that many of these may be killed by calling them to a blind. The animals already described do not respond readily and hence must be hunted. Monkeys are very respon-
sive and will answer and follow a call at any time. Some birds will answer a call only when they themselves are calling, and will not follow a call; while others will follow up a response when they are calling. All of these characteristics are known and taken advantage of by the Indian. In the evening when the maam’s *Tinamus* call is heard he goes after it, repeating its call at regular intervals until he comes up to it. In the forenoon when the male curassow or powis (*Crax alector*) crows the hunter gives the call of the female and waits for the male to come, which he does at once, bringing with him all of his companions, when several may be killed before they take fright. The trumpet birds (*Psophia crepitans*) feed largely on the ground in flocks of a dozen or so. They have better eyes than the powis and take fright very easily, hence it is necessary to build a blind of a few leafy branches to hide behind when calling. The flight of the arrow makes no disturbing noise; and the cry of the wounded bird brings the whole flock together, where a number may be killed. The macaws are the most intelligent birds in the forest and the most difficult to capture. Their flesh is not so much prized as their plumage. They have a habit of frequenting certain trees, near the tops of which the Indian builds his blind and awaits their coming. Many varieties of small birds are killed principally for their feathers, but all birds are eaten.

The Indian rarely hunts alone, because he is afraid of the Kenaimas, evil spirits which take the form of little men and attack a man when he is alone. Even the presence of a small child is sufficient to keep them away. There is another reason why two or more men hunt together. No Wapisiana ever carries his own game to the village, hence it is necessary to have a companion. Each may carry the other’s game, but not his
own. This custom is based upon an old tradition, according to which the Creator when hunting took his brother with him to carry the game.

Fishing.

The Wapisianas are unable to get a constant supply of fish because the Rupununi, their principal river, ceases to flow for four or five months during the dry season and the fish remain in deep pools where they will not take the hook. The Tarumas, who live on the everflowing Essiquibo where they can catch fish in abundance at all times of the year, are the greatest fish eaters of all the tribes. They know the habits and haunts of all the different varieties of fish and the food they prefer. For bait they use leaves, fruits, insects, flesh of animal, bird or fish to suit the taste of the particular fish desired. They depend largely upon the hook and the arrow for their food supply. In the Rupununi, the piranha or pirai (Serrasalmus piraya), that most savage of all fish, cuts the line, making it very difficult to fish with the hook, even during that part of the year when the other fish would take it. The Wapisianas must then use other methods. The simplest of these is trap 1 made by building a dam across the river where the fish, jumping into it, cannot get out.

Trap 2 is made by throwing two logs across the rapid river or by setting a stake in the middle of the river and lashing two poles to it at a few inches below the surface of the water. Then the straight stems of palm fronds are set against this support and lashed with bush rope near together to prevent the fish from pushing them aside. Turf, leaves and brush are thrown in above to dam against the uprights. The stems project two feet or more above the water except at one place near the middle,
where a gap is cut two feet wide with the stems left projecting three inches above the water. A large tray is plaited and secured below the gap so that when the fish jump through they are caught on this tray trap. Trap 3 is a funnel-shaped basket made of palm fronds woven spirally and set with the large end up just below a small waterfall where the fish may drop into it. By obstructing the other part of the channel the fish are thus forced over into the trap. It is six or eight feet long and tapers from a foot at the top to almost a point at the bottom, where it is tied with a cord to prevent anything from passing through. It may be set also in rapid water. The fish go in head first and cannot get out. It is set at night and removed in the morning. Trap 4 is much like the preceding, but has an inside funnel so woven that the fish pass through but cannot return. The top is fifteen inches across and the bottom when untied will allow the hand to enter or the fish to pass through. It is set anywhere in rapid water. (Fig. 4.)

Trap 5 is made of sticks a half inch in diameter and two or three feet in length in the form of a truncated cone. The sticks are held in position with bush rope and the top wound with bark to protect the hands from the rough ends of the sticks. This trap is carried into a pond and planted down on the bottom. The fish thus enclosed are removed from the top by hand. (Fig. 5.)

Trap 6 is made of a spring pole to which is attached a baited hook. The bent pole is held in place by a notched stick.
which is tied with a very short string to a stake driven into the bottom of the stream. The cord, ten feet long with baited hook, is attached to the pole and the surplus cord tucked up in loops so as to allow the bait to drop the required depth into the water. The loose cord is to allow the fish a run which is necessary to release the trigger. The fish is lifted out of the water, which prevents other fish from eating it.

The most ingenious trap in use is a funnel-shaped basket attached to a spring pole. (Fig. 6.) The basket is made by taking a number of split sticks about three feet long for the uprights or ribs and weaving between them split bush rope. The large end is eight or ten inches in diameter, while the other runs to a point. The spring pole is either a small tree standing at the edge of the river or a pole planted firmly in the ground. The trap is held under water by a pole pushed into the side of the bank or by a framework tied to an upright post. The basket is fastened to the spring pole by two cords three feet long tied one on either side of the top of the mouth when in a horizontal position. The basket is placed below the pole or framework to keep it under water and held in place by a third cord tied from the end of the spring pole to the trigger stick. The bait attached to the trigger hangs down inside the trap, now in a horizontal position a few inches below the surface of the water with the opening down stream. When the fish strikes
the bait, the trigger is released and the trap pulled forward and upward out of the water, allowing the fish to fall head first to the bottom of the sharp-pointed basket.

The pacu (*Myletus pacu*) feeds largely on the fruit of the (*Genipa Americana*) and the yellow plum (*Spondias Myrobalanus*) when they are ripe and falling into the water. At this season of the year the water is so colored on account of the rains that it is difficult to see the fish. So the Indian collects the fruit and drops it into the river from an overhanging branch of a tree. When the fish rises to the bait it is shot with an
arrow which has a cord attached for the purpose of securing the fish or of retrieving the arrow. This fish, which is seldom found in pools in the dry season, is distributed along the whole river when it is in flood. In the dry season it is found in the clear water of the rapids, where it is shot with the bow and arrow in the usual manner.

A small circular dip net a foot in diameter is sometimes used to catch fish along the banks of the river when the water is high. The same net is also used to gather up the dead fish at a poisoning.

The most common as well as the most productive method of catching fish is by poisoning the deep pools along the river during the dry season. The methods used in the quiet pools and the running water differ to some extent. In the latter case the poison is placed in the shallow rapid water just above the pool and is carried to the bottom of the deep water, where the fish are killed within fifteen minutes. In the quiet water the poison is placed directly into the pool. If there are shallows connecting the pools, a dam of branches and leaves is made across and each poisoned separately. While the poisoning is in progress, women and children watch these dams to prevent the fish from escaping. A poisoning is a great event, and everything must be done in keeping with its importance. A head man has full charge of all arrangements and directs the whole operation. Two or three days in advance the poison is collected in the forest. It may be necessary to make a two days' journey to a region where the particular poison plant grows. The head man goes along and selects the desired plants, which are cut up and carried home. The day before the appointed time he takes the poison to the selected pool. The dams are built, if any are necessary, and firewood is collected for the barbecue which
always follows the catch. The men who have been selected to assist in the poisoning make clubs of green wood a foot long and two inches in diameter to be used in reducing the plants to a pulp. In the evening just at sundown the head man gives a signal, when all these men with their clubs go to a large rock in the pool or at its edge, where the poison has already been stored. The head man cuts up the plant, which is a liana of some kind, into pieces six or eight inches in length, while the men pound them to pulp on the rock. When the poison is all ready it is put into palm-leaf baskets and allowed to stand until morning. The amount needed depends upon the size of the pool. Three hundred pounds of pulp would be sufficient to kill all the fish in a pool one hundred yards long and fifty yards wide. The men go home for the rest of the night, or else to their camp if the pool is a long distance from home. They must sleep away from their wives or the poison will not be effective.

Before daybreak they eat a light breakfast and go to the pool. The head man takes his place at the side of the pool and directs the men who take the baskets of poison and go into the water. Each man carries a long spear to defend himself against any savage fish which may happen to attack him. The men wade or swim about according to their commands, sousing the baskets of poison up and down in the water and holding them up to allow the poison to drain out. Every fifteen minutes or so the baskets are taken back to the rock, where the chief pounds them with the end of a heavy pole eight feet long and five inches in diameter. Then they are taken back to the water again, where the same process is repeated until the poison is all dissolved or the water sufficiently saturated. The only visible effect shown in the water is a white suds which floats
on the surface. It requires a long time for the fish to be killed. They soon feel the effects and rush about, trying to escape, but within two hours from the beginning most of them are floating on their sides. No one should point his finger at a fish or touch one, except it be the vicious ones, for fear of nullifying the effect of the poison. The vicious ones, such as the perai, are speared at once, but not with an iron point. If a stranger should happen along he must take no part in the poisoning.

When the head man is satisfied that all the fish are dead he takes a basket of poison and goes all the way around the pool to make sure everything is all right and then gives a shout which is the signal for everybody to plunge in and get as many fish as he can. Men, women and children rush about in great excitement, having a general good time. Several hundred pounds may be taken at a poisoning. The fish are at once cleaned and barbecued. The men have a great feast that night, and the following day pack up the remaining fish and go home. Several pools are thus poisoned every year along the upper rivers. The lower reaches are too large to be poisoned and so the fish are preserved to stock the pools again when the rains and full rivers return.

Fish Poisons.

The most deadly of all the fish poisons is a liana called—

1. Aishal. The stem and branches are used as already described. The plant is now very scarce and long journeys are made to secure it. The Indians cut it into pieces two feet long and carry it home in their quakes or baskets. It may be stored for some time without losing its strength. There are two other varieties of aishal:

2. Atolikum.
3. Kumasaukum. 2 and 3 are used in the same way but are not so strong as 1.

4. Katufaru, a ribbed liana, is plentiful but not often used because it kills only a certain kind of fish which is more easily killed than the average. It gives a little milk when freshly cut and blackens the water.

5. Kohirei, is a liana which grows in a twist of three. When cut, a little water runs out with a hissing sound. It blackens the water and is not generally used because so much is required.

6. Kowab is a large tree which grows along all the rivers. The fruit only is used and is pulverized in a mortar or on the hard ground.

7. Iñak is a small shrub which grows to the height of ten feet on the elevated savannahs near the foot of the mountains. The leaves only are used and are beaten in a mortar. It is good for small pools or streams.

8. Puraunan is a thistle which grows in rocky places on the savannah near the mountain. Its unripe seeds are reduced to a pulp in a mortar and used in small pools.

9. Pi is a small tree which comes up in abandoned fields in the forest. The fruit and leaves are pounded on rocks and used in pools.

10. Kurukuruai, a liana similar to aical, is one of the strongest poisons known to the Wapisianas. The vine contains little poison and is seldom used, but the roots are very rich in poison. They are crushed and used in baskets as described. It grows readily from slips.

11. Haiarri is another very strong poison. The roots are used in the same way as described above. It grows from the seed and is often planted by the Indians.
12. Kunan grows from the seed. It is used in a very different way. The leaves and fruit are pulverized and mixed with grated cassava. It is then rolled up in banana leaves, slightly roasted and made into small pellets one-quarter inch in diameter. These are dropped into the rapid water of the river, where certain fish take them. Very soon after swallowing the poison the fish rush about violently in every direction, apparently suffering great discomfort. They must be caught at this time, for they soon become stupefied and sink to the bottom, where they are eaten by other fish. They may be caught in a small net or shot with an arrow or struck with a spear.

13. Tikun is a small shrub which grows from a slip. The leaves only are crushed and used in the usual manner.

14. Kumarau, a small tree with dark leaves and bark, grows from a cutting like cassava. When the young shoots are about six feet high they are cut down and carried to the place where the poisoning is to be done. Each person takes one stick at a time and breaks it up with his hands under the water. This prevents the poisonous juice from burning the hands. It is then pounded on the rock and used in baskets. It blackens the water and makes the fish very lively at first.

15. Kumarau, of another variety, has light green leaves and bark.

16. Hiarri kupa is a liana which looks much like aical, but has smaller leaves. It is known only on the Essiquibo, where it is very plentiful, but is not a strong poison and is used only in an emergency.

17. Hiarri bali is very similar to kupa and grows in the same region.

18. Cassava (*Jatropha manihot*) juice is sometimes used, but it is very difficult to get enough at one time, so it is generally used with pi, kumarow and tikun.
19. Inak kawan. Seeds only are used; grows wild; seldom used.

20. Ineki inak is not cultivated. Only the leaves are used, beaten in a mortar with water.

21. Purowan. Seeds only are used.

22. Tikum,

23. Kumas aukun, and

24. Atolikun have leaves only used.

These four last are not strong and are used only when better varieties are not available.

Most of these poisonous plants grow over a wide area and many of them are known to other tribes, who do not use them, because, living near rivers that flow all the year, they are able to secure fish with the hook or bow and arrow at any time. The Wapisianas know more poisons and use more than all the other tribes combined because they have no other method of securing fish from the deep pools during the five months of the dry season.¹

The Indians sometimes catch lizards with hooks and use them for fish bait. They go among the rocks and throw the bait near the lizard. He gathers it up and starts to run away, when he is caught.

 IMPLEMENTS OF THE CHASE.

The Indians are successful hunters largely because they know so well the habits of all the game they pursue and not because of their perfect implements or skill in their use. In fact, they are not good marksmen with the bow and arrow. They get the game by stalking it, lying in wait for it to come

¹ Fourteen of these plants were sent to the Agricultural Department at Washington but have not yet been reported upon.
near, or by calling it within easy reach. Their implements are well made and specialized. Fish, birds and animals are captured or killed with particular arrows or spears. For the most part each man makes his own implements. In some cases the best material grows only in certain regions and it or the finished implement must be obtained by barter.

Their bows are made either of purple heart (*Capaifera pubiflora*) or letterwood, leperwood, turtlewood (*Piratinera Guianensis*). The trees grow to the size of two feet or more in diameter, but a small part of the heart only can be used. The tree is cut down and allowed to lie until the outer part has largely decomposed. Then the remaining heart, six inches in diameter, is taken out and split to the desired thickness. It was formerly worked down with a knife made from a peccary's tusk. The curved cutting edge of the tusk lent itself to rounding the front of the bow and to making a broad shallow groove in the back. For this purpose steel knives are now used and the back of the bow made flat. When the bow has been worked down to the desired size, six feet in length and an inch across, it is "sand-papered" with the rough leaf of the shrub (*Curatella americana*) and polished by hand until it is in perfect condition. The bow is very stiff and if flexed too far, will break. However, the great length makes it safe in this respect. The bow is strung in the usual way and the surplus string wound on the lower half of the bow. The bow when relaxed is perfectly straight. To tighten the string, one end of the bow is placed on the ground against the foot while the other knee is pressed against the middle of the bow. When not in use on a journey, the string is kept just slack enough to require only a few twists to tighten it without untying the knot. Thus it is made ready for use at a moment's notice. So much work is
required to make a bow that a man would rather part with any other possession he has than with it. A man takes the same care in making a three foot bow for his son as in making his own. One bow serves for all varieties of arrows. The Wapisianas obtain their best bows from the Waiwais, ready made.

No flint occurs in the region, so the arrows must be tipped with some other material. The reed shaft is the same in all cases, but the size differs from the heavy harpoon for large fish to the light bird arrow. The arrow reed is the flower stalk of the wild cane (*Gynoeicum saccharinum*), which is cultivated by the Indians for this purpose. The foreshaft is made of the stem of a shrub. The end of the foreshaft is notched or the knots on the stem left and dressed into sharp barbs. A bone or bamboo point may be attached to the foreshaft. A curved bone point may be so attached that the upper end projects as a barb. The foreshaft may end in an enlarged blunt point to prevent piercing, or four very short sticks may be tied together perpendicularly around the foreshaft near the point for the purpose of stopping the penetration. These two latter are used for birds only. Again, the foreshaft may have a detachable poisoned point from six to ten inches in length, used for killing peccaries. The harpoon arrows and certain ones of the larger bamboo spear-headed arrows are made without feathers, but all the others are feathered. Great care is taken in tying on the feathers, each arrow maker having some characteristic method of wrapping or weaving the threads. Different colors of cotton thread are often used to form some interesting design. The hardwood foreshaft is inserted into the reed shaft which is compressed by using a cord a foot long with a stick tied at each end. One end is held with the foot between the toes and the other in the hand. The cord is wound once
around the shaft and pulled tight. The shaft is then rolled up and down the string and pressed firmly around the foreshaft. A waxed cotton cord, closely wound about the shaft, holds it in place. Wax is made from the pitch of the karamana tree (*Ceroxyylon andicola*) mixed with beeswax to make it more pliable and with powdered charcoal to make it black. It is very strong unless too much beeswax is used. It is stored in a bamboo joint an inch and a half in diameter and eight inches in length. The bamboo is cut away as the wax is used. It is valuable for many purposes: for cords in making bows and arrows, for covering blowguns and arrow cases, for repairing canoes and implements.

While many arrows may be used for different purposes, nearly all of them have particular uses. The harpoon with toggle head is used for very large fish. Large arrows with flat diamond-shaped bamboo points or longer rounded bamboo points are used for big game, such as deer, tapir and jaguar. The long barbed foreshaft is used for fish, monkeys or birds. The blunt heads are for birds only. Poisoned points are used primarily for peccaries. These points are about eight inches long and are carried in a special case containing the same curale poison as that used with the blowgun darts. The point fits loosely into the socket at the arrow, so that the arrow may drop to the ground after the point has been shot into the peccary. Thus the poisoned arrow remains in the wound, preventing free bleeding which would carry away the poison. The hunter uses the arrow again with another point. The case is made of a bamboo joint covered with a cap of tapir skin which renders it almost airtight. The poison will remain active indefinitely if kept moist in the joint. The ends of the arrows
are kept in the poison when not in use. The poison of the point, when exposed to the dry air, soon loses its strength.

In warfare the bamboo point is used. It is said to be more deadly than the poisoned points, because it not only contains poison but also because it makes a large ragged crescent-shaped wound which bleeds profusely. The poisoned arrows are not now used by the Wapisianas in warfare and probably never were so used. There is a tradition that in ancient times bamboo was the only point used in warfare.

Spears are made from purple heart or letterwood and usually have round handles with a square, tapering head a foot long. They are from six to ten feet in length and may be used for killing jaguars, tapirs, peccaries, or for holding their heads aside while stabbing them with a bamboo knife. Spears are used also for protecting themselves against vicious fish when poisoning pools. They are not used in warfare.

The most ingenious of all the weapons is the blowgun, but it is by no means the most useful; in truth, it is very little used. It cannot be used for big game or in warfare because the small arrow will not carry sufficient poison to make it effective. Its use is limited to small animals and birds. The monkey is very difficult to get, even with a gun, because when mortally wounded it will often find a secure place among the lianas or in the fork of a tree. When shot with a dart it remains motionless after it is hit and drops to the ground. Birds feed in quiet and fly away at the slightest disturbance. The dart is noiseless and gives the bird so slight a shock that it does not even fly away when hit. The hunter thus may secure a number before giving alarm. This weapon is also used to secure birds for pets. Very little poison is used and when the bird falls the arrow is at once removed and salt rubbed into
the wound as an antidote. It is said that the birds always recover after such treatment. The Wapisianas do not make blowguns now and probably never did. They obtain them ready made by barter direct from the Arecunas, who live near the source of supply, or through the Macusis. The inside reed used in their manufacture does not grow in the dry savannah region, but only near the headwaters of the Orinoco. The inside of the gun is the straight section between the nodes or the first joint of a rather small bamboo-like reed called aura (*Arundinaria Schomburgkii*). It is perfectly straight and exceedingly firm, even though from eight to twelve feet long and only a half inch in diameter. It must be dried and cured with great care to prevent warping. It is then fitted inside the stem of a palm called samura (*Ireartia setigera*) to add strength and to prevent its bending when in use. The gun may be left in this comparatively rough state or finished by covering it with closely wound split liana or bark held in place with pitch. This covering is heavier at the butt of the gun and thins out towards the point. The heavy end has a mouthpiece attached which is made from the black nut of the akiro palm (*Astrocaryon aculeatum*) or from a spool-shaped piece of wood. The so-called “sights” are made by fixing two agouti teeth (*Dasyprocta agouti*) with wax on the barrel one or two feet from the butt. They are not sights at all, but are used only to mark the top of the barrel. The long tube always has a weaker side, which will allow it to bend when held by one end in a horizontal position, as when shooting. If shot in that position the arrow would continue on the downward curve. When the tube is held with the weak side uppermost the gun is straight. The “sight” simply indicates which side to hold uppermost. To prevent warping or any change in this alignment the gun is never stood on end or laid
across a support, but is always suspended by a loop over the small end or in two loops in a horizontal position.

The darts used in the blowgun are made from the midrib of the cokerite palm (*Maximiliana regia*). They are about the size of knitting needles and ten inches long. One end is sharpened by drawing it between the saw-shaped teeth of the pirai (*Serrasalmus piraya*), a jaw of which is always tied to the quiver. The point is tipped with curale poison (*Strychnos toxifera*) and the other end is wrapped with silk cotton (*Eriodendron*) to fill the bore of the gun. A large number of the darts are carried in a quiver made of a joint of bamboo or wickerwork covered with wax with a cover of tapir skin. The quiver is carried on a string over the shoulder. In the bottom it contains curale poison, into which the points of the darts are thrust. There is attached to the quiver the jaw of the pirai for sharpening the arrows and a small basket for carrying the silk cotton. The blowgun is an unwieldy instrument and must be used with deliberation. The Indians use it with considerable accuracy in shooting game in the tops of tall trees. As they are noiseless, misses are not expensive, while hits in any part of the body are effective. It is not necessary for the dart to touch a vital part.

The poison and its curious properties are not fully understood by the outside world. Watterton and Schomburgk witnessed the manufacture of the poison by the Indians and both performed many experiments to determine the powerful effect of the poison. It is made by many tribes and with different ingredients, but all the formulae appear to contain the bark of a creeper (*Strychnos toxifera*) which no doubt is the most active principle. It apparently paralyzes the nerves of the voluntary muscles. A very small amount is sufficient to kill a large animal. Watterton killed a chicken in five minutes with
a dart, and a large ox with three hog arrows in twenty-five minutes. The curale plant grows abundantly in the Kanuku mountains and the Macusis who inhabit the region are experts in the manufacture of the poison, and from them the Wapisianas obtain their supply. The name is spelled "curale," "urari," "ourari" or "wourari," according to the ear of the recorder. Its occurrence in different regions is indicated by the names of rivers; as, Curaray, a branch of the Napo, in Peru, and Uraricuera, a branch of the Branco in Brazil.

**Travel.**

The Wapisianas are great travelers, both by land and by water. They are the greatest traders of all the tribes and make long journeys across the savannahs on foot or up and down the rivers in canoes. They are good walkers and runners, but have no races. On the trail they walk very fast, even with a heavy pack. In the savannah, where there is always a good trail, they will make three and a half miles an hour with a sixty-pound pack; over the rough, brushy forest trails nearly three miles. When traveling with men from other tribes the Wapisianas always get to camp first and are willing to make a longer day. However, all tribes like to go into camp early, particularly so when traveling on foot.

The Wapisianas are experts at following the trail, however blind it may be. Their perfect sense of location aids them also in keeping the trail. When hunting in the forest or the savannah they never forget the direction home or the way back to the trail. They do not mark their hunting trail nor attempt to follow it back as some forest Indians do, but go across country directly to the point they wish to reach across country. Near the house along some trails may be seen piles of stones, tufts of grass and
bunches of leaves, but these are not for the purpose of locating the trail, but are places of offerings to one spirit or another. At one such place we threw tufts of grass to the spirit of Wounded Knee so that we might not become lame during the journey. It is comparatively easy for most men to keep their course when traveling in a savannah country in the dry season, on account of the extended vision and the position of the sun, but in the forest when the sun is not shining one may very easily lose his bearing after chasing game in every direction for half a day. I was constantly surprised at the ability of our men to travel and hunt in strange forests. They might wander farther away than they thought, but they always knew the direction back to camp. After traveling for four months up the Essiquibo, across the head streams of the Trombetas, over the divide and down the Corentine they told us one day that we were directly east of their home and that it would require only five days to go there if there were a good trail through the forest. There was no trail and no one had ever been in the country before. From our calculations of latitude and longitude we found they were correct. When we asked how they kept track of all our wanderings by canoe and on foot through rain and shine, they said they did not keep record of anything, but that they just knew. When traveling by canoe along the winding rivers the average man loses all sense of direction, but these Indians, even in unknown rivers, always keep the points of the compass in mind.

**Canoes.**

The Wapisianas are the canoe makers for the whole region, not only for the other tribes, but also for the Brazilians all the way to the Amazon and for the English on the Essiquibo and
its branches. Their largest canoe and the one most desired by others is a peculiar kind of dugout with a plank added on each side. Today they use an axe and an adz instead of the stone and fire of former times. They fell a tree, preferably a cedar, which may be far from the river, hew off the outside sapwood and shape the log but do not point it as in making the ordinary dugout. Holes are now drilled a short distance apart all over the sides of the log to the depth of about an inch. The inside is then hewn out until the ends of these holes are reached, thus making a shell with an even thickness of an inch except the bottom, which is left a little heavier. The ends are not left intact as in an ordinary canoe, but have the appearance of a canoe with the ends cut off. It is now ready to be opened out into a broad flat canoe. In order to render the sides more pliable and to prevent splitting, a hot fire is made on the ground and the canoe inverted over it. When the wood is sufficiently heated it is removed from the fire, turned right side up and the sides are spread apart by means of great levers which are operated from both sides at the same time. Boards are firmly fixed across to secure the sides in place. The open ends allow the sides to spread to the desired width. This pressure, separating the sides near the middle of the canoe, lifts the ends above the water line. V-shaped planks are fitted into the gaps at bow and stern and the sides raised by the addition of a plank which is pinned to the sides and the end pieces. All the joints are calked or glued with karamana wax.

Pins dipped in the same wax are driven into the drill holes. This makes a very desirable large canoe which is much lighter and much steadier in the water than the common dugout. Smaller canoes are then made without a plank and with less flaring sides. (Fig. 7.)
The lightest canoes, "attamanmad," are made from the bark of the purple-heart tree (*Copaifera pubiflora*) or the tirikir (*Hymenaea courbaril*). They are made by all the tribes in the region and serve for light loads. They are suitable for rapid water, because they are so light they may be carried around the falls or over the rocks, but yet they are so heavy they will sink. This makes them a dangerous craft to handle. When not in use they are sunk to prevent sun cracking and warping. To make them, a tree may be felled or the bark taken off with the tree standing. Before the people obtained axes these canoes were, no doubt, always made by the latter method because of the difficulty in felling a tree. The great lianae run from tree to tree and so bind them together that it is often necessary to cut three or four trees to get one down, and then the bark may be broken when the tree falls. The canoe is made of one piece of bark. The tree selected is usually about two and a half feet in diameter. The bark is split along the tree in two lines the required length for the canoe and the ends cut through. Then with wedges the bark is pried from the log.
It is not possible to take off all the bark, because it will split at the back; hence, experience is necessary to determine how much pressure the bark will stand. It is desirable to take all the bark possible, as it determines the depth of the canoe. After the bark is removed the natural curve is resumed. The ends are dressed to points at the bottom from a distance of three feet. Grooves are cut through the coarse outer bark down the sides at these angles. The grooves do not extend across the bottom. A fire is then built in the ends, either inside the bark or on the ground and the bark inverted over it, to soften the inner bark. When hot enough to be pliable one man stands in the bark at the place where the grooves converge and another lifts up the pointed end, being careful to fold the soft bark so that the point of the bow will go outside the body of the canoe and the point of the stern on the inside. This lifts the points into the same plane as the tops of the sides and makes a watertight joint without any calking. To hold the points up in
proper position, light poles are lashed around at the edges of the sides and secured at the points. It is necessary to fasten stays across at the angles and in the middle to prevent the sides from approaching each other as they dry out. Stays are also fastened across the bottom to prevent it from folding up in the middle. A small block of wood may be used as a seat. It is necessary to make the seat low and to keep the load low because the bottom of the canoe is round and it will roll over with slight provocation. (Fig. 8.)

Paddles are made from the flat buttress roots of the paddle wood tree (*Aspidospermum excelsum*). The paddles are about five feet long, with a long narrow blade, two feet long by six or seven inches wide. The handle ends with a flat hold cut square across the width of the hand, with short projecting sides.

When paddling the large canoe, the bowman sets the stroke at about twenty per minute and very gradually works it up to forty or even to fifty, then with his paddle he throws water high into the air as a signal to change stroke. If going down stream or in quiet water, he may rest for two or three strokes and take a few long breaths, but if going up stream he at once takes up the slow stroke. Where there are rocks or rapids he often stands up in the bow and gives directions to the steersman. The crew at all times is under command of the steersman. He selects the camping places, sends some men hunting, and others fishing? When the food is cooked he divides the portions. When another village is reached, he goes first to the chief, followed by the bowman and the other men in order of position in the canoe. It is the bowman's duty to look after the security of the canoe. In the rapids when it is necessary to put out a line to track or to pull from rock to rock, he remains in the bow to push it off or holds fast if it becomes
necessary for him to get out. The man who paddles in front on the other side of the canoe carries the line ahead and later returns it to the canoe. When we were traveling with fifteen men for more than a month, all worked so harmoniously and the orders were so quietly given that it was hardly evident who was in command.

The large canoes are often fitted with a tolda or cover made by bending sticks into semicircles and securing them to the sides of the canoe. This framework is then covered with palm leaves. It is used to protect their baggage from the rain or the sun. It is built near the stern, leaving room only for the steersman behind. This arrangement allows all the paddlers to sit in the bow and also gives an advantage when passing over obstructions. If a log is encountered under the surface of the water, the paddlers get out and pull the canoe half way over, then they get in while the steersman gets out, the stern lifts up and the canoe slides over. For the bark canoe a lined double wickerwork mat with leaves is used for a waterproof covering to lay over their baggage. More often they have no permanent covering for the canoe and depend upon cutting leaves for temporary use.

Occupations.

There appears to be, on the whole, a fairly equal division of labor between the sexes. One reason whites often say that Indian women do all the work is because they do not regard the hunting and fishing the men do as labor, and because they see women carrying packs when men carry nothing but their bows and arrows. When one hunts for a living he works as hard as when he digs for it in the field. It is much easier to carry a pack on the trail than it is to chase through the forest after
game and keep up with the pack train. When visitors enter a village the work of the women is increased at once and all are busy, while the men for the time being entertain the guests. If the visitor were to start hunting before daybreak the next morning, follow the hunter all day and carry a deer or a peccary for miles through the forest without a trail, he would realize that the hunter had no easy job.

The men select the site and build the house, clear the land or at least do all the cutting. The women often help with the burning. When the ground is ready the men look after the cassava cuttings, often going to another village for them. The women assist in planting the cassava, corn and potatoes, and in doing what little is done in the way of cultivation, which consists only in keeping down the weeds. Their fields are often a long way from home and the whole family will go together to do the planting. They may go in the morning and return in the evening or camp for a time under a temporary shelter.

The men make their bows and arrows, traps and snares. They do the hunting, yet a man may take his wife along for company and to carry his game. They collect the materials and make the fish poisons. They make the dams and poison the water, but the women help to collect, dress and barbecue the fish and to carry them home. The men use the dogs in hunting, but the women care for them at other times. Men do all the trading, making long journeys to other tribes, but women often accompany them, particularly when they go on foot. Men make the canoes and do the harder part of the paddling. The man always paddles while his wife steers the canoe, or if they have children a small boy will steer. Besides assisting her husband as described, the woman always gathers the food from the fields, cooks it and serves it to her husband
and sons. When she pulls up a stalk of cassava she at once plants slips in its place. When the corn is ripe she carries it home in the husk and hangs it up in the house for future use. She carries the water from the distant stream and makes the drinks. She gathers the cotton, spins and weaves it into loin cloths and hammocks. Thus it will be seen that the division of labor is on natural lines and that every member of an Indian village has his own individual share to perform.

SOCIAL CULTURE.

DRESS AND ORNAMENTATION.

While the Indians wear very simple clothing, they are never seen perfectly naked after childhood. The men always wear a loin cloth and the women a short apron. The children until they are six or eight years of age wear nothing more than a necklace, or sometimes, in addition, a string around the waist. The cloth worn by the men is made of cotton and woven in a strip about five feet long and six or eight inches wide with long tassels left at the ends. It is passed between the legs and suspended before and behind over a tight-fitting belt. Ordinarily the ends hang loose and reach nearly to the knees, but when on the trail or at work the ends are tucked up. If they have laps for everyday wear, they are usually shorter and without tassels. The cloth is always colored with the red pulp of the annata (*Bix orellana*), a small plant cultivated by the Indians, who often color their bodies with the same dye mixed with haiwa gum (*Icica heptaphylla*). This custom probably led to using the same color for the cloth, because it rubs off the body very freely and in a short time would make the cloth the same color as the body. Today for ordinary wear they use red
cloth secured from the white trader. Many have learned to wear white man's clothing within the last few years, but they keep their loin cloths for festive occasions and for the seclusion of their own homes. When changing their cloths they are careful to retire to a secluded place, even when no women are present. The belts worn by the men are braided with a certain kind of liana. These cloths were originally made of the soft inner bark of the cakaralli tree (*Lecythis ollaria*).

The men sometimes wear sandals over the stony parts of the savannah. These are cut to fit the foot from the thick leafstock of the aeta palm (*Mauritia flexuosa*) or the hide of the tapir. The leafstock is better, because the pebbles are not felt through the thick sole, but it wears out in three or four days; however, it can be made in a few minutes from the ever-present palm. The sandal strings, made of the fiber of the same palm, pass between the great toe and the next one to it, over the instep through the sandal on either side and around the feet.

The dress of the women is even more simple than that of the men, consisting only of a short narrow apron secured by a string around the waist close above the hips. The size varies from six by eight inches to twelve by fifteen. They were formerly made of a simple fringe of cotton strings, or a fringe with seeds on the strings. Today they are ingeniously woven with various colored beads on the strings, forming beautiful interior designs with ornamented borders. Sometimes they have also a fringe of bright colored seeds or nuts which serve as ornaments and rattles which make a soft tinkling sound at every step. A special loom is used in making these aprons.

The hair is worn long by most of the men and women, but in different fashions. The men, after combing and oiling
their hair, wrap it in a long queue and draw it through a bamboo tube which is allowed to hang down the back. The length of the tube is determined somewhat by the length of the hair. The tube is always ornamented with beads, paint or strings. Sometimes men allow the hair to grow nearly to the shoulders and cut off the ends, but many today cut it quite short and wear a hat. The women allow their hair to hang loose about the shoulders and usually cut it across in front to keep it away from the face. When at work they sometimes tie it in a knot behind the head. At the first indication of puberty the girls cut their hair, then for a year they wear a head-band made of woven white cotton.

Body mutilations for ornament are rare. The longitudinal lines incised on the arms and legs of men are not intended to be ornamental, but have to do with successful hunting. The men also file their upper front teeth to a point, not for ornament particularly, but to prevent the food from lodging between them. There is no ceremony whatever in filing the teeth. Both men and women pierce the septum of the nose and wear a small silver disc suspended over the upper lip; pierce the lower lip half way to the bottom in front and wear a hardwood stick or several pins; they also pierce the lobe of the ear and wear a short stick from which beads are suspended. The women now wear earrings, while the men are giving up the custom of wearing ornaments. The women who chew the cassava bread or corn in making fermented drinks have lines tattooed about the mouth, one across the upper lip extending well over the cheeks, a corresponding one on the lower lip and others from the corners of the mouth to the cheek. The tattooing is done with a liquid made of calcined cassava chips and honey. The root is scraped, cut into thin chips and dried in the sun or on
the bread pan. In this form it is called "sapara" and is used in making drink. These chips are burned, pulverized and mixed with the honey of the wild bee. Fine lines are pricked about the mouth with thorns and the mixture rubbed in. The outer part of sugar cane or banana skins may be charred and used for the same purpose, but these are mixed with cane juice instead of honey. The tattooing may be in solid or dotted lines. (Fig. 9.)

The tongue also is tattooed, for this a sweet kind of honey is used called kamowab. The tongue is scraped along the sides and the mixture rubbed in. Sometimes instead of tattooing the tongue a special kind of ant is allowed to bite it on the end. This treatment of the tongue is supposed to make the drink sweeter.

A nut called waiurini, which resembles a peanut, is worn around the necks of small children to give them assistance when learning to speak. It is also calcined, mixed with the sweet honey and used to tattoo the tongue to give facility in speech. The mandibles of the mocking bird (Cassicus persicus) are calcined and used in the same way and are supposed to be better for one who wishes to speak other languages than his own. With this treatment one can learn to speak a new language within the period of one moon. These methods may be used for both children and adults. A small plant like ginger called kumi is used in the same way by the women to prevent fabulous animals from injuring or swallowing them.

Other ornaments are attached to the body without mutilation. Necklaces are worn by both sexes from childhood.
Formerly necklaces were made of seeds, teeth, shells and bones, but now beads are used more than anything else. The men wear the sacred upper mandible of the duck suspended about the neck. They like necklaces of peccary teeth because they indicate the number the hunter has killed. The men also wear beautiful crowns made of bright colored feathers. All wear woven cotton bands about the wrists, arms, ankles and legs. Bands worn by the women on the wrists and ankles are woven in place, the others are made adjustable. The bands on the upper arms are also made of strips of bark wound around and secured by tucking the tapering end under the band. Today the arm and leg bands are often made by winding a long string of small beads scores of times around the limb. Both sexes wear a kind of double bandoleer, formerly made of cotton strings, twisted cords of monkey hair or strings of seeds, but now usually of beads and seeds only. Numerous strands—fifty or more—are firmly wrapped together with strong cord for an inch or two, then the strands are equally divided and put over the shoulders so that the wrapped part remains in the middle of the back and the loops, crossing the breast, fall under the arms on either side. They are never worn as a single bandoleer.

The body is decorated on certain occasions with different colored paints. The whole body may be painted with the red pulp of the *Bixa orellana* or the reddish-yellow extract from the leaves of *Bigona chicka*, mixed with the scented wax of the *Icica heptaphylla*, to keep off the flies and insects. For their dances the women paint lines or designs on the face and body. Black lines are drawn around the arms, legs and body. Often black bands are drawn around the waist and small white clay discs set in the band, making diamond-shaped figures.
Lines of these discs are made around the mouth, on the cheeks and forehead. The black paint is made from the juice of the \( Genipa \) americana).

The men are gradually giving up all their ornaments and mutilations, but the women continue to load themselves with beads, although they seldom wear the nose ornament or the lip plug. Many of them are wearing skirts and some have waists also, but these are not so popular because the beads look much better over the bare skin. There are great individual differences in regard to dress and ornamentation in both sexes. Persons of fine physique and good looks take considerable care of their appearance, and appreciate the admiration of their fellows just as keenly as do the good-looking, well-dressed ones of our own race.

Music.

The Wapisianas and the other closely allied tribes are the poorest musicians of all the South American Indians I have met. What they have they have borrowed from the Macusis—both words and music. In all their own singing they use but one word, or rather two nonsense syllables, hai-ya, which they repeat in the rhythm of the dance with little variation of pitch, making most monotonous music. When they use the borrowed Macusi music one man sings a solo part, the words of which are to some extent improvised, and all men and women join in the chorus. For emphasizing the rhythm they use rattles attached to the legs and in their hands. A man often plays for his own amusement a flute made of a section of bamboo or of the leg bone of a jaguar. Both varieties of flutes are engraved with intricate designs. The bone flutes have the designs in color and are decorated with bands of woven cotton.
and thongs with attached feathers. For the dance a great trumpet is made by coiling together long strips of palm leaf. This gives a low, hoarse tone which emphasizes the accented beat in the dance.

**The Dance.**

There are few fixed times for dances, but some of them are very elaborate affairs and arranged for with great pains. The Wapisianas dance to celebrate the visit of friends or the successful conclusion of any undertaking. When a man has finished a difficult or important piece of work, he calls in a few neighbors and has an informal friendly dance. If a man is planning to make a field or to build a house and needs some assistance, he invites his friends to dance and drink the night before the work begins and again when it is completed. After the return from a successful hunt where the men go a distance into the forests for game, or after a fish poisoning when the dried fish are brought home, all the people interested gather for a feast and dance. At all dances the drink plays a very important part, but at the great dance the drink is so important that it gives the name to the dance, the parikara.

When food is plenty, particularly when a field of mandioca is ready to use in making bread and drink, the chief or headman sends out invitations to all the villages in the region to attend. Such an invitation includes all the people, not alone those of dancing age or inclination, and it means besides that they are expected to remain for a week or two or until all the food and drink are consumed. The long stay means that all domestic animals must be taken along, because no one would stay behind or return to feed them. The dogs are most in evidence, but they accompany the hunting parties
that go out every few days to get some fresh meat. The men come dressed to represent birds or animals with a head covering of leaves that completely hides the face. Their bodies are painted and practically covered with a dress made of palm leaves. A heavy skirt with leaves fastened to a belt and hanging loose reaches below the knees while a cape of the same material covers the shoulders. The headdress is a hat made of the same palm leaves which stand up two or three feet high. Each man carries a long trumpet. The men come in one party and the women in another. The women have their bodies painted, but wear no head coverings. Upon arrival they go at once into the house.

The custom used by the men in approaching the house is difficult to understand. They seem to make an attack upon the house. Two good strong men have been stationed at the entrance to defend it. The visiting men lay off their leafy clothing as they approach and each in turn rushes the defenders in an attempt to enter the doorway. The defenders grapple with him for a time and attempt to lift him from the ground. When they succeed he takes his seat by the side of the house and another rushes. After all have thus been conquered they bathe and dress for the dance.

Games.

The disposition of the people does not encourage contests or games requiring skill or endurance. They do not like to put another person at a disadvantage. The children play at shuttlecock, but do not make a game of it. They put feathers in a piece of corncob and throw it into the air to see it turn over and fall right side up. The boys never have wrestling, running or swimming matches. They play with their bows and
arrows, but never shoot at a target. They hunt mice or grasshoppers or anything to kill. The skill displayed is not in marksmanship, but in being able to get near to the game. Any modern archer could defeat an Indian archer in shooting at a target, but not in getting game. Boys and girls never play together.

**Political Organization.**

In former times, no doubt, there was a head chief over each of the tribes, but today there is no necessity for united tribal action and there is no chief of any one of the tribes. Each village has its head man who directs the affairs of his immediate community. He takes charge of village dances, fish poisonings, and hunting parties. His advice is sought in all affairs or undertakings of any importance. He takes the lead in forming public opinion, which is the real force that controls the acts of individuals and the policies of the community. There is no definite punishment for any crime; in fact, it can hardly be said that crimes are ever committed. Theft, murder and infidelity are practically unknown among them.

**Medicine Men.**

All sickness, disease and death are due to the evil influence of a medicine man of another tribe in another village. Men ought to live forever and would do so but for the evil spirits under the influence of hostile medicine men. Hence it is necessary to have one medicine man to counteract the evil done by another. He is called piaiman by the coast people, but marinau by the Wapisianas. He does not inherit his position or powers, but receives a visit from the good spirit which tells him that he is to be a marinau and what he must do to obtain strength. He drinks tobacco juice until he is overcome and sees
visions; then he receives strength, but must spend some time with another marinau to learn the incantations and practices of his art. As marinaus administer no medicines and have no surgery, a long period of study and training is unnecessary. The greater part of their practice consists in diagnoses and in taking note of symptoms. When a man appears with any infirmity the marinau drinks tobacco, sees visions and then tells the patient what is wrong. He then passes his hands over the ailing parts and says that he has removed a stick or bone or fragment of stone or something and that the patient will recover. The marinau has power to separate his spirit from his body and can send it away at will and to any distance to accomplish his purposes. Every pain is due to some foreign body which his spirit places in the flesh of his victim. These bodies may be worms, as sometimes seen in wounds or in the body after death, or they may be fragments of wood or bone. His spirit may be sent in the form of an animal, bird or serpent. It is never necessary for him to go in person. All believe in his power because they know their spirits leave their bodies when they sleep. Their only protection is in the power of their own marinau, who removes the causes of the pain or disease. A wasting disease, as tuberculosis, is usually attributed to a poison, for which they have no cure. Each village has its own marinau who is summoned for all kinds of ailments. He is both medicine man and priest, caring for the souls as well as the bodies of his people.

Some examples will suffice to show his methods and results. After a long journey up river Mr. Melville had an attack of fever. One of his best friends was a marinau who, hearing of his sickness, came to see him. He drank tobacco, saw a vision and told Melville that the sun had been too hot on his head after
he had lost his hat on the river. It is said that he did not know the hat had been lost, but no doubt there was the evidence of sunburn. He took some water in a bowl, blew over it and then, tapping the floor with some leaves, repeated incantations for recovery. After he had finished he told Melville that he had extracted a small arrow from his neck and that he would soon recover. A good diagnosis.

At another time when Mr. Melville was returning from Georgetown with his crew in his small boat, the brother of the captain became very sick. They came to the home of an old Carib, where they thought they would stop for a time to give the sick man a rest and an opportunity to recover, but the Carib would not allow them to come ashore. They continued for several days to Melville's ranch, the sick man growing worse all the way. They decided to take him on up river to his people, but he died the second day out. When the grave was prepared and they were about to deposit the body, his brother said, "Stop, that Carib killed my brother and I am going to kill him!" Taking two rattlesnake fangs, he struck one deep into each breast of the corpse, saying, "As the Carib pierced my brother's heart, may this pierce his heart and kill him." Then, taking an eagle's claw he dug it deep into the groin, saying, "As this grips my brother's groin, may it grip the Carib's groin and kill him." Last he took two gun caps and, placing one in each ear, said, "As this goes into my brother's ear, may it explode in the Carib's ear and kill him. Now the Carib is dead." The body with the objects in place was then buried. Two months later, when going down the river, before they came in sight of the Carib's place, Melville told the boys to get some farina ready for the Carib and to stop at the landing. The captain said, "The Carib is dead and the place destroyed by
Melville asked how he knew and he said, "Were you not present at the burial of my brother when I killed the Carib?" No one had heard of the Carib's death. They found the place destroyed and the remains of the Carib's body. This occurred in 1868 at the mouth of the Rupununi. The Carib was the last of his tribe and this was the farthest point south in British Guiana reached by his tribe.

Because of this power of vision and ability to kill or injure at a great distance, the marinau has a very great influence for good or evil in the community. The people feel that they must obey, and an evil-minded marinau may take advantage of them. He always receives pay for his services and may extort anything he desires. He does no work and makes nothing for trade with the whites or other tribes, but he gets what he wishes in fees from the people. His power is so great that he has only to ask for what he wishes. Some time before the English took the tribe under their care, the marinaus became so oppressive the people killed a number of the worst of them and thus were able to keep the others somewhat respectable through fear. The government stopped the killing and the people soon complained, saying, "Now we have no protection. If you had not interfered we should have killed him, but you allow him to go on doing evil. You must kill him or take him away."

An example of the extreme things a marinau will do may be of interest. A woman gave birth to twins and neither she nor the children were strong. The husband sent for a marinau, who told him that the children were not his, that the woman had conceived from an evil serpent and this was why she and the children were sick. He said the spirit was still in the woman and would kill her and take possession of someone else. There was only one means of escape and that was to burn his
wife alive. He told the husband that he must do it himself and at once. The man refused to do it. The woman grew worse. The marinau sent a messenger who told the man if he did not burn her he would be held responsible for all the evil results. The sister of the sick woman, who would in any case be the second wife, was so afraid of the marinau that she carried the sick woman into the forest, collected a large heap of firewood and laid her on top of it. Still the husband refused to set fire to the heap. Then the marinau sent the messenger again and told him he must set the fire and the poor man did so. When Melville heard of the outrage he arrested the marinau, took him with witnesses to Georgetown, found him guilty of murder and sentenced him to ten years' confinement. After six years he died. This trial and punishment for the crime have had a good influence upon the whole tribe.

The marinau has no power over nor influence with the "kenaima," or evil spirits in the form of little men who may attack a man when he is alone and destroy him. He cannot see them in his visions. On this account the people are very much afraid of them. They are really human and must eat and drink like men, but they can go places and do things that men cannot accomplish. The sense of constant danger that these Indians feel cannot be appreciated. A man may imagine that a kenaima is following him to kill or maim him and will not go out alone. The kenaima never attacks two people, even if one is a child, because he must not be seen. He never draws the blood of his victims, but breaks their bones or injects something into the bowels through the anus, causing sickness.

The marinau in his incantations always mentions some animal. As in fever, the monkey's name is always used in the
prayer that the person may be like the monkey who never has fever and goes about with impunity. In treating snake bite he passes his hands down over the patient's body from head to foot, driving the poison out at the toes. In the beginning the god Tuminkar called the people together and told them how to cure all kinds of ills; the only reason that they suffer now is because they have forgotten what he told them. He taught them how to make fields and build their houses in which they should be safe from everything except snakes. He told them how to protect themselves from the snakes and the remedy for their bite, but they have forgotten it all. He took lianas, cut off the ends, threw them on the ground and they became snakes. He said, "It is just as easy to make a poisonous snake that will bite and kill you; but I can make a cure for its bite. I have made pleasant things like the pineapple, but I have made painful things also like the snake. The pleasant things will cure the painful ones. Whenever you are bitten call on me and remember that I made the snake and the sweet things also. If you forget, you will suffer."

The people apply some remedies themselves. For severe headache they thrust the spine of the sting-ray through a fold of skin on the temple, producing profuse bleeding. For bleeding wounds they apply the juice of the manioca, which serves as an astringent. The sting-ray is very common in the Takutu and lower Essiquibo and the feet of the Indians are often wounded by it when hauling their canoes in shallow water. The mucus left in the wound is very poisonous, causing great pain which may continue for three months. The flesh of the whole top of the foot putrefies and falls off, leaving an ugly scar and a lame foot. The Indians have learned that heat applied at once may
effect a cure, so they build a fire and hold the wound in it. They often put gunpowder in the wound and set fire to it. They sometimes have rheumatism and scarify the legs, causing them to bleed freely as a cure. Another cure for rheumatism, or any severe pain, is the application of live ants which sting the part. About fifty ants are secured by the head in a braided palm leaf frame called a weikobar. The braids are about a half inch wide and at the intersection the heads are pushed through. The sting is very painful. It may be applied also for pain in the stomach after drinking bouts. A little prayer to some animal is always muttered when applying the ants. Melville had them applied once. He had been riding for a long time and an Indian, thinking that his arm must be tired and lame from holding the rein so long, suggested that the weikobar would make it well. Melville said he didn’t want it, but when the Indian said he was afraid, he allowed it to be done. The pain was severe and caused the arm to swell considerably. The weikobar is used also at certain dances to test the courage of young men.

Marriage.

The Wapisianas are exogamic and polygamous in their marriage relations. Inheritance is in the male line and the woman goes to live with her husband in his father’s village. By custom a man must marry his cousin. Being exogamous and marrying cousins, a man must marry either one of his father’s sister’s daughters or one of his mother’s brother’s daughters. A man may have his choice of several cousins near his own age or, if he happens to be the youngest son of the youngest daughter, he may have little choice and that between girls.
much older than himself. Where there is opportunity for selection the boy is free and makes his choice without suggestion from his parents. If, however, there is a cousin near his own age she is often spoken of as his wife even while both are small. Marriage takes place very soon after the girl reaches puberty. There is no ceremony whatever and no formal announcement of either engagement or marriage. The first evidence of marriage is given when a woman goes with a man and follows his trail. They are never seen together without companions before they are married. They decide the matter themselves without consultation with anyone. The boy does not even ask the consent of the girl’s father, but custom requires him to work for his father-in-law for a time after he is married or to give him an equivalent. Marriage usually takes place at the time of planting at the end of the rainy season. It is generally understood between the couple and the public that they are to be married. The boy selects his own time without consultation and makes a clearing which is evidence that he intends to take a wife at once. He then goes to his cousin’s hammock at night and the next day she goes with him on the trail. Any service rendered her husband is acknowledgment that she is his wife. Going to a girl’s hammock is considered by her as the consummation of marriage and is so regarded and insisted upon by the public. The sexes are kept apart from childhood; boys and girls never play together; young men and women are never alone in each other’s company before marriage; cohabitation is regarded as marriage, hence their social relations are perfect and illegitimacy is unknown among them.

Men are allowed to have two wives and in truth most of them do, thanks to the curious fact that there are many more
women than men in the tribe. When the first child is born the wife tells her husband that he should take another wife because there is so much work to be done—the field must be cultivated, cotton spun, hammocks and clothing made. He must take another cousin and his wife may advise him which to take, her younger sister or her cousin, saying that they would get on well together. The first wife is the master of the household and usually does less of the outdoor work. She assumes the care of both sets of children and governs the household so successfully that they grow up as one family. The boys always eat, hunt and work with their father, while the girls and their mothers eat and work together. Each mother has her separate fireplace and cooking utensils and each furnishes a part of the food for her husband and boys. The women take the food first to the men at the end of the house near the men's door, afterwards taking what is left to their own end of the house, where they and the girls and dogs eat together. A man and one wife may eat together, but never do so if another person is present.

The number of cousins in the two groups may not be equal in any one generation and in such case second cousins are allowed to marry. If, however, there are not enough relatives to go around, they sometimes marry outside.

It is remarkable that there is so little evidence of jealousy between the wives of the same husband, or rather, that the husband is so successful in the management of his household that there is no cause for jealousy. In the twenty-five years that Mr. Melville has been intimately acquainted with the tribe he had heard of two cases of women committing suicide by hanging because of the husband's favoritism for the other wife; both tragedies occurred in recent years. In one case the woman killed her three children also by the same means.
Divorce.

There is no separation ceremony, but husband or wife may desert the other at will without fear of punishment. But separations seldom occur; for the same reason that there are few family troubles of any kind. That is, the great regard for public opinion. The most intimate relations are very freely discussed in public and everyone desires favorable consideration.

Childbirth.

Near the time for delivery a pregnant woman must remain at home and confine herself to a certain fixed diet. She must not walk in the hot sun nor eat strong food. They understand the physiological facts about conception and know the period of gestation is nine moons, but do not keep individual records. When the woman realizes that her period has nearly run she sends for her mother, aunt or married sister, who acts as midwife. For the delivery an old hammock is cut lengthwise in the middle; she sits astride, leans forward and pulls on the sides of the hammock. The midwife receives the child underneath the hammock. Together they cut the umbilical cord with a bamboo knife, having first fastened a split reed of an arrow-shaft over the cord. The mother then bathes herself and the baby and the assistant carries the placenta away and buries it. The mother remains in the house for a month, but assists with the work. It seldom happens that twins are born, but they are considered a good omen and the parents are very proud of them. Children nurse for three or four years or until near the time for the next child. Melville told of a boy smoking a cigarette and nursing between puffs. The child is kept in a hammock until it is able to sit up, when it is placed on a mat on
the floor. It is carried about the house astride the mother's hip and on the trail in a broad band of the bark or woven cotton used as a bandoleer. The child sits in the loop in front of the mother's left arm with his legs together against her body. In this position he cannot fall out and it leaves her hands free for work and her back for the pack basket which is carried by a tumpline of bark from the forehead. Children are fondled by their parents and treated with great care and kindness, but never kissed. They are never spoiled and seldom cry except on account of severe injury.

The daughter of an old man living on the Rupununi, near Dada Nawa, was not quite sane. She was not married, but gave birth to a child. The girl's father and mother killed it by strangulation because it had no father. She could give no account of its origin and attributed it to a serpent. Mr. Melville, who is a government officer, took the man to task for killing the child, saying that there was a father for it somewhere and that a child could not be born without a human father. The old Indian had one time been down the river to the mission station and had heard the story of the immaculate conception. So he replied by asking that childish question, "Who was the father of Jesus?" The man received no punishment, but was warned not to allow it to occur again.

Couvade.

When a child is born the father takes to his hammock and keeps it for a month. He must not go out in the hot sun or do any manual labor whatsoever. He must not eat any strong or solid food. His wife and other women bring him only the most delicate foods. They think there is some mysterious physical relation existing between father and child
and that it would harm the child just as much for the father to eat coarse foods as for the child to eat them itself. He must not kill any vicious animal or poisonous snake for a period of two years.

**Terms of Relationship and Names.**

The name for wife is dideru and for husband dideri, but they never call each other by these terms. Others use them in speaking about the husband or wife. They call each other cousin. A small girl has a name when spoken of, but she is called little sister until the approach of puberty, when she is called Kadinebe, or little breasts. After marriage she is called the wife of so-and-so until she becomes Kakarudaru, or mother of the unborn, and retains this name until the birth of the child. It is named at once and she takes its name as "mother of John or Mary," as the case may be. The child in speaking of his father and mother would use dari and daru, the proper names for everybody to use, but in speaking to them he would use papa and mama. One would not ask a boy concerning his papa but his dari. A man calls the husband of his wife's sister his brother-in-law and calls the husband of any one of the cousins he himself was eligible to marry by the same name. The man who marries one of his forbidden cousins or his sister he calls brother. In other words, the cousins he cannot marry are considered his sisters. He calls each of the fathers of the girls he is eligible to marry father-in-law long before he is married, and they in turn call him son-in-law. His other uncles he calls by the proper name for uncle, or darikaru. All old men are called uncle. The grandfather is called by that term, but the great-grandfather is called the brother of his great-
grandchildren. No one ever pronounces his own name, but another may do it for him; hence, one always asks the name from another. I was taking physical measurements of a man and asked another his name; he said, "He is my brother-in-law's son-in-law." He must not be called by his name, but some kind of circumlocution must be used. For example, one of our men bore the name "red deer," but was addressed as "little red thing with two horns that runs through the forest." We spoke of him even in his presence as red deer, but not to him. Persons are named on account of some physical peculiarity or habit of thought or action. There is no ceremony at the naming of the child. A nickname may be given at any time, and in that case he may be addressed by it.

MOURNING.

There are no visible signs of mourning worn when a husband or wife dies, but for a month after the death of either when they meet relatives or intimate friends they speak of the dead in endearing terms, weep and wail for about fifteen minutes and then break off suddenly and begin laughing even before the tears are dry. The widow remains in the village with her daughters and marries again very soon, or she may go back alone to her own people. Her sons go to their father's eldest brother, or, if he had no brother, then they would go to a near male relative on the father's side. When a wife dies the daughters go to their mother's eldest sister. The children thus remain in their father's village. Children are not a handicap to remarriage, but rather an asset, because they are good workers, even when small girls, and pay their way. The marriage service of their future husbands is also to be considered.
DEATH.

Man never dies a natural death and would live forever if it were not for the kenaima, or evil spirits which kill him. When a man dies he is buried in the floor of his house. A shallow grave is dug just underneath his hammock and the body lowered into it by loosening the hammock ropes. No one touches the corpse. All of his possessions are collected in the house over the grave and burned together with the house. The family goes to live in another place a short distance away, but continues to use the same field, which is usually some distance from the house. A woman may be buried in the floor and the family continue to live in the house, or she may be buried as children and unimportant people are, in an unmarked solitary grave a long distance away. Her hammock and personal ornaments are buried with her, but her cooking utensils are left for the family. There is a tradition that they formerly cremated some of their dead.

COSMOGONY.

These tribes make no attempt to account for the origin of the universe. They start with a world ready-made, just as it is today, a great flat plain which has an end that might be reached, but no one has been there to see it. Men, animals and all things that move about on the earth were created, but the sun, moon, earth, air, water and wind have always been as they are. Neither the sun nor the moon is adored. The sun goes to bed at night and gets up in the morning, but the phases of the moon are not understood. There is no story of the eclipse of the sun, but the eclipse of the moon is called kaimani-kan, or the dying of the moon. It takes place because the people have not been doing their duty; have been negligent or
When they notice the eclipse coming on they all go to work at once; the men chop trees in the clearing or go hunting, while the women spin and make bread. After the shadow has passed over they say, "It is all right now, it is gone." They tell each other the following day what work they did. They cannot tell what the eclipse is or what causes it.

**Divisions of Time.**

The position of the sun in the sky is used to mark short periods of time, while longer periods are counted by moons and seasons. The Indians have no way of keeping records over a long period, neither do they have any traditions relating to historic events. An old man is very hazy about events of childhood.

When Aries, tadaii, the capybara, appears it is time to plant corn so that it may get a good start before the heavy rains come, when it might be beaten down into the ground and killed. This growing time is called wamadun, the time of the locusts, whose calls are constantly heard at this season. The mornings are cloudy and there are a few showers. This is the time to hunt the capybara, because "when tadaii is present our bows and arrows are good, but when he disappears they are not good." That is, at this time the capybara goes out from the streams to eat grass, but when the waters are high he cannot be found.

With the coming of Pleiades, winan, the turtle's nest and father of the rains, the June wet season begins. This is called windun, or the time of the rains. The next season, diralidun, is the time when the floods are the highest and all the lowlands are covered with water. The animals retreat to the high lands and are hunted there. This is the time also of Taurus, kuduia-
wei, the jaw of the tapir killed and eaten by Orion, Baukur. At the end of one rainy season Baukur had a great battle with Tuminkar and killed his son. Tuminkar in anger hurled him into the sky, where he may be seen disappearing with the ceasing of the rains.

The beginning of the long dry season is announced by the first appearance of wakarasab, the egret, a constellation which includes Gemini, Cancer and Leo. He is flying after Baukur with outspread wings. This is the time of high winds, lightning and thunder. The noise of the winds is like that made by the wings of the egret. The rains are past and the mornings are roseate.

When the head of Scorpio, kwarar, the anaconda, appears it foretells the coming of the December rains. This is called O·idun the time of O·i, Antares. This red star is the red macaw which kwarar has swallowed. O·itęppeting is the disappearance of O·i and the end of the wet season. The Southern Cross is powis, the Curassow (*Crax alector*), and powisdun, the time to hunt the powis. The male crows just before the break of day and the hunter must start at once to find him at his roosting place. Alpha and Beta Centauri are a man and his wife going to hunt the powis.

The Milky Way, mawakumawea, which is the name of the Amazon also is the river of the dead. They cannot tell why itis so called, as the stars are not thought of as spirits of the dead. Altair, mananba, is a man out in the great river—the Milky Way—who cannot swim, while Beta and Gamma, Aquila are his two friends, who are helping him across to the other shore. Deneb is the large red-breasted kingfisher seleli (*Alcedo torquata*) flying along the banks of the river.
In north Brazil there is a superstition among the whites that the anaconda has something to do with the coming of the rains, and the December-January rains are called the boia-assu (*Lingua Geral*) or big anaconda. The relation between the name and Scorpio, and the relation of the rains with his ascendancy have apparently been forgotten.

**Zodiac.**

1. Aries, the ram: Tadaii, the capybara.
2. Taurus, the bull: Kuduiawei, the tapir's jaw.
   Pleiades, the sisters: Winau, the turtle's nest.
   Orion, the warrior: Baukur, the warrior.
3. Gemini, the twins: Wakarasab, the egret, flying after Baukur with wings outspread.
4. Cancer, the crab: Antares, the scorpion's heart: O- i, a red macaw the anaconda has swallowed.
5. Leo, the lion: Alphacrurus, the wild men: Man and wife hunting the powis.
6. Virgo, the virgin: Spica, the spike of barley: Marikmanka, the corn-planter.
   Crux, the cross: Powis, the curassow.
7. Libra, the balance: Alpha and Beta Centaurus, the wild men: Man and wife hunting the powis.
8. Scorpio, the scorpion: Kwarar, the anaconda.
   Antares, the scorpion's heart: O- i, a red macaw the anaconda has swallowed.
9. Sagittarius, the archer: Aquila, the eagle.
   Alpha, Altair: Manauba, the man who can't swim.
   Beta and Gamma, Aquila: Manauba's friends helping him across.
10. Capricornus, the capricorn: Alpha Cygnus, the swan: Seleli, the kingfisher.
11. Aquarius, the water bearer.
   Pegasus, the horse: Dipeli, the barbecue.
12. Pisces, the fishes.

The coincidence between the ancient and the Wapisiana interpretation of the principal groups of conspicuous stars visible from the region of the equator is not to be wondered at. Each observer saw in the heavens the animals, birds, serpents and plants familiar to him in his own country and each saw them from an open plain where there was an extended view. We find the ram and the capybara; the bull's head and the tapir's jaw; the group of sisters and the group of eggs; the warrior and the warrior; the virgin with spike of barley and the virgin planting corn; the wild men and the hunters; the scorpion and the serpent; the red heart of the scorpion and the red macaw in the serpent; the swan and the kingfisher; the four feet of the horse and the four feet of the barbecue. As I was not in the country throughout the year, I was unable to get a complete list of their constellations, but this makes a very good basis for further study. Much of this information was obtained while making astronomical observations at night with a sextant and artificial horizon. As the stars are so important in regulating their seasons, they could appreciate my interest in them. When traveling along the river it was convenient for me to arrange a place for observations before dark because it was often necessary to clear away the trees obstructing the view of desired stars. In order to do the least cutting possible I used a compass to determine the exact directions. The Indians traveling with us were very much interested in the instrument, but had little use for it because their sense of orientation was so highly developed. We carried a good pair of binoculars, which they appreciated more than anything else we had. They would sit by the hour
looking at the stars and particularly at the moon in its earlier and later phases. They could not understand why I did not take observations of the moon; it was difficult to explain to them that the stars were far away and that the moon was near and its path variable, rendering calculations more difficult.

**Religion.**

The religious conceptions of the Wapisianas are very primitive and undeveloped. They have no idea of a great spirit nor of a god—the creator and ruler of all—who has always been a spirit. They are acquainted with spirits which they call durimas; but these are disembodied spirits which have left their natural bodies at death. They know, from dream experiences and from the practice of the medicine man who is able to send his spirit away, that these spirits inhabit the body during life. The loss of consciousness from shock, fainting or fright is explained also by the temporary absence of the spirit. The spirit is not thought of as having existed before the body to which it belongs nor to have more than continued existence. It is not everlasting, but continues as long as the memory of the individual endures or as long as the traditions of noted persons are recounted.

The creator is not an all-powerful spirit with supernatural powers, but a superman who lived on the earth before the creation of men and animals and who continued to live as a man with men for a long time thereafter. He went hunting with his brother, who was caught by a monster over whom he had no control. He kept dogs for hunting purposes and used the blowgun and poisoned arrows to shoot birds and monkeys. He had no definite power over animals or inanimate objects. He had no spiritual power and is not now thought of as a spirit.
He does not possess any of the attributes of a god. He is one who lived on the earth a long time ago, who went away and is now living in the sky, where he will continue to live, not as a spirit but in the body. It is not a place for departed spirits. They have no place to go, but remain about the old home for a time. When a man dies, his body is buried in the house and the family moves away to avoid being molested by the spirit which continues about the place.

There is no other life or existence for the body or the spirit; hence, there can be no rewards nor punishments for good or evil deeds done in the body. Whatever religion they may be said to practice has no reference to moral teaching. All the good that comes to a man is through his own efforts and only evil is sent upon him. Hence it is that the medicine man is employed to discover the source of evil.

Tuminkar is indifferent and inactive, hence no offerings, prayers or supplications are addressed to him by the common people, nor any attempt to merit his good will. The medicine man, however, calls upon him in his incantations to drive away sickness and the rain cloud.

The Soul.

Every man has something in him they call a durima, which leaves the body at death and continues to live nearby, but there is no one place where durimas go or remain. The people have some fear of the return of the durima. A mother’s durima, for instance, might return and take away her children. No offerings are made to it and no methods used to keep it away. If

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1 Among the Mapidians there is the belief that the soul, the size of a new-born babe, at death goes to the sky and remains there with Tuminkar. The dead retain their human faculties. For example: the chief said that when he got up above, he would watch for us and when he saw us coming he would tell Tuminkar how good we had been to him.
one dreams of a dead man it is because his durima is near. Dreams are spoken of as real experiences, but they distinguish between them and their waking experiences. As dreams are always due to the presence of another durima or the absence of one's own, they are regarded as foreboders of evil to the individual, his spirit or his family. They always relate their dreams the first thing in the morning. If a man does not sleep well, he says his spirit was out walking or away, but if he slept well he says he did not know he had a spirit. There is no idea of a future existence: no conception of rewards for the good nor punishments for the evil. Death ends all and is to be avoided on that account.

TUMINKARDAN.

A long time ago there lived on the earth a great giant named Baukur who went about killing and injuring people until finally Tuminkar remonstrated with him. As a result war was declared and waged for a long time with fearful loss. One of Baukur's arrows struck and killed the son of Tuminkar, which made Tuminkar so angry that he drove Baukur away from the earth and bound him fast in the sky so he can never return. He can be seen today, the constellation Orion, and he continues to shoot his arrows from the sky in the form of meteors. Tuminkar fought with thunder and lightning as his weapons. After Tuminkar's son was killed his body was first buried under the rock Maridiku, where it remained only a few days and then came to life again. The people were very sad and followed him weeping as he went around behind Mount Karawain, where Tuminkar in vexation stamped upon the great flat rock tcakni which immediately opend. Then Tuminkar laid the body of his son at the bottom of the cleft and the rock closed
again over the body. The son had no name, but was called Tuminkardan—the son of Tuminkar.

After the death of his son, Tuminkar left the earth and went to live above. Before leaving he told the people that when the rock had worn away his son would come forth and be their leader and teacher. The rock is nearly gone and they are continually expecting him. In the beginning Tuminkar told them everything: how to live, how to make and do all things, but they have forgotten much of his teaching. When Tuminkardan returns to live among them they will learn everything anew.

At present there is no way of getting wisdom. There is no communion with Tuminkar, who is still living above, knows their wants and will do them good; but they do not call upon him for assistance except in case of sickness, when the medicine man makes use of certain incantations. The common people never address him in any fashion. Their ignorance and helplessness must continue until the coming of the redeemer, who will live among them and teach them the way of life.

**Mythology.**

The Wapisianas have no tradition of the creation of the world, but start with a world ready made composed of land and water, air and sky as they are at present. There were two deities, called Tuminkar and Duid, who were brothers living on the earth. The elder brother, Tuminkar, was the benevolent creator who made and taught the people all things while he was yet on the earth. The younger brother was the companion and assistant of the creator. Men and women were created before

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1 The rock is of laminated sandstone about a hundred feet square and fifty feet high.
animals were made, but they do not know of what man was made nor which was made first.

THE ANIMALS.

The animals were made of clay in the desired form and size and then painted. After this the animal was allowed to select for himself where he should live, what his food should be and what call or song he should have. The people stood by watching the process with eager interest. The first animal was the jaguar, bidikur. After he was completed and his spots had all been put on, Tuminkar asked him where he would live, what he would eat and what sound he should make. He looked about and seeing nothing but trees and people, said, "There does not seem to be much in the trees to live on; I think I should prefer to live on the ground, roar and frighten the people and eat them." He was allowed his choice. The second animal was the monkey, paut. When he was ready and his long tail completed, Tuminkar put the same questions to him that he had put to the jaguar. He looked about and saw the people and how they were frightened at the jaguar, who was growling fiercely, and said, "I do not like the looks of that spotted fellow on the ground, I think I should rather live in the trees, whistle and eat nuts." He, too, was allowed his choice. The third animal was the tapir, kudui. While Tuminkar was making him, the monkey climbed down on a low branch to watch the operation and became very anxious about it when he saw what a large animal was being constructed. He said to himself, "Now that fellow ought to live on the ground, but I can see very well that he will not want to do so because there will not be enough for both him and the jaguar to eat; I am afraid he will want to come up here and it will not do, for he is
so big he would break the trees down and it would be dangerous for both of us.” So he climbed down very near to the tapir and when Tuminkar asked him about where he would live, the monkey whispered in his ear, “Don’t say anything. You cannot come up here and there will not be enough on the ground for you to eat, so don’t say anything at all.” When the tapir did not answer, Tuminkar repeated the questions and the monkey whispered again, “Do not answer.” Then Tuminkar said to the tapir, “You are such an awfully stupid fellow you have no use for a voice. Go away and secure your living wherever you can and eat whatever you can get.” Hence he has no call, and though he lives on the ground, he eats the leaves of the trees which he pulls down with his long nose.

**The Owl.**

After Tuminkar had made the screech owl (megascops) he took him up, opened his mandibles and looked down his throat, which resembles the female genitalia, and said, “You have no voice for a singer and you are so ugly you must go away and hide yourself in some dark place during the day and come out only at night.” He obeyed. One day while he was hiding under some leaves near the river bank, a woman came to micturate. Looking up he saw her, and then screeching with laughter he flew away, saying, “At last I have seen something uglier than myself.”

**The Tree of Life.**

After Tuminkar had made men it was the duty of Duid to provide food for them, which he did in abundance. Every day he brought fresh food in great variety and profusion and gave it freely to the people, who were grateful and rendered
him thanks for his goodness. Having nothing to do, the people amused themselves by watching the animals going out every morning in the same direction and returning well-fed in the evening. So they said among themselves, “We have nothing to do; let us go along with the animals and see where they go and what they do.” After they had followed for a long distance they came to a great tree bearing all kinds of fruits and vegetables. The ground was covered and there was plenty for all the animals. They said among themselves, “This is where Duid gets food for us every day; let us come for it ourselves, we have nothing else to do, then we shall not have to thank him for it. We will get just what we want and just when we want it.” They all agreed to it and went to Duid and told him that he need not bring them food any more, that they knew where he got it and that they would go for it themselves. Duid was very angry and said, “Very well, it shall be as you wish, henceforth you will have to work to obtain food to eat. Tomorrow the tree will be cut down, and it will die, and there will be no more food for you to gather. However, I tell you this; if you will break off a branch of each kind of fruit or vegetable you like, plant it in the ground, water, cultivate and protect it, it will grow and bear its own fruit in its season and each after its kind. Then you may plant the seeds that are in the fruit and they will grow again and produce, each after its kind. Thus you may continue to eat the fruit of the tree, but you will be required to work very hard for it.” The day following the tree was cut down as Duid had said. The people selected a certain number of fruits and vegetables and planted them, but it was so much labor and trouble to care for them, that they saved only a few of the great number. They did not like to work so hard. They experimented with the ones they
had saved and kept only the ones they liked best. Consequently there are today not many kinds of edible plants in the world; whereas, if they had been more industrious these would be found in great abundance. Moreover, to this day it is necessary to work hard in order to make the cassava grow.

The stump of the tree is pointed out to this day—a steep granite rock standing up fifty feet or more out of the plain. It is known as Awaiyapiapu Mountain and is located in the region of the group of sacred mountains (see map). The name is the same as that for the silk-cotton tree (*Bombax ceiba*) and this tree is also spoken of as the tree from which Duid secured the food. It is characterized by its massive buttress, large straight trunk and huge spread of its horizontal branches, which furnish a lodging place for innumerable parasitic plants. This may account for the connection of this tree with the story. The trunk of the tree may not have a single climber and yet the branches will support a great profusion of plant life. It is the most impressive tree one sees in the tropical forests. The West Indian negroes make propitiatory offerings to this tree when they cut it down on account of their superstition that it is occupied by jumbies or spirits. This custom may be traced to an Indian origin.

THE FLOOD.

When Tuminkar had the tree cut down the waters of the tree burst forth in a tremendous flood, which gradually rose and covered the face of the whole earth except Serriri, a three-peaked mountain, the highest in the region, located about forty miles northward between the Rupununi and Takutu Rivers. When the waters began to rise some of the people, in order to prevent the extinction of the race, caught a “bai,” or wild
muscovy duck (*Cairina moschata*), cut off his upper mandible, which they used as a canoe, and floated to the top of the mountain. After twenty days the waters began to subside. The survivors were very hungry and wondered how soon the land would again appear, so they threw off rocks towards the north to determine the depth of the water and thus the small round-topped mountain nearby was built up. The duck's bill is frequently used today as a spoon or worn suspended from a necklace as an amulet.

**Origin of Fire.**

Wapisiana stories start by saying, "A long time ago when the world was still close." This means that the occurrence took place while Tuminkar was still on earth and while men were more like gods and capable of transforming themselves into other beings, and when animals and birds spake like men. At that time they had neither fire nor clothing and often suffered from the cold winds at night. Once a certain young woman was sleeping alone in the forest and towards morning she awoke feeling cold. Looking under her hammock she was surprised to see a maam (*Tinamotis elegans*), a small game bird which feeds on the ground. When she asked him what he was doing there he said, "I knew you were cold so I was making a fire for you." There was already a little fire, so she got out of her hammock and warmed herself by the fire. She remained in the forest for two days. The maam told her to gather all the old decaying logs and branches she could find, because the fire fed upon these things. Then she went home and took the maam with her, but left it outside when she entered the house. Her parents asked where she had been and she replied, "I was sleeping in the forest, where I met a maam whom I
have taken for my husband.” “Where is he?” asked the father. “He is waiting outside,” she said. “Oh, son-in-law, come in,” shouted the old father. He entered and was received into the family. For a time everything went well; then the father noticed that his daughter was collecting old wet wood and remonstrated with her. He asked why she was gathering all this wood, but she would not tell him. He then talked with the bird, her husband, about it and quarreled with him repeatedly. Finally the bird became so discontented that he told his wife that if her father quarreled with him again he would leave. The old man blamed the husband more than his daughter, saying that it was because she was under his influence that she was gathering old wood. “What do you want it for?” asked the old man. His son-in-law would make no reply. Again after a few days the father found more old wood piled in his way and he became very angry. His daughter was out at the time, so he quarreled with her husband. The bird did not reply, but went outside, where he found his wife and said to her, “I am going away as I told you I should,” and at once flew away, taking with him the rest of the fire. Hence to this day the phosphorescent toadstools are known as maam’s fire. In telling the story, the narrator makes the characteristic sound of the bird’s wings, which very much resembles that of the woodcock.

Fabulous Spirits.

Many spirits of various kinds are living in the forests and one must be very careful when traveling or he may fall into the power of one of them. They are in the form and have all the attributes of men, but they are very large and powerful. They are expert at making traps to catch wild animals. Once when Duid and Tuminkar were hunting in the forest they came upon
one of these traps set across a game trail. It was made very much like a fish trap, except that it had a slip noose instead of a bait. The noose was made of a supple liana and hung so that the animal’s head would pass through it and the weight of the animal would spring the trap. When Duid saw the trap he said to his brother, “I am going to jump through the noose.” His brother tried to persuade him that it was a very dangerous thing to do, and said, “You had better not attempt it.” He would not listen, however, and with a swift run jumped through the noose, but to his surprise he found himself caught by the scrotum and unable to extricate himself. When his brother saw his predicament he said, “I told you not to do it. You got just what you deserve for being so foolhardy.” But before he could do anything to rescue his brother, the big monster Aniri, who had set the trap, came along to see what he had caught. He carried on his back an enormous quake, or basket, in which he had all kinds of game. He took Duid out of the trap, put him in the quake and laced it up taut so he could not get out. Fortunately Duid was not hurt. He asked his brother not to forsake him in his trouble. The monster took up his quake, put it on his back and started for home; but on the way he called in to visit some friends, leaving his quake outside the door. Duid began calling quietly for his brother, who had been following close behind all the way, and begged him to undo the quake. So he untied the lashings and allowed Duid to escape. They feared the Aniri might miss him by noticing that his load was lighter. They were hunting with a blowgun and had with them the arrow case in which was a large amount of urali poison. This they hid away in the quake and carefully tied it up again. The monster came out very soon, took up his quake and went on home. His wife met him and
asked him what he had caught. He enumerated all the things and among them the man. He was very hungry and decided to roast the man because he had a smooth skin and would require less time to prepare. The woman took the quake and found in it all the game as her husband had said except there was no man. Instead she found the arrow case, which she took to be a young man. Her husband was greatly surprised and said, "I caught his father, but he must have got away somehow. This must be his child." They stood looking at the child for some time and discussing the loss of its father. The husband remarked that the old man must have been very fat, judging from the child, as it was very soft outside. The arrow case was covered with wax, which they had mistaken for the fat of the child. Then they took the arrow case and put it over the fire to roast it. When the wax began to melt and run down the case they got cassava bread to catch the drippings. They both remarked as they ate it, "If we had only kept the father, how nice he would have been." Presently the urali began to melt and run down with the wax. It was very bitter and they did not like it, but they kept on eating, remarking to each other, "He is about done now; this is from his gall bladder that has burst." By this time they were drunk and shortly after both dropped down dead.

**The Great Serpent.**

There is a place about the headwaters of the Miliwau River, which crosses south of the head of the Rupununi and is a branch of the Takutu, where people today are afraid to visit because, according to an old myth, it is the home of the great

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1 Father and child here mean large and small as they have no direct expressions for these terms.
serpent, Urupiru. There is a small lake surrounded by high mountains, under which the serpent has its home in a sort of cave. The neighborhood of the entrance is easily located from the fact that it is always very clean and kept so by the blowing of the serpent’s breath. Urupiru, is an enormous monster one hundred feet long and three feet thick, much larger than any other known serpent. It has little serpents about the size of ordinary big ones. It is addicted to swallowing people, on which account people avoid the region.

One time a young man was hunting and got too near the serpent’s home. He heard it coming and knowing that it would be sure to swallow him, he cut a pole twice as long as his own body and, gripping it firmly in the middle, awaited the approach of the serpent. He could hear it coming as its body knocked against things, making a peculiar noise which sounded like “tup, tup; tup, tup;” he could feel its breath like a strong wind blowing. The serpent soon came up to him and licked him all over with its red human-like tongue—which is not forked like those of other serpents. Then, sucking him into its mouth with its breath, it swallowed him. It does not kill its prey as other serpents do by biting or crushing in its coils, but a long way down in its body it has some rocks which it uses to grind up the victims. There is no danger at all until the rocks are reached. The boy held on tightly to the middle of his pole; after he had been swallowed some distance the pole caught on either side and left him suspended. After some time this irritated the serpent so much that it vomited him up again, but kept him there and would not allow him to go away to his people.

The serpent transformed himself into a man and they two lived in the cave together. Urupiru called the boy “untukan,”
which means, my grandson. He made untoukan his hunter. Sometimes he would go along with untoikan and they would hunt together. Once they found a great drove of peccaries and Urupiru said, “I will go around them and drive them towards you if you will stay and kill them.” So he transformed himself into a serpent again and crawled around the peccaries. It was so long and its body was so high that it practically formed a great corral around the drove. Untukan had no difficulty in killing a large number of them as they ran out at the opening left between the serpent’s head and tail. Urupiru, becoming a man again, was greatly pleased when he saw all the dead peccaries, and said, “As you have killed them I shall have to carry them home.”1 He transformed himself into a serpent, promptly swallowed all the peccaries and they started home together, but before they reached the cave Urupiru became a man again.

After some months had elapsed he asked the boy if he would like to return to his people for a visit, the boy said he would, and was allowed to do so. When he arrived, all his friends were surprised and astonished at the change in the boy. They said, “What a pretty skin you have and what pretty markings on it!” Then he told them that he had been swallowed by Urupiru, the great serpent, which has the most beautiful markings of all the serpents known in the whole country. Two of the young men of the village, who admired the boy’s beautiful skin, decided to go back with him and be marked in the same way. The boy untokan, however, did not tell them about the use of the pole, so when they met the serpent they were swallowed and

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1 It is the custom among the Wapisianas that a hunter never carries his own game home. A hunter takes a man to carry his game. When two hunters are together they carry each other’s game, thus the best hunter has the lighter load.
ground to pieces by the stones. Many persons have been killed in this way. Only one other was ever saved and he escaped by an accident. He was hunting with a bow and arrow—not a Wapisiana bow but a Waiwai bow, which is very much longer—so that when he was swallowed the bow caught in the same way the pole had done and thus he was saved. Untukan is still living there with urupiru, but never returns to his people.

The Marriage of the Electric Eel.

An old Marinau, or medicine man, had a beautiful daughter of marriageable age whom he was anxious to have marry a very strong man, stronger even than himself, if it were possible to find such a man. Word was sent out announcing the fact and calling for suitors. The jaguar, knowing himself to be the king of the forests, came first and to his surprise was rejected without serious consideration. Many other animals came in succession, each setting forth his claims to great power or ability, but all these were rejected also. Finally Kasum, the electric eel, came saying that he was stronger than all the others combined, but the old Marinau laughed at him and said, "You can do nothing; you are so small and insignificant it is presumptuous of you to think yourself worthy of my daughter. You should not dream of such a thing." "Try me before you send me away," said Kasum; "touch me and see for yourself how powerful I am." So the Marinau laid his hand on Kasum and received such a severe shock that he was completely overcome and rendered unconscious for some time. When he had recovered from the shock and the surprise of it he said, "You are very powerful indeed; I think you will be the proper husband for my daughter. You are able to do things that even I
cannot accomplish. I cannot command the thunder, the lightning or the rain. It is often very inconvenient to have the rain come. See what you can do to control it.” Later when the storm approached, Kasum divided the rain clouds to the right and to the left and sent them away to the south and to the north. The Marinau was very much pleased and at once gave him his daughter in marriage.

Today, when a threatening storm approaches, the Marinau goes out in an open space away from his house, faces the storm and repeats the following prayer: “Tuminkar (the creator), in ancient times you gave Kasum power over the storm cloud to turn it aside. You have more power than Kasum. Turn this storm away; it will do us great harm to have it come now.” Then he blows his breath towards the storm and waves it aside with his hands: the right towards the south and the left towards the north, and returns to his house.

The story is told and the ceremony performed by tribes of the Arawak stock who live in the forested country as well as by those living in the open savannah, although their prayers are seldom answered. It is not appropriate in the forests because the distant view of the storm and the parting of the clouds cannot be seen.

The electric eel is common in all the rivers of northern Brazil and the Guianas and is greatly feared by the Indians. It grows to the length of five feet and is able to give a very severe shock. According to reports along the Amazon, men are often killed by it. The eels are numerous about the wharves at Manaos, where several men are lost every year from falling into the water. It is the prevalent belief that these men, who are invariably good swimmers, are killed by the eels. The bodies do not rise to the surface and are never recovered. We experi-
mented with an eel about two feet in length. The shock from it made us so uncomfortable that we did not care to try a larger one. An alligator three feet long which was placed in the same tank was greatly frightened when he received his first shock, but soon regained his composure only to receive another and another until the third day, when he died.

The marriage of the electric eel is of great historical importance because it locates definitely the home of the people at the time of the origin of the story. Their traditional home was in the savannah plateau, of southern British Guiana, between the Akarai mountains on the south and the Pakaraimas on the north. Within this plateau there are numerous small round-topped mountains which bear sacred names. One is the stump of the tree of life which was cut down when the people told Duid they knew where he got the food he brought them daily and would no longer thank him for it because they could get it themselves; another is where the few people who escaped the flood were saved, and another the former dwelling place of the creator. More than a dozen places are so named and associated with the creator at the time when he lived on the earth. As will be seen later, this location agrees with that for the story of the eel.

It is interesting to note that the medicine man associated the shock from the eel with the thunder, lightning and rain. He at once asked the eel to try his powers on the storm cloud.

To the eastward the two ranges of mountains are low and near together, but as they extend westward they separate and increase in elevation from five or six hundred feet to two thousand feet on the south and more than eight thousand on the north. The storm clouds which come from the east therefore divide and follow the two mountain ranges, depositing their
moisture and producing dense forests on either side. The rainfall of the savannah is less than half that of the forests one hundred miles away. At Boa Vista, on the Brazilian side, it is forty-two inches, while two degrees south it is nine or ten feet.

The eel facing the storm, or the east, turned away the clouds to the right, or south, and to the left, or north. The medicine man today does exactly the same thing in the same locality and the clouds obey him as they did the eel in ancient times and for the same reason. The story thus fits the environment of the eastern Arawak traditional home; moreover, that is the only locality in South America where it will fit.

THE ARUNAU BIRD.

This bird (*Tigrasoma brasiliense*) is one of the most beautiful of the fish-eating birds common along the smaller rivers. It never flies ahead of the canoe when it is surprised, but stops near by on a low branch in an obscure place. It is a rich brown color with white lines running down the neck and body. The long yellow bill is very sharp and is used with telling effect on other birds or on its captors.

A maid was once strolling along the side of the river when one of these arunaus flew out from its hiding place near at hand. She was startled and said aloud, “Oh, what a beautiful bird!” It heard the remark and alighted a short distance below. When the maid came along, it transformed itself into a young man and asked her what she had said. She told him and he replied, “I am that bird, do you not think me beautiful now?” After some conversation she returned to her home and told her parents she had seen a handsome young man in the forest. Her father told her to return and bring him home with her. The next day she went to see the bird and after some
persuasion took him to her home. He took the girl for his wife and, as is the custom, lived with her father for a time to assist in making a field. The old man soon discovered that he was inclined to be lazy and early one morning said, "Son-in-law, let us go and underbrush our field." The bird replied, "ah-ah" (its call), but did not go. Another day the father said, "Son-in-law, let us go and cut down our field." The bird replied, "ah-ah," but did not go. Another day the father said, "Son-in-law, let us go and burn over our field." He replied as before, but did not go. The father tried again and said, "Son-in-law, let us go and clean up our field." He replied as usual and as usual did not go. The father tried once more and said, "Son-in-law, let us go and plant our field," and the bird replied as usual, but did not go. One day after the work was all done the father said, "Son-in-law, I am going to look at my fish trap. Will you go along?" The bird jumped up quickly and went along. The old man said to his daughter, "This is his habit in life. When there is any work to be done he simply answers, 'ah-ah', and stays at home; but when there are fish in the trap he says, 'ha-ha-ha-ha,' and goes along."

Cats' Cradles.

The Wapisianas, like most other peoples, amuse themselves by making string figures or "cats' cradles." They have also a number of tricks in which the complicated arrangement of the string will run free when pulled. For the most part they are named after the resultant form of the figure. Very

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1 This story reveals the kind disposition of the father-in-law which is traditional among the people. He did not lose his temper, even after two months of laziness on the part of the son-in-law, while he himself worked hard making a field. It will be noted that he said "our field," but "my fish trap." The field is for the whole household, but the trap belongs to the individual. The same story is found among all four tribes of this group.
few of the people are able to make the figures. Many of the forms found here are common in other parts of the world, but this fact is not more significant than that they should make string figures at all. Some of these similar figures are made by different methods. The nomenclature used in recording the figures is adapted from that devised by Drs. Rivers and Haddon. A string over a finger is called a loop; one on the thumb side is radial; one on the little finger side is ulnar; one lying across the back of the hand is dorsal; the loop nearest the top of the finger is distal and the one nearest the hand is proximal. Even with this terminology it is often very difficult to describe the movements. No songs, words or stories were used to accompany the movements.

SUCINIK (Spider's Nest).

(Sus, spider, and cinik, hammock.)

Place loop back between index and third finger of left hand, bring it forward over the ends of these two fingers and draw tight. Repeat with the other end of the string about the corresponding fingers of the right hand, being sure that the strings are straight and around corresponding fingers.

With backs of index and middle fingers of left hand take the loops from the back of the corresponding fingers of the right hand.

In the same manner take up the original proximal loops from the index and middle fingers of the left hand with the index and middle fingers of the right hand and draw out.

Have an assistant throw another similar string over the figure and allow the ends to hang down in the front and the back.

With downward movement of index and third fingers of both hands take new string on hooks of these fingers and release the original string.
Have the assistant take the two loops from one hand and draw out both, holding hands far apart, thus suspending the figure of the original string.

This is found among the Macusis also.

**Pirara, a Worm.**

Hold left hand with thumb uppermost. Hang the string over the thumb, letting the loop fall down the palmar and dorsal sides of the hand. Pass the right index beneath the palmar string and between the thumb and index; then around the pendant dorsal string, bringing it between the thumb and index. Give the loop a right-hand twist, place it over the left index and pull tight the pendant strings. Again pass the right index beneath the pendant palmar string and between the index and middle fingers, hook it over the dorsal string, bring it forward, twist as before and put it over the middle finger. In the same manner make loops over the ring and little fingers. Remove the loop from the thumb and with the right hand pull the palmar string. All the fingers are released.

This trick has a very wide distribution. It is found among the neighboring Macusis and the Macheyengas at the head of the Amazon in Peru, East Africa (Cunnington), West Africa (Parkinson), Batwa Pygmies, Torres Straits, Philippine Negritos, and Linao Moros, Japanese, Alaska Eskimo, Plains Indians (Jayne).

**Sabai, Trap for a Small Fish.**

Place string around both wrists. With the mouth take up the center of the ulnar string from proximal side; take up on the back of the right little finger the left-hand section and on the back of the right little finger the right-hand section;
release the lips and extend. Take loops off wrists and place them on index fingers. Take up with backs of thumbs the radial little finger strings from the proximal side distal to index finger over thumbs also. Pass the proximal radial thumb strings over the thumbs to the palmar side. Insert index fingers into the triangles adjoining the thumb loops, release little fingers, rotate wrists inward and extend.

The Macusis also have the same figure, identical with Cunnington's from Central Africa, except that the mouth is used in the second movement instead of the hand. The resultant figure is identical with Parkinson's Yoruba from West Africa, but the method is different from the beginning until the last three movements. Haddon records the same figure from South Africa, but the operation differs from ours. Another variety is found among the Osage Indians (Jayne, p. 24), in which a double string is used.

Panainum, a Door.

Place loops over thumbs and little fingers. Take on indexes opposite palm strings with downward hook and inward turn. Pass thumb loops through index loops from below and replace on thumbs. In the same manner pass little finger
strings through index loops and replace on little fingers. Release indexes and extend. The open space between the parallel strings is the door. (Fig. 10.)

WANANIRI, a Mirror.

Place the string over the thumbs and little fingers of both hands. With the index and third finger of each hand take up the opposite palmal' string from the proximal side. Remove thumb loops and place on indexes and little finger loops and place on third fingers. Bring the larger loops to a distal position on indexes and third fingers. Remove the remaining individual loops of indexes and third fingers and release. Insert great toes in third finger loops and extend. A frame for the mirror is made by having an assistant throw another string over the figure and take it up through the finger loops.

SABURIWA, Howling Monkey's Jaw.

Place string as simple loop around left wrist. Pass the radial string back between the thumb and index and the ulnar string between the third and ring fingers. Bring both forward between index and third finger. Place index string over thumb and third finger string over little finger. Place the other end loop over right wrist. Take up index palm string from the proximal side on index of right hand and the third and ring palm string on the third finger of right hand. Bring over and release the left wrist loop. Place index and third finger loops of right hand on corresponding fingers of left hand. Bring over and release original index and third finger loops. Transfer index and third finger loops of left to the corresponding fingers of right hand and draw out. (Fig. 11.)
Iwi, Organ of Generation.

Place string as simple loop around left wrist. Pass radial string back between thumb and index and the ulnar string between third and ring fingers. Bring both forward between index and third fingers. Place radial string over thumb and ulnar string over little finger. Place the other end loop over the right wrist. Take up index palm string from proximal side on right index and third finger palm string on right third finger. Bring over and release left wrist loop. Place right index and third finger loops on corresponding fingers of left hand. Bring over and release original index and third finger loops. Place left index and third finger loops on corresponding right fingers. Bring over and release the right wrist loop and extend quickly.

Rapur, a Vicious Fly, Difficult to Catch.

Place string around the neck. Pass right hand string around again. Cross the strings in front, with the right hand string underneath forming a pendant loop. Pass this loop over
the head, with crossed strings behind, and pull the front string. It comes off the neck—the fly escapes. Another form of the same one. Place the string twice around the neck as before and take the right hand string on right thumb and little finger and left string on left thumb and little finger. Take up palm strings on backs of opposite indexes. Pass the head through the loop of the indexes from the proximal side. Release all but the little fingers and extend. It comes off the neck as before. The foot may be used in the same way in place of the head. ¹

Kaburn, a House.

Place loop over left thumb from dorsal side. Wind around the hand and pass the proximal string between left thumb and index and the distal string between left third and ring fingers. Bring both strings forward between left index and third fingers. Pass index string over left thumb and third finger string over left little finger. Place long end loop over right hand. Take up index and third finger palm strings proximal side on backs of index and third fingers of right hand. Bring over and release the loop over the right hand. Place right index and third finger loops over corresponding fingers of left hand. Place original left index and third finger loop over corresponding right hand fingers. Bring over and release the two loops on the back of left hand, allowing the proximal string to pass over the end of the thumb. Extend and the two strings between index and third fingers make the pole, the other strings the rafters, while the left hand loops become the plates which support the rafter.

¹ Identical with Cunnington’s No. 2 from Central Africa. Haddon found it also in Rhodesia and Uganda.
WARIDIKIP, a Parrot's Tail.

Place loop over left index. Take up ulnar index string on back of thumb over radial index string. On the dorsal side pull up the index loop, turn 180 degrees in either direction and place over the left index and thumb. Bring over the dorsal string to the palmar and the palm string to the dorsal side of the hand. Hold strings and move thumb and index forward and backward.

TARABARA, a Fly.

Place loops over both thumbs. Pass left thumb strings over back of the left hand. Take up these two strings from the distal side on the right little finger. Take up the two right thumb strings from the distal side on the left little finger over all the other strings. Bring over and release the two strings from the back of the left hand. Extend and draw tight the knot midway between the hands. Release the little fingers. These two pendant loops are the fly's wings. Ask a friend to catch the fly between his hands. When he attempts to do so, pull the strings quickly and the loops slip through the knot, or the fly escapes.

KUBAD, a Double Basket for Palm Seeds.

Place loops over thumbs and little fingers. Take up from the distal side the left hand palmar with the hook of the right index. Twist half way around to the right and place the loop over the left thumb and little finger. Take up the right hand palmar string and place in the same way over right thumb and little finger. Take up on right index and third finger the left thumb and little finger loops from the proximal side. In the same way take up on left index and third finger, the right thumb
and little finger loops within the right index and third finger loops. Throw over and release the proximal thumb and the proximal little finger strings. Take up on backs of right index and third finger the loops of left index and third finger. Take up on backs of left index and third finger the original loop of right index and third finger over the new loops. Extend and the result is a similar basket figure in each hand.

KADARAU, Two Fishes always Seen Together.

Place loops over little fingers. Take up on thumbs the ulnar little finger string distal to radial string. Take up palm strings from proximal side on indexes. Release thumbs. Pass thumb distal to index strings and take up on backs of thumbs the radial little finger string. Place index loop over thumbs also. Transfer proximal thumb loop over tip of thumb to palmar side. Place each index into its triangle on palmar side of each thumb from the distal side. Release little fingers, rotate wrists and extend holding figure on thumbs and indexes. Two similar figures result. The first part of the operation differs from No. 1 of Cunnington’s from Central Africa, but the end is identical.

ATAROIS.¹

The Atarois originally occupied the open savannah territory between the upper Rupununi and the Cuduwini Rivers. At present they do not exist as a separate tribe and no longer speak their own language. They have been absorbed by the Wapisianas, whose language is in common use. Very few can speak Ataroi and the language will disappear with this genera-

¹ Atorais, Atorads, Atorradis, Atorayos, Aturatis.
tion. Only three individuals of pure blood—one man, a woman relative, and her daughter—and not more than a hundred half-bloods remain. Physically, linguistically and culturally they are very closely related to the Wapisianas. Their material cultures are identical, but the Atarois have some myths in addition to those found among the Wapisianas.

The Atarois live in the center of the traditional home of the tribe and have no stories of migrations. Tuminkar and Duid lived here before men were created and continued to live in the mountains about the region for a long time thereafter. Tuminkar's home was on Mount Mariwidwantaua. His dogs were kept on Mount Walirdap. (The word walir means fox and dap house. These foxes were used by Tuminkar as dogs to hunt with before he made dogs out of beeswax.) Tuminkar's son was first buried under the rock Maridiku; when he came to life again he came out on top of Mariwidwantaua, Tuminkar's home. He was buried again in the great flat rock, Tcakui, which stands behind Karawaimin. In his second resurrection he will not come out of this rock but from one some distance away. Near the burial rock the birds are still crying as they did at the time of his burial. The toucan and a large green parrot are very plentiful about the region and have not been killed in the past because of their crying for Tuminkardan. The Wapisianas go there now to hunt them.

Near the burial rock is another distinctly laminated rock called Tuminkarbadi, or Tuminkar's bread, on account of the resemblance to the great flat cakes of cassava bread called badi.

When Tuminkar finally went away he left his fowls on Mount Kilikadap which stands near Kilikuwau creek. These

1 The Amaripas, Daurais and Taurais, formerly living among subtribes of the Atarois, are now extinct.
fowls are still there and can be heard very often when they are hungry, but they are as quiet as can be as soon as they feed. The exact location of the place of creation is not known, but the stump of the tree of life, Awaiyapiapu, stands just west of this group of mountains. Their musical instruments came from under Mount Keridtauia. The Atarois heard music coming from under the ground and some of them, being anxious to get instruments, went under the mountain and came out into the pool Kiminaruana. An opening about six feet in diameter through which they came from under the mountain can be seen when the pool is nearly empty in the dry season. They brought out all the instruments they now use, but could not bring all they saw there. The music is still going on, but the present people cannot hear it. The pool contains plenty of water except near the end of the dry season, when only a little is left in the middle which fills the hole leading to the mountain. They will not go near the pool and warn their children to keep away from it for fear of falling into it and of being captured by the spirits and kept alive by them in their underground place. These spirits do not live in the water but in the ground near by. Seven years ago one of Melville’s cows fell into the pool and the Indians say she is still living down below.

Makataua, a mountain near by in sight of the pool, is where two virgins formerly lived with their mother. Tuminkar told them that the people were going for the musical instruments and asked them to be careful not to look when they came out with the instruments, for if they were seen great misfortune would come upon both parties. It so happened that the very day the people came out the mother was engaged in picking lice from the heads of the virgins; the mother was sitting behind and the virgins in front facing the pool when they all saw
the people come out with the instruments. Tuminkar, in his wrath turned them to stone, and there they sit today on the mountain top looking at the pool. The people brought all the instruments they could carry and meant to return for more, but they were not allowed to do so because the virgins saw them. The Virgin mountain's mate, Makamintaua, stands hard by on the east. Maka means maiden, or virgin; min, companion, or mate; and taua, mountain.

About three miles south of the village of Kiridinaua, at the side of the regular trail, is the shrine to Kuduruilamire, or broken knee, where every passerby must sacrifice something to prevent injury to his knee on the journey. I was walking alone, when I saw a little grave-like mound upon which were a number of fresh tufts of grass, moss and roots, and wondered what it was. As others were coming behind, I sat down to rest within sight of the mound and waited to see what they did as they passed it. Before reaching the place each one provided himself with some small thing and as he threw it on the mound he said, "Dinapuwanikiui," there is your food. (Dina, there is; pu—a part of the possessive pronoun purikar, your and wanikiui, food.) If they neglect to give him his food he will shoot them in the knee and they will be his wakai, or hunting dogs. The spirit of Kuduruilamire has lived here since ancient times, but they do not know his history. One fellow who had a heavy load said he could not stoop to get anything to throw on the shrine and asked the spirit to forgive him.

In the Ataroi story of creation two other animals are mentioned; the dog was made from a lump of beeswax which

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1 From the Wapisiana village of Aishalto, three miles away, the three figures can be distinguished, but they do not show in the photograph taken near the mountain. There are petroglyphs on some large rocks in the plain near the foot of this mountain.
Tuminkar formed into the proper shape and gave it life. The acouri (*Dasyprocta aguti*) was the only animal saved at the time of the flood. He took a ball of beeswax, made himself a house of it and floated about until the water subsided. The evidence of this is that the back part of his lower hind leg has no hair and looks like wax because he sat on his legs so long in his wax house. Moreover, he has no tail, but a little wax stump instead.

**TARUMAS.**

**History.**

The first mention we find of the Tarumas is in the year 1668, when Pedro da Costa Favella and Father Theodosio of the order of mercy, the first navigators of Rio Negro, entered into communication with them on the lower Negro River. The Tarumas assisted them in building the first town on that river, Fortaleza da Barra, the site of the present city of Manaos.¹

Von Martius, in his enumeration of the Indian tribes, published in 1867, considers the Tarumas extinct. The first report of them on the Essiquibo was given by a Carib chief who visited Demarara about 1800. He gave a very fabulous account of them, saying that they were amphibious, living in caverns under the water, whither they were in the habit of fleeing upon the approach of strangers.

The Tarumas have a tradition that they came from the south and that their ancestors were tall heavy men. Another branch of the tribe, the Parauien, recently became extinct.

Their material culture is very much the same as that of

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the Wapisianas. As they live in the forested area and not in
the open savannahs, their houses differ somewhat from the
usual type of the Wapisiana’s. The framework is the same, but
they use no side walls of mortar. The thatch continues to the
ground either with or without a wall. A man and his wife tie
their hammocks to the same two posts and the man sleeps
above. The dogs occupy a platform against the wall and are
not allowed to run loose except three times a day for exercise
and for hunting. This is a precaution against the jiggers
which infest the dust about the village and enter the toes of
the dogs and men as well. The bark canoe is made in the
same way as that of the Wapisianas; they also make a simple
dugout, with very sharp points but not the plank type.

They are the greatest fish eaters of all the tribes. The
Essiquibo continues to flow throughout the year and the fish
will take the hook, hence they do not use poison to any great
extent. They also have more forest game and pay less atten-
tion to growing vegetables. They have fields of cassava and
plant a little corn along the sides of logs where it gets the greatest
amount of moisture, but they have no beans, melons or pump-
kins. The Wapisianas, Atarois and Macusis have many varieties
of pumpkins and melons, but no beans.

Marriage.

Soon after a girl is born, even before she is a year old, a
man asks her father for her as a wife for his small son who may
be about the same age as the girl. If the father gives his con-
sent then the girl is known as the wife of the boy and when
she approaches puberty she goes to live in the boy’s family.
About a year later, that is, after puberty, the boy takes her as
his wife. There are no public ceremonies of any kind in connec-
tion with either puberty or marriage. A man may ask for a girl as a wife for himself, even if he has sons of his own. In this way a well-to-do man may have two or three wives. One of the chiefs has a wife nearly old enough for his mother and another much younger than himself.

TRADITION OF CARIB RAID.

A long time ago two canoe loads of Caribs came up the Essiquibo to the Taruma country to capture slaves. Some Tarumas who were fishing in a light canoe saw them coming and fled. They went up the river, turned into a small stream where their village was located and gave the alarm. The Caribs, losing sight of them, went by the stream and on up the river, but after a time returned to the small stream and ascended it to the village. The Tarumas had collected in large numbers and when the Caribs reached the landing the Tarumas attacked them and killed every one. Another version says the Caribs killed all the men at one village and captured four women and two men from other villages. These they took with them and started across country to visit Waiwai villages, but on the way they found no water, so they gave the women cutlasses to dig holes in the low ground, where they found water. The Caribs, having lost all their calabashes, got down on their knees to drink whereupon the women split their heads with the cutlasses and escaped.

Among the Ataroi is a story, no doubt referring to the same expedition. A long time ago some Caribs came up the Cuduwini River to the landing, where they left their canoes and started across the savannah along an old Ataroi trail. They had trouble among themselves, fought and killed all their number but one who escaped.
Both of these stories are founded upon the historic fact that about a hundred years ago the Dutch on the coast wanted more slaves and sent a Carib, "Massorueah," up the Essiquibo with a party of his people to capture some Tarumas. They had formerly gone among the Macusis and Wapisianas for slaves, but these tribes had retired from the river and it was difficult to find them. They went up the Essiquibo, turned into the Cuduwini, captured some Tarumas, continued up to the landing, crossed the savannah and descended the Kwitara River.

**Other People.**

The Tarumas believe that any unknown region is inhabited by some strange people. Our guide pointed out where a drum was once heard when his people were traveling on the Cuduwini River. They still believe the place is inhabited, but Mr. Ogilvie, who has traveled all through the region, says that no one lives within fifty miles of the place.

**Diseases.**

The Tarumas do not fear the Kenaima as do the Wapisianas and Macusis. They are not afraid to travel or hunt alone, while the members of the other tribes must always have company to prevent an attack by the Kenaima. The Wapisianas must employ a medicine man if they wish to injure anyone at a distance or cause his death, but the Tarumas are able to do this for themselves by simply blowing on his body, his food, or anything belonging to him. The Tarumas believe the Waiwais are expert at blowing diseases and dread their evil influence. All their ills of whatever nature and deaths also are attributed to them. A Waiwai may blow his breath upon one while sitting
by his side smoking, but this is not usual. His more common method is to blow upon something a man uses or with which he is very intimately associated. He blows on a hammock if it is left hanging and causes backache, or on a carrying basket, causing sores or on the tracks of a man who has gone to his field, and if, upon his return, he should step in the same track his foot, leg and body will swell up and he will die. Or he may blow upon spittle, causing sore throat or tuberculosis. Our interpreter’s father died from “spitting blood” on this account. He blows upon urine and causes the person to urinate blood and die, or upon excrement, causing diarrhea and dysentery. Another method is to take an evil herb, dry it, scrape it into powder and put it on food and food plants, causing various kinds of stomach and bowel troubles.¹

The Tarumas are able to overcome these evils and effect some cures, otherwise all would die. Their medicine man, Kwikriaknelyn, cures people who have been blown upon by smoking the patient and calling upon the evil spirit to come out of him, but this method is effective only when the spirit is in a listing mood. When a child is sick its father builds a fire and burns peppers, making a very dense heavy smoke. He holds the naked sick child in the smoke and says to each spirit, “Go out of my child and leave him alone.” He calls upon the spirit of the anaconda, the jaguar, the puma and others because he has no way of knowing which it is that is troubling the child and must call upon all of them. When the child is better he tells his father that he saw or heard a certain animal while the smoking was going on, and then the father knows which spirit it was.

¹ This gives us a list of their most dreaded diseases: rheumatism, beri-beri or something akin to it, tuberculosis, haemoglobinuria and dysentery.
THE GUIDE’S DREAM.

Whether at home or on the trail, the regular morning greeting is, “Are you awake? How do you feel this morning?” When our guide was thus greeted on the morning of January 1, 1914, he replied, “I do not feel well. I do not believe I can go on in the canoe. Last night I went with my wife (who had been dead for several years) to visit a Wapisiana friend at his home in the savannah. He was out hunting and I waited to see him. When he came in he said, ‘What are you doing here? You have no business here.’ He shot me with an arrow in the back of my right shoulder and I pulled it out. Again and again he shot me in the shoulder and arm and each time I pulled the arrow out. At last he took one of the large, broad iron arrows and attempted to shoot me with that. I knew it would kill me, so I caught him and after a desperate struggle succeeded in taking it from him. I plunged it under his right arm, but did him little harm. Then into his left side, then under his ribs on the right side, piercing his heart, and the blood gushed out in a great stream. Then I said to my wife, ‘We must go away. I am sorry I have killed this man.’ At the first village we stopped and told them what had happened and how very sorry I was. They said, ‘It is all right; he was a bad man and always treated men in the same way. No one will make trouble for you because you killed him.’ My shoulder and arm are so sore on account of those wounds I cannot go on in the canoe today.”

He thought of this dream as an actual experience and attributed his lameness to that cause. The real cause of his trouble was his work the day before. He had not been doing any hard work for some time and had been put in the stern of
a canoe where he was compelled to paddle in the rapids. He was very tired when he got in at night but felt no pain. In the morning he quite naturally attributed his lame shoulder to the dream rather than to the labor.

**THE DEAD.**

When a man dies his friends, without any ceremony whatever, take the body into the forest and cremate it. They collect a heap of logs and brush two or three feet high, lay the body on top and then heap more wood over it until the pile is four or five feet high. Then they set fire to it and go away immediately. After a few days, when the whole thing has had time to burn out, they return and cover with leaves and brush any fragments of bones that happen to remain. All the little trinkets and purely personal things are placed with the body on the funeral pyre; but canoes, bows and arrows, dogs, etc., are divided among the family in any satisfactory way. Children are buried because it is too much trouble to gather wood to burn them. The body of the medicine man is buried as quietly as possible so that the spirits of other medicine men may not be disturbed. Our interpreter buried his father, who was a medicine man. His mother died earlier and he buried her without sending for his father, who was away from home at the time.

At one of the villages which we visited, a young man died and they attempted to burn the body, but the wood was damp and would not burn well, so the body was left for the vultures to consume. In another place a crippled boy died. His parents took the body away, but we did not learn what disposition they made of it. He died in his hammock. They
took all his little things—hooks and lines, bag of trinkets with paints and a spoon—and laid them on the body, which was then wrapped in the hammock. They unloosed the ropes, let the hammock down on the ground and straightened out the corpse. Then they cut a strong pole, laid it lengthwise on top of the body and lashed it with the hammock ropes. The man took the head and the woman the foot, lifted it to their shoulders and carried it to the canoe. There is no regular place for burial or cremation, so they put the body in a canoe and paddle up or down river some distance until a suitable place is found. No marker is used for the grave or pyre.

When one dies a bunch of leaves is hung up at the landing place on the river and on all trails leading to the house to announce the fact to any visitor. When we arrived at the second Taruma village we found a bunch of branches about eighteen inches long tied to a tree at the landing. The same thing is done where the body is cremated so that no one will go near the place. The sign of death near the house is not meant to keep persons away, but only to give the information which results in actions appropriate to the occasion. The bereaved have no outward sign of mourning, but for some time they weep and wail when friends come about. Some one, usually the chief, recites the good deeds of the departed and at intervals all break out in a heartrending wail. This will continue for fifteen minutes and then suddenly stop.

In former times, when the Tarumas lived in single houses, they destroyed the house when a man or woman died and built another near it, so that they could continue to use the same fields. Now they live in large communal houses and do not leave unless there has been an epidemic of some kind.
Taruma Song and Dance.

The Taruma dances are similar to those of the Wapisianas and their music about as simple. The music and words here recorded are used on all occasions for all dances. After one has listened to it for a few hours he is quite ready to join them in the liquid part of the performance and then retire to his hammock while the dance continues.

Myths.

Origin of the Human Race.

In the beginning there were two brothers who lived on the earth, Ajijéko being the older and Duid the younger. There were no other men and no women, but they had the idea that there must be such a thing as a woman somewhere. There was a certain rock near the river upon which they often noticed scales and fragments of the bones of fish. They wondered what it could be that came there to eat, so they took turns watching to discover what it was. As nothing appeared during the day, they decided that whatever it was came up at night, so they caught a rain frog and set him to watch, telling him to report in the morning. The two brothers came early and asked the frog what he had seen. He said he had seen nothing at all, but unfortunately he had fallen asleep before morning. There was fresh evidence that something had been on the rock again and they decided to try another animal. So they caught an owl and put him on watch. As he never sleeps at night, he was successful and reported that the guilty fellow was an otter. They decided to waylay one of the otters and learn if she knew anything about woman. They did so, but she would give them no information. Then they thought she must be the female
for the human race and seized her. She tried to evade them by making excuses, until she saw they were so determined that she could not escape and must tell for her own safety. She told them she knew where woman lived and if they would only release her she would tell them how to get her. She said the woman lived in a certain deep pool in the river and that they should fish for her. In the morning they went fishing, but without success. The next day they went again and Duid hooked a fish and landed it. The day following they pulled up a quake, carrying basket, and so on day after day they got something they had never seen before. As we know, women have so many things it took a long time to get them all. Finally they landed a hammock and were much excited. The next morning they went to work early, but after a time Ajijěko got tired and fell asleep. When he awoke, he asked Duid what he had caught and he replied. "Oh, as usual, more rubbish," and pointed to some little things he had landed. Then they went home. Next day Duid was very reluctant about going fishing, and every morning thereafter refused to go. Ajijěko, suspecting him of having caught the woman, charged him with it, but Duid denied it. One night, when they were sleeping near together, Ajijěko awoke, and turning to speak to his brother was surprised to find him with four legs and four feet. He intended to awaken his brother after he had thought the thing over, but fell asleep again. In the morning he accused Duid of having the woman, but again he denied it. Another reason for Ajijěko's suspicions was that Duid had been making playthings—balls and shuttlecocks.

One day when Ajijěko came in from hunting, Duid refused to assist him in preparing food and declined to eat anything. Then Ajijěko said, "I know what is wrong with you; you have
the woman." Then Duid admitted that he had caught her while Ajijěko was asleep. They called the woman Chakukantu. Now the reason why he would not join Ajijěko in preparing food was that he was suffering from an accident. He had been embracing the woman and the biting fish which inhabited her had bitten him most severely. In order to prevent the loss of the entire organ of generation he consulted with Ajijěko to see what could be done. Duid was always getting into trouble and going to his brother, who gave him assistance and always helped him out of his difficulties. Ajijěko decided to poison the fish and make the place free from danger. So he collected all the poisonous bark and vines from the trees and poisoned the place and killed all the fish. Since then woman has always been safe, but man has continued maimed. Duid kept the woman for his wife and from them have descended the whole human race.

**Origin of Fire.**

Ajijěko and Duid lived in separate houses after the woman came, but they were near together in the same clearing. They had always eaten their food raw, but they noticed the woman ate nothing raw except fruit and decided she must have some secret because she always ate alone. They tried to persuade her to tell them where her fire came from and how it was made, but she declined to do so. Many years afterwards, when she was an old woman and had many children, Ajijěko paid them a visit and about sunset bade them good-bye and started home. They thought it strange he had left his bag of trinkets behind. Presently he called to his sister-in-law to bring them over to him. She brought them and, standing at a considerable distance said, "Here they are." Ajijěko said, "No, bring them here,
up closer to me." She then came closer, holding them at arm's length, but he said, "No, bring them closer still, close up to me." She was frightened and said, "I am going to throw them to you." He said, "Do not do that; they will break. Bring them right here where I am." She did so, and immediately he sprang up and seized her. He told her he would embrace her if she did not tell him the secret about fire. After several evasions she consented to give him the secret. She sat flat on the floor with legs wide apart. Taking hold of the upper part of her abdomen, she gave it a good shake and a ball of fire rolled out of the genital canal on the floor. This was not the fire that we know today; it would not burn nor make things boil. These properties were lost when the woman gave it up. Ajijēko said he could remedy that, however, so he gathered all the barks, fruits and hot peppers that burn one and with these and the woman's fire he made the fire that we now use. Now that they had fire, all nature wanted it and it was given to Duid as his special duty to guard and protect it.

One day he was sitting on the bank of the river with the fire by his side, when an alligator put out his jaws and snapped it away. When Ajijēko came in from hunting, Duid told him his misfortune. Ajijēko called up the alligator and demanded the fire, which he received at once. It had not been damaged at all, but had burned out the alligator's tongue and since then he has been tongueless.

Two or three days after this Duid was looking after the fire when a maroudi picked it up and flew away with it. When Ajijēko came home Duid told him of the loss of the fire again. The maroudi was called back; she returned the fire undamaged, but her neck was so burned that it has always remained red.
Duid was always an irresponsible sort of fellow. One day he went away and left the fire alone on the trail. A jaguar came along and accidentally stepped on it and his feet were so badly burned that he has never since been able to put his feet flat on the ground, but must walk on his toes. The tapir also came along and stepped on it. He is so slow in his movements that he was very badly burned and has had hoofs ever since.

**Origin of the Fields.**

Ajijēko and Duid ate only nuts and fruits in the beginning, but after the woman came she was dissatisfied and directed Duid how to make a field. She told him first to cut the underbrush, then to take his stone axe and cut down all the big trees. When they had cured she told him to burn the field and clean it up. Thus the woman told him how to do it. Having no seeds or cuttings or anything whatever to plant, she told Duid she would call her father and when he came he must not be afraid of him. She told Duid several times not to be afraid of her father and at last he said he would not. She called her father, who lived in the big pool where she had lived before Duid had fished her out. Soon after she called, they heard a sound like a flute in the water and she told Duid this was her father coming. The sound came nearer and nearer until it was at the side of the pool where they got their water. She told Duid again that he must not be afraid. Then a huge anaconda appeared, much larger than any seen today, at least two feet thick, whom she introduced to Duid as her father. She had previously prepared some drink for her father and when he entered she gave him a drink from a calabash. She told her husband not to be afraid and to ask her father for the seeds of all known plants. Duid was so afraid that he was quite unable
to speak to him. She kept giving her father more and more drink to get him drunk, thinking that eventually Duid would summon up sufficient courage to ask him for the seeds. Her father got very drunk, but still Duid was afraid. His wife scolded him and they quarreled bitterly. Her father, being very drunk, slept for some time while they quarreled. He awoke finally, sufficiently sober to go home and, bidding them good-bye, started down into the river. The woman begged and urged her husband by every known means to speak to her father, who had entered the water until his head was submerged. She begged her husband, but to no purpose. Her father's body was gradually disappearing and only a little remained. She was grieved for her husband. Something must be done. Her father's body was just disappearing from sight. She rushed down to the water's edge, cut off the tip end of his tail and from the point of it dropped seeds of all kinds of fruits and plants and vegetables. Thus the woman got for them all their food plants. The Tarumas venerate the anaconda more than all other animals, not only because he gave them their foods, but also because he was the father of the mother of the human race. While they pay no worship to him, nor make any offerings, they never kill him or allow another to do so if they can prevent it. If a stranger attempts to kill one they object and say, "He is one of our people." When they see one along the river they salute him and call him uncle, but never molest him.

The first large one I saw when traveling with our men in a large canoe, I shot and was surprised to find that all the men had dropped on their faces in the bottom of the canoe. When I asked what it all meant they told me and begged me not to shoot any more anacondas. I promised, but some months later
as we were going along a very narrow stream we found one lying on some brush that had fallen across and blocked our passage. We should have to cut our way through within three feet of it. They were afraid to go so near and asked me to shoot it. Tarumas build their villages by the pools when there is an abundance of anacondas. No one was ever killed by an anaconda, but once a man was attacked by one that caught his arm. He was ever after called "anaconda food."

THE ANACONDA'S HOUSE.

A very long time ago a little boy lived with his parents near the head of the Essiquibo River. When his father sent him fishing with a hook and line, he would dive into one of the deep pools and remain there all day. At night he would return to the house, but without any fish. His parents and friends tried to break him of this dangerous habit, telling him that a big anaconda would catch him some time, but he had no fear and still persisted in his practice. He grew to manhood, took a wife and had children of his own. In the meantime he had become a medicine man whom the people regarded with great consideration because they said he must have some relation with the anacondas. He was still in the habit of diving into the deep pools. One day he went fishing and took his small son with him. After drifting down stream some distance and spending the greater part of the day fishing, they came into a large pool. They were both hungry and the father said, "My son, let us go down and visit our aunt." The boy was surprised at such a suggestion and remarked that there were no houses in the neighborhood. "That is true," said the father, "but our aunt lives in the water. We are hungry; let us go and visit her and get some bananas." He put the boy on
his back and dived head first into the pool. As he continued swimming down deeper and deeper the boy, unable to hold on with his hands alone, seized the back of his father's neck with his teeth, but finally he could hold no longer and rose to the surface. He swam back to the canoe, climbed into it and waited there for his father. They were very near the bottom when the boy was torn loose; with a few more strokes the father arrived at the house of his aunt. She was a great anaconda who lived in a large house very much like a white man's house built on the bottom of the river. There were a great many things in the house which the Tarumas do not use today. "The white men are bringing many things to our notice which were in her house. There were a great many other things in her house which we have not yet seen. Probably the white men will bring more of them later. When the white men bring new things to us we are interested but not surprised, because we know where they all come from." At the back of the house there is a large field of bananas. He got a bunch from his aunt and started back. All this time the boy had been waiting patiently for his father to return. Presently he bobbed up close to the side of the canoe and handed his son the bunch of bananas.

The Great Fish.

A great fish, waramaiai, used to live in the deep pools along the upper Essiquibo and the lower Cuduwini rivers. It was so large and strong that when it was caught with a hook and line it would drag down the canoe and swallow the fishermen. Its bones were as large as those of a tapir. The scales on its back lay in the ordinary way, but those in the front lay in the opposite direction. It had a mane like a horse and the
scales along the neck near the mane were very small and fine. The people in ancient times were very fond of its flesh, which was nearly all fat. They used a strong hook and line to catch it. When they got it on the hook, the whole tribe hauled on the line from the shore and when they got it out on the ground they killed it with a great stone axe. Then they made a huge barbecue and roasted it. The bait used was a certain kind of kingfisher which the fish always ate. The fish still lives in some of the deepest pools and looks much like the aimara, but no one has seen it recently.

**Spirits in Pools.**

Each of the deep pools along the Essiquibo has its own spirit or vidiu. The pool where he resides is called tciwandu. These spirits are thought of as great anacondas with large eyes as bright as the moon. Vidiu is a spotted anaconda. These spirits or vidius do not kill people or eat them. They simply swallow them without injury and they live in the vidiu forever. The vidiu has a house at the bottom of the pool where he lives. The people passing in canoes often see the spirits and avoid them by carrying their canoes across the land around the pool. A short time ago a man saw one that reached all the way across the river and completely barred his passage, so he took his canoe overland to the river below the pool. Some places are notorious and the people make no attempt to pass nor wait to see the spirit, but haul their canoes on the land. Some pools must be passed at certain times of day or on one side only. If the spirit becomes too troublesome the medicine man may kill the spirit. He drinks tobacco, and kills it with certain incantations by using a bunch of leaves. The people themselves cannot kill a spirit, but they blow smoke upon it.
and ask it to allow them to pass, which it may do for a long
time and then suddenly swallow some one.

The second day up the Essiquibo from the Cuduwini mouth
we passed a very large pool which was formerly inhabited by a
very bad spirit whose tongue was the lightning. He swallowed
people by means of a whirlpool and kept them in his house
at the bottom of the pool forever. The canoes always passed
very quietly on the west side so they might not disturb him.
Schomburgk camped on a sandy point at the foot of the pool.
In order to appease the spirit before he attempted to pass,
he made an image of a baby and placed it at the base of a large
rock as an offering. Since then no one has been disturbed by
this spirit. However, we took no chances, but passed quietly
on the west side. This story is told by the Tarumas, not by
Schomburgk.

Visit of the Parrots.

One day the chief of the tui parrots told his people that he
was going to visit Idivyko, the god of all the parrots. "We
shall start in three days. Let everyone make complete prep-
eration. Get together all your hooks, bows and arrows, and
all hunting apparatus. Make plenty of bread and get every-
thing ready for going, my grandchildren." Each got his own
special things in readiness and on the second day they began to
assemble. They came from all parts until there were a very
great many of them. The third night they slept with the old
chief, their grandfather, and the following morning bright and
early they made their start. They flew east all day and at
night slept among the aeta palms. There were so many
parrots that all the tree-tops were filled. They continued east,
and the third day in the afternoon they came to a field. The
old chief said, "This is Idiyiko's field. Let us rest here; we are weary from our long journey. Let us eat from the seeds, for we are hungry. He must be out hunting, but he will certainly return before night, when we shall meet him."

The seeds were very fattening and before long many of them were so fat and full that their clothes were hurting them. So they began to take off their clothes and soon many of them were entirely naked. Presently Idiyiko came along through the field with his large funnel-shaped carrying basket on his back. He held it under the seed plants where the parrots were feeding and many of the naked ones dropped into it. When it was full Idiyiko said, "I am not very hungry, but you are so fat I must take some of you home to eat." He invited the chief and the others to his house, where he presented them to his wife. It was now near sunset. Idiyiko presented the appearance of a very old man. His hair was thin and streaked with white; his beard was long and grizzled; his wrinkled skin hung from his bones, and tears were raining from his eyes. His wife also looked like a very old woman. Her hair was gray, her breasts were flaccid and pendant, her stooping frame was hung with wrinkled skin. Their bodies were covered with sores. They had the same appearance as the oldest people of today. The parrots made themselves comfortable for the night and slept until sunrise. When they awoke they were surprised to find that Idiyiko had the appearance of a young man and his wife that of a young woman at puberty. The Wapisiana terms used for persons of these ages are tumenyer and tuminyeber respectively. This is Idiyiko's way. In the evening they are old people, but by the morning they have renewed their youth.

The parrots remained for a couple of moons or so and then one morning the old chief said to Idiyiko, "I want to get some-
thing. I want a new suit of clothes for myself and one for each of all my grandchildren." Idiviko gave each his new suit and when they put them on they were able to fly again. Then they went home, flying in the daytime and sleeping at night. Upon their arrival they called together all their neighbor parrots and the few of their own tui tribe who had not been able to go with them and described their visit and all they saw on the way. After two days of this reunion they settled down again to the ordinary routine of domestic life.¹

TORTOISE.

A long time ago when animals spoke like men and could understand each other, there lived an old turtle who took to himself a wife. They lived happily together for a long time. He was continually boasting of what he could do and among the things he claimed as one of his specialties was climbing. His wife was doubtful of his ability in this line and one day proposed that they should go into the forest and gather some fruit. After wandering about for some time his wife said, "I am tired of eating these seeds that have been dropped by birds and other animals. Go up into the tree and bring me down a good load of decent fruit." She looked about and selected a particular tree, the balata (*Mimusops globosa*), whose fruit is prized by all birds and animals as well as man. He walked around the tree and found a place where he thought he could get up, but after he had reached the height of a man's head he fell down. "Try again," said his wife. This time he got up twice as high, but fell again. His wife urged him to continue

¹ This story accounts for the annual migration of these tui parrots. The Tarumas say the tuis migrate to the east somewhere every year but the other parrots never go away. The tui is a small bluish-colored parrot or parrokeet.
trying, which he did, but fell every time. At last he gave up and said, “I am tired of this, I cannot climb the tree.” His wife then made him a ladder of a certain flat liana which has short undulations and is known among all the tribes as the turtle’s ladders. She hung the ladder from the tree-top and told him to climb it, but he was weary and even then unable to climb the tree. So his wife decided to do it herself and when she got up to the top of the tree she threw some fruit down to her husband. At first the fruit was very good and he enjoyed it, but after a while he noticed a peculiar flavor which he did not like. The change of flavor was due to a tcaun, the bird that feeds on certain kinds of leaves which it rolls up in its claws. It eats and sleeps as it flies. It came along and stopped to make love to the turtle’s wife. As it was hopping about it touched the fruit with its feet and gave it the taste of the leaves it had been carrying. It did not mean to make the fruit distasteful to the woman’s husband below. This was entirely incidental to the love-making. The turtle on the ground shouted up to his wife, “What are you doing up there?” She replied evasively, “Nothing.” Presently he heard her laughing and he was angry. “I know what it is; you have a man up there,” he said and ordered her to come down at once, but she refused to come. So he went away and called the birds of all kinds, the parrots, toucans, powis, marondis and others, and told them his story. Then he called all the animals, the jaguar, deer and peccaries, and told them his story. He said to all the birds and animals together, “Let us go and hunt her and bring her down and beat her and kill her.” They all agreed to assist him. In the meantime, while he was assembling the company his wife came down and went home. The turtles had a house they had built for themselves which was
unlike the houses the Tarumas build today, being more like a white man's house with a floor high above the ground. All the party went to the house and began searching for her. The birds went up into the trees and on the roof, while the animals looked about on the ground, but without success. The acouri went down into the ground and the mocking-bird went poking about in the leaves. The acouri is always nosing and smelling about and the mocking-bird goes about looking under the leaves. They were the two who could find her if she were to be found, but they did not succeed. As there were still some animals to come, there was yet a chance. A little turtle who lives in small creeks was slow because of his short legs, but when he finally arrived he began to look about on the ground.

The wife was hiding in a small room closed by a door. She had been there a long time and had a terrible desire to spit. At last she could resist no longer and spat in her hand and held it so that it might not drop on the floor and reveal her hiding place, but it leaked through her fingers and dropped just in front of the little turtle. He tasted it and at once recognized it as the spittle of the wife. Having now the direction of her location, they soon found her and dragged her from the room. As she fell to the ground the jaguar caught her and ate her up, bones, shell and everything except two eggs which dropped from his mouth through the canine spaces, one on each side. As everybody knows, the jaguar has openings between his teeth. Some of the animals got these eggs and carefully put them away with sand in a basket. After a time they hatched and became the ancestors of the present tortoises.

The Wapisianas have the same myth with some variations. Here the turtle does not boast of his climbing ability, but is supposed to be able to climb. When he was at the foot of the
balata tree he attempted to climb up the natural way, head first, but fell down. After several failures he tried to go up tail first, but with no better success. Then his wife made the ladder. It was not the taste of the fruit he noticed, but the odor. It smelled like tobacco. Here the tcaun is supposed to smoke the leaves he rolls between his toes and hence the suggestion of tobacco. The Wapisianas smoke long cigarettes made by rolling the whole length of the tobacco leaf in bark. The spittle fell upon the back of the little turtle and he said, “What is that?” The bush deer, standing nearby, licked it up and to this day the little water turtle has the tongue marks on his back. The deer told him it was the spittle of his wife and directed him where to look for her. He found her and when he pulled her out she fell on the ground, where all the animals ate her. The peccary got the eggs, but could not eat them, for every time he attempted to chew, they slipped out of his mouth. They decided then to boil the eggs and eat them, but the water would not boil. So they thought the eggs must have been sent by Tuminkar and they hid them away in the sand and covered them up. They hatched and became the land turtles of today.

This story reveals the intimate knowledge of the Indians concerning the character and habits of all the birds and animals about them. This story accounts for the origin of the special liana, the land turtles and the hollows in the rough shell of the water turtles and also suggests the former punishment for unfaithfulness.

**Evil Spirit in the Rocks.**

Near the top of one of the highest mountains a ledge of rock can be seen standing out on the south side. This is the home of an evil spirit whose breath makes a hissing sound
which can be heard when one goes near the rocks. Anyone who approaches is either killed at once or dies soon after. Three sons of our guide died very soon after they had been near enough to hear the sound. As we followed along a low pass between two hills the guide stepped high over the trail of this spirit and turned around to make sure that we did the same. One always obeys such instructions. Many such trails found in similar passes were made no doubt by animals crossing from one water course to another.

MAPIDIANs.

The Mapidians (Maopityans or Moonpidennes) call themselves Pidians, people, but the Wapisianas who have been the guides to their country have prefixed ma-, not, hence they are not people to all travelers who come from the west.

Schomburgk was the first to visit them in 1843, when he found the whole tribe, thirty-nine in all, living in one village at the head of the Apiniwau River on the Brazilian side of the Akarai mountains adjoining the Tarumas on the Guiana side. Coudreau visited them in 1884 and apparently they were still occupying the same territory, but some of them had moved across to the Taruma country. Im Thurn, who did not visit them, says they lived among the Tarumas and spoke the same language.

Today they live farther in the interior, surrounded by tribes of Carib stock, among whom they are intermarrying and from whom they are receiving new elements of culture. They claim relationship with the Atarois, but speak their own language, which is a dialect of Arawak resembling the Ataroi to such an extent that our Ataroi boy recognized it at once. They have a
tradition that their ancestors came from the head of the Apiniwau, but no one lives on that river today. The Atarois have a tradition that a part of their tribe in ancient times went over the mountains to the southeast and disappeared. No doubt the present Mapidians are the remnant of that early migration. Many of their myths are very similar to those of the other Arawak tribes, differing only in minor details. The story of the creation of animals by Tuminkar is almost identical with the Wapisiana version.

The story of the origin of the race is an interesting variant of the Taruma story in which the two brothers went fishing with hooks made from the jawbone of the paca, and Duid caught the woman while Tuminkar was asleep. Tuminkar had set a fish trap, but could get no fish because something invariably robbed him of his catch; so he put an owl over the trap to watch. Near daybreak an object in the form of a woman wearing a feather crown came along and stopped at the trap; before she reached in for the fish she removed her crown and hung it over the trap. It happened that she had placed it over the owl’s head, so he flew away with it to Tuminkar and told him all that he had seen. Tuminkar, thinking the woman would surely come to claim her crown, took it with him and went up above. She came and followed him from one village to another in the sky, at last finding him with the crown; Tuminkar seized her and kept her for his wife and they became the progenitors of the present race of men.

The marriage, childbirth, couvade and burial customs of the Mapidians are the same as those among the Wapisianas. They die because some one blows upon them or their possessions. Our boys burned their old carrying baskets to prevent injury after
they had made new ones on the trail. One favorite method of
treatment of any ailment is to rub the same part of a well person
with wet raw cotton and then rub it over the ailing part. Or to
insure health and strength they rub the cotton all over the body
of a strong person and then over the small child several times.
Ogilvie and I were rubbed with the wet cotton by packers just
before they started on their return journey because they had
baby boys at home. The men of our party who had children less
than a year old never ate with the rest of the men on account
of certain food restrictions. They often had difficulty in obtaining
sufficient food of required kind. They ate fruit, nuts and
fish, but nothing shot with gun or bow and arrow. They pluck
their eyebrows and beard as do the others of the group.

The Mapidians use no salt, neither do their neighbors.
They have good fields of cassava, sugar cane, bananas, cashews
and pineapples, but no beans, pumpkins or melons. They
poison the fish, using the same dip net found among the Wapi-
sianas and Atarois, but not seen elsewhere. They also make
the same fish traps and bird traps.

They make the usual cassava bread, but no farina. Their
baking pans are often made of a flat stone fifteen inches in
diameter. When grating cassava the women sit on the ground
with frayed Brazil nut bark for cushions, holding the grater
between their legs. Thus they become covered with cassava
juice, requiring frequent bathing to remove it. Men, women
and children bathe together twice a day.

Their dance and the music which accompanies it were
probably borrowed from their neighbors. The leader of the
dance, who is also the leader of the music, came as a child from
the Diaus, which was so long since that she had forgotten her
language completely, but she may have remembered the dance and the music. We were unable to learn the meaning of the words used.

Sung by Mapidian Women in their Dances.

\[
\begin{align*}
\text{Ha ya de ya ma hu hu ha ya de ya ma hu hu ha ya de ya ma hu hu ha ya de ya ma hu hu ku ma ma ku ma ma ha i ya ye ku ma ma ha i ya ye ku ma ma hu hu hu hu hu ku ma ma ku ma ma ku ma ma ku ma ma ku ma ma hai ya ye.}
\end{align*}
\]

Six women and two girls danced in the sun for two hours while the men sat looking on. The leader carried a gourd rattle in her right hand, keeping time with the singing and all accented the beat with the right foot. Two women carried small babies during the whole time. Needless to say, the babies were soon fast asleep. The women grasped hands, palms together with interlaced fingers, forming an undulating line, and danced contrary clock-wise around a circle twenty feet in diameter. At each quarter of the circle the line would retreat with a low bow and advance erect, move at an angle to the left, retreat to the right and retreat, then to the left
and advance on the circle. This method gave opportunity for a variety of movements which were very gracefully performed.

**Sung by Two Men in Treatment of Snake Bite.**

*Andante sostenuto.*

![Musical notation](image)

On the trail, January 28, 1914, one of our Waiwè men, the last in a line of sixteen, was struck on the bare leg by a very poisonous snake, the Jararaca or Fer-de-Lance. We were near and at once applied the torniquet, the lance and the hypodermic with permanganate and strychnia which I always carry in my pockets when traveling. The Indians of the party, fourteen in all, stood by watching this drastic treatment. They had never seen white men before and were unacquainted with the methods of their medicine men, but offered no objections. After we had made him as comfortable as possible, it occurred to me that I had missed a most valuable opportunity of witnessing their method of treating snake bite and suggested that they give him their treatment in addition to ours, as he was still suffering great pain. The Waiwè chief went to the son of
the Mapidian chief and they rehearsed at a distance for a short time, then they went to the patient in his hammock and sang the above song in a very low tone of voice, after which each in turn, using his left hand as a funnel, blew on the top of the head and all joints of the body, ending with the toes, and concluded the performance by spitting on the wound, or rather by spitting at it from the distance of a foot. The treatment had a soothing effect and for a quarter of an hour he lay quiet, then he began to turn in his hammock in severe pain. They then repeated the same performance the second time and again the third time after a longer period. After three hours, although his foot and leg were badly swollen, his pulse had returned almost to normal and he was suffering less pain. The chief said we should go on our journey and leave the man's wife behind with him. As they were both carrying food, which we left with them, they would get on well until the chief and his party returned two weeks later. We never heard from them again, but hope the man recovered.

Not one of the Mapidians had ever seen a white man before, yet they showed no anxiety, nervousness, or special interest in us personally. They were greatly interested in all our equipment and the trading material we carried. Their only regret was that they had so few things of value for exchange. They breed good hunting dogs which they use for barter, but we had no use for them.

When we entered their village they each in turn, from the old chief to the smallest child, came and offered a word of greeting; when they came to our camp each came to speak to us individually. Upon leaving camp each would point to himself and say tcikėna (I am going), and so when we were
leaving and had our packs on our backs every one of the whole party of sixteen had to go to each person in the village to say good-bye. It was a full hour after we were loaded before we finally got away.

As the old chief was too feeble to accompany us to the next village, a long journey over rough mountains, he sent his son in charge of the outfits. The chief had been very kind to us, coming every day to invite us to eat with him, furnishing food for the men, giving up anything we desired for exchange, etc. As we were leaving we presented him, among other things, a good machette which he greatly appreciated. In parting he said, "I am an old man, I shall soon go up above; when I get there I will watch for you and when I see you coming I will tell Tuminkar how good you have been to me." This was the only time in my experience that an Indian gave expression to feelings of gratitude and appreciation. They often show it and often return kindnesses as we are expected to do at home, but say nothing. I take pleasure in recording this incident and in paying tribute to this splendid man, one of the best I ever met.

DESTRUCTION OF THE CILIKUNAS.¹

There is a story current in the Rio Branco region that the Cilikunas lived near the foot of the mountains of the moon near the head of the Takutu River in Brazil. As the first missionaries sent among them were not well received, soldiers were sent to punish the Indians, whom they found on a great sandbar without protection or defense. They massacred the whole tribe. There may or may not be some foundation for the

¹Parivillanas, Parauanas or Paraguanos.
story, but the legend told among the Wapisianas concerning the disappearance of the tribe is interesting in this connection.

A woman went to get firewood a short distance from her home and after she had partially filled her carrying basket with fallen sticks she went to a clump of trees and broke off a dead branch, thus frightening a deer which jumped up and started to run away. The woman, startled, made a motion as if to throw the branch at the deer, when to her surprise it fell down dead. She laid it on top of the firewood and carried it home. When she told her husband how she killed the deer he refused to believe such a strange story, saying that she must have a lover who killed it and gave it to her; but she adhered to her original story and in showing him just how it was done she pointed the branch at him and he fell dead at her feet. The tribe then came together and accused her of killing her husband, but she maintained her innocence and showed them how it happened by pointing the branch at a man nearby who instantly fell down dead. Then the chief asked her to take them to the tree, where he broke off another branch and to test it pointed it at one of his fellows and killed him. They were now satisfied and said among themselves, "We have a weapon with which we can easily overcome our enemies; we are quite safe."

After a time one of the tribe fell in love with another member's wife and, as it was so easily done, he killed him with a branch and took his wife. Then others used the branch for any cause, until finally civil war broke out among them and they killed each other until all were gone.

The Wapisianas say the tree grows just north of the mountains of the moon, but no one can identify it. They say also that this story is a recent one and does not belong to the class
that begins, "A long time ago when the world was young."
It may refer to the introduction of firearms, but it is doubtful.

Im Thurm\(^1\) records a story of a Carib woman who, when attacked by a jaguar, seized a stick to defend herself and when she pointed it at the animal he fell dead.

**THE NIKARIKARU.**

The so-called Nikarikaru Indians are found living along the Takutu River in northern Brazil. The term is applied to the descendants of former crosses between Brazilians and Indians of whatever tribe without reference to any particular group. It is a general term in local use. Brazilians are called *Kariwais* (dark people) and the English, *Paranakaris* (light people) by the Wapisianas.

**WHITE INDIANS.**

The usual story of white Indians is common in every part of the Amazon country. There is a tribe in northern Brazil known among the outside foreigners as the "white Indians." This results from a misinterpretation of their name. The Wapisianas, with whom the Brazilians first came into contact, call the tribe Waiwais. They also call the white cassava starch by the same name. The Brazilians call this white starch tapioca, hence the Waiwais are Tapiocas, or white people. It happens, however, that they are much lighter in color than the Wapisianas, but far from being as white as tapioca.

**TRIBES OF WOMEN.**

On our way up the Takutu we heard many times of a tribe of women living at the head of the river on the British side.

\(^1\) *Among the Indians of Guiana*, London, 1883, p. 25.
Later we learned from Mr. John Ogilvie that some ten Wapisiana women live together in a large house they built for themselves on Sand Creek. They are elderly women whose husbands are dead and whose children are married. As there are many more women than men among the Wapisianas, there was little hope of their finding other husbands; so they went together, cleared their fields and built their home. They cannot be spoken of as a tribe of women and have no connection with the story of the Amazons still current along the Amazon and lower Negro.

PETROGLYPHS.¹

Throughout the region occupied by these Arawak tribes are found numerous incised designs upon rocks, known as petroglyphs. For the most part they occur along rivers on the smooth surface of granitic rocks in exposed places open to view from the river; they are, however, occasionally found in the open savannah, as, for example, near the sacred mountains of the Atarois. Drawings, measurements and photographs were made of all observed that could be determined with accuracy.

The designs are in the form of men, animals, fish, serpents, or they may be purely geometric figures. The human face, which does not occur in profile, may be round, square or diamond-shaped, while the figures may be concentric circles, ovals, quadrangles or simple lines. The methods used in carving the glyphs were by pecking, scratching and rubbing and for the most part the grooves were polished smooth.

The Indians living in the regions where they occur know nothing of their origin or significance and have no traditions or beliefs regarding them. This is good evidence that they were

made by a former people and are of very great age. There are traditions connected with all the nearby mountains in the savannah, but none about the glyphs, therefore they must be older than the mountain myths and the story of creation.

The glyphs themselves give the best evidence of their age. On overhanging rocks, in protected places, the grooves are more than a quarter of an inch deep and it may be inferred that they were originally of equal depth on the upper surfaces. The grooves were rubbed smooth and have been further protected from erosion by deposits of oxide of iron, so that it is possible to trace them by touch when they cannot be seen. This erosion of the rock surface to the depth of a quarter of an inch has taken place since the glyphs were made. We can form no idea of the rate of erosion in that climate, but we know from experience that granite decomposes very slowly and that it would require too long a period, covering so many generations, for the survival of any traditions regarding the makers of the glyphs.

The use and significance of such stone carvings, which are world-wide in their distribution, have always been a fruitful source of theorizing. They have been interpreted as everything from mere pastime occupations to serious historic records, but no satisfactory explanation can be hoped for because there are no supporting facts. Any attempt at a comparative study must end in futility. Glyphs which are evidently meant to be realistic may have very different interpretations. Simple line drawings of animals must necessarily resemble each other, but in one region the animal may be a clan totem, in another a hunter's record and in a third it may have no significance other than the portrayal of an animal. When the figures become conventionalized the difficulties are increased. In symbolism, differing figures may be employed to express the same thought
and diverse significance may be attached to the same figure. Hence typical resemblances prove neither evidence of contact nor similarity of ideas.

Whatever their significance, they are interesting because they are the results of primitive man's first efforts at artistic presentation. They are examples of early customs and our sole evidence of a long extinct culture.

SOMATIC CHARACTERISTICS.

From the physical measurements and photographs it will be seen that these people are a strong, virile race despite the custom of cousin marriages which has been going on for unnumbered generations. One interesting fact is noteworthy, although it may not be due to inbreeding: there are many more women than men among them. The Wapisianas say there are two women for every man. Mr. Ogilvie, who is making an exact census of this tribe, says that nearly two-thirds of the whole number are females.

Men and women are well developed, but neither fat nor muscular. Both have great endurance and pack heavy loads for long distances without apparent fatigue. Those living in the savannahs are excellent long distance runners, but never enter into contests of any kind among themselves nor with their neighbors. A ceremonial wrestling match has already been described.

In personal appearance they are rough featured in comparison with some of their Carib neighbors of the interior, but not uncomely. All are scrupulously clean in their habits of life. Among the Mapidians, men, women and children all bathe together. It is the custom among all the tribes to bathe twice a day. They keep their dogs and houses clean also.
The Atarois and Wapisianas who live in the open savannah are noticeably darker in skin color than tribes of other stocks in the forests. The Tarumas and Mapidians who today are forest dwellers are darker than their forest neighbors, but differ very little from their kinsmen. Their hair is black and particularly among the Tarumas and Mapidians it is slightly wavy. They have very little body hair, even on the pubis or in the axilla. Nearly all the men have hair on the lip and a few have scattering long hairs on the face. Both sexes extract the eyebrows. Men wear the hair long and confined in decorated tubes of bamboo, while women wear theirs loose or tied in a knot on the nape of the neck. Sometimes they cut it square across over the eyes. At puberty a girl cuts her hair and wears a white head band for a year or until after she is married.

Men would live forever if it were not for evil spirits and evil medicine men who either kill people outright or send all kinds of sickness and diseases which kill them. They never die a natural death—in the end something always kills them. As we have no statistics it is difficult to make anything like exact statements, but it would appear that the average age at death among them is much less than among Europeans. Yet a goodly number of very old men and women are found. They show their age more in the loss of teeth and in wrinkled skin than in color of hair or faltering steps. The oldest men have very few gray hairs and are never bald.

Abnormal individuals are rare among them. One case of lateral curvature of the spine was observed; one of feeble-mindedness and seven of deaf-mutism. No case of albinism had ever been heard of by the oldest residents. We saw no supernumerary digits, nor malformations of any kind. There were evidences of more or less severe injuries for the most part on
hands or feet and due to the ordinary accidents in connection with labor and travel or to attacks by animals, reptiles or insects. One had a stiff hand from the bite of a poisonous snake, and two had lame feet from the stroke of the sting-ray.

Their senses of sight, hearing and location are well developed, but this result is largely due to education and special training, and it may be due to concentrated attention in the savannah country where the distances are great and the sight unobstructed. They never get lost, but always keep in mind the direction back to camp. When traveling on long journeys into new territory they are able to orient themselves perfectly.

The posture habitually assumed when at rest differs with the sex. The men squat on their heels or at times place a small stick under their heels to lift them up. When eating they squat around the cooking pot. When the women stop to rest, with or without a pack on the back, they drop first on their knees and then sit back on their feet with the toes turned in, or else they sit flat on the ground with one leg straight and the other bent with the foot close between the thighs. Both sexes squat to urinate. Men often stand on one foot with the other resting against the opposite leg just above the knee.

There is little to be observed in the way of artificial deformations or body mutilations. All pierce the ears, septum and lower lip. The men file their front teeth to a point and tattoo binas on their arms. The girls who are to chew materials for making intoxicants tattoo lines about their mouths. The head is not deformed.

It is difficult to determine the size of the average family, because no records are kept and the dead are soon forgotten. Infanticide, while not common, has been practiced. The old
Mapidian chief who has had four wives, two dead and two still living, said he had killed a number of his first children, he had forgotten how many, because they did not want them at that time. He strangled them by tying a cord about their necks. Infant mortality is said to be very great. The families observed were not large. The relative number of children to adults is best shown by the populations of some of the villages as follows: 9 men, 11 women and 14 children; 12 men, 15 women and 17 children; 10 men, 14 women and 18 children, etc.

The total population of these four Arawak tribes is less than 1,500 and rapidly decreasing. According to some accounts of the savannah tribes, this condition seems due to changed economic conditions and introduced diseases. Several tribes have totally disappeared within the past hundred years. The Wapisianas number about 1,200; the Atarois, including half bloods, less than 100; the Tarumas about 50 and the Mapidians less than 100.

Comparison of Measurements.

The tallest of the tribes are the Mapidians, with an average stature of 1,615 mm.; the Tarumas come next at 1,596 mm., while the Wapisianas and Atarois are the shortest at 1,573 mm. The Mapidian women are taller than the Taruma women, measuring respectively 1,488 mm. and 1,461 mm. The Mapidians also show a greater range of variability than the other groups; the shortest and the tallest individuals are found in this tribe. The Wapisianas are relatively longer bodied than the other groups, with a height sitting-height index one point greater. They have also a higher span-height index which is due to greater length of cubit and breadth of shoulders. The Tarumas have
longer hands, feet and third fingers, greater depth and breadth of chest and broader hips than the others. Actually and relatively the women have broader hips than the men; their shoulders are 26 mm. narrower, but their hips are 6 mm. broader. In head form there is little variation between groups or individuals, with an average index of 80 for men and 81.1 for women. The Wapisianas have a longer head, a rounder face and a broader nose than any other group, but the differences are not great.

When a comparison is made between the male and the female measurements and indices it will be noted that there is a remarkable agreement in bodily proportions—for the most part less than one point of difference in the indices. The females have relatively broader hips, heads and faces, but narrower hands and noses.

The measurements are those usually taken, but a few explanations seem necessary. Every one who has done field work among the less frequented tribes is aware of the difficulties encountered when any attempt is made to touch the person. There is little difficulty in getting photographs because the instrument does not touch the body and the native does not understand what is going on (unless some foolish person attempts to explain the process, when serious difficulties may follow); but taking body measurements is a different problem. The operation itself is often troublesome, requiring great care to attain any degree of accuracy. There are no floors and the ground is uneven, affecting all height measurements. The greatest difficulty is in getting the sitting height—there are no seats or boxes available, the ground is too low and a log—is round. The shoulder, hip and chest dimensions are obtained with precision because the people wear no clothing. The
shoulder measurement taken is the biacromial breadth and the hip, the biliac breadth.

No comparative study with other groups or stocks is entered into here because we shall later publish new material from many tribes in other regions.
FIG. 13.—TYPES OF ARROWS.
### Measurement

**Table 1—Wapiana**

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**Indeces**

- Height sitting - height: 50.8
- Span - height: 50.1
- Arm - height: 44.9
- Cubit - height: 29.1
- Foot - height: 16.5
- Breadth shoulders - height: 23.8
- Breast hips - breast shoulders: 86.4
- Chest: 69.5
- Hand: 49.7
- Foot: 45.8
- Cephalic: 79.1
- Bizygomatic - breadth head: 96.6
- Bigonial - bizygomatic: 77.6
- Upper facial: 51.7
- Lower facial: 102.7
- Total facial: 83.0
- Nasal: 82.9

1 All measurements are in millimeters.
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- Span - height: 108.4
- Arm - height: 42.4
- Cubit - height: 28.7
- Foot - height: 15.6
- Breast - shoulders - height: 21.4
- Breast hips - breadth shoulders: 86.6
- Chest: 80.4
- Hand: 42.9
- Foot: 40.6
- Cephalic: 77.5
- Bisymomatic - breadth head: 93.8
- Bignomial - bisymomatic: 78.0
- Upper facial: 58.8
- Lower facial: 92.2
- Total facial: 72.0
- Nasal: 92.0

**Note:** The table contains measurements for various body parts and indices, including height, breadth, and span. The data are provided in centimeters and inches, with ranges and averages given for each measurement.
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<td>85.9</td>
<td>81.4</td>
<td>94.8</td>
<td>77.8</td>
<td>80.5</td>
<td>88.9</td>
<td>77.6</td>
</tr>
</tbody>
</table>

**FARABEE—THE WAPISIANAS**

**TABLE 6—MAPIDIAN.**
<table>
<thead>
<tr>
<th>Females</th>
<th>Atarai</th>
<th>Cross</th>
<th>Average, 18 Females</th>
<th>Average, 32 Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>1452</td>
<td>1509</td>
<td>1490</td>
<td>1500</td>
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<tr>
<td>Height to shoulder</td>
<td>1205</td>
<td>1243</td>
<td>1226</td>
<td>1235</td>
</tr>
<tr>
<td>Height to third finger</td>
<td>555</td>
<td>578</td>
<td>543</td>
<td>560</td>
</tr>
<tr>
<td>Height sitting</td>
<td>753</td>
<td>792</td>
<td>735</td>
<td>774</td>
</tr>
<tr>
<td>Span</td>
<td>1525</td>
<td>1548</td>
<td>1559</td>
<td>1554</td>
</tr>
<tr>
<td>Arm length</td>
<td>620</td>
<td>665</td>
<td>683</td>
<td>674</td>
</tr>
<tr>
<td>Breadth of shoulders</td>
<td>341</td>
<td>332</td>
<td>337</td>
<td>342</td>
</tr>
<tr>
<td>Breadth of chest</td>
<td>282</td>
<td>284</td>
<td>283</td>
<td>282</td>
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<tr>
<td>Depth of chest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breadth of hips</td>
<td>305</td>
<td>306</td>
<td>306</td>
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</tr>
<tr>
<td>Length of cubit</td>
<td>404</td>
<td>413</td>
<td>408</td>
<td>404</td>
</tr>
<tr>
<td>Length of third finger</td>
<td>92</td>
<td>99</td>
<td>99</td>
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<tr>
<td>Length of hand</td>
<td>153</td>
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<td>163</td>
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<tr>
<td>Breadth of hand</td>
<td>71</td>
<td>70</td>
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<td>Length of foot</td>
<td>219</td>
<td>234</td>
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<td>231</td>
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<tr>
<td>Breadth of foot</td>
<td>93</td>
<td>92</td>
<td>88</td>
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<tr>
<td>Length of head</td>
<td>183</td>
<td>181</td>
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<tr>
<td>Breadth of head</td>
<td>148</td>
<td>147</td>
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<td>Minimum frontal</td>
<td>105</td>
<td>103</td>
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<tr>
<td>Breadth, bizygomatic</td>
<td>136</td>
<td>132</td>
<td>132</td>
<td>132</td>
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<tr>
<td>Breadth, bigonial</td>
<td>102</td>
<td>94</td>
<td>93</td>
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<tr>
<td>Height, menton-crinion</td>
<td>165</td>
<td>169</td>
<td>168</td>
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<tr>
<td>Height, menton-nasion</td>
<td>105</td>
<td>113</td>
<td>111</td>
<td>112</td>
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<td>Height, prosthony-nasion</td>
<td>67</td>
<td>70</td>
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<tr>
<td>Height of nose</td>
<td>44</td>
<td>45</td>
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<tr>
<td>Breadth of nose</td>
<td>29</td>
<td>36</td>
<td>35</td>
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<td>Breadth, bicocular</td>
<td>62</td>
<td>58</td>
<td>56</td>
<td>60</td>
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<tr>
<td>Breadth of mouth</td>
<td>57</td>
<td>51</td>
<td>46</td>
<td>49</td>
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<tr>
<td>Height of right ear</td>
<td>59</td>
<td>54</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Grip, right hand</td>
<td>55</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Grip, left hand</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>67</td>
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<tr>
<td>Respiration</td>
<td>24</td>
<td>22</td>
<td>20</td>
<td>21</td>
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<tr>
<td>Pulses</td>
<td>72</td>
<td>96</td>
<td>96</td>
<td>97</td>
</tr>
</tbody>
</table>

Indices:
- Height sitting - height
- Span - height
- Arm - height
- Cubit - height
- Foot - height
- Breadth shoulders - height
- Breadth hips - breadth shoulders
- Chest
- Hand
- Foot
- Cephalic
- Bizygomatic - breadth head
- Bigonial - bizygomatic
- Upper facial
- Lower facial
- Total facial
- Nasal

Indices:
- Height sitting - height
- Span - height
- Arm - height
- Cubit - height
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- Upper facial
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- Nasal
THE LANGUAGE OF THE CENTRAL ARAWAKS
LANGUAGE.

In offering the following most incomplete study of the languages of these groups, an apology must be made for the meager amount of grammatical material collected. The field worker in difficult out-of-the-way places must secure what he can at the moment and record it for what it is worth to those who follow. Much of the Wapisiana material was obtained while traveling on the trail or in canoes with the natives. We hoped later to be able to get texts, but were disappointed. There are in use no ritualistic songs, dances or ceremonies in which exact linguistic forms and expressions are preserved. They tell some stories, but these have no established form. The one text recorded, with its translation, was sent to me by Mr. Ogilvie after our expedition was over. Phrases are of value and observed usage is most valuable even if little illustrative text is available.

**Key to the Phonetic System.**

- a as in father  ai as in aisle
- ā “ hat
- e “ fete
- ē “ met
- i “ pique
- į “ pin
- o “ note
- ō “ not
- u “ rule
- ū “ but

There is a decided tendency toward the use of pure vowels. The most common sound is that of a in father. There are a
few nasalized vowels, but the sounds of umlauted ö and ü do not occur. There is often some uncertainty between weak i and e.

Of the consonants, k occurs much more often than any other. Strong r is common and has a tendency to roll. Labials b and p are very common, as are also the dentals t and d. Nasalized n frequently occurs in compound words. Hard g, aspirated h, and j are rare. The sounds of th, tl and v do not occur. They are unable to pronounce the Portuguese word for horse, cavallo.

Nouns.

Nouns do not change their form when used in the sentence, unless suffixes are added when a final consonant may be elided or the length of a final vowel may be changed. There are no case endings.

Personal Pronouns.

I .................................................. u
you ................................................ pui
he .................................................. i
she .................................................. u
we .................................................. wa
you ................................................ puinau
they (m.) ....................................... inau
they (f.) ....................................... unau

I, u, is the abbreviation of unkar and you, pui, of purikar.

Demonstrative Pronouns.

that .................................................. ili, man
that .................................................. ulu, woman
that .................................................. baulau, object

There are no plural forms.
Possessive Pronouns.

my ................................................. u or un
your .................................................. pui
his ..................................................... i
her ...................................................... u
our ........................................................ wa
your .................................................. puinau
their (m.) ........................................... inau
their (f.) .............................................. unau

John's bow ......................................... John sumarau
your bow ......................................... suisumarau

The word for bow is sumar.

Adjectives.

Adjectives always precede the nouns which they modify.

a large house ........................................ tabar kabern
a good man .......................................... kaimen pidian
a bad man ........................................... auna kimen pidian

No article is used.

The form of the adjective does not change to agree with the gender of the noun modified.

Comparison of Adjectives.

The comparative degree is formed by adding erda to the positive; erda literally means, a little. One tree is a little taller than another. The superlative is formed by adding amēn to the positive.

Good ................................................. kaimēn
Better .............................................. kaimēnērda
Best ................................................. kaimēnamēn
Tall ................................................. duku
Taller ............................................... dukuērda
Tallest ............................................. dukuamēn
Verb to Sleep.

Present Tense.

I sleep ........................................ udauin
you sleep ...................................... puidauin
he sleeps ...................................... idauin
she sleeps ...................................... udauin
we sleep ...................................... wadauin
you sleep ...................................... puinaudauin
they (m.) ...................................... inaudauin
they (f.) ...................................... unaudauin

Past Tense.

I slept .......................................... udau
you slept ....................................... puidau
he slept ....................................... idau
she slept ....................................... udau
we slept ........................................ wadau
you slept ....................................... puidau
they (m.) ....................................... inaudau
they (f.) ....................................... unaudau

Future Tense.

I will sleep .................................... udauinin
you will sleep .................................. puidaunin
he will sleep .................................. idaunin
she will sleep ................................ udauinin
we will sleep ................................ wadauin
you will sleep ................................ puidaunin
they (m.) ...................................... inaudauinin
they (f.) ...................................... unaudauinin

I was sleeping ................................. udauininan
I wish to sleep ................................ udauerun
I had slept ..................................... udauinakan

imperative ..................................... dau
present participle .............................. dauinin
past participle ................................. dauininakan
Plurals.

Nouns are made plural by adding nau to the singular. In the plural aro, deer, becomes aronau; kudui, tapir, kuduinau. Plurality is also expressed by repetition. A bird with a forked tail is a sirsir, or two tails; a spotted jaguar, a katinatin, or having many spots.

Gender.

While there is no grouping of nouns with reference to grammatical gender, sex endings are used. As dari, father; daru, mother; puitol, manservant; puitolyeb, a woman servant; arodaunaiura, a male deer, and arorin, a female deer.

Limitations of the Language.

They have no direct expressions to describe the form or content of an object. There are few words which can be used for analytical purposes. A new object is described by referring it to some object already familiar. The size of an object is expressed in terms of age: a large bead is an old man bead, a large man is a grandfather. They have names for white, black and red, but use the same word for blue, yellow and green. To distinguish between these colors, they use along with the common word that of a bird of the particular color.

Negative Expressions.

Positive statements are usually made in negative form. "I wish to live" is expressed by saying, "I do not wish to die." Blind, ma'awin, means without eyes; deaf, makinauri, without internal ears; mute, maparadan, not speaking; shallow, makana, not deep; lean, aunakakiwain, not having fat; few, auna-ilib,
not many; bad, aunakaimen, not good; light, makimic, not heavy; naked, makakamitc, not having a breechcloth. The particles ma and auna are negatives and ka a verbal form.

**Salutations.**

The common form of salutation on the trail, or upon entering a house or village, is kana and the response is diña. These terms mean literally, "Are you there?" and "I am here."

**Group Ideas.**

Groups of ideas are expressed by groups of phonetics. Lips, dakmad; eyelid, awínmad; scrotum, kumad; tobacco wrapper, sumamad; bark canoe, atamaumad. The monosyllable mad means skin. Again dakmad, as above; month, daku; to name, dakut; spittle, radak; to talk, kadakin. The word dak means tooth. The word for eye is awin; to sleep, dawinan; to dream, randawin; the buttons on a coat, kínamidawin. The word for foot is kedib; sole, kedíbdaru; heel, kedíbulud; toes, kedíbdan; great toe, kedíbdaruair; little toe, kedíbdansud; the instep, kedíbutei. The sole is the mother, the heel the root, the little toe the little son and great toe the head of the foot. Similarly the thumb is head of the hand and the fingers, sons. A puma is a kucardin, a deer dog; a spotted jaguar, a wirad’din, a turtle dog; a black jaguar, a kuduidin, a tapir dog. The din means dog in Ataroi; hence, the names for these animals, deer dog, turtle dog and tapir dog, have been adopted by the Wapisianas along with the idea that they feed upon the animals for whom they are named.
Onomatopoetic expressions are frequently used in giving names to actions and to animals, birds and insects. To grate cassava is tciktcik, in imitation of the sound of grating; a gimlet is a kuikui; a bird is a cucu, dilidili, tcibilibili, tiritiri.

Language Variations.

Men and women use the same expressions, with a few exceptions. To express emphasis men use raitce with the word to be stressed. It has no meaning in itself, but is used to strengthen the other word. For example: auna is no; auna-raitce is no indeed, or decidedly not. A woman is not allowed to use raitce, but she uses akwii in the same sense. A man uses pubaulan for by myself, while a woman uses baitcebau for the same expression.

Order of Words.

In the order of words, the noun or subject precedes the verb and the direct object follows it. An indirect object follows the direct. The preposition is postfixed to the word it governs: as unet, to use; kaburnet, to the house; kaburnik, from the house; Johnid from John.¹

(1) U baien kopai
    I shot (a) fish
(2) i tan kopai un et
    He gave (a) fish me to
(3) i naidep unkar
    He likes me
(4) u naidep puikar
    I like you

¹ Nouns are not classified, but enter the sentence without change of form.
Numerals.

1 baiadap  
2 vaitam  
3 dikinërda  
4 pamiadatonkin  
5 bakajërda  
6 baiadapbakinët  
7 vaitambakinët  
8 dikiniërdbakinët  
9 pamiadatonkinbakinët  
10 baukuka  
11 baiadapwakedib  
12 vaitamwakedib  
13 dikiniërda wakedib  
14 pamiadatonkinwakedib  
15 baiadapkedib  
16 baiadapaulauwakedib  
17 vaitamaulauwakedib  
18 dikiniërdaaulauwakedib  
19 pamiadatonkinaulauwakedib  
20 baiadapidian  
21 baiadapaulupidianipë  
22 baiadapidianbaukuka  
23 yaitampidian  

Numeration among the Wapisianas is based upon a combination of the quinary and decimal systems. The numerals to five, as far as we know, have lost their original meaning. Five is made up of ha, by itself; kai, hand, and erda, the particle used in forming the comparative. Six is one and five; and so on up to nine. The first syllable of ten, bau, is a group when applied to trees. kuka is not understood. Eleven is one and wakedib, my feet, and so on up to fourteen. Fifteen is one and foot, ten understood. Sixteen is one, baulau, another, and my feet; and so on up to nineteen. Twenty is one, baiadap and pidian, person, one of the two p’s being elided. Twenty-one is one, another, person and ipe, whole. Thirty is twenty and ten, and forty is two persons.

For numbers above forty they say ilib, which means many. By continuing the same system they could count on indefinitely, but at present there is no use for higher numbers. To give some idea of a number that has not been counted they make use of ilib for many and aunailib, not many, for few. For an indefinite large number they repeat ilib once or twice or so and for a very small one repeat the same word after auna.
no ordinals. They cannot say first, second, third. There are no terms for fractional parts of an object, except bada'i, which means half, or more properly the middle.

They count time by suns rather than by sleeps, as the Atarois do. Two days are counted as two suns, three days as three suns, not one sleep and two sleeps. Longer time is counted by moons and still longer by seasons.

It is interesting to note the great number of animals, birds, insects, fish, with which they are familiar. In the vocabulary there are names of more than a hundred fish, sixty birds, fifteen frogs, eight lizards and seven wasps. There is also a list of twenty-four poisons with which to kill or capture game.

**Names of Men.**

Aro........................................red deer  
Arunau......................................a brown bird  
Awarakauli................................whirlwind  
Awarsub....................................little wind  
Dakali idib..............................partridge nose  
Dawirabai.................................long legs  
Dawitain..................................long ear  
Dilidili....................................a bird  
Jef alintun..............................the small catfish  
Kadabóbitieu..............................crooked penis  
Kadaktinein..............................a talker  
Kadino....................................man with a beard  
Kapasauin.................................armadillo eye  
Karap......................................a small bird  
Kori........................................a rat  
Kwavar.....................................anaconda  
Maparadauri...............................deaf mute  
Mätáda.....................................big fresh water turtle  
Pratatабai................................silver leg  
Romi........................................black howling monkey  
Sabai.......................................a small fish  
Tcutcun....................................little snail in the water
Tolín..................................................hole in a tree
Tomali..............................................a rattle behind your back
Tumtumruair..........................................lizard head
Turau.......................................................a frog
Ubun......................................................sting-ray

**Names of Women.**

Amidar
Amidaruu
Cimuyeb..............................................little child
Elaika
Kaduiyeb.................................................female tapir
Kasuryeb.................................................female ant
Makawēnēli................................................without eyes
Mandyeb...................................................a mould
Manikap
Surababii................................................a sunfish
Warikup...................................................ginger

It is quite evident that these names are given because of some physical peculiarity or deformity, habit of life or intellectual characteristic of the individual. It is often difficult to determine what particular habit of the animal the name implies, especially so since we are unfamiliar with the life history of most of the animals. In some cases the names imply faculties of mind and habits of thought and action the field worker does not observe. Such names as “Little Wind,” “Sting-ray,” a “Talker” and “Rattle Behind Your Back” are plainly derogatory. This custom of naming must have a salutary effect upon the conduct of the community.

**Names of Tribes.**

The names Wapisiana, Ataroí, Taruma and Mapidian are those used by the Wapisianas. The Ataroís call themselves Atorads; the Tarumas call themselves Ujēssī and the Mapidians call themselves Pidians. Tarumas call the Wapisianas, Wapi-
tcan; the Atarois, Saitcikko, and the Mapidians, Waikasi. Waiwaits call the Mapidians, Mawaiyen and the Tarumas, Tcaruma. The Mapidians call the Waiwës, Kutcipiana. Thus the name one receives for any particular tribe depends upon the direction of approach to the tribe. This accounts to some extent for the great confusion of names throughout the Amazon Valley.

**STORY OF THE ARUNAU.**

Kutie nau paradan keikîne arunau ramtan i daidarau
Long ago those have spoken it is said tiger bird took his wife
kutiauler i ilmedukur dapadan keikîne “he’ei wa baruopan
long ago his father-in-law called it is said “he’ei we will cut with
the axe
tcaunai.” “ha’a’a arunau kiên auna i makuna maraen
son-in-law “ha’a’a tiger bird answered, no he went but did not go
panadun “he’ei wa rupan airi i ilmedukur kiên “ha’a’a
sometimes “he’ei we will weed today his father-in-law said “ha’a’a
arunau kiên auna maraen i makuna “wa pauna wa
tiger bird answered but he went “we will plant our
mariki airi tcaunai,” i ilmedukur kien “ha’a’a” arunau
corn today son-in-law, his father-in-law said “ha’a’a tiger bird
kien maraen auna ipei i ilmedukur na’apan i et auna
answered but no all his father-in-law said the same him to no
maraen i arotan maraen “wa kobauana tcaunai” tinaranau
but he did hear but we will fish with trap son-in-law old man
kien, “ha, ha, ha” arunau kiên ēli i menrewan i makuna.
said, “ha, ha, ha” tiger bird said then he made ready he went.

**TRANSLATION.**

It is said that long ago a tiger bird took a wife and went to live in her village. When his father-in-law would ask him to assist in clearing the forest or in planting or cultivating a field, he would assent to it but never go to work. When there were fish in the trap, however, he would make ready quickly and go along.
VOCABULARIES.

ENGLISH-WASPISIANA

abdomen...............................................tub
about..................................................padamata
above..................................................haiër
absent..................................................auñakaiwer
acouri...................................................uran
acouri, small.................................adula
advise................................................kanikini
adz..................................................purali
afraid..................................................kitcnenait
after..................................................deinau
afternoon...........................................tcipurau
again........................................paua (v.), pauait
aim (v.)..................................................sauda
alight (v.).............................................pakâtap
alike................................................na'ap
alive................................................kakap
all........................................ipe, ïpena
alligator.............................................âtalî
alligator, large.............................kanuad
all right (m.)..................................baise maisa
all right (f.)..................................baise maïña
almost..............................................âtairu
alone.............................................pubaulau
also................................................kupum
altair (man who can't swim)..............manauba
always..................................................ipie
Amazon........................................mawakunawa
among.................................................bi
anaconda..........................................kwarar
anato paint.....................................kalo.il
ancient.................................................kutiana
and...................................................êt
anger..................................................kerulibêt
ankle...............................................baroli
answer..............................................kien
another.............................................baulau
ant.....................................................amau
ant.................................................kācur
ant.................................................kācuryeb
ant.................................................koki
ant.................................................kokibairu
ant.................................................korum
ant.................................................mali
ant.................................................mar
ant.................................................mât
ant.................................................miñar
ant.................................................miñartukerai
ant.................................................rakaul
ant.................................................samarai
ant, big black......................................wik
anteater........................................tamandua
ant frame........................................weikobar
anus..............................................dekēp
anything..........................................aimaikan
apron (woman's)...............................kinidebar
arm.................................................anub
armadillo........................................kapac
armadillo, small (n.)...........................capas
arrow..............................................baili
arrow case for blowgun......................kubin tcatîn inenai
ascend (v.)........................................ride
ashamed (v.).....................................kibeîrun
ashes..............................................parati
as it is said......................................kaicatî, na'ap
as it should be................................rubart
ask (v.)...........................................picien
aunt..............................................darukaru
aunt or mother-in-law.........................wani
autumn...........................................wawat
awake (v.).........................................pukad
axe................................................baru
axilla..............................................kecêp
axilla hair......................................kecêbid
baby................................................dan
baby carrier....................................didême
back ornaments................................risiman
back, over the.................................burai ñnap
back, the ........................................ bali (v.) burai
back, to go ...................................... dawi
bad ................................................. aunakaimen
bad bush ......................................... icekari
bad tasting ....................................... katër
badly done ....................................... kasa aulir
bail water (v.) ................................... warakan
bake (v.) .......................................... tcerud
balata ............................................. turar
bald ................................................ madruair
balsam ............................................. marana
banana ............................................ slr
barbecue ......................................... dipeli (v.), taradapaua
bark used as bina .............................. kunana
bark, tanning ................................. kurapat
bat .................................................. tamalu
bathe (v.) ......................................... kaup
bead ............................................... kasur
beak .............................................. ćidib
beard ............................................... din
beat (v.) .......................................... bairi
bed .................................................. pitcet (v.), cimēk
bee ................................................. maba
behind ............................................. dauēt
being sick ....................................... kilinan
bell bird ........................................ palāntale
belly ............................................... kāru, tub
belt ................................................ radau
bend (v.) ......................................... kulaid
best ............................................... kaimēnamēn
better ............................................. kaimēnērda
biceps ............................................ si’Înwîr
bina of bark .................................... kunawa
bina of thongs ................................. korotkini
bird ................................................ aradautun
bird ............................................... ciroli
bird ............................................... cucu
bird ............................................... delp
bird ............................................... dflidifìli
bird ............................................... diwi
bird ............................................... guaraparu
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burn (v.) ........................................ kawaud, kaupan
bush deer .......................................... kucar
but .................................................. maran
butterfly ........................................... tumatum
buttock ........................................... doru
buttocks ......................................... dekepau
buttons on shirt ................................. kiñamidawin
buy .................................................. toli
by and by (soon) ................................. nariña
by and by (longer time) ....................... nariñariña
caiman ........................................... kanuad
calabash bowl ................................... puk
calabash tree ................................... bone
call anyone ...................................... dāpadāp
camoodi (snake) ................................. pakubi
canoe ............................................. kanoa
canoe of bark ................................... alamanmad
capabara ......................................... kācu
carib ............................................... kariná
carry baby ...................................... tauatap
carrying basket ................................. yeriko, depanai
cart ................................................ talalá
cashew fruit ..................................... tabutc
cassava bread ................................... badi
cassava food .................................... weiru
cassava grater ................................. cudakari
cassava, roasted ............................... sapara
cassava root ..................................... kanēn
cassava roots, to scrape ..................... baiān
cassava stick ................................... kanakadi
cassava strainer ............................... manari, niri
cassava, sweet ................................. makucir
cassava, take out .............................. teat
cassava, to take out .......................... lakētanak
cassava, to plant .............................. winipan
cassava tray ................................... pataer
cat .................................................. pucien, pican
catch .............................................. ramit
centauri ......................................... pauis
chafe ............................................. miskud
change to another vessel ...................... tiak
charcoal........................................... ralu
charm.............................................. bina
charm, woman’s................................... kumi
cheek............................................... kauru
chest............................................... dukuli
child (m.).......................................... dan
child, little (f.)................................. cimuyeb
children.......................................... kuraidiaunan
chin.................................................. awai, idak
cigarette.......................................... sum
clam shell.......................................... bokud
clean up a field................................. puderiapan
clear................................................ kanan
clear (r.)........................................... wak
clitoris............................................. airu
close or short..................................... madi
clothed............................................. kakamitc
cloud................................................ ici’ir
cloudy............................................... ica
cock of the rock................................. kauanaru
cohabit............................................. rimid
cold................................................... wodid
cold (n.)............................................. drakar
comb............................................... maudi, pulalu
come.................................................. kau
come (r.)........................................... wat
come on............................................ burwai
come on over..................................... burwai tinap
come out.......................................... kudit
come to maturity................................. kasanarin
cooking pot....................................... kaiër
cord................................................... rena
corn.................................................. marik
corn drink......................................... mariki
corn planter....................................... marikpauka, spica
corpse............................................... durina.i
cotton boll......................................... kĩläleid
cotton yarn....................................... kĩnair
count................................................ aitin, etĕnpan
covered with blood............................... amaran
cow.................................................... tapir
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deer...........................................wideara
descend........................................dapolat
deserted place..............................pi'idini
dew.............................................abicr
die................................................mowak
die from fish poison......................witan
different one.................................bakadin
dirt................................................imi
dirty...............................................kanilib
dirty...............................................kethamiadi
dive.............................................apitcait
diver...........................................yerauain
do..................................................naiyam
do as I say.....................................baise
dog................................................arimerak
dogs.............................................arimeraknau
dog that hunts by scent...................damab
dog that hunts by sight....................wakai
doll..............................................tupan
dolphin...........................................poa
do not...........................................mena
domestic fowl.................................kilik
door...............................................panainum
dove...............................................oliada
down...............................................apu
down below......................................apoa
drag...............................................korot
dream..........................................randawin
dress.............................................si
dress (v.).......................................murakad
drink (n.)......................................iliwin
drink (u.).......................................sabner
drink (a.).......................................sauraura
drink (v.).......................................tir
drink, a kind of...............................bicawid
drink, I wish a.................................utirairun
drink, kind of.................................tcik
drink, anything to...........................iliwini
drink, to pass.................................dia waitam
drive ........................................... await
drive away by dog ......................... watan
drive out of the house ...................... kasanai
drown .......................................... nalan
dry ............................................ mar, arad
dry (v.) ........................................ arad
dry, farina (v.) .............................. malilipan
dry teeth, or thirsty ....................... marad’ak
drum ............................................. samur
drink, to be ................................. puid
duck ............................................ karakarari
duck ............................................ odaud
duck, muscovy .............................. bai
duck, small  ................................ bai’ier
duck, wisisi  ................................ bi’idid
duckling ....................................... udn
dumb ............................................. maparadan
dung ............................................. dik
dung (v.) ....................................... dikēd
dying fish ................................. wit

eagle ........................................... kwiyar
eagle, harpy .............................. kukui
eagle, sun .................................. wilum
ear ................................................ tain
earth ............................................. imi, amarad
east ............................................. wakuit
eat (v.) ........................................ arawap
eat (v. imper) .......................... nik
eating ........................................ arauap
eclipse of moon.......................... kairmanikan
dge .................................................. denum
dge of the forest ......................... tauadap
dark ............................................. dan
degret ........................................... wakarasab
eight .......................................... dik’nierdabak’inēt
eighteen ....................................... dik’nierdabaulauwakidib
elbow .......................................... pātolī
elder brother .............................. tīnefr
electric eel .............................. kasum
eleven ........................................... baiadapwakidib
field ........................................................... radak
field for planting ........................................... saertun
fifteen .......................................................... baidāpkildib
fight (v.) ....................................................... miraitakīn
fill (v.) ........................................................ pide
filthy ............................................................ kētamadei
fine ............................................................... dire
find .............................................................. ikud
finger-nail ....................................................... bar
fingers ........................................................... kaidan
fire .............................................................. tiker, rim
firestick ........................................................ tikerē
fire, wood for ................................................ ātaman
firewood ......................................................... ruakēr
firewood, load of .............................................. tikerwaru
first .............................................................. kiwin, kewit
fish ............................................................... aimir
fish ............................................................... amaraib
fish .............................................................. arad
fish ............................................................... arawana
fish .............................................................. arum
fish ............................................................... atalanē
fish .............................................................. bauara
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<td>wikinanwamakum</td>
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<tr>
<td>fish</td>
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<td>wikíd</td>
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<td>sabai</td>
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<td>rêtcab</td>
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<tr>
<td>fish, hoari</td>
<td>rîtcab</td>
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<td>kuleir</td>
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<td>aurép</td>
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<td>fish, small cat</td>
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<td>arudan</td>
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<td>paridrab</td>
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<td>fish, tiger</td>
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<td>fish, yarow</td>
<td>krasai</td>
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<td>bakaierra</td>
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<tr>
<td>flat</td>
<td>ibar</td>
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<tr>
<td>flea</td>
<td>kwaib</td>
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<td>flesh</td>
<td>dène</td>
</tr>
<tr>
<td>flesh to eat</td>
<td>nana</td>
</tr>
<tr>
<td>flesh of person</td>
<td>inana</td>
</tr>
<tr>
<td>float</td>
<td>omakad</td>
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</table>
flood..........................dirali
flowers..........................sus
fly (n.)..........................rapur
fly...............................tarabara
fly (v.)..........................rirêt
fog or mist......................kā
food..............................wanikini
food (flesh).....................wakai
fool..............................skeribiaman
foot...............................kedib
foot of deer.....................arokedib
footprints......................puna
forest.........................kanuk
for nothing......................meranaiman
forty.............................yaitampidian
four..............................pamiatonkîn
fourteen.......................pamiatonkînwacedib
fowl.............................kilik
fox..............................walîr
frightened, to be.............talieu
frightened, to be.............kitcenait
frog.............................anîr
frog..............................daliddalîr
frog..............................dawar
frog..............................kibairu
frog..............................kudari
frog..............................kunawaru
frog..............................kure
frog.............................ori
frog..............................paipai
frog..............................parî
frog..............................plîplîn
frog..............................turau
frog..............................turorub
frog..............................wikadar
frog, large mamochi..........ra
from a person...................îd
from a place...................îk
fruit.............................kalîne
full..............................paid, pide
fill (c.)..........................pide
gather ........................................ patimakan

gave .................................................... tan

genitals ................................................ tîn

get a spine in a body .................................. kiwîdan

get lost .................................................. purauatan

get ready for a journey ............................... minru

going to firewood ......................................... rian

gimlet ..................................................... kui kui

ginger ..................................................... warikup

girl .......................................................... rînsud

girl, name for, after puberty ........................ manika

girls, name for, at puberty ............................. kadînebe

girl, young ................................................ ka.iwisud

give (v.) .................................................... tanan

give medicine (v.) ........................................ kasarait

give water (v.) ............................................ mînawîn

glans ......................................................... tiuru-ai

gloomy ....................................................... kadad

go ............................................................ mak

go alone .................................................. pubaulan

go a long way ............................................. morawan

go ashore .................................................. marat

go out, fire (v.) ............................................ makad

go there, let us .......................................... naitmua

go to pieces .............................................. dadawan

gold .......................................................... kalikuri

good .......................................................... kaimên

good bush rope ........................................... war

good to eat ............................................... kadeya

gourd ......................................................... mots

grandchild ................................................ tukan

granddaughter .......................................... ûtukănîn

grandfather .............................................. dukari

grandmother ............................................... nairu, koku

grandson ................................................... ûtukandaunauna

grandson ................................................... untukan

glass ........................................................ phüd

glass, silk .................................................. rîni

grate (v.) .................................................... tciktcik

grater ...................................................... tcmari

great toe ................................................... kedîbdanruair
green.............................................kuli
green parrot.................................buricawa
group of balata trees.....................iteiari bau
group of ita palms.........................oiwaiubau
grind in a mortar..........................bordap
guinea fowl................................pikot
gum...........................................diakarieib
gum...........................................gumanime
gun.............................................makowa
gun cap........................................makowarim

hair.............................................ruairid
hair, pubic.....................................cimerau
hair of deer..................................ara\ld
hammock, cotton.............................r\âmok
hammock, fiber...............................c\nik
hammock frame..............................kauatuminini
hammock on the frame......................kauli
hammock rope................................inaui
hammock, to tie.............................kuid
hammock with high sides..................saporuk
hammock, woven.............................patu
hand...........................................kai
hand, back of.................................kaidaru
hand, palm of.................................kaibulei
hang out to dry (v.)..........................darakad
hard...........................................dadar
hard, rough or coarse......................ari
hard, stiff.....................................dadar
hard wood...................................tcipir
harpoon.......................................tauat
hat.............................................kwomai
hat, straw....................................witc
haul (v.).....................................kurat
have (v.)......................................k\ña
have a bad time.............................putkaitenan
have had enough (v.).......................abapan
have menstruation..........................masapan
have second menstruation................m\ñaispan
having.........................................ka, ke\ña
having a sweet odor.......................kapu
having fat...........................................kakiwain
having female organs..........................kaiuisud
having speed.....................................dimín
he or his.........................................i
head................................................ruair
hear, to..............................................eirun
hear (v.)..............................................abat’tan
heart..................................................nekanai
heart beat..........................................nikǐmǐk
heavy..................................................kimic
heel....................................................ulud
help....................................................kamunikit
her......................................................u
here......................................................a
here, I am............................................da
here, we are...........................................dati
here, you are........................................dfňa
hers.....................................................uli
herself...............................................baitcēban
hide (v.)...............................................direin
high up................................................duku
higher..................................................dukuerda
highest...............................................dukuměnaměn
him.......................................................araui
himself.................................................pubaulan
hip......................................................puraua
his........................................................i
his, this is..........................................iwir
hit (v.)..................................................taik
hoe.......................................................sampa
hold (imp.).............................................ramat
hold (v.)...............................................raniot
hold under the arm..............................keceptan
holder...................................................obar
hole....................................................tor
hole in earth or tree..............................dap
home, house, hole.................................dap
honey..................................................kamowa
hoof of deer........................................arabar
hooks.................................................kuban
horse fly.............................................rapur
hot ........................................... witc
house ........................................... kahun
house fly ........................................... tabaraba
house, shelter ........................................... dap
how are you? ........................................... kaiña
how many? ........................................... napidilm
humming bird ........................................... pimud
hunt (imp.) ........................................... baiit
hunt (v.) ........................................... baiyit
hunt deer (v.) ........................................... karipitan
hunt with barking dogs (v.) ....... ikudap
husband ........................................... dideri

I am ........................................... din
I am here ........................................... dina'a
iguana ........................................... sauan
influenza ........................................... drakar
in front ........................................... wa'aib
inside ........................................... ru
inside of anything ........................................... karú
instep ........................................... kedibutei
insufficient ........................................... auatap
intercourse, have ........................................... riuued
intercourse, promiscuous ........................................... suraran
internal ear ........................................... kinau
intestine ........................................... ikuli
in the box ........................................... ruboxusru
in the place of ........................................... wadin
in your shadow ........................................... dikineit
iron ........................................... spirari, tclipirari
iron arrow-point ........................................... takok
is it not so? ........................................... kuaiauna
is it so? ........................................... aiti
is it so? ........................................... kuaia
island ........................................... katunamar
island in savannah ........................................... tun
is that so? ........................................... pa'an
ita palm ........................................... duer
ita palm river ........................................... duerwau
ita parrot ........................................... katoliër
itchy ........................................... daue
it is said..........................kikíni
it is so, or is it so?..................mic
it is there..........................dînâ’a

jaguar.............................bidikur
jaguar, black........................kudiudin
jaguar of savannah....................kitanar
jaguar, spotted......................wîrâd’din
jasper.................................irîk
jigger..................................tciberai
joint.................................likidau

kill (v.)..............................rui
kiss (v.)..............................bio
knee....................................kudura
kneecap..............................kudurapater
knife.................................mari
knock (v.)............................tike
know (v.)..............................aitapan
know, I................................eirunana
know, I do not.......................nakarimau

labia................................iwidenun
lad......................................douani
lake...................................kêrîce
lame..................................tukurai
language..............................paradakar
large..................................tabar
larynx.................................satarauch
latex..................................eb
laugh (v.)............................carat
lazy..................................ru’u
leak (v.)..............................kolictan
lean...................................mideai
lean....................................kamasâ
lean....................................ebairun
lean....................................aunakakîwîn
leave a mistress (v.)...............minpêatapan
leave behind (v.).....................waratan
leave it alone........................sapapam
left, to the..........................asîbarun
left-handed ........................................ asabarun
leg ................................................. iku
leg. lower ......................................... tabai
letterwood ......................................... pa.ir
liar ................................................ malidineir
lie (v.) .............................................. malidin
lie flat on the ground (v.) ......................... warstinpan
lie in a hammock (v.) ............................... kakuraip
lift (v.) ............................................ dukubat
lift out (v.) ........................................ kapotan
light in weight ..................................... makimic
light of day ........................................ sakad
like ................................................... kawun
like (v.) ............................................. naidap
lips .................................................... dakmad
listen ................................................ tän
little ................................................. sub
little, a ............................................... mapesëk
little food .......................................... mapaskida
little finger ......................................... kaidansud
little toe ............................................ kedibdansud
lively, alive ........................................ pokud
liver ................................................... kuba
lizard ................................................... antakar
lizard ................................................... gitabar
lizard ................................................... pakor
lizard ................................................... sarawar
lizard ................................................... siodiar
lizard ................................................... suan
lizard ................................................... tumtum
lizard ................................................... tunile
load .................................................... waru
load for gun ......................................... makanawaru
lock (v.) ............................................. dadarad
locusts ............................................... wamad
long ................................................... dawif
long ago ............................................. kutioi
look (v.) ............................................. tikap
look (imp.) ........................................... auentap
loose ................................................... kilid
loose, it is .......................................... sarak
loosen (v.) .......................................................... subi
loud ................................................................. dei
louse ................................................................. ni
love ................................................................. naidap
low forest ......................................................... mapala
low water ........................................................ apu
lung ................................................................. icêne

make (v.) ............................................................... tum
make a hammock (v.) ........................................... kaudan
make a house ..................................................... kauiar apan
make fast the canoe (v.) ....................................... dadarâdan
make fun (v.) ...................................................... barni kitern
make waves (v.) .................................................. kaparan
male child, my .................................................. udandaunaiura
man ................................................................. mamma
mandioca .......................................................... kanir
man or father ..................................................... dawanaiuri
man servant ...................................................... puitol
man's name ........................................................ dakali idib
man's name ....................................................... dilidili
man's name ....................................................... jefalîntun
man's name ....................................................... kadabótieu
man's name ....................................................... kadîno
man's name ....................................................... kapasawîn
man's name ....................................................... kwarara
man's name ....................................................... maparadauri
man's name ...................................................... matada
man's name ....................................................... pratatabai
man's name ....................................................... turaua
many ................................................................. lib, elîb
margin or edge ................................................... denum
mark ................................................................. sad
mark (v.) ............................................................. sadap
marmoset ........................................................ wîtaro
maroudi, white-head ........................................ kuyui
maroudi, red-throat ........................................... marat
mash (v.) ............................................................ komakadan
mash with foot (v.) ............................................. skaratan
master .............................................................. naubana
match
may be
me
meatus
medicinal plants
medicine
medicine man
medicine man, borrowed
melt
membrane
mend (v.)
merchandise
macaw
midday
middle
midnight
milk, animal
milk, human
milk in breasts, have (v.)
milky way
mine
mirror
miserly, to be
miss a thing (v.)
miss with gun (v.)
mist
misty
monkey
monkey
monkey
monkey, black howler
monkey, red
monkey, red howler
monkey, red
monkey’s jaw
monster spirit
month
monster spirit
moon

rim
man
un
dekūsāba
paraokari
kasarei
marinau
piainan
komakadan
iui
renind
sapiar
dada
suketępamun
rikun
tuman rikun
tapīrdīnī
dīnī
kadfnainban
mawakunawa
ungum
wananiri
milainiau
dubatcman
kaskile
k’ā
ici
bisa
kakitcikīn
poat
witca
wowa
rumi
sibur
laboker
wisa
saburiwa
aniri
daku
aniri
kaier
moonlight........................................... tcai’ir
more ............................................. paua
morning ........................................... tcaipuik
morning star ..................................... besus
mortar ............................................. aku
mosquito .......................................... mist, mistu
moth ............................................... maukapara
mother ............................................. daru, rin
mother-in-law ..................................... mlrdukur
mother of the unborn ............................. kakarudaru
mould .............................................. mand
mould of bread ..................................... mandyeb
mouldy, be (v.) .................................... malidan
mountain .......................................... mediku
mountain .......................................... mariiwídwantana
mountain .......................................... maiudikutana
mountain .......................................... maukatana
mountain .......................................... mediku
mountain .......................................... tana
mountain .......................................... waliirdap
mountain, Ararat ................................. sërêri
mountain, name of ............................... dukabana
mountain, name of ............................... keridana
mountain, name of ............................... kiridinana
mouth ............................................. dak
much .............................................. teki
muddy ............................................. kadâd
murky .............................................. bolud
mute ............................................... maparadan
my ................................................ u
myself ............................................. unkar

nails ............................................... taupali
naked ............................................. makakamitc
name (v.) ........................................ dakut
nape of neck ..................................... konaiman
narrow ............................................. maru
nature ............................................. amarad
near ............................................... maunap
nearly ............................................ ateru
neck ................................................ konai
nephew ...........................................  dānikari
nest ...................................................  ēnik
nest of turtle's eggs ..............................  darawadini
nettle on rocks ...................................  aluru
nettle, stinging ...................................  aruro
newly made ........................................  pineari
next word ...........................................  rip balai
niece ...................................................  dānukaru
night ...................................................  aiwakan
nightshirt ...........................................  si'inkaru
nine ...................................................  pamiadatonkīnbānēt
nineteen .............................................  pamiadatonkīnbaulauwakedīb
nipple ...................................................  dinru-ai
no .........................................................  auna
no, indeed ...........................................  auna raitce
nose .....................................................  idīb
not .........................................................  ma
not good .............................................  auiman
not yet ................................................  aunari
nothing ..............................................  aimekīn
nothing more ......................................  marau
now .......................................................  kai
nut .......................................................  ak

obedient, be (v.) .................................  aurat
offspring ...........................................  dan
old man ..............................................  teñarenau
old mistress ......................................  mīnsēbar
old woman .........................................  masklnau
one ......................................................  baiađāp
one-half .............................................  badai
only ......................................................  ba
on top ...................................................  inkuam
open (v.) .............................................  dadat
orion ...................................................  baukur
otter ...................................................  sar
otter, little .........................................  sara
our .......................................................  wa
our feet ..............................................  wakedīb
out of sorts .........................................  mādurana
outside ...............................................  panibar
outside of .......................................................... panibeit
over ............................................................... duku, tinap
overhead .......................................................... saki
tap

paca ................................................................. auerēp
paddle .............................................................. pura
paddle (v.) ......................................................... puratan
pain ................................................................. kario
paint, red .......................................................... anato
pajama trousers .................................................. tcirura in karu
pale ................................................................. barak
palm ................................................................. waka
palm seed .......................................................... kubad
papaya .............................................................. mapai
paper ............................................................... kalit
parrakeet ........................................................ tciriki
parrot .............................................................. wāru
parrot ............................................................... kuku
partridge ........................................................ dakali
pass a thing to you .............................................. sawad
pass drink around .............................................. tciraplan
patella .............................................................. patēr
path ................................................................. dinap
payment .......................................................... winipina
payment for anything .......................................... winip
peccary, large .................................................... bitci
peccary, small ................................................... bakur
penis ............................................................... tieu
people ............................................................. plālan
pepper ............................................................. skerip
peppers ........................................................... diidid
peppery ........................................................... karib
perai ............................................................... kepim
perhaps .......................................................... tirki
permit (v.) ......................................................... kasapum
person ............................................................ tumini
pestle .............................................................. akutana
pig ................................................................. kuc
pigeon ............................................................ pakapad
pigeon ............................................................. waukuku
pin (v.) .............................................................. tininpan
pink .................................  waiair
pium or kaburi fly ........................ mariwi
place ..................................... kērei
plait, to .................................... tire'it
plait closely (v.) ........................... tied
plaited basket ............................... daroau
plaited bread tray .......................... sunabar
plane ........................................ wicalibe
plane (v.) .................................... wican
planets ....................................... tcauinai
plank ......................................... paulibai
plant, to ...................................... pauan
plantain ..................................... saer
plantains .................................... saernau
plate .......................................... prapi
plaything ..................................... kauanaman
pleiades .................................... wiñaau
plenty of ..................................... teki
plenty of ..................................... ilib
plenty of ..................................... dili
plenty of ..................................... diliada
pluck, as feathers (v.) ....................... bidian
poison (v.) .................................... ikutap
poison (n.) ................................... aical
poison .......................................... átolikum
poison .......................................... haiari
poison .......................................... iñak
poison .......................................... kalubaru
poison .......................................... kauar
poison .......................................... kohiori
poison .......................................... kumarau
poison .......................................... kumasaukun
poison .......................................... kunan
poison .......................................... kuwar
poison .......................................... kurukuri
poison .......................................... pi
poison .......................................... puraunam
poison .......................................... tikun
poison .......................................... urali
poisonous snake ............................. sakatki
poke with finger (v.) ......................... dikian
pond, large .......................... kimiñaruana
pond .................................... kéréie
pool ....................................... bauk
powder ..................................... kurupar
powis ....................................... pouis
powis variety ............................ waukwfm
pregnant woman ......................... karudaru
presently ................................. nariñari
press (v.) ................................ palaik
prop (v.) .................................. dilid
property, some one's .................... irnau
prostitute ................................. sauansibar
pull (v.) .................................. to'ot
pull in two (v.) ......................... bidit
pulp of ita palm seeds ............... déu
pulse ....................................... pararu
puma ....................................... kucaradin
pumpkin ................................. kouaiyam
pus in the eyes ......................... rawìn
push (v.) .................................. kidyęk
put in the water (v.) .................. dumat
put on clothes (v.) ..................... kaiwad

quarrel (v.) .............................. rënapan
quarrel (n.) .............................. to'ol
quarrelsome person .............. to'oleir
quickly ................................... kadimîn
quickly as possible ....................... kadamînürubarb
quiet ....................................... masad
quit (v.) ................................... mard

rain ........................................ wîn
rainbow ..................................... kiwefr
rainy season ............................. owidun
rainy season, beginning .............. dunwin
rainy season, end of .................. owitîpetîn
ramrod .................................... skelerîñar
rat .......................................... kari
rattle ..................................... tomali
really ..................................... kilikînianun
really good ............................. kimanaman
really not (f.) ........................................... aunaaki
red .......................................................... wîr
red banana .................................................. orienta
red cloth ..................................................... salalu
red howling monkey ....................................... laboker
red in morning ............................................. kalitana
red macaw .................................................... saku
red monkey ................................................... sîbur
regulus ........................................................ taradapaua
remember (v.) .............................................. nekampan
repair (v.) .................................................... saban
replace (v.) ................................................... kawadin
rest awhile (v.) ............................................. sakpan
rib .............................................................. arde
right, to the .................................................. wemîn
right-handed ................................................ aiman
ring .............................................................. kaisaba
ripe fruit ....................................................... oroak
ripple (v.) ..................................................... kaparan
river ............................................................. wau
roach ........................................................... bicirau
road .............................................................. dinap
roast (n.) ....................................................... dipêrd
roast (v.) ......................................................... karîmêt
roast corn or potatoes (v.) ...................... pidiaît
roast meat (v.) ............................................... karumît
roast plantains (v.) .................................. saer ain ana
roast vegetables (v.) ................................... pidait
roof .............................................................. idewir
root .............................................................. ulud
rope ............................................................. rina
rotten .......................................................... puokad
round ........................................................... katoliyê
round plaited tray ....................................... sabarud
rub (v.) ........................................................ susaban
Rupununi River .............................................. rupununwau
run ............................................................... dîm
run away (v.) ............................................... kidiwap

saliva ........................................................... radak
salt .............................................................. deu
salty..............................................kirilib
same...........................................kakawan
sand..............................................ka’at
sand bank........................................ka’atabar
sandpaper tree...............................imiñer
sap................................................aib
savannah........................................ibarra
savannah, burn the (v.).................idanimepan
savannah, open...............................idanar
savannah, other side of the............ibarra-it
scissor-tail bird............................sîrsfr
scorpion..........................................owi
scorpion.........................................saualil
scorpion, black.................................kanakuri
scrape (v.).....................................barian
scrotum...........................................kumad
scrub, thick bush...............................karamak
sea..................................................paranabauk
sea cow..........................................apini
search for (v.)..................................dauat
season............................................dun
season, rainy...................................win dun
seat................................................tábai
sediment.........................................diku
see (v.)...........................................awînaib
see (imp.)..........................................tikap
seed...............................................ak
seeds..............................................Id
serpent of myth...............................urupiru
serve food (v.).................................kustan
seven..............................................yaitambakînêt
seventeen........................................yaitambaulauwakedîb
shadow...........................................dîkîn
shallow...........................................makana
sharp.............................................dimîn
shelf...............................................taridipan
shift anything (v.)..........................rikud
shirt............................................kîñamed
shiver (v.)......................................kadamait
shoot, duck.............................bai-i
shoot (v.)......................................bietan
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
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<tbody>
<tr>
<td>shoot (v.)</td>
<td>imud</td>
</tr>
<tr>
<td>short (few)</td>
<td>kiada</td>
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<tr>
<td>short (length)</td>
<td>disud</td>
</tr>
<tr>
<td>short (quantity)</td>
<td>auatap</td>
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<tr>
<td>shot (n.)</td>
<td>pirot</td>
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<td>shot</td>
<td>baiyen</td>
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<td>shoulder</td>
<td>tawab</td>
</tr>
<tr>
<td>shoulder basket</td>
<td>pakar</td>
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<tr>
<td>shoulder blade</td>
<td>tawabar</td>
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<td>shouting</td>
<td>kadakun</td>
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<td>shovel</td>
<td>salampi</td>
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<tr>
<td>shiver (v.)</td>
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<td>shrine</td>
<td>kudurulam'fere</td>
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<td>shrub, a</td>
<td>rupununu</td>
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<td>shut (v.)</td>
<td>tarat</td>
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<td>sick</td>
<td>kulîneb</td>
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<td>sick, make (v.)</td>
<td>kaliñan</td>
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<td>sickness, having</td>
<td>kalini</td>
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<tr>
<td>side</td>
<td>pât</td>
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<tr>
<td>sigh (v.)</td>
<td>nanikaneutin</td>
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<td>silk grass</td>
<td>rini</td>
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<tr>
<td>sing</td>
<td>kunai</td>
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<td>sink (v.)</td>
<td>tipît</td>
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<td>sirius</td>
<td>besus</td>
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<tr>
<td>sister</td>
<td>wîwi</td>
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<td>sister, a woman’s</td>
<td>ìñuru</td>
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<td>sister, man’s</td>
<td>dadku</td>
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<td>sister, sister’s</td>
<td>uaru</td>
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<td>sit down</td>
<td>sakanat</td>
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<tr>
<td>six</td>
<td>baiadäpbakînît</td>
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<td>sixteen</td>
<td>baiadäpbaulauwakedîb</td>
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<td>skin</td>
<td>mad</td>
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<td>skull or bone</td>
<td>inunwîr</td>
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<tr>
<td>sky</td>
<td>aukur</td>
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<tr>
<td>sleep (v.)</td>
<td>dawin</td>
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<tr>
<td>slip (v.)</td>
<td>tcîtcokatan</td>
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<td>slippers</td>
<td>darikaro</td>
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<td>slipped</td>
<td>darihîd</td>
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<td>slippery</td>
<td>kêrai</td>
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<tr>
<td>slow</td>
<td>konai</td>
</tr>
<tr>
<td>slowly</td>
<td>konaidîa</td>
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small ........................................ sab
small ........................................ sud
small ........................................ disud
small ........................................ dire
small quantity, a .......................... mapěšěk
small red deer ............................... sue
small yassi .................................. maora
smell (v.) .................................... daman
smoke ......................................... ici
smoke from fire .............................. tikercan
smoke tobacco (v.) ......................... sumat
smoky ......................................... icun
smooth ........................................ medud
snail, small ................................. tcutcun
snake .......................................... kuarar
snake .......................................... urupiru
snipe .......................................... misoir
soak (v.) ...................................... sikud
soft ........................................... cumud
soil ............................................. amarad
sole ............................................. rupurup
sole .......................................... kedībdaru
sometimes ................................. panadun
son ............................................. dan
son ............................................ bitci
son ........................................... ūđandaunaiura
son-in-law .................................. tcaunai
son of Tuminkar ........................... tumīnkardan
song .......................................... rabī
soup ............................................. ia
sour ........................................... katam
speak (v.) .................................... paradan
spica .......................................... marikpauka
spider ......................................... sua
spider's web ................................. sucinik
spin (v.) ..................................... diērat
spin on the thigh (v.) ..................... waralan
spine, spiney ............................... kīwidker
spinner ........................................ timkerai
spirit .......................................... durina
spit (v.) ...................................... supit
spittle.............................................. radāk
split (v.) ........................................... dada auk
spoon................................................. tcipuk
spotted............................................... kafinkatin
stand (v.)........................................... kadisap
stand up (v.)...................................... kadicit
star.................................................... wir
stars................................................... wirau
steady hand....................................... masa
steal (v.)............................................. kuidep
stern of boat...................................... bale
stick.................................................. umar
stick together (v.)............................... sakadan
stiff................................................... dadar
still the same..................................... pakuauan
sting-ray............................................ yebkoar
sting-ray............................................ yebkoar
stink (v.)............................................. depus
stomach.............................................. tabu
stone................................................... kuib
stool.................................................. taub
stool (v.)............................................. tiod
stop (v.)............................................. madak
stop.................................................... masap
stout................................................... turamar
straight............................................. sakitēp
straight away..................................... saliap
strangers.......................................... tauerai
straws for plaiting.............................. makaru
string (thing to tie with)..................... watilabar
string (v.).......................................... karinēt
stringy............................................... kasilin
strip (v.)............................................. seid
striped............................................... rapud
strong............................................... maborak
suckle (:•.)......................................... bi'īd
suffer (v.)........................................... baiwaip
sufficient.......................................... ata'ana
sugar cane........................................ kaiwere
sugar cane (drink)............................... kaiwerei
sun or day......................................... kāmu
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<thead>
<tr>
<th>English</th>
<th>Wapisianas</th>
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<tr>
<td>sunset</td>
<td>watcipenan</td>
</tr>
<tr>
<td>sunset or night</td>
<td>watcipenan</td>
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<tr>
<td>surprise</td>
<td>raitce</td>
</tr>
<tr>
<td>square (v.)</td>
<td>turaóp</td>
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<tr>
<td>square</td>
<td>katabab</td>
</tr>
<tr>
<td>square of Pegasus</td>
<td>dipeli</td>
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<tr>
<td>squeeze (v.)</td>
<td>lēidan</td>
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<tr>
<td>squirrel</td>
<td>kalitc</td>
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<tr>
<td>swallow (n.)</td>
<td>salipere</td>
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<td>swallow (v.)</td>
<td>dikarait</td>
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<tr>
<td>sweat</td>
<td>marsik</td>
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<td>sweating</td>
<td>marskin</td>
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<tr>
<td>sweep (v.)</td>
<td>piliap</td>
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<tr>
<td>sweep (v.)</td>
<td>paraiēp</td>
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<tr>
<td>sweet</td>
<td>bicu</td>
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<tr>
<td>sweet cassava</td>
<td>makucir</td>
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<tr>
<td>sweet potato</td>
<td>ka'ri</td>
</tr>
<tr>
<td>sweet potato</td>
<td>klitc</td>
</tr>
<tr>
<td>sweet potato (drink)</td>
<td>kari'I</td>
</tr>
<tr>
<td>swim (v.)</td>
<td>niaut</td>
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<tr>
<td>swing (v.)</td>
<td>dapan</td>
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<tr>
<td>tail</td>
<td>dēn</td>
</tr>
<tr>
<td>tail of bird</td>
<td>kutaeredēn</td>
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<tr>
<td>tail of dog</td>
<td>ariniērkđēn</td>
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<td>tail of fish</td>
<td>kupaidēn</td>
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<td>take a long rest (v.)</td>
<td>kidikēptan</td>
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<td>take out (v.)</td>
<td>sotē</td>
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<td>take out cassava (v.)</td>
<td>nianak</td>
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<tr>
<td>talk (v.)</td>
<td>kadakin</td>
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<td>talker</td>
<td>kadaktnēfr</td>
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<tr>
<td>tall</td>
<td>duku</td>
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<tr>
<td>tall man</td>
<td>dawitabai</td>
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<tr>
<td>tame</td>
<td>tukera'iap</td>
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<tr>
<td>tangle (v.)</td>
<td>wariwan</td>
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<tr>
<td>tangle (v.)</td>
<td>minēobdīn</td>
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<tr>
<td>tapir</td>
<td>kudui</td>
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<tr>
<td>tapir or cow</td>
<td>tapīr</td>
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<tr>
<td>tapir's jaw</td>
<td>kuduiawēi</td>
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<tr>
<td>Taruma</td>
<td>sikidiu</td>
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<td>tasty</td>
<td>kadeya</td>
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taurus or jaw of a tapir ......................... kuduaiawei
tear (:.) ........................................ karit
tears ........................................... ine'eani
tell (:.) ........................................... kuad
tell a lie (:.) ..................................... dam
tell stories (:.) ................................... witcibapan
ten .................................................. baukuka
testicles .......................................... ku
that (far) .......................................... ilir
that (near) ......................................... ulir
then ................................................... eli
there is ............................................ diña
these (far) ........................................... deti
these (near) ......................................... de
these, to ........................................... na-ib
these people ....................................... tauanau
they .................................................. winawi
thick ................................................... mead
thick soup ......................................... maiwē
thief ................................................. kuidimik
thigh .................................................. kuba
thin .................................................... madadik
thin (soup, etc.) ................................... aiberun
thing .................................................. tumini
thing for .............................................. be
thing for ............................................. ta-una
thing to hold ....................................... kiu
thing you sit on .................................. dikep
think .................................................. detin
think (:v.) ......................................... ditinpan
think, reckon ...................................... etēnpan
thirsty ................................................ maradak
thirteen ............................................ dikimidawakidib
thirty ............................................... baiadapdlfanbaukuka
those .................................................. nau
thread ............................................... kanolibe
thread (:v.) ........................................... kit
thread, one ......................................... tininpan
three .................................................. dikinerda
throat ................................................... kona
throw (:v.) .......................................... butan
throw away (v.).................................................. kibat
throw light upon (v.)................................. kudan
thumb.......................................................... kaidaruair
thunder............................................. turauanar
tickle (v.)............................................. tikian
tickly.......................................................... daui
tie (v.).................................................. watidan
tie (v.).............................................. skēlīt
tie (v.)............................................. kakadan
tie in bundles (v.)............................... dudat
tie knot (v.)........................................ watīd
time of the floods................................. deiralidun
tin.......................................................... kuras
tire (v.)........................................... kasadiñan
to.......................................................... it
tobacco.................................................. suma
tobacco wrapper............................. sumamad
today.................................................. airī
today............................................... iti
toe.......................................................... kedībdan
toe nail............................................. bar, kedībar
tongue............................................... inoba, inīnuk
tongue................................................ unanob
tomorrow........................................... waikīnan
too short........................................ kētalaida
tooth.................................................. dak
tortoise............................................ wirada
to the.................................................. it
toucan............................................... tīkakui
touch (v.)........................................ pictan
touch with hand (v.)........................... dawadan
tow rope........................................... kanoan rina
trail.................................................. denap
tremble (v.)........................................ kadamait
tree.......................................................... īn
tree of life........................................... awaiyapiapa
trip up (v.)......................................... tikaleupan
troubled............................................... kadad
trousers........................................... tīciruka
true.......................................................... mic
true, be (v.)........................................ raitcean
<table>
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<th>Term</th>
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<tr>
<td>trumpet bird</td>
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<tr>
<td>truth</td>
<td>aunamalidineu</td>
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<tr>
<td>try (v.)</td>
<td>tiwer</td>
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<td>turkey</td>
<td>aduad</td>
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<td>turn (v.)</td>
<td>niput</td>
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<td>turtle</td>
<td>dupiman</td>
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<td>turtle</td>
<td>kuduwarum</td>
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<tr>
<td>turtle, small river</td>
<td>darau</td>
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<tr>
<td>turtle, water</td>
<td>matad</td>
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<td>twelve</td>
<td>yaitamwakedīb</td>
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<td>twenty</td>
<td>baiadāpīdan</td>
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<td>twenty-one</td>
<td>baiadāpaulapīdanipe</td>
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<td>saman</td>
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<td>twist (v.)</td>
<td>akauli</td>
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<td>twist two threads (v.)</td>
<td>witcibap</td>
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<td>twisted</td>
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<td>twisted</td>
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<td>umbilicus</td>
<td>rali</td>
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<td>uncle</td>
<td>darikari</td>
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<td>uncle, woman's</td>
<td>tēti</td>
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<td>underbrush a field (v.)</td>
<td>paradapan</td>
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<td>underneath</td>
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<td>undress (v.)</td>
<td>nalakad</td>
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<td>unloose (v.)</td>
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<td>urinate (v.)</td>
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<td>urine</td>
<td>rin</td>
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<td>used by females only</td>
<td>kuai</td>
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<td>vagina</td>
<td>iwi</td>
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<tr>
<td>vein</td>
<td>pararu</td>
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<tr>
<td>village</td>
<td>aicalto</td>
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<tr>
<td>vine</td>
<td>kurider</td>
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<td>virgin</td>
<td>mauka</td>
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<td>visit (v.)</td>
<td>murauait</td>
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<td>taitan</td>
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vomit (v.) .................................................. taitañean
vulture .................................................. banaulu
vulture, white-headed ....................................... anuan

wages .................................................. kaiwin
wagging of dog’s tail ........................................... anebinan
wait .................................................. draidad
wait, stop or (v.) ........................................... musaf
walk .................................................. tcikëp
walk (v.) .................................................. tcikëpàn
want .................................................. aiapan
Wapisiana man ............................................. wapisian
Wapisiana woman ........................................... wapisiañeb
warm, hot .................................................. wîtc
wash .................................................. ske
wash (v.) .................................................. skapi
wash clothing (v.) ........................................... tcikai
wash with hot water (v.) ..................................... kumalipan
wasp .................................................. kadiper
wasp .................................................. kapud
wasp .................................................. maba
wasp .................................................. malibanter
wasp .................................................. rikibi
wasp .................................................. tcimitcimeri
wasp .................................................. tipud
water, rain .................................................. wîn
waterfall .................................................. turauan
watermelon .................................................. patcia
wax .................................................. karawana
we .................................................. wa
we .................................................. wainau
weak .................................................. kaput
weary, be (v.) .................................................. mirein
weary of it (v.) ............................................. kasadîñan
weed (v.) .................................................. rupan
weeds .................................................. karamakau
well .................................................. riu
well, be (v.) .................................................. riuân
went .................................................. makuna
west .................................................. wakadapuît
wet .................................................. rabî
wet (v.) ........................................... dumat
what ................................................... kanum
what ................................................... napum
what for .............................................. kamantanua
which .................................................. kandi
when ................................................... napfnlm
where ................................................... naidi
whisper (v.) ......................................... tcesikiu
whistle (v.) ........................................... witcantin
white ................................................... barak
white ................................................... basakau
white man ........................................... parinakari
white mountains .................................. karawaimIn
whole ................................................... ipe
why ..................................................... kanditana
wife ..................................................... dideru
wife or mate ........................................ miniyeb
wind ................................................... awar
wind, little .......................................... awarsub
wind, whirl .......................................... awarakauli
window .............................................. panernum
wing ................................................... wiuri
with ..................................................... tim
woman or mother .................................... rin
woman’s apron ....................................... kinadibeir
woman’s name ....................................... amidaru
woman’s name ....................................... ainadar
woman’s name ....................................... elaika
woman’s name ....................................... kaduiyeb
woman’s name ....................................... makawineli
woman’s name ....................................... manikap
woman, pregnant .................................... cemodaro
woman servant ...................................... puitolyeb
wood ................................................... ataman
word ................................................... balai
work ................................................... kerdin
work, I wish to ...................................... ukerdinerun
world ................................................... amarad
worm ................................................... pirari
worthless person ................................... surar
yam. ........................................ klikt
yam, buck. .................................. tcupin
yawn (v.) ................................... tubuan
yassi .......................................... kapurc
yawari ........................................ warsa
yellow ........................................ kuli
yellow macaw ................................ kaiëri
yes ............................................. uh
yesterday ..................................... minamîn
yesterday (the day before) .............. kutaike
yesterday (the day before that) ... kutaïke dinuiman
you ............................................. pureker
young .......................................... pacêru
young man ................................... douanioar
young man ................................... tumiñer
young woman ............................... mauka
young woman ............................... tumiñeban
your or their ................................ inau
your ........................................... pu
your ........................................... pui
your ........................................... purikar
zigzag ........................................... ri-iên

WAPISIANA-ENGLISH

a. ............................................ here
abapan ....................................... to have had enough
abat'tan ..................................... to hear
abicîr ......................................... dew
aduad .......................................... turkey
adula .......................................... small acouri
aiapan ....................................... want
aib ............................................. sap
aiberun ..................................... thin
aical .......................................... fish poison
aicalto ....................................... a village
aiçu ........................................... brain
aimaikan ................................... anything
aiman ......................................... right-handed
aimekîn ..................................... nothing
aimir.  fish
ainadar.  woman’s name
airi.  today
airu.  clitoris
aitapan.  to clitoris
aiti.  is it so?
aitin.  to count
aiwakan.  night
ak.  nut or seed
akauli.  to twist
aku.  mortar
akutana.  pestle
aluru.  nettle on rocks
amarad.  earth, nature, world
amaraib.  fish
amaran.  covered with blood
amau.  ant
amidaru.  woman’s name
anato.  red paint
anebinan.  wagging of dog’s tail
anir.  a frog
aniri.  monster spirit
antakar.  a lizard
anuuan.  white-headed vulture
anub.  arm
apini.  manatu or sea cow
apitcait.  to dive
apoa.  down the river, or down below
apu.  low, down, below
ar.  brother
arad (n.).  fish
arad (a.).  dry
arad (;.).  to dry
aradautun.  a bird
arat.  to bite
araul.  him
arawap.  eating
arawana.  a fish
arawapan.  to eat
arde.  rib
ari.  hard, rough, coarse
arimèrkak ........................................ dog
arimèrkakdèn .................................... dog's tail
arimèrkaknau .................................... dogs
aro ..................................................... deer
aro kedib .......................................... foot of deer
arudan .............................................. sukana fish
arum ................................................... a fish
arumau ............................................... a brown bird
arunau ............................................... tiger bird
aruro ................................................... stinging nettle
asabarun ........................................... left-handed
asibarun ............................................ to the left
ata'ana .............................................. enough, sufficient
átairu ............................................... almost
atalanè ............................................... a fish
átali .................................................. alligator
átaman ................................................ wood, firewood
atamanmad .......................................... bark canoe
atcimèrè ............................................ aimara fish
átolikum ............................................ fish poison
auatap .............................................. short, not sufficient
auentap .............................................. to look
auerèp ............................................... paca
auiman ................................................ not good
auin ..................................................... eye
auinait ............................................... to see
auinbara ........................................... face
auinmad ............................................ eyelid
aukur .................................................. sky
auna .................................................... no
aunaaki .............................................. really not
auna-ilib .......................................... few
aunakaimen ........................................ bad
auñakiwer .......................................... absent
aunakakawín ....................................... lean
aunakimen .......................................... bad
aunamalidineu ..................................... truth
auna raitce .......................................... no, indeed
aunari ................................................... not yet
aura ..................................................... reed for blowgun
aurat ................................................... to listen, be obedient
aurēp ......................... pacco fish
awai .......................... chin
await .......................... to drive
awaivapiapa .................... tree of life
awalibai ......................... fan
awan ............................ a crow
awar .............................. wind
awar akauli ........................ whirlwind
awarsub ........................... little wind

ba .................................. only, by itself
bacarau ............................ cockroach
badai ............................... one-half
badai ............................... cassava bread
bai ................................. muscovy duck
baiadāp ........................... one
baiadāpbakinēt ..................... six
baiadāpbaulaupidīlanipe ....... twenty-one
baiadāpbaualuwakēdīb ............ sixteen
baiadāpidīan ....................... twenty
baiadāpidīanbaukuka ............... thirty
baiadāpkēdīb ........................ fifteen
baiadāpwakēdīb ..................... eleven
baidikur ............................ jaguar
bai‘i ................................. to shoot
bai‘ier ............................... small duck
baili ................................. arrow
bairi ................................. to beat
baise ................................. do as I say
baise maiña (f.) ................... all right
baise maisa (m.) ................... all right
baitcēban ............................ herself
baiwaip .............................. to suffer
baiyēn ............................... short
baiyet ................................. to hunt
bakadin ............................. a different one
bakaierdā ............................ five
bakur ................................. small peccary
balai ................................. word
bāle ................................. stern of boat
bali ................................. back
bañap..........................day after tomorrow
bañapdínuiaman..................day after the day after tomorrow
banaulu..........................vulture
bar................................fingernail or toenail
barak..............................white or pale
barakadau..........................turtle
barian..............................to scrape cassava roots
barniap............................day after tomorrow
barni kitern........................to make fun
baroli...............................ankle
baru.................................axe
baruait..............................to cut down
basakau..............................white
bau.................................group
bauara..............................fish
bauk.................................pool
baukuka..............................ten
baukup..............................everybody
baukur................................orion
baulau.................................another
be....................................thing for
besus.................................sirius or morning star
bi.....................................among
biait.................................to hunt
bicauid.............................a drink
bicirau..............................roach
bicu.................................sweet
bidian...............................to pluck, as feathers
bidikur..............................jaguar
bidíkur..............................fish
bidit.................................to pull in two
biétan...............................to shoot
bi’id.................................to suckle
bi’idíd.............................wisisi duck
bina.................................a charm
bio.................................to kiss
birit.................................to unloose
biritan..............................to beat
bisa.................................monkey
bítcı.................................son
bitci.................................large peccary
bokabokwim....................fish
bokud..........................clam shell
bolud..........................murky
bone............................calabash
bordap........................to grind in a mortar
burai...........................the back
burai tinap.....................over the back
buricawa........................green parrot
burwai..........................come on
burwai tinap....................come on over
butan............................to throw

capas............................small armadillo
carat............................to laugh
carud............................to break
cêmodaro........................woman with young child
cileraub........................fish
cimêk.............................bed
cimerau...........................pubic hair
cimuyeb...........................little child
cinîk..............................hammock
cinik..............................nest
ciroli............................a bird
cit.................................enough
cucu...............................a bird
cudakari..........................cassava grater
cueir..............................fish
cumud..............................soft
da.................................here
dada...............................macaw
dada auk..........................to split
dadar..............................hard, stiff
dadarad...........................to shut or to lock
dadaradan.........................to make fast the canoe
dadat..............................to open
dadawan...........................to go to pieces
dadku..............................man's sister
dak.................................tooth
dakali.............................partridge
dakali idib........................man's name
dakmad.....................lips
daku.......................mouth
dakut......................to name
dalidalfr..................a frog
dam.........................to tell a lie
damab......................dog that hunts by scent
daman......................to smell
dan..........................child, egg, offspring, son
dānikari....................nephew
dānukaru....................niece
dap.........................home, hole
dâpadâp....................to call anyone
dapolât.....................to descend
dapuan......................to swing
darakad.....................to hang out to dry
darasra.....................fish
daru.........................small river turtle
darawadini..................pleiades, nest of turtle's eggs
dari.........................father
darihîd........................slipped
darikaro.....................slippers
darikari.....................uncle
daroau.......................plaited basket
dartidi......................boots
daru..........................mother
darukaru.....................aunt
daruna.........................spirit of man
dati..........................here
dauat........................to search for
daubar.......................fish
daue.........................itchy
dauet.........................behind
dauf..........................long
daui.........................tickly
dawadan......................to touch with hand
dawaniuiri..................man or father
dawar.........................a frog
dawi..........................to go back
dafl..........................long
dawin..........................sleep
dawînan......................to sleep
dawītabai: tall
dawītain: man's name
de: there
deinau: after
deip: a bird
deiraldun: time of the floods
dekēp: anus
dekūsāba: meatus
demiu: sharp
dēn: tail
denap: trail
dēne: flesh
denum: margin, edge
depanai: carrying basket
depus: to stink
deti: there
detīn: think
deu: salt
dēu: pulp of ita palm seeds
deu: loud
dewar raipain: bring in ita palm
diakarieiib: a gum used in making black paint
diaudiau: fish
dia waitam: to pass drink
dībarui: fish
dīerat: to twist, to spin
dīdēme: baby carrier
dideri: husband
dideru: wife
dī’did: peppers
dik: excrement
dikaraig: to swallow
dikat: to cut or to break in two
dikēd: to dung
dikēp: thing you sit on
dīkian: to poke with finger
dīkīn: shadow
dīkīneit: behind or in your shadow
dīkīnierda: three
dīkīnierdabākīnēt: eight
dīkīnierdabaulauwakīdib: eighteen
dīkinierdawakidib. ............ thirteen
dīku ...................... sediment
dīli ....................... plenty
dīliada ........................... enough
dīlid .............................. to prop
dīlidili ...................... a bird
dīlidili ........................... man's name
dīm .............................. run
dīmin ...................... having speed
dīmin ...................... sharp
dīn ...................... beard
dīn ...................... I am
dīña .............................. here you are
dīña ...................... there is
dīña’a ...................... I am here
dīnap ...................... road or path
dīni ...................... milk from the breast
dīno ...................... breasts
dīnurai ...................... nipple
dipeli ...................... to barbecue
dipeli ...................... square of Pegassus
dipērd ...................... to roast
dirali ...................... high flood
dire ...................... fine, small
direin ...................... to hide
disud ...................... short, small
ditēp ...................... eyebrow
ditēnpant ...................... to think
diwi .............................. a bird
doru ...................... buttock
douani ...................... lad
douani ...................... brother
douanioar ...................... young man
draidap ...................... to wait
drakar ...................... influenza, a cold
dubatcamand ...................... to miss a thing
dudat ...................... to tie in bundle
duer ...................... ita palm
duerwau ...................... ita palm river
duid ...................... evil or worthless one
dukaban ...................... a mountain
dukari . grandfather
duku . tall or high
duku . over
dukubat . to lift
dukuerda . higher
dukuli . chest
dukumënamën . highest
dulait . to fall over
dumat . to put into water, to wet
dun . season
dunwën . rainy season
dupian . a fish
dupiman . a turtle
durina . spirit
durina-i . corpse
eb . latex
ebairun . lean
eirun . to hear
eirunana . to know
elaika . woman’s name
éli . then
élīb . many
é̂t . and
etênpan . to think, reckon, count
gitäbar . a lizard
guaraparu . a bird
gumanime . gum used for polishing pottery
haiari . fish poison
haiêr . above
hwitau . fish

i . name
i . he or his
ia . soup
ibar . flat
ibarra . savannah
ibarra-it . other side of the savannah
ica . cloudy
icekari........................bad bush
icēne..........................lung
ici...............................musty, smoky
ici'ī.............................cloud
icun.............................smoky
īd.................................seeds
īd.................................from a person
idak..............................chin
idanar...........................savannah
idanimepan.....................to burn the savannah
idewir............................roof
īdib..............................nose or beak
īdikēp............................bottom of boat
ierana............................deep pool which never dries up
īk.................................from a place
iku...............................leg
ikud...............................find
ikulf..............................intestine
ikutap............................to hunt with barking dog
ikutap............................to poison
ilib...............................many, plenty
ilir...............................that
īliwin.............................to drink
īliwīni...........................anything to drink
imedukur........................father-in-law
imi.................................earth, dirt
imiņer............................sandpaper tree
imīrdukur........................mother-in-law
imud...............................to shoot
in.................................tree
īnak...............................fish poison
inana.............................flesh
inau...............................your, their
inau...............................hammock rope
ine'eni............................tears
īnīhuk............................tongue
inwrīr............................bones
inkuam............................on top
inoa...............................tongue
inunwīr...........................skull or bone
īnur...............................man's brother
iňuru .......................... a woman's sister
ipe .............................. all, whole
ipena ........................... all
ipie .............................. always
ir ............................... plural
irei .............................. blood
irib .............................. fish
irik .............................. jasper
irnau ............................ some one's property
iruir ............................. bow of boat
isapam ........................... fish
it ................................. to, to the
itali .............................. fear
iteiar ........................ group of balata trees
iti ............................... today
iui .............................. membrane
iwaur ............................ creek
iwi .............................. female genital organ
iwidenun ........................ labia
invir ............................. his
jefalin ........................ small catfish
jefalintun ........................ man's name
jiberai ........................... jigger
kā ............................... fog, mist
ka ............................... having
ka'at .............................. sand
ka'atabar ........................ sandbank
kabitce ........................... a sore
kaburn ........................... house
kācu .............................. capabara
kacu .............................. beads
kācur .............................. ant
kad ............................... boggy
kadabo ............................ twisted
kadabōtieu ........................ man's name
kadad ............................ troubled, gloomy, muddy
kadakin ........................... to speak
kadaktineir ........................ talker
kadakub ........................... a fish
kadakun ................. shouting
kadamait ................. to tremble, to shiver
kadamīn ................. quickly
kadamīn rubarb ............ quickly as possible
kadarau .................... a pair of fishes
kaderaul .................... fish
kadeya ..................... good to eat
kadicit .................... to stand up
kadīnai ban ............... to have milk in breasts
kadiñeb .................... name for girl at puberty
kadīno ..................... man’s name
kadiper ..................... wasp
kadisap .................... to stand
kaduiyeb ................... woman’s name
kadular .................... deep, never dries out
kai ......................... hand
kai ......................... now
kaibulei ................... palm of hand
kaicati .................... as it is said
kaidan ..................... fingers
kaidanruair ............... thumb
kaidansud .................. little finger
kaidaru .................... back of hand
kaijer ..................... moon
kaiêr ....................... cooking pot
kaiêri ..................... yellow macaw
kaimēn ..................... good
kaimēn'amēn .............. best
kaimēněrd'a ............... better
kaiñā ....................... how are you?
kairmanikan .............. eclipse of moon
kaisaba .................... ring
kaiuin ..................... wages
kaiwad ..................... to put on clothes, to dress
kaiwere .................... sugar cane
kaiwerei ................... drink, of sugar cane
kaiwin ..................... wages
ka-iwisud .................. girl
kakadan .................... to tie
kakamitc ................... clothed
kakap ..................... alive
kakarudaru........................mother of the unborn
kakawan..........................same
kakitcikîn..........................a monkey
kakiwain..........................having fat
kakuraip..........................to lie down in a hammock
kalabara..........................deer
kalikuri............................gold
kaliñan..............................sick
kaliñan..............................to make sick
kaline...............................a fruit
kalini..............................having sickness
kalit.................................paper
kalitana.............................red in morning
kalitc...............................squirrel
kalubaru.............................fish poison
kamantanua........................why? what for? what is it?
kamaru...............................fish
kamaśa...............................lean
kamitcen............................breechcloth
kamowab.............................honey
kamuna..............................sun or day
kamunikit...........................help
kana.................................deep
kanad.................................bright
kanakadi............................cassava stick
kanakuri............................black scorpion
kanan.................................clear
kandi.................................which
kanditana...........................why
kanën.................................cassava root
kanikîni.............................to advise
kanilib...............................dirty
kanin.................................clear
kanir.................................mandioca
kanoa.................................canoe
kanoan rina..........................tow rope
kanolibê.............................thread
kanuad.................................large alligator
kanuk.................................forest
kanukad..............................cassava stick
kanum.................................what
kapac...armadillo
kaparaib...fish
kaparan...to make waves
kapasa...armadillo
kapasawín...man's name
kapotan...to lift out
kapu...having a sweet odor
kapud...wasp
kapurc...yassi
kaput...weak
karakarari...a duck
karamak...scrub, thick bush
karamakau...weeds
karap...a small bird
karari...blue macaw
karawaimin...white mountains
karawana...wax used in calking canoes
karí...rat
karí...sweet potato
kari-i...sweet potato drink
karib...peppery
kariná...carib
karímĕt...to roast
karínĕt...to string
karío...pain
kari pitan...to hunt deer
karit...to tear
karod...bów
karu...blood
karú...broad
kāru...belly
kāru...inside of anything
karu daru...pregnant woman
karumît...to roast meat
karuru...a fish
kasa aulir...badly done, bad people
kasab...cloudy, dark
kasadiñan...to weary of it
kasanaí...to drive out
kasanarin...to come to maturity
kasapum...to permit
kasarait .................................. to give medicine
kasarei .................................. medicine
kasareiwe ................................ an evil spirit
kasilin .................................. stringy
kaskile .................................. to miss with gun
kasum .................................. electric eel
kasur .................................. bead
kasuryeb ................................ ant
kata-bal ................................ square
katam .................................. sour
katarid .................................. fish
katensud ................................ boy
katér .................................. bad tasting
katinkatîn ................................ spotted
katirin .................................. fish
katoliër .................................. ita parrot
katoliyê .................................. round
katunar .................................. island
kau .................................. to come
kauan .................................. like
kauanaman ................................ plaything
kauanaru ................................ cock of the rock
kauar .................................. fish poison
kauatumin ................................ hammock frame
kauar .................................. to make a hammock
kaudi .................................. which
kauiarapan ................................ to make a house or heap
kauari .................................. hammock on the frame
kaup .................................. to bathe
kaupan .................................. to burn
kauru .................................. cheek
kawadin .................................. to replace or repay
kawaud .................................. to burn
kawun .................................. like
kecêbiđ .................................. axilla hair
kecêp .................................. axilla
keceptan .................................. to hold under the arm
kedib .................................. foot
kedibdan ................................ toes
kedibar .................................. toe nail
kedibdanruair ................................ great toe
kedībdansud ....................... little toe
kedībdaru ......................... sole of foot
kedībutei ........................ instep
kelek .............................. fowl
keña .............................. having
kenaima ............................. evil spirits
kenan .............................. to have
kepim .............................. perai
kērai .............................. slippery
kērei ............................... the place to
kerdin .............................. work
kērice .............................. pond, lake
keridana ............................ a mountain
kerulibēt ........................... anger
kētameadi ........................... dirty, filthy
kētalaida ............................ too short
ketib ............................... wing feather
kewit ............................... first
kiada ............................... few, short
kibairu .............................. a frog
kibat ............................... to throw away
kibeirun ............................. ashamed
kibi ................................. bitter
kibira-i ............................. fish
kidikiptan .......................... to take a long rest
kidikēpwik ........................ day
kidiwap ............................. to run away
kidyēk .............................. to push
kien ................................. answer
kier ................................. moon
kikini ....................... it is said
kildid ......................... loose
kilik ........................ domestic fowl
kilikiniunan ....................... really
kilianan .............................. being sick
kimanaman ........................ really good
kimic .............................. heavy
kimiharuana ........................ pond
kinadibefr ......................... woman’s apron
kina’ir ........................ cotton yarn
kīna’aleid ........................ cotton boll
kiñalud .................. deer
kiñamed .................. shirt
kiñamidawin .................. eyes or buttons on clothing
kiñau .................. internal ear
kinid .................. fish
kinid'daru .................. tiger fish
kiñidebar .................. woman's apron
kiripip .................. fish
kirfb .................. salty
kiridinanana .................. a mountain
kirip .................. fish
kiripid .................. fish
kit .................. to thread
kitanar .................. jaguar of savannah
kitcenait .................. to be frightened or afraid
kiu .................. thing to hold
kiwain .................. fat
kiweir .................. rainbow
kiwidan .................. to get a spine in body
kiwidker .................. a spine, spiney
kiwin .................. first
kiwin .................. fat
klikt .................. yam
klitan .................. to cut with scissors
klitc .................. sweet potato
kohiori .................. fish poison
koki .................. ant
kokibairn .................. ant
koku .................. grandmother
kolictan .................. to leak
komakadan .................. to melt
komaneri .................. fish
komuniket .................. to help or assist
kona .................. throat
konai .................. neck
konai .................. slow
konaida .................. slowly
konai'ipan .................. to dance
konaiman .................. nape of neck
konaiten .................. to sing
kopai .................. fish
kori ........................................ rat
korot ..................................... to drag
korotkfini .............................. bina of thongs
korum .................................... ant
kouaijam ................................. pumpkin
krasai .................................... yarrow fish
ku ............................................. testicle
kuad ........................................ to tell
kuai ......................................... used by females only
kuaia ....................................... is it so?
kuaiauna .................................. is it not so?
kuaib ....................................... to flee
kuarar ..................................... snake
kuau ......................................... fish
kuba ......................................... thigh, liver
kubad ....................................... double basket
kubau ....................................... hooks
kubin ....................................... blowgun
tubin tcatin inenai ...................... arrow case for blowgun
kuc ............................................ pig
kucar ....................................... bush deer
kucaradin ................................. puma
kud ............................................ fish
kudan ....................................... to throw light upon
kudari ...................................... a frog
kudit ..................... to come out
kudoi ....................................... deer
kudindin .............................. black jaguar
kudui ....................................... tapir
kuduru ..................................... knee
kudurapater ................................ knee-cap
kuduruulamfre ......................... shrine
kuduwaram ................................. a turtle
kuduiawei ...................... taurus or jaw of a tapir
kuib ......................................... stone
kuid ......................................... to tie hammock
kuidep ..................................... to steal
kuidimik ................................... thief
kuidipur .......................... bottom of house wall
kui'ir ....................................... bird
kui kui ................................. gimlet
kukaid ...............to bend the bow
kuku ..................a parrot
kukui ..................harpy eagle
kulaidap ...............twisted or crooked
kuleir ..................kulit fish
kuli .....................blue, green or yellow
kulibar ..................fish
kulñeb ....................sick
kulirnalitcib ..........a fish
kumad .....................scrotum
kumalipan ..............to wash with hot water
kumarau ..................fish poison
kumasaukun ...............fish poison
kumi .....................woman's charm
kumkum ..................fish
kunai .....................to sing
kunaiupan ...............to dance
kunan .....................fish poison
kunanu ...................bark used as bina
kunawa .....................a bina
kunawaru .................a frog
kunuru .....................a fish
kupai .....................a fish
kupaidén ..................tail of a fish
kupum ......................also
kuraidiaunan ..............children
kuraiduana ...............child
kuramac .....................a fish
kurapat ...................bark used in tanning
kuras ......................tin
kurat .....................to haul
kurider ...................vine
kurie .......................a frog
kurine .....................a Brazilian
kurukuri ..................fish poison
kurupar .....................powder
kustan ...................to serve food
kutaeredén ...............tail of a bird
kutaike ....................yesterday (the day before)
kutaike dunuimau ........the day before that
kuti .....................fish
kutiana............................long ago, ancient
kuti’ir..............................a bird
kutioi...............................long ago
kuwar..............................fish poison
kuyui...............................maroudi white bead
kwaib...............................flea
kwarar..............................anaconda
kwarara............................man’s name
kwiyar..............................an eagle
kwomai..............................hat

laboker..............................red howling monkey
lakgtanak...........................to take out cassava
lamit.................................broken
lamitan...............................to break
lēidan...............................to squeeze
likidau..............................joint

ma.................................no, not
ma’awin..............................abbreviation of mauna
maba.................................bee
maborak..............................strong
mad.................................skin
madadik..............................thin
madak.................................to stop
madi.................................close or short
madurana...........................out of sorts
madruair............................bald
maiwē...............................thick soup
mak.................................to go
makad...............................to go out (fire)
makakamitic........................naked
makana...............................shallow
makaru...............................straws for plaiting
makanawaru........................load for gun
makawineli........................woman’s name
makimic..............................light
makinau.............................death
makinauir............................deaf
makowa.......................gun
makowarim...................gun cap
makucir.....................sweet cassava
makuna......................went
mali..........................ant
malibanter...................a wasp
malid..........................to be mouldy
malidln......................to lie
malidineir...................liar
malilipan....................to dry farina
malita.......................dark as night
malut..........................to enter
mameu..........................blunt
mamma..........................mam
man.............................may be
mana...........................shallow
manai...........................unsalted food
manaibar......................fish
manap...........................far
manari..........................cassava strainer
manauba......................altair
mandveb.......................mould
manika..........................name for girl after puberty
manikap..........................woman's name
maora..........................small yassi
mapai..........................papaya
mapala..........................low forest
maparadan.....................dumb
maparadauri...................man's name
mapaskida.....................little food
mapesek..........................a small quantity
mar.............................dry
mar.............................ant
maradak..........................dry teeth, thirsty
maran..........................but
marana..........................balsam
marat..........................to go ashore
marat..........................fish
marat..........................maroudi, white-head
marau..........................nothing
mard..........................to quit
marepan......................fish
mari............................knife
maridiku.......................place where Tuminkardan was first buried
marik..................corn
mariki......................corn, drink made of
marikpauka.................spica or corn planter
marinau......................medicine man
mariwi......................pium or kaburi fly
mariwidwantana............a mountain
marsik......................sweat
marskin.....................sweating
maru..........................narrow
marudikutana..............a mountain
masa..........................steady hand
masad......................quiet
masap.......................stop
masapabar..............to have menstruation
maskinau..............old woman
mat............................ant
matad......................water turtle
matada........................man's name
matamata...................a turtle
materaib....................fish
maud..........................mould
maudi..........................comb
mauka......................young woman or virgin
maukapara....................moth
maukatana..............a mountain
maunap......................near
mawak........................to faint
mawakunawa..............milkyway or Amazon
mead..........................thick
mediku......................mountain
medud......................smooth
mena..........................do not
menaipan...................to have second menstruation
meranaiman................for nothing
mic............................true
mideai........................lean
milainiau....................to be miserly
mile............................fish
mîn. black pitch
minamin yesterday
miñar ant
miñartukerai ant
minawin to give water
minêobdin to tangle
miniyeb wife or mate
mînpēatapan to leave a mistress
minru to get ready for a journey
minsebar an old mistress
miput upset
miraitakin to fight
mirein to be weary
mîrikid a fish
miskud to chafe
misoir snipe
mist mosquito
mistu mosquito
modari forest fish
morawan to go a long way
mots gourd
mowak to die
murakad to dress
murauait to visit
muroi dog fish
musaf stop or wait
museni fish

na'ap as it is said
na'ap alike
naïdap to like or to love
naïdi where
nairu grandmother
naït to these
naitmua let us go there
naiyam do
nak to bring
nakarimau I do not know
nalakad to undress
nalan to drown
namatc trumpet bird
namatca..............deer
nana..................body
nanai..................to bring
nanikanetin............to sigh
napidêm................how many?
napinim................when
napum...................what
nariña..................by and by (soon)
nariñariña..............presently (very soon)
nariñariñana...........by and by (longer time)
nasakara................bird trap
nau....................those
naua...................to eat flesh
naubana................master
naun....................brother-in-law
nekampan..............to remember
nekani...................heart
ni.....................louse
nianak..................to take out cassava
niant...................to swim
nîk........................to eat
nikimîk................heart
niput...................to turn
niri....................cassava strainer
nirua...................to breathe
nîruana................breath
nomeauenî..............emphasis

obar......................a holder
odaud....................a duck
o'i.......................farina
oiwaiubau...............group of ita palms
oliada....................dove
om........................fish
omakad...................to float
omakaneri...............fish
ori.......................a frog
orienta...................red banana
oroak....................ripe fruit
oto........................fish
owl....................scorpion
owidun.............................rainy season
owitipetin...........................end of rainy season

pa'an..............................is that so?
pacêru..............................young
padamata............................about
paid.................................full
paipai...............................a frog
parir.................................letterwood
pakak.................................a bird
pakapad..............................pigeon
pakar.................................shoulder basket
pakâtâp..............................to alight
pakauan..............................still the same
pakor.................................a lizard
pakubi.................................camoodi (snake)
palaik.................................to press
palântale............................bell bird
palikawar............................savannah sparrow
pamiadatonkin........................four
pamiadatonkinbakînêt.................nine
pamiadatonkinbâulauwakedib........nineteen
pamiadatonkinwakedib...............fourteen
panadun..............................sometime
panainum............................a door
panapulin............................a bird
panaukari............................evil spirit
panêrnum............................door or window
panibar...............................outside
panibît...............................outside
paradakar............................language
paradan..............................to speak
paradapan............................to underbrush a field
paraiêp...............................to sweep
parailibe.............................broom
paranabauk...........................sea
paraokari............................medicinal plants
pararu.................................pulse or vein
paratî.................................ashes
pari..................................a frog
paricara.............................big dance
paridrab.................sun fish
paridrabkubin............fish
parinakari.................white man (Englishman)
pariwarim..................fish
pāt........................side
pataer.....................cassava tray
patci.......................lowlow fish
patcia......................watermelon
pater.......................bottle
patēr......................patella
patimakan..................to gather
patoli......................elbow
patu.........................woven hammock
paua.......................more
pauait......................again
pauan......................to plant
pauis......................Centauri
pauis......................powis
paulibai....................a plank
pe'erau.....................a bird
pi.........................fish poison
piainman...................medicine man
pican......................cat
picien......................to ask
pictan......................to touch
pidait......................to roast vegetables
pide.........................full
pide.........................to fill
pidiait......................to roast
pidian......................people
p'i'dini.....................deserted place
pikot.......................guinea fowl
pillap......................to sweep
pimud..............humming bird
pineari...................newly made
pīnd.......................grass
pīnpīn.....................a frog
piralibi....................a broom
pirari......................worm
pirot......................shot
pisera.....................cricket
pitcet bed
poa dolphin
poat a monkey
podan to blow with a fan
pokud awake or alive
prapi plate
pratatabai man's name
pu abbreviation, purekar
pu your
puat black
puat black monkey
pubaulan alone
pucien cat
pud black
pudel fish
puderiajan to clean up a field
pui your
puid to be drunk
puitol man servant
puitolyeb woman servant
puk calabash
pukad to awake
pulalu a comb
puna footprints
puokad rotten
pu a paddle
purali an adz
puratan to paddle
pura the hip
puraua shark-tail fish
purauatan to get lost
puraunam fish poison
purawab fish
pureker you
purikar your
pusat a fish
putkaitenan to be unfortunate
ra large frog
ra'ad crying
ra'adan to cry
rabi ............................... song
rabi ............................... wet
radak ............................... spittle
radak ............................... field
radau ............................... belt
radud ............................... fish
raipan ............................... a fish
raitce ............................... surprise
raitcean ............................. to be true
rakaul ............................... ant
rali ............................... umbilicus
ralu ............................... charcoal
ramat ............................... to hold
ramit ............................... to catch
râmok ............................... hammock
randauln ............................. dream
raniot ............................... to hold
rapud ............................... striped
rapur ............................... horse fly
rena ............................... cord
rênapan ............................... to quarrel
renind ............................... to mend
rêtcab ............................... houri fish
rian ............................... getting firewood
ridean ............................... to ascend in boats
ri-iën ............................... zigzag
rikibi ............................... a wasp
rikud ............................... break wind
rikud ............................... to shift anything
rikun ............................... middle
rim ............................... fire, match
rinid ............................... to cohabit
rin ............................... woman, mother
rin ............................... urine
rina ............................... rope
rinan ............................... to kill
riini ............................... silk grass
rinikupai ............................. fish
rinsud ............................... girl
rip ............................... next
rip balai ............................. next word
rirēt ....................... to fly
risiman .................... back ornaments
ritcab ...................... hoari fish
riu ......................... well
riuan ........................ to be well
riued ........................ to have intercourse
romi ......................... black monkey
ru ............................ inside
ruair ........................ head
ruairīd ........................ hair
ruakēr ........................ firewood
rubart ........................ as it should be
ruboxusru ................... in the box
rui ............................ to kill
rukanumru ................... exchange for what?
rumi .......................... black howling monkey
rupan ........................ to weed
rupununu ..................... a shrub
rupununwau .................. Rupununi River
rupurup ........................ sole
ruroi .......................... a bird
ruru ............................ fish
ru'u .............................. lazy

sab ................................ small
sabab ........................... a bird
sabaer ........................... a fish
sabai ............................. a small fish
saban ............................ to repair
sabarud ........................ round plaited tray
sabi .............................. a fish
sabuer ........................... a drink
saburiwa ........................ monkey's jaw
sad ............................... mark
sadap ............................ to mark
saer .............................. plantain
saeran .......................... to roast plantains
saertun ........................ field for planting
saik ................................ cut
saikan ............................ to cut
sadak ............................. light in weight
sakadan ........................... to stick together
sakanat ........................... to sit down
sakaruin ........................... to cut the hair
sakat ............................... to bite
sakatki ............................. poisonous snake
sakawinki ............................ bird
sakitap .............................. overhead
sakitēp .............................. straight
sakpan ............................... to rest awhile
saku ................................. red macaw
salalu ............................... red cloth
salampi .............................. shovel
saliap ............................... straight away
salipere .............................. swallow
saman ............................... twin
samarai .............................. ant
sampa ............................... hoe
samur ............................... drum
samura .............................. blowgun case
sapapam ............................. leave it alone
sapara ............................... roasted cassava
sapuruk ............................. hammock with high sides
sapiar ............................... merchandise
sar ...................................... otter
sara ................................. little otter
sarāk ................................. loose
sarawar .............................. a lizard
satarau ............................... larynx
saualil ............................... scoopion
sauan ............................... iguana
sauansibar .......................... prostitute
sauda ............................... to aim
sauraura ............................. a drink
sawa ................................. fish
sawad ............................... to pass a thing to you
sērēri ............................... mountain (Ararat)
seid ................................. to strip
si ...................................... dress
sēbur ................................. red monkey
si’inkaru ............................. nightshirt
si’inwēr .............................. biceps
sikidiu............................ Taruma
sikud............................. to soak
siodiar............................ a lizard
sipuskapi.......................... Essiquibo
sir................................. banana
sirsrir............................. scissor-tail bird
skapi............................... to wash
skapiwau......................... Essiquibo river
skaratan.......................... to mash with foot
sk................................. wash
skelerifar........................ a ramrod
skelit............................. to tie
skeribiiman....................... fool
skerip............................. pepper
solerun............................ crest of bird
sotê................................. to take out
sowalik............................ fish
spiriri............................. iron
sua................................. spider
suan................................. lizard
sub................................. little
subi................................. to loosen
sucinik............................ spider’s web
sud................................. small
sue................................. small red deer
sukatana.......................... birth
suketêp............................ straight
suketêpkamu....................... midday
sum................................. cigarette
suma............................... tobacco
sumamad.......................... tobacco wrapper
sumar.............................. bow
sumat............................. to smoke
sunabar............................ plaited bread tray
supar............................... cutlass
supit............................... to spit
sur................................. rock hauri fish
surababai........................ sunfish
surar............................... worthless person
suraran............................ promiscuous intercourse
surasub............................ fish
sus. .......................... flowers
susaban ....................... to rub

tábai ......................... seat
tabai ......................... leg
tabaiña ...................... to bleed
tabar ......................... large
tabritc ....................... a fish
tabu ......................... belly
tabutc ....................... cashew fruit
tai ......................... to hit
tain ......................... ear
taitan ...................... vomit
taitañean .................... to vomit
takok ........................ iron arrow-point
talalá ....................... cart
talieu ....................... to be frightened
tamalu ..................... bat
tamandua .................... anteater
tan ......................... gave
tán ......................... listen
tana ......................... mountain
tanan ...................... to give
tapir ......................... cow
tapirdini ................... milk
tapir raipain .............. bring in the cows
tarabara ................... house fly
taradapua ................ regulus or barbecue
tarait ...................... to cross over
tararam .................... a bird
tarat ....................... to shut
taridipan ................... shelf
tarniuca .................... a fish
tatakan .................... to urinate
tau ......................... brow
taua ......................... mountain
tauadap ..................... edge of the forest
tauanau ..................... these people
taut ....................... harpoon
tautap ...................... to carry baby
taub ......................... seat (stool)
tauerai ......................... strangers
ta'una ......................... the thing for
tawab ......................... shoulder
tawabar ....................... shoulder blade
tcab ......................... to cut
tcai'ir ......................... moonlight
tcaipuik ...................... morning
tcakni ......................... rock where Tuminkardan is buried
tcakui ......................... toucan
tcami ......................... brother
tcarlepan ..................... to pass drink around
tcarmi ......................... brother used as a mate
tcauinai ...................... planets
tcaun ......................... a bird
tcauinai ...................... son-in-law
tcegma ......................... a bird
tcepēn ......................... a bird
tcerud ......................... bake
tcesikiu ...................... to whisper
tcibē ......................... a drink
tciberai ...................... jigger
tcilibibili .................... a bird
tcikai ......................... to wash clothing
tcikēpan ...................... to walk
tcikēp ......................... walk
tciktikan ...................... to grate cassava
tcimari ....................... grater
tcimitcimeri ................... a wasp
tcipakwi ...................... fish
tcipir ......................... hard wood
tcipirari ...................... iron
tcipoua ....................... Essiquibo river
tcipuk ......................... spoon
tcipurai ....................... afternoon
tciriki ....................... parrakeet
tciruka ....................... trousers
tcirura in karu ............... pajama trousers
tcitcokatan ................... to slip
tcorim ......................... a bird
tcupin ......................... yam
tcutcun ....................... small snail
teat.......................to take out cassava
tēbar......................large
tēkaira....................deer
tēkarwaru..................load of firewood
tēki.......................much, plenty
tēñarenau..................old man
tēti.......................woman’s uncle
tiak.........................to change to another vessel
tied.........................to plait closely
tieu.........................penis
tīkaleupan..................to trip up
tikap.......................to look
tike.........................to knock
tiker.......................fire
tikercan....................smoke
tikere......................fire stick
tikerwaru...................firewood
tikian......................to tickle
tikun.......................fish poison
tīm.........................with
tīmkerai....................spinner
tīn..........................genitals
tinap........................over
tinaranau...................old man
tineir......................elder brother
tininpan....................to pin
tınınpan....................a thread
tiod.........................to stool
tipft.........................to sink
tīpud.......................a wasp
tīr.........................to drink
tireit.......................to plait
tīritīri......................a bird
tīrki.........................perhaps
tiuru-ai....................glans
tiwer.........................to try
tobar.......................fish
tokururi....................fish
toli.........................to buy
tomali......................a rattle
to'ol.......................... to quarrel
to'oleir......................... quarrelsome person
to'o't.......................... to pull
tor............................... hole
tub............................... belly
tubaoiñan........................ to fall down
tubauan.......................... to yawn
tukaduro.......................... a fish
tukan.............................. grandchild
tukera·iap........................ tame
tukum.............................. end
tukural............................ lame
tuli............................... to buy
tulid.............................. fish
tum............................... to make
tuman rikun........................ midnight
tumatum............................ butterfly
tumiñebar......................... young woman
tumiñer........................... young man
tumini............................. person, thing
Tuminkar........................ creator
Tuminkardan...................... son of Tuminkar
tumtum............................ a lizard
tumur............................... fish
tun................................. island in savannah
tunile............................. lizard
tupan............................... doll
tuptali............................ nails
turamar........................... stout
turaop............................. to square
turar............................... balata
turaud............................. frog
turaua............................. man's name
turauan............................ a waterfall
turauanar........................ thunder
turoúb.............................. a frog

u................................. my, her
uaru............................... sister
ubur............................... sting-ray
udandaunaiura..................... son
FARABEE—THE WAPISIANAS

udanjin................................daughter
udn......................................duckling
uh........................................yes
ukerdinerun..............................I wish to work
ulamuntakak............................a bird
ul..........................................hers
ulir.......................................that
ulud.......................................heel
ulud.......................................root
umar......................................pole, stick
un..........................................me
unanob.................................tongue
une’eani.................................tears
unidib....................................nose
ungum....................................mine
unkar.....................................myself
untukan.................................my grandson
urali.....................................poison
uran.......................................small acouri
uru.........................................cow’s horn
urupiru....................................great serpent
ütkankaunauna.........................grandson
ütkanrin.................................granddaughter
wa.........................................we, our
wa’aib....................................in front
wabar......................................a fish
wadin.....................................in the place of
waiair.....................................pink
wai’il.......................................creek bank
waikinan.................................tomorrow
wainau....................................family
wainau....................................we
wak.........................................to clear
waka.......................................a palm
wakadapuit..............................west
wakai......................................hunting dog
wakai......................................flesh food
wakandan.................................to dawn
wakarasab...............................egret
wakedib..................................our feet
wakuit ..................... east
walan ..................... underneath
walir ..................... fish
walir ..................... fox
walirdap ..................... a mountain
wamad ..................... locusts
wamaru ..................... savannah man
wananiri ..................... mirror
wani ..................... aunt or mother-in-law
wanikini ..................... food
wanum ..................... mouth of creek
wapisan ..................... Wapisiana man
wapisiañeb ..................... Wapisiana woman
war ..................... good bush rope
warakan ..................... to bail water
waralan ..................... to spin on the thigh
waram ..................... a fish
wararap ..................... fish
wararim ..................... fish
waratan ..................... to leave behind
warau ..................... a fish
warcnau ..................... blue hen
warikup ..................... ginger
wariwan ..................... to tangle
warsa ..................... vawari
warsnau ..................... a bird
warstinpàn ..................... to lie on the ground
waru ..................... a load
wārū ..................... parrot
wasamac ..................... fish
wat ..................... come
watakup ..................... a fish
watan ..................... to drive away by dogs
watcipenan ..................... evening, sunset or night
watid ..................... to tie knot
watidan ..................... to tie
watilabar ..................... string
wat tu ..................... crow
wau ..................... creek, river
waukuku ..................... a pigeon
waukwim ..................... a powis
wawat ........................................ autumn
weikobar ...................................... ant frame of medicine man
weiru .......................................... cassava food
wemin .......................................... to the right
wicalibe ........................................ a plane
wican ........................................... to plane
widealara ...................................... deer
wik ................................................ big black ant
wikadar ......................................... a frog
wikid ............................................. fish
wikid ............................................. aipina fish
wikinan ......................................... tomorrow
wikinanwamakum ................................ fish
wilum ............................................ sun eagle
win .............................................. water, rain
winau ........................................... pleiades
winawi .......................................... they
windun .......................................... rainy season
winip ............................................ payment for a thing
winipan .......................................... to plant cassava
winipina ........................................ payment
winri ............................................. wing
wir .............................................. star
wir .............................................. red
wirada ........................................... tortoise
wirad’din ....................................... spotted jaguar
wirau ............................................ stars
wisa .............................................. monkey
wit ............................................... dying fish
witan ............................................ to die from fish poison
witaro .......................................... marmoset
wltc ............................................. hat
witc ............................................. warm, hot
witca ........................................... bisa monkey
witcantin ....................................... to whistle
witcibap ........................................ two threads twisted
witcibapan ..................................... to tell stories
wiwi .............................................. sister
wodid ........................................... cold
wowab ........................................... a monkey
wowaban ........................................ to fall
yaitam ................................. two
yaitambakinët ......................... seven
yaitambauluwakedib .................... seventeen
yaitampldan ........................... forty
yaitamwakedib ........................ twelve
yaunai ................................. boy
yebkoar ................................. sting-ray
yerauain ............................... diver
yeriko ................................... ariwick fish, carrying basket

ENGLISH-ATAROI

ankle. ..................................... baroli
arm ........................................ anubai
arrow ...................................... beiri
aunt (father's sister) ................... mamatci
aunt (mother's sister) .................. mamai
baby ........................................ dan
back ........................................ dawi
beard ...................................... hin
belly ....................................... tub
blood ....................................... ire
body ........................................ tauair
boy .......................................... danainai
bow .......................................... baurari
brain ....................................... aiku
breast ...................................... dun
breath ...................................... niruana
brother, man's ........................... inaur
brother, woman's ........................ ar
brother-in-law ........................... naun
cheek ...................................... kaudai, ukawitai
chest ....................................... dukudi
child ........................................ dan
chin ........................................ watai
cloud ....................................... waiyukancan
cousin ..................................... wiwi
cutlass .................................... katcupara
dark ........................................ wamalihana
daughter ................................... rinkaru
day ....................................................... kidikepwik
dog ....................................................... din
ear ....................................................... taine
earth ..................................................... tari
elbow ..................................................... umpatori
evening ................................................... waïyukan
eye ....................................................... nawin
eyelash ................................................... nawinumte
eyebrow ................................................... ohipaug
face ....................................................... awinbara or untau
father ..................................................... har
finger ...................................................... unkueisin
fire ....................................................... tikir or tegère, titer
foot ......................................................... kid or unketi
girl ......................................................... rinkaru
grandfather ............................................. dukari
grandmother .......................................... nau
hair ....................................................... ruairi
hand ....................................................... unkuei, kai
head ...................................................... ruair, urueietërua
heart ...................................................... nikin
heel ....................................................... baruliir
honey ..................................................... kamowab
intestines .............................................. ikulî
knee ....................................................... kudur
leg ......................................................... ikub
leg, lower .............................................. unkoube, tabai
lip ......................................................... dir
lip, lower .............................................. oteri
lungs ..................................................... cin
male child .............................................. dan’înai
man ....................................................... yaunâf
midday ................................................... waïpokodîn
mist ....................................................... ka
moon ...................................................... kaier
mother ................................................... haru
mouth ................................................... daku, atagu
nail ........................................ bar, umpari
neck ........................................ unkanei
nephew ...................................... tcam
niece ........................................ wiwi
night ........................................ tciaptan
nose .......................................... unhib, ohipe, untenai
planet ....................................... watcair
pulse ......................................... wariru
rain .......................................... win, wuau
razor ......................................... kidimic
scissors ..................................... errata
shadow ....................................... hikin
shoulder ..................................... tawat, untawata
sirius ........................................ besus
sister ........................................ wiwi
sister, man's ................................ rir
sister, woman's ............................. ar, inaur
sister-in-law ................................. tcikaru
skull ......................................... inuwir
sky ............................................. waikanbara
smoke ........................................ tinkircan
sole .......................................... kedibdarur
son ............................................. dan, danainai
spirit ......................................... durunai
stars .......................................... watcair
sun ............................................. kamu
thumb ......................................... kaidaruar
toe ........................................... kidbsu
toe, great ................................... unkutesin
tongue ........................................ ininuk
tooth ......................................... dak, ohetag
umbilicus ................................... dni
uncle .......................................... haruk
vein ........................................... wariru
water .......................................... win, honit, tuna
wind .......................................... awar
woman ....................................... rinakaru
Ataroi Numerals

1  baiadēpa,  paitagpa
2  baiadēpti,  pauitaiteg
3  ikaiedēp,  ihikkaitab
4  baidai'iki,  pauitaigket
5  baikaiapap,  wakaipap
6  baidēpahakenêt
7  baidēptibakenêt
8  ikbakenêt
9  baibakenet
10  bauakuka,  paukubawakai
11  baiadēpawakidib
12  baiadēptiwakidib
13  ikaiedēpwakidib
14  baidai'ikiwakidib
15  baiadēpakidib
16  baiadēpabaulauwakidib
17  baiadēptibaulauwakidib
18  ikaiedēpaulauwakidib
19  baidai'ikibaulauwakidib
20  batoipapldian

English-Taruma

agouti ................................................. tuh
agouti, small ..................................... huki
anaconda ............................................. helitcitci
anato paint ......................................... kalo-il
aniqua bird .......................................... haragua
another ................................................. utcaka
anything fat .......................................... hatcākwa
are you there? ...................................... habia
armadillo ............................................. marura
armadillo, small ..................................... kabeiyo
arrow .................................................. kuba
aunt ..................................................... maini
axe ...................................................... badibapi
balata tree .......................................... bikeru
barbecue (p.) ....................................... jauyi
beads .................................................. kasur
belt ................................................................. ñjábo
bird ................................................................. zíli
blue ................................................................. daitwik
boil ................................................................. jiku
bottle ............................................................... pateli
bow ................................................................. tceka
bowl ................................................................. tala
bread ............................................................... tcíwi
bring ................................................................. awadasi
brother ............................................................ wi
brother-in-law ..................................................... akiwa

calabash .......................................................... gölie
capabara .......................................................... guara
carrying basket ................................................ ásígi
casarip ............................................................. batcuku
chicken ........................................................... akala
chop ................................................................. bitci
clay ................................................................. kuline
cold ................................................................. siwa
color ............................................................... samaku
comb ............................................................... paleli
corrall ............................................................. bakwasi
cotton ............................................................. mulu
creek ............................................................... kidju
crown ............................................................. tcínika
curassow .......................................................... ohona
curassow, white-head .......................................... kuyui
cut (v.) .............................................................. tatuka
cutlass .............................................................. katcupara
day after tomorrow ........................................... saliki
day after day after tomorrow ................................ salikabada
day before yesterday .......................................... noki
day before day before yesterday .......................... nukibada
deep ................................................................. gwoa
deer, bush ......................................................... ki’ilya
deer, red ........................................................... kauyi
deer, savannah .................................................. hitci
dog ................................................................. hi
duck, cuervus ..................................................... zakoka
duck, diver ........................................................ cuniwad
duck, mareka ................................kaibadje
duck, moscova ..................................peli
eagle ..............................................mokaua
earth ................................................dudo
earth, black .......................................jongwì
east ..................................................atcakwa
eat, let us .........................................gwàñiwi
Essiquibo .........................................zi’ikidju
eye ....................................................atci
far ....................................................dunahá
fat .....................................................tcàkwa
father .................................................paiyo
field, new ...........................................tcëyo
field, old ..........................................gùmeja
finished ...........................................aima
fire ...................................................fwa
fire, to make .....................................kwami
fish ...................................................ale
fish hook ..........................................kwakèp
fish line ...........................................fitema
foot ...................................................apa
forest .............................................nukuda
give water ........................................daziza'
go into hole .......................................hwakikuraba
go to rear ..........................................gwanana
good .................................................hia
grandfather .......................................abana
grandmother ......................................agigi
grater ................................................tcìmarì
gun ...................................................arkebusa
gun cap ............................................duladula
gunpowder ........................................gulaparu
hammock ..........................................sai’ì
hand ..................................................aù
hard ..................................................u’ù
haul ..................................................jujukwa
having .............................................ha or habia
head ..................................................adam
heavy ...............................................dupá
here..............................mahiki
herron, blue.........................junari
hot..................................biau
house.................................duiya
how many?............................kwatciwigeraba
hungry...............................hukpadika

incense wax............................zi
it is so................................haka
jaguar....................................dun
kill......................................bâhé
kingfisher..............................bitcitcu
kingfisher, red-breasted..............séïleli
knife....................................malia
know, I do not..........................ndau

large.................................wakana
leaf....................................jükár
leak....................................tcuraka
lean....................................wiruwiru
lie (v.)..................................hada
light, weight...........................kabú
little...................................gacíwi
lizard.................................uwana
lizard.................................asijéri

made.................................mukimuki
make....................................kuru
make fire (v.)..........................kurukwami
male....................................maito
man.....................................gika
many......................................tcegitcegi
many fish..............................tcegiale
medicine man..........................kiliku
monkey, black..........................kwagi
monkey, black howler..................rumi
monkey, friarly.........................koku
monkey, hooded........................kwisa
monkey, marmoset.....................hisai
monkey, red howler...................mu
monkey, striped.......................sikwa
moon....................................biwa
<table>
<thead>
<tr>
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<th>Xam</th>
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<tr>
<td>mother</td>
<td>maiyu</td>
</tr>
<tr>
<td>mouth</td>
<td>kukana</td>
</tr>
<tr>
<td>mountain</td>
<td>fwai</td>
</tr>
<tr>
<td>my</td>
<td>hamu</td>
</tr>
<tr>
<td>near</td>
<td>diwi</td>
</tr>
<tr>
<td>nephew</td>
<td>jayiwi</td>
</tr>
<tr>
<td>no</td>
<td>Inja</td>
</tr>
<tr>
<td>nose</td>
<td>aza</td>
</tr>
<tr>
<td>oil</td>
<td>tcimi</td>
</tr>
<tr>
<td>otter</td>
<td>karangwi</td>
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<tr>
<td>otter pup.</td>
<td>kwahau</td>
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<td>paca</td>
<td>kaikwi</td>
</tr>
<tr>
<td>parrot</td>
<td>kurigua</td>
</tr>
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<td>parrot, green</td>
<td>karikari</td>
</tr>
<tr>
<td>parrot, noisy</td>
<td>kiukiu</td>
</tr>
<tr>
<td>peccary</td>
<td>baiyi</td>
</tr>
<tr>
<td>peccary (large variety)</td>
<td>hisu</td>
</tr>
<tr>
<td>pink</td>
<td>jöli</td>
</tr>
<tr>
<td>plantain</td>
<td>blli</td>
</tr>
<tr>
<td>powis</td>
<td>wokuki</td>
</tr>
<tr>
<td>puma</td>
<td>kwailipaua</td>
</tr>
<tr>
<td>quick</td>
<td>gwásiki</td>
</tr>
<tr>
<td>rain</td>
<td>fuza</td>
</tr>
<tr>
<td>rain is coming</td>
<td>madakínafuza</td>
</tr>
<tr>
<td>razor</td>
<td>kdímic</td>
</tr>
<tr>
<td>red</td>
<td>iciku</td>
</tr>
<tr>
<td>river</td>
<td>kidju</td>
</tr>
<tr>
<td>rock</td>
<td>api</td>
</tr>
<tr>
<td>scissor</td>
<td>cirata</td>
</tr>
<tr>
<td>scrub forest</td>
<td>kasikasagwa</td>
</tr>
<tr>
<td>seat</td>
<td>moeli</td>
</tr>
<tr>
<td>shallow</td>
<td>jama</td>
</tr>
<tr>
<td>short</td>
<td>ciaiwi</td>
</tr>
<tr>
<td>shoulder basket</td>
<td>pakar</td>
</tr>
<tr>
<td>sick</td>
<td>baukánama</td>
</tr>
<tr>
<td>sister</td>
<td>atci</td>
</tr>
<tr>
<td>slow</td>
<td>hiabakwai</td>
</tr>
</tbody>
</table>
soft ......................................................... yuma
sore ....................................................... kwara
spirit ..................................................... kantu
stars ....................................................... uinra
stone ...................................................... api
strangers ............................................... wanitcu
strangers are coming madakína—wanitcu
strong .................................................... dumi
sun ........................................................ hwa
suncreek ............................................... wakikidju
take hold ............................................... tcuni
tapir ....................................................... baki
there ....................................................... duia
thing ....................................................... kokuna
thirsty ..................................................... wanapadika
throw away .............................................. siwi
tobacco ................................................... tuma
today ....................................................... fo le
tomorrow ............................................... sali
tortoise ................................................... gini
toucan, red-breasted ................................ liyu
toucan, white-breasted ................................ ziku
trumpet bird ............................................. naki
turn ......................................................... bainikwa
turtle ...................................................... yariko
very little ............................................... gaciwigaciwi
wash ....................................................... gwaciki
watch (r.) ................................................ gugua
water ...................................................... za
waves ....................................................... uriparu
weak ....................................................... ulu
weary ..................................................... ulukantua
west ....................................................... zuniakwakiwaka
what ....................................................... gaga
when ....................................................... hama
where ..................................................... ndatci, ungwá
white ..................................................... wokik
without .................................................. yulu
woman ..................................................... gunitca
wood ................................. jukánahu
wrap .................................. duma
yesterday .............................. nok
you ....................................... a’a
you have come ......................... kwegiag
younger brother ..................... u-ui
your ..................................... ani

**Tarauma Numerals**

1  ociwai  .................................. 9  jobaradakyakana’ahami
2  jowa ....................................... 10  doborg
3  mikyahahi  ................................ 11  ociwaiyakanahapabi
4  jobarada ................................ 12  jowayakanahapabi
5  dobangurubāb  ......................... 13  mikyahahiyakanahapabi
6  ociwaiyakana’ahami .................. 14  jobaradakyakanahapabi
7  jowakyakana’ahami ................... 15  urawapaba
8  mikyahahiyakana’ahami

**English-Mapidian**

acouri ................................. tukula
accuri, small ......................... adule
all ......................................... heda
anaconda ............................... uyeč
are you there? ......................... koraif
arm ......................................... cawada
armadillo ............................... kapaiya
arrow ................................. kaing
aunt  ................................ aya
aunt (mother’s sister) ............... neini
back ................................... unbule
beads ................................. kasoru, mama
blue ...................................... udaiza
bow ...................................... keňe
Brazil nut ............................... mia
brother ................................ unyosio or undiasi
brother-in-law ......................... unaudia
brow .................................. untawa
bush fowl .............................. rulie
buttock ................................. untuma
<table>
<thead>
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<tbody>
<tr>
<td>calabash</td>
<td>kawalie</td>
</tr>
<tr>
<td>carrying basket</td>
<td>utibè</td>
</tr>
<tr>
<td>cassava</td>
<td>kasè</td>
</tr>
<tr>
<td>cassava sticks</td>
<td>kanakad</td>
</tr>
<tr>
<td>child</td>
<td>unđè</td>
</tr>
<tr>
<td>chin</td>
<td>uwici</td>
</tr>
<tr>
<td>color</td>
<td>tcizawa</td>
</tr>
<tr>
<td>corn</td>
<td>mariki</td>
</tr>
<tr>
<td>creek</td>
<td>kete</td>
</tr>
<tr>
<td>curasow, red-throat</td>
<td>matù</td>
</tr>
<tr>
<td>curasow, white-head</td>
<td>kuyusi</td>
</tr>
<tr>
<td>cutlass</td>
<td>katciparo</td>
</tr>
<tr>
<td>deer, bush</td>
<td>kucara</td>
</tr>
<tr>
<td>deer, small</td>
<td>kiseda</td>
</tr>
<tr>
<td>dog</td>
<td>tcimada</td>
</tr>
<tr>
<td>done</td>
<td>hedana</td>
</tr>
<tr>
<td>drink, I want a</td>
<td>unkaurini</td>
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<tr>
<td>drink, my</td>
<td>unkauri</td>
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<tr>
<td>ear</td>
<td>utciya</td>
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<tr>
<td>eyes</td>
<td>unoso, nohro</td>
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<tr>
<td>father</td>
<td>untar</td>
</tr>
<tr>
<td>female</td>
<td>rinharo</td>
</tr>
<tr>
<td>finger</td>
<td>unkuba</td>
</tr>
<tr>
<td>fire</td>
<td>hikesia</td>
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<td>fish</td>
<td>kamanari</td>
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<td>fish</td>
<td>ku'u</td>
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<td>fish</td>
<td>solida</td>
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<td>fish, aimara</td>
<td>atimar</td>
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<td>fish, cat</td>
<td>hoca</td>
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<tr>
<td>fish, hauri</td>
<td>ŋĩèrsa</td>
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<tr>
<td>fish, shark-tail</td>
<td>purauab</td>
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<tr>
<td>fish, tiger</td>
<td>kulica</td>
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<tr>
<td>foot</td>
<td>unobà, uruba</td>
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<tr>
<td>forest</td>
<td>dîrearù</td>
</tr>
<tr>
<td>gave, you</td>
<td>itcana</td>
</tr>
<tr>
<td>going farther</td>
<td>butcidana</td>
</tr>
<tr>
<td>going, I am</td>
<td>jakaina</td>
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<tr>
<td>grandmother</td>
<td>amumumu</td>
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</tbody>
</table>
hair ........................................... untčínamũ
hammock ................................... biwi
hand .......................................... untčigya, unkuba
hat ............................................. kũwũdi
head .......................................... unkũ or unrũku
hot ............................................. kuida
I .................................................. unu
I am here .................................... diěniha
jaguar ........................................ gĩmada
knee ........................................... kuduru
knife .......................................... mariën
leg ............................................. untcabã
loins ......................................... untiaž
maam .......................................... mami
mirror ......................................... kanapa
mother ........................................ untaru
mouth .......................................... unau, numiya
neck .......................................... ulewu
nose ........................................... uněteba
otter .......................................... waiyawaiya
otter pup ..................................... tsarau
paca ........................................... caba
peccary, large ................................ bita
peccary, small ................................ bakur
pitch, arrow .................................. ma'iba
pitch, black ................................... min
powis .......................................... akisi
razor ......................................... egimitcegaha
razor .......................................... kídimíc
red ............................................. tcticoliuma
scissors ..................................... tciřata
shoe .......................................... uluba
shoulder, basket ............................ gatìmel
shoulder ..................................... nobũ
sister .......................................... seyulu
sweet potato ............................... kasai'ũ
tapir.......................................................... kudui
teeth.......................................................... nu'u
thigh.......................................................... unwi
thirsty, I am.................................................. maraona
thread, cotton................................................ molu
today.......................................................... itana
toe.............................................................. unbaiyč
to me.......................................................... naini
tomorrow....................................................... kaukaña
tomorrow, day after................................. taukiañatcukenaha
tongue.......................................................... unanob, yoyoba
trumpet bird................................................... namiti
water.............................................................. wín
white.......................................................... keseda
wife............................................................ unosoro
yam.............................................................. lisu
yam, small..................................................... kalua
you.............................................................. igiēm

MAPIDIAN NUMERALS

1 tcioñi
2 asagu
3 dikinerda
4 genakahu or kanuku
5 katharida or kadurana
6 mikyanohi or mikuhanu
7 enikandikuba
8 kalyrika
9 tcauñē
10 mikyanikuba
11 mikyanwaruba
12 tcioñi'ikadana
13 ikonada
14 tcioñitcikiada
15 tcioñiaha
16 ronoakuba
17 tcikonada
18 lakatale
19 orono
20 amikidu
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PLATES
TYPICAL SAVANNAH OF SOUTHERN BRITISH GUIANA

PHOTOGRAPH BY H. P. C. MELVILLE
WAPISIANA WOMEN GRATING CASSAVA

PHOTOGRAPH BY H. P. C. MELVILLE
WAPISIANA WOMEN PREPARING CASSAVA
PHOTOGRAPH BY H. P. C. MELVILLE
WAPISIANA WOMEN PREPARING CASSAVA
PHOTOGRAPH BY H. P. C. MELVILLE
WAPISIANA GIRLS SPINNING
PHOTOGRAPHS BY H. P. C. MELVILLE
WAPISIANA BOYS MAKING FIRE

WAPISIANA WOMEN WEAVING A HAMMOCK
PHOTOGRAPH BY H. P C. MELVILLE
WAPISIANAS

WAPISIANA GIRL

WAPISIANA BOY ROASTING MONKEY

WAPISIANA WOMAN

PHOTOGRAPHS BY J. OGILIE
WAPISIANA WOMAN
PHOTOGRAPHS BY H. P. C. MELVILLE
WAPISIANA WOMEN IN THEIR PAINT
PHOTOGRAPH BY H. P. C. MELVILLE
WAPISIANA HEAD MAN

ATAROI MAN
ATAROI MOTHER AND DAUGHTER
TARUMA MAN
INTERIOR OF MAPIDIAN HOUSE SHOWING THATCH

MAPIDIAN CHIEF'S DAUGHTERS
A Beaded hair tubes—Taruma.
B
C Stamps for painting designs on body or cloth—Ataroi.
D E
F Maiden's paint cup—small gourd covered with pitch—Ataroi.
G Bamboo paint tube—Ataroi.
H Down—in cases of bird skin for personal decoration.
I Poisoned points for arrows.
J Case for poisoned arrow points, Mapidian.
K L Knives of peccary tusks, Mapidian.
M Wax wrapped in palm leaf—used for light.
N Pitch on stick for setting arrow points.
O Wax for coating pottery.
A, B} Shoulder baskets for containing a man's toilet articles.
A—Woman’s trinket basket.
B—Pack basket.
C
D
E
   Baskets for holding raw cotton.
F—Basin shaped basket for holding cotton rolls.
G—Basketry foundation for headdress.
H—Hand carrying basket.
I—Woven palm leaf band to hold wasps.
J—Palm leaf basket with handle.
WAPISIANA
A—Tobacco as prepared for use.
B—Bark, for cigarette wrappers.
C—Grass Belt.
D—Maiden’s head dress.
E—Sandals made from the leaf stock of the eta palm.
A—Maiden's apron—made of cotton strings.
B—Woman's beaded apron.
C—Leg band—knit.
D—Spindle whorl.
E—Ball of string in palm leaf retainer.
F—Loom for making baby carrier.
G—Spindle.
H—Loom for making bead apron.
WAPISANA, MAPIDIAN
A} Bead aprons worn by women.
A—Comb.
B—Ear pendants.
C—Necklace.
D—Lip pendant.
E—Belt ornament.
WAPISIANA, MAPIDIAN
A—Back ornament.
B—Seeds and beads.
C—Ear ornament.
D—Belt of seeds and beads.
E—Necklace—deer teeth and glass beads.
F—Necklace.
G—Necklace—with monkey tails.
H—Beads—Job's Tears.
J—Necklace—teeth of dog or tiger.
K—Ear ornament.
L—Necklace—powis' eye vine seed—open.
M—Necklace—powis' eye vine seed—closed.
N—Necklace—beetle legs and glass beads.
O—Necklace—agouti teeth.
Club with scorpion design.
Musical Instruments

A—Clay whistle.
B—Rattle of deer toes.
C—Tortoise shell, played by friction.
D—Reed flute, or whistle—Gourd top.
E—Flute of deer bone.
F—Decorated gourd for rattle.
G    I  Bamboo flutes.
H—Pipe.
J—Bone flute.
A—Binas—drawn through nose to insure success in hunting.
B—Armadillo shell bag.
C—Implement for turning cassava bread in baking.
D—Hanger.
E—Toys—for game like shuttle cock.
G—Outfit for poisoned darts.
Wapisiana
A—Blow gun.
B—Bag of cotton.
C—Case of darts.
WAPISIANA BLOWGUN