# University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Anthropology Faculty Publications

Anthropology, Department of

1976

# Ye'kwana Basketry: Its Cultural Context

Raymond B. Hames University of Nebraska-Lincoln, rhames2@unl.edu

llene Hames University of California, Santa Barbara

Follow this and additional works at: https://digitalcommons.unl.edu/anthropologyfacpub

Part of the Archaeological Anthropology Commons, and the Social and Cultural Anthropology Commons

Hames, Raymond B. and Hames, Ilene, "Ye'kwana Basketry: Its Cultural Context" (1976). *Anthropology Faculty Publications*. 180. https://digitalcommons.unl.edu/anthropologyfacpub/180

This Article is brought to you for free and open access by the Anthropology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Anthropology Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



# YE'KWANA BASKETRY: ITS CULTURAL CONTEXT\*

Raymond B. HAMES and Ilene L. HAMES

#### INTRODUCTION

The aim of this article is to describe an aspect of Ye'kwana (Makiritare) technology, basketry, in its overall cultural context. We will not only describe basketry as technology *per se* but the role it plays in Ye'kwana symbolism, ecology, economy and social organization. Also, we will discuss its role in inter-village and inter-ethnic trade and how this role has implications for understanding socio-cultural change in the immediate area of the Padamo River Basin, Territorio Federal Amazonas, Venezuela.

Studies of primitive technology probably rank among the oldest and least interesting of all anthropological work. One reason for this fact is that early explorers and ethnologists were interested mainly in gathering artifacts for museum collections. The resulting publications were mere catalogs describing baskets and other artifacts in meticulous detail as to where each item came from, who made it, how it was made, and its function. The only generalizing approach taken with these materials was to group them in culture areas (*Kalturkreise*).

Research for this article was carried out from March, 1975 through June, 1976 in the Padamo River Basin (mainly in the village of Toki), Territorio Federal Amazonas, Venezuela. The project was funded by a grant to Dr. N. A. Chagnon, Pennsylvania State University, from the National Institute of Mental Health, Grant #NIMH 5 RO1 MH 26008-SSR. We would like to thank Dr. Jacques Lizot for his help in the identification of many

We would like to thank Dr. Jacques Lizot for his help in the identification of many of the plants in Appendix I and to Paul Henley for his useful comments regarding the organization of the text.

In fact, many primitive cultures were better known by their technology than by their form of social, political, or economic organization. Furthermore, early entrants into primitive areas rarely stayed with the people longer than a few months and, more rarely still, spoke their language. Thus, since an adequate knowledge of technology could be gained by patient and careful observation and, unlike any other aspect of culture, examples could be transported and preserved in museums, technology was studied most often.

The other problem in the anthropological study of technology is the lack of strong theoretical framework. To be sure, in the area of technological replacement, Salisbury (1962) and others have shown that steel tools will be readily adopted once their superiority over stone tools in decreasing labor time has been demonstrated. However, as we will point out, technology is not simply an arm of the economy and, therefore, it must be understood in its non-economic aspects as well. Recent South American ethnological work, such as Rivière's work (1969) on blowguns (from the perspective of structuralism) and Wilbert's monograph (1975) on Warao basketry (interpreted from myth and ethnohistory), has tried to relate technology to noneconomic issues. The readers of Antropológica have recently witnessed Lizot's call (1974) for more studies in the vein of Rivière's work, which prefaced his discussion of Yanomamö boat construction and pottery, and Watson-Franke's work on the Guajiro (1974). It is our intention to contribute to this dialogue and, in a later publication using concrete examples from the Ye'kwana and Yanomamö, to directly attack the problem of why cultures adopt only certain parts of another culture's technology (as suggested by Lizot).

# BASKET MATERIALS AND FUNCTIONS

Ten of the 18 baskets that the Ye'kwana make are wholly or partially devoted to processing for human consumption the manioc tuber, the staple of the Ye'kwana diet. Manioc is carried from the fields, kept, pressed, sifted, stored and served in a variety of baskets specially designed for each of these jobs. The 7 other baskets serve more diverse functions: 'storing valuables, transporting burdens on long trips, trapping fish, caging animals, and for use in ritual occasions.

Almost all of the materials and tools used in the construction of any basket may be found in the immediate vicinity of the village. As can be seen in Appendix I, the Ye'kwana use a great variety of materials. Most Guiana cultures rely on one of several species of *Ischnosiphon* for virtually all of their baskets (Roth, 1921; Simpson, 1944; Wilbert, 1975), while the Ye'kwana regularly employ three different genera of plants for basket fibers: *Anthurium flexuosum* (the aerial root of an epiphyte), *Guasdua latifolia* (a species of bamboo)<sup>1</sup>, and *Ischnosiphon arouma* (Aubl.) Koern or *Ischnosiphon obliquus* (its pliable and pithy stem is used).

Although there is no seasonal variation in the availability of basket materials, some materials are sparsely dispersed or completely absent, depending on the geographic region. Generally, villages in areas at low elevations have the full range of basket-making materials while those villages in the upper reaches of the major Ye'kwana river basins do not.

For example, kaana<sup>2</sup>, the best fiber for the tönkoi, or sebucán, is abundant in the lower Padamo but, according to informants, it is absent in the upper Cunucunuma. Thus, the people in the upper Cunucunuma are forced to use a closely related species, amutu, which grows in both regions. Amutu is inferior to kaana, which is nodeless, because it has large nodes that make it difficult to work. The unequal distribution of prime basketry materials has not led to regional trade, as in the case of kuratä (Andruinana schomburgkii), a giant hallow reed used in making blowguns. Rather, when Ye'kwana visit a village in an area that has a prime material their own region lacks, they will collect the material and manufacture the desired object during their visit.

Relative to other Guiana cultures, the Ye'kwana employ an extraordinary number of subsidiary materials that add to the strength and durability of baskets. For example, a U-shaped stem of a hardwood

ö is a high central vowel that corresponds roughly to the vowel sound in the German word "Goethe" or the vowel sound in the English word "bird";

<sup>1.</sup> It is interesting to note the use of *Guasdua latifolia* as the preferred material for all Ye'kwana flat and decorated baskets. Although all Guiana cultures know of the plant and use it in their technology (e.g. Cartib datt cases and Yanomamö arrow point cases), none use it for making baskets. In its place one of the three species of *Ischnosiphon* is used. The Ye'kwana use *Ischnosiphon* only as a last resort, saying that *Guasdua* is more durable and makes a prettier basket.

<sup>2.</sup> Material will be referred to by Ye'kwana names. Refer to Appendix I for scientific names.

Ye'kwana vowels and consonants are pronounced close to the vowels and consonants of Spanish except for the following letters:

a is equivalent to the vowel sound in the English word "what";

<sup>&#</sup>x27; is a glottal stop, only characterizing vowel sounds.

bush, shaada, is covered with a piece of bark edging and sewn with a length of kurawa in order to reinforce the top loop of the tonkoi (Figure 1a). Similarly, the bottom loop (Figure 1hi) is reinforced by binding it with kurawa and rope made from tree bark (probably a member of the Linden family). The most comprehensive account of Guiana basketry (Roth, 1921) shows that the bottom and top loops of all other sebucanes are woven extensions of the body and are not reinforced. Perhaps the reason for the difference in Ye'kwana sebucanes is that typically the Ye'kwana tönkoi must be strong enough to support a tension of up to 225 kilograms for several hours and to be used daily during periods of manioc production. The woman's burden basket, the wöwä, which must be able to bear a weight of 60 kilograms, is reinforced from top to bottom by sewing a hard and woody aerial root, amamaada, onto the inside of the basket in a series of spirals. In addition, all flat baskets and the man's burden basket are strengthened by a triple rim system.

A list of all Ye'kwana baskets commonly found in the lower Padamo and a brief description of their uses follows below. Those baskets devoted to the processing of manioc are listed first, followed by those which serve other functions. Readers interested in the technical details of manufacturing the baskets should refer to Appendix II.

# 1. Baskets used for processing manioc

# Tönkoi (sebucán), 1.85 m x 14-16 cm (Figure 1)

The *tönkoi* is a long cylindrical basket, closed at the bottom and open at the top. The basket has two loops: the top loop, above the mouth of the basket (Figure 1c), is used to suspend the basket on a press stand while the bottom loop (Figure 1i) accepts a long hardwood pole used to put tension on the basket. The *tönkoi*'s only function is to squeeze the prussic acid and water from freshly grated manioc. The squeezing is accomplished by one or more women sitting on the bottom pole to depress it and then hooking the pole in the hewn notches of a stout post vertically implanted in the ground (see Roth, 1921, Fig. 86).

The *tönkoi* is probably the most physically demanding basket to make. The Ye'kwana often complain of having sore hands and fingers after working on one.



Figure 1

α

Tönkoi: casava press.

a) shaada support on front of top loop; b) back of top loop; c) top loop area; d) lip; e) starting point when making the basket; f) close-up of twill weave; g) point where basket first breaks, after approximately 3 months of use; h) rope tie reinforcement; i) bottom loop.



FIGURE 2

a) *Matidi:* note the hexagonal weave; b) detail of the center and twill weave of the *sehecha* and *manade*.

#### Deweke humudu (sebucán), 1.2 m x 7-10 cm

The deweke bumudu is the child's or learning version of the tönkoi. Since the tönkoi is quite difficult to make and the quality of its construction is more critical than other baskets, young boys first learn to master the deweke humudu. The deweke humudu is quite similar to the sebucanes made by the Arawaks (Roth, 1921, Plate 68).

#### Matidi (mapire), 22 x 44 x 30 cm (Figure 2a)

The *matidi* is a bowl-shaped, hexagonally woven basket that is produced for the storage of manioc farina (*mañoco*). It is able to contain the loose farina only when it is lined with *tarutaru*, or another suitable species of plant leaves, which close the wide holes formed by the hexagonal weave. Once the basket has been used as a farina container, it may be hung on a rafter inside the house and used to store valuables. It is never re-used for farina.

Because of the marketing of manioc farina, the *matidi* is probably the most commonly made basket in the village of Toki. We estimated that approximately 275 *matidi* were manufactured during one year. Whenever a Ye'kwana travels far (on a long hunt or to a distant village) he will always carry a *matidi* of manioc for use as his main source of food<sup>3</sup>.

## Sehecha, 60-100 cm diameter (Figure 2b)

The *sehecha* is a large, open-twilled flat basket used by women to fish in shallow forest ponds and streams. During the dry season the forest ponds and streams shrink considerably in volume. Groups of women will go to these areas and catch fish by scouping them into the *sehecha* after they have trapped them in shallow areas or in corners. Also, the *sehecha* is used for sifting pressed manioc (see *manade* description below) for manioc.

<sup>3.</sup> Many people mistakenly believe that manioc farina is the Yo'kwana staple food. In reality, casava cakes are, and manioc farina is rarely eaten at home. It serves as an emergency or travel food and is sold to the *criollo* populations of the upper Orinoco.

Manade (manare), 40-80 cm diameter (Plate 1)



Plate 1

a) Waha: a rare painted waha named kotobo yudi; b) manade: one of the first baskets learned by young male Ye'kwana because it is relatively simple to make. The design is a series of concentrically arranged rhomboids, called fahadifedu.

The *manade* is an open-twilled flat basket with fine mesh used to sift grated manioc after it has been pressed by a *tönkoi*. The women use the *manade* by placing a lump of pressed manioc on it and rubbing the manioc through the mesh in a circular fashion. The coarse part of the flour that will not pass through the mesh is discarded. The flour is sifted either directly onto the *budare* where it is transformed into casava cakes or into a *waha* (see description below) where it is kept a short time before being used for casava.

#### Waha (guapa), 80-100 cm diameter (Plate 1)

The waha is a flat basket with a closed twill weave. It is used to catch manioc flour as it is sifted through a manade, prior to toasting casava



Plate 2

#### Waha tomennato

a) Mawadi (culebra de agua, or anaconda): Mawadi is a feared supernatural counterpart of a real anaconda. He is said to be the grandfather of all aquatic beings and, while posing no direct threat to human existence, he can cause great damage to a man who kills an anaconda. He is mentioned in the myth, Wanadi nistama (Civrieux, 1970, p. 95). Mawadi is represented by a black line surrounded by white and then by a row of stars (shidicha). Next is a black line (ishakudu), followed by a peripheral design called kodadai (worm) which is a common edging between the central design area and the periphery of the basket. The kodadai is commonly seen on the woven rim (chahia) of waha tomennato as well. At the corners, the kodadai pattern creates a complete square, called kudadai (head or top). b) Wanadi motai (shoulders of Wanadi, or the carpintero real). The carpintero real is a damodede, a manifestation of Wanadi who is the culture hero of the Ye'kwana. It was Wanadi who helped man to cut down the tree of life, Marahuaca, which contained all the crops and wild fruits that the Ye'kwana consume. (When Marahuaca was felled, it became a mountain; myth of Semenia, Civrieux, 1970, p. 117). The carpintero real has a white streak on the outside of its wings which forms a "V" on the bird's back. The white shoulders of two carpinteros reales are represented by the white area "X", bordered by stars (shidicha). In the same basket, waiyamo, the terecay turtle, is also represented four times as Wanadi's friend and helper. In the myth, Manuua, he is portrayed as a trickster who fools the jaguar (Civrieux, 1970, p. 149).

cakes, or through a *sehecha*, prior to cooking manioc. Also, the *waha* is used to store casava cakes as they are taken off the *budare* and to carry casava from the cookhouse to the home.

Waha tomennato (guapa), 8-80 cm diameter (Plate 2)

(Literal translation: "painted *waha*"). The *waha tomennato* is a flat, closely-twilled basket with abstract, anthropomorphic, or zoomorphic woven designs. It is used as a plate to serve casava cakes during meals. It is also used in inter-ethnic trade; in the past with the Pemon and today primarily with Venezuelan nationals.

#### Kumukö (guapa), 20 cm diameter

The kumukö serves the same function as the waha tomennato and is quite similar to it in form and plait. It differs in that it is woven of finer wana elements (Appendix I) and its design is never painted. Since the basket is monochrome, the only designs rendered in the twill weave are the konoho kudö or the fahadifedu which also appear on the waha (Plate 1).

#### Wöwä (watura), 25-75 x 20-45 cm (Plate 3)

The only basket women make and the most time-consuming of all is the  $w \ddot{o} w \ddot{a}$ . It is a deep, kettle-shaped basket plaited in a radiate twine weave. It is used primarily to carry manioc tubers from the garden to the cookhouse, or to collect firewood. Women carry the  $w \ddot{o} w \ddot{a}$  by means of a tumpline across the forehead. Men, who rarely use the basket, place the tumpline across their shoulders. These baskets vary considerably in size, depending on the strength of the user; some gaily decorated  $w \ddot{o} w \ddot{a}$  made for little girls are merely 10 cm in height.

Wutakä, 75 x'65 x 40 cm

The *wutakä* is a box-shaped basket woven in a herringbone twill. The basket is a large storage bin used for freshly grated manioc and manioc farina. We were unable to observe the construction of a *wutakä* as it is made rarely in Toki today.



PLATE 3

a) Two *wöwä:* a woman's and a small child's, made for a little girl approximately 7 years old. Note the black elements used as a decoration. b) *tudi:* note the three different weaves, hexagonal with a secondary weft, wicker at the edges of the body, and coiling on the rim.

. 1

#### 2. Miscellaneous baskets

#### Tudi (mochila), 80 x 35 x 20 cm (Plate 3)

The *tudi* is one of the most difficult baskets to make because it involves three different weaves: hexagonal, wicker, and coil. The Ye'kwana men use it in much the same way one uses a backpack. A tumpline is attached to the frame and a man carries the basket on his back with the tumpline around his shoulders. The *tudi* is used

mainly by men (by women if a *wöwä* is unavailable) for carrying possessions on long trips, for transporting meat from distant kill sites and occasionally for gathering firewood or forest produce.

#### Tahiha and kodoma (mochila), 50 x 35 x 20 cm

The *tahiha* is identical in size and shape to the *tudi*. It differs primarily in that its hexagonal weave lacks a secondary weft. This makes it quicker to plait, but weaker as a result. In the Cunucunuma region it is made more commonly than the *tudi* and may be viewed as a regional variant.

The *kodoma*, while having the same form as the *tahiha* and *tudi*, differs significantly in that it is woven completely in wicker and it is much shorter. Its primary function is to carry a hammock on trips.

#### Duma (mochila), 50 x 20 x 15 cm (see Roth, 1921, Plate 126a)

When a Ye'kwana man is hunting and unexpectedly encounters the ripe fruits of the seje palm or other desirable forest fruits, he must devise a way of carrying them back to the village. The *duma*, a knapsack-like basket, can be made to serve this purpose if a *kuhedi* or *kudai* palm (Appendix I) is nearby. With the leaves of these trees a *duma* sturdy enough to carry a load of up to 30 kilograms can be made quickly. The *duma* is usually discarded after its first use and is used only when a *tudi* is unavailable.

# Ähaida'no, 25-30 cm x 8-14 cm

The *ähaida'no* is made exclusively for the *wasai* festival (described in Arvelo-Jiménez, 1971). During the festival young women attempt to steal roasted meat that has been wrapped with *mönätä* (Appendix I) elements to form the basket, which is carried on the forearm of a man as he dances drunkenly in the *churuätä*. The women succeed in taking the meat by attacking in groups and wrenching both meat and basket free of the man's arm. After the prize is won, the meat is removed and the basket discarded. Cetu, 28 x 3-11 cm ( Fig. 3)

The *cetu* has little utilitarian value, although it is sometimes used to store peppers, kapok, or cotton. This small, bottle-necked wicker basket is used most often as a cage for a *kikwa* or *komaka* frog which sings during the nights of the dry season.



FIGURE 3

Cetu: note the wicker weave and coiled handle.

#### Kangwa (petaca), 8-18 x 10-16 x 20-38 cm (Plate 4)

The height of Ye'kwana basketry is manifested in the *kangwa* (pegall). It is difficult to construct because of its box-like shape and because it is really two baskets. The top half must be perfectly proportioned to allow a close and easy fit over the bottom half. Although the designs used to decorate the *kangwa* are not different than those



Plate 4

Kangwa made with kikwe design.

portrayed on the *waha tomennato*, they are more difficult to execute (see Appendix II for details on construction).

When made as gifts or for trade, *kangwa* are often made in sets of 2 or 3; each basket fitting into one another. The *kangwa* is used for storing various and sundry valuables, such as pigments, arrow feathers, resins, etc.

# Mudoi, 1.8 m x 10-50 cm (Roth, 1921, Plate 108)

The *mudoi*, or fish trap (creel) is submerged in the mouths of small streams and other areas of slowly-moving water where fish are known to feed. The orientation of its mouth depends on the direction of the flow of the fish; when the water is flowing out of the stream into the river, the mouth is pointed upstream to trap the fish as they leave, but during periods of heavy rain, when the fish enter the small streams to feed, the mouth is pointed downstream. The mouth is the widest part of the basket and allows the fish to enter a steadily

narrowing passage and easily push through loose internal strands. Once inside, the fish cannot leave because trying to escape through the mouth forces the internal elements to close.

The *mudoi* is rarely made today by the upstream Ye'kwana and the downstream villages say they have forgotten how to make it. Its disappearance, as well as the disappearance of other traditional methods of fishing, has most probably been caused by the introduction and easy availability of steel fishhooks and nylon fishline. We were unable to observe the construction of a *mudoi* but the Patamona fish creel described by Roth (1921, pp. 335-336) is very similar to that made by the Ye'kwana.

# BASKETS WITH PAINTED AND UNPAINTED DESIGNS

The Ye'kwana made 3 twilled baskets that have colored or uncolored tesselate designs plaited into them. The *waha* and *waha tomennato* are quite similar in structure, with the latter undoubtedly a development from the former. The *kangwa*, although different in form from the *waha* and *waha tomennato*, contains many of the abstract and zoomorphic motifs of the flat baskets. The *waha* and *kangwa*, along with the woman's beaded apron, represent the pinacle of Ye'kwana artistic achievement.

The tradition of bichrome flat baskets most probably evolved from the monochrome tesselate designs of the *waha*. The design structure basic to th *waha* and *waha tomennato* (and also to the *sechecha* and *manade*) is a series of concentrically arranged rhomboids called *fahadifedu* that terminate with the basket's rim. This twill type is represented all over the Guianas by Arawak (Farabee, 1926), Carib (Farabee, 1926), and Warao (Roth, 1921) flat baskets, fire fans and manioc sifters. A variation on the *fahadifedu* of the *waha* is the *konoho kudö* which begins in a series of concentrically arranged rhomboids. However, the rhomboids terminate before the edge and are met by a series of lines, the *konoho* (rain) that strike them from the edge at right angles. This design is the template for virtually all the bichrome *waha tomennato*<sup>4</sup> and is the design characteristic that distinguishes Ye'kwana flat basketry from all others in the Guianas.

<sup>4.</sup> If a waha tomennato is made with only the konobo kudö design, it is called a kumukö.

The waha can also be made in a variety of designs according to the whim and artistic ability of the basket-maker who invents and names the designs according to what they mean to him (e.g. kotoho yudi [Plate 1] and töhi yudu [not illustrated]). However, the fahadifedu and konoho kudö are the most common and elementary designs employed.

Aside from differences in size, fineness of materials and complexity and variety of motifs, there is a significant difference in the rims of the *waha* and *waha tomennato*. While a woven rim is absent in the *waha*, the rim of the *waha tomennato* (called *chahia*) is plaited separately and then sewn onto the body of the basket, creating a beautiful edge that covers the loose elements of the body so that edge and body of the basket appear to be the same piece.

The abstract, zoomorphic and anthropomorphic designs plaited into the *waha tomennato* can be conveniently divided into central figures and peripheral figures. Central figures are always located in the central rhomboidal area (often called *washadi sudadö* or ribs of the tapir) and the basket is named after the central design. There is usually one central figure, commonly a zoomorphic representation of a mythical figure, which may be repeated a number of times. Peripheral figures, usually abstract or naturalistic, but rarely zoomorphic, occupy the border area of the rhomboidal depiction zone, separating it from the ever-present *konoho*. Also, peripheral figures separate multiple central figures from each other. Plate 5 illustrates the difference between central and peripheral figures. There appear to be no rigid rules for combining peripheral and central figures, although some combinations are more common than others.

The technique of Ye'kwana twilled plaiting limits the forms of the tesselate decorations. First, all forms must be portrayed geometrically and mosaically; geometrically because this is an inherent form in all baskets except for imbricated decorations on coiled basketry, and mosaically because each decoration is composed of the effect of weft elements being raised over one to five warp elements. Second, twilled baskets may have only two colors, one for the weft and one for the warp<sup>5</sup>. Third, the apparent clutteredness of decoration is due to the

<sup>5.</sup> It is interesting to note that many of the warp and weft elements of the kangwa are half red (or black) and half natural, which could easily lead to polychrome baskets, but does not. Still, it would be difficult to closely juxtapose more than two colors. The use of more than 2 colors in weaving only occurs when working with elements running in three directions or in inbricated weaving, where additional decorations are sewn onto the baskets after they are made.



#### Plate 5

Waha tomennato: This basket is named Wanadi hiñamo hodö (was Wanadi's wife). Wanadi created her by bringing to life a painted kikwe frog that adorned the sides of a pegall (Civrieux, 1970, p. 65). The kikwe frogs make up the central figures of the basket a). The peripheral figures include: b) konoho kudö (rain); c) kudadai (top or head); d) ishakudu: line used to separate the body of the design from the rain; e) chawoto: lines or walls which compartmentalize the repeated central design; f) aisada (room) area surrounding each central figure; g) konoho: continuation of the rain; h) kumashi (Venus) or shidicha (star): found inside the kikwe frog on this example.

fact that weft elements may pass consistently over no more than 3, and occasionally over 5, warp elements without producing a basket with too loose a plait. Therefore, there is very little of the basket left to simple open space; the weaver is necessarily preoccupied with filling the design or its background. This fact explains why, for example, the *kikwe* decoration (Fig. 4a) has stars (*shidichä* or *kumashi*) on its body and in the background between its hind and fore legs. If the stars were absent, it would force the weft to skip 9 warp elements. In fact, stars in Ye'kwana basketry appear to be unrelated to the central design and primarily serve technical ends, permitting a tighter weave. Lastly, the width of the elements influences the number of



Several central and peripheral figures:

a) kikwe (frog), the same frog as that portrayed in Plate 5. b) washadi (tapir): Washadi is mentioned in the myths of Semenia, Washadi and Mado (jaguar) as a stupid and selfish creature who was easily fooled and was condemned to eat roots and leaves because he would not cooporate with men. He is the owner or grandfather of all tapirs (Civrieux, 1970, pp. 117 and 125). c) yarakadu (white monkey): We could gather no information other than the identification of this figure as a white monkey. A yarakadu is mentioned in the myth of Kaweshawa (Civrieux, 1970, p. 59) as a cousin of Wanadi. d) kwakwa (frog). (e and f) kangwa menudu (small box): two variations of an abstract drawing of a kangwa basket, showing the two



FIGURE 5

Two central figures: a) Kasu nohudidi (Kasu's thought or idea): This central design is purely abstract and was invented by a Ye'kwana man named Kasu who alledgedly lived in the upper Padamo some 100 years ago. b) Awili: merely the name of the rectangularly spiraling design.

decorative figures and the size of basket necessary to depict those figures. All central figures are formed with the same number of strands in order to keep their size equal. Consequently, if one wants to make a medium basket 40 cm in diameter (Plate 5), he must reproduce the central figure 4, 9 or 16 times, but for a small basket 20 cm in diameter, he must make it only once and fill the remaining space with stars, since it is too large a space to be left bare and too small for another figure. Some baskets, such as *wanadi motai* and *mawadi* (Plate 2) may only be made quite large (more than 40 cm in diameter) in order to fully depict the central figures. Several central and peripheral figures are illustrated in Figures 4 and 5.

## ORGANIZATION OF BASKET PRODUCTION

This section on the organization of basket production will deal with the age/sex division of labor, the teaching and learning of basketry, the estimated amount of time each individual devotes to basketmaking and directly related activities, and the amount of time devoted to the construction of each particular basket. In addition, we will show that the amount of time any individual spends in basket-making is largely a function of his or her age. These factors of production will illustrate the manner in which the Ye'kwana maintain a steady and adequate supply of baskets for their needs.

In comparison to North American Indian cultures (Mason, 1904) where women are the predominant basket-makers and men are rarely engaged in such a sedentary occupation, among the Carib Indians in the Guianas men make virtually all the baskets. The Ye'kwana division of labor prescribes that men make all baskets needed for the processing of manioc, except for the woman's burden basket. Since the processing of manioc is a solely female occupation, men never use these baskets. This division can be explained by the fact that the predominant mode of Ye'kwana subsistence is manioc cultivation. Women are considered "owners" of the manioc gardens and a man's only connection with the garden is to clear an area of forest each year. His wife, or wives, then prepare the soil, plant the crops, weed and harvest<sup>6</sup>. Furthermore, the time-consuming tasks of peeling, gra-

<sup>6.</sup> Occasionally, if a woman feels overburdened and cannot get help from her children or other women, she will call upon her husband to help weed or plant.

ting, squeezing and toasting manioc are women's duties. Therefore, the responsibility of making baskets falls upon the men. This rigid but complementary division of labor serves to unite the most basic and important subsistence activity into a meaningful totality of mutual dependence.

Other baskets not used in manioc production are used predominantly by men (*tudi, tahiha, kodoma, duma*) or by men and women equally (*kangwa, cetu, ähaida'no, mudoi*). These baskets are used mainly for transport or storage.

Technical excellence in the construction of traditional handicrafts is highly valued in Ye'kwana culture, even in heavily acculturated downstream villages where traditional arts are fast disappearing. A great deal of prestige is gained by a man who is known by his fellows as a "master" at canoe-making, house-building, basket-making, or other crafts. In fact, as Arvelo-Jiménez reveals (1917, p. 233), the headmen of villages are those men who have achieved ritual and technical excellence.

At an early age boys casually watch their fathers, relatives or fellow villagers making baskets in their homes, workshops and in the men's section of the round house (the usual focal point of men's artistry). A boy is encouraged to learn by doing as soon as he takes an interest, usually around the age of 9 or 10. He typically begins by accompanying his father when he gathers basket materials from the forest. There he is shown how to collect properly so that the plants will regrow after cutting (improperly cut *wana*, for example, will not regenerate); and how to distinguish superior plants from inferior ones, harvesting only strong, mature, and unblemished basket materials. He will then learn how to properly prepare the materials for plaiting, because a basket is only as good as the prepared elements. The Ye'kwana stress that the elements should be of a consistent size and shape related to the particular type of basket to be made. Finally, the boy will help his father plait by inserting a few elements.

When a father feels that his son has enough general knowledge about the craft, he will ask him to make a *sehecha*, the simplest of all baskets to weave. While the body of the basket is usually mastered on the first attempt, shaping and sewing the rim is much more difficult, and our neophyte basket-maker needs his father's assistance to finish. Once the *sehecha* is reasonably mastered, he is urged to make a *waha*, using the same material as the *sehecha, kaana*, to plait the simplest design, *konoho kudö*. Later he will learn to make it with *wana*, which is more difficult to prepare than *kaana* but is a finer and more durable material. After mastering these relatively simple flat baskets, a boy is ready to learn how to weave the most difficult of the commonly made baskets, the *sebucán*. However, instead of weaving the *tönkoi sebucán*, he first makes the *deweke humudu sebucán*, which is smaller, less intricate and does not need to be sewn and reinforced. This *sebucán* is made only by young men who are still learning the craft of basketry.

The Ye'kwana stress that boys should learn to make the baskets in steps of increasing difficulty outlined above so that they will have a basis towards mastering the full repertoire of baskets, and because these are the baskets necessary for processing manioc. By the time a male is of marriageable age (past 17) he should know how to make the *sehecha*, *manade*, *waha* and *tönkoi* for his wife. Learning the other baskets occurs later in life and some Ye'kwana never master the full repertoire.

The only basket women make is the  $w \ddot{o} w \ddot{a}$ , a burden basket. It is one of the most time-consuming and durable baskets made by the Ye'kwana<sup>7</sup>. Girls learn basketry in much the same way as boys; a girl first learns about plaiting a  $w \ddot{o} w \ddot{a}$  around the age of 10 or 11 by helping her mother prepare the elements. Oftentimes one sees a mother busy weaving while her daughter prepares the elements as they are needed. By the time she is 17 or 18 she knows how to make her own  $w \ddot{o} w \ddot{a}$ .

The use of baskets by females depends on age and physical strength. Girls begin using the *waha* or *waha tomennato* to carry food from the cookhouse to the home, or from house to house, and to serve men casava. Their mothers sometimes make them a tiny and gaily decorated *wöwä* so that they can help by carrying a few kilograms of harvested manioc from the garden. Although the help given is not significant, the use of these "toy" baskets accustoms the child to responsibilities she must assume as she grows. When a girl is 14 or 15 she has enough strength to use a medium-sized *wöwä* fully loaded with manioc tubers; she can use the *manade* to sift manioc flour to toast into cakes, and she can help her mother or another person set and

<sup>7.</sup> The wöwä takes about 40 hours to make. We have observed women carrying wöwä loaded with manioc weighing as much as 60 kg.

remove a loaded sebucán from its stand (always a two-person operation since a full sebucán is unwieldy and weighs up to 50 kg).

Boys usually give their first flat baskets and *sebucanes* to their sisters to use. In this way the basket division of labor of males as the makers and females as the users is inculcated early in life.

Men and women devote more time to basket manufacture than to all other handicraft activities combined. The amount of time spent by any individual in basket production is a function of his or her age. The amount of time devoted to making and maintaining any particular basket is determined by whether it is used in manioc processing or not. These relationships are quantitatively described in the tables and figures below.

Ye'kwana males spend an average of 18.9 minutes per day making baskets, or 115 hours per year<sup>8</sup>. Married males spend 26 minutes per day and unmarried males 8.3 minutes per day (cf Table 1). Age generally determines the amount of time an individual spends making baskets (Fig. 6a). Using the Pearson product-moment formula, we find that the correlation coefficient (r) is 0.87 for men. By squaring this figure ( $r^2$ ) we get 0.75 which means that three quarters of all the variation in minutes per day for basket-making is due to the independent variable of age. The significance of this relationship is that as one ages, one is not able to engage in the active pursuits (hunting, clearing gardens, etc.) of able-bodied men and, as a consequence, one must devote more time to sedentary economic activities in order to make a contribution to the household economy.

Table 2 shows that females spend an average of 9.87 minutes per day plaiting baskets, or about 60 hours per year. Married women spend 11 minutes per day while unmarried women spend 3.33 minutes per day making baskets. The relationship between age and work time for female basketry does not correlate as well as it does for men ( $\mathbf{r} = 0.79$ ). The unexplained variation is due in part to the fact that 14 *wöwä* were traded in from other villages during the past year (cf Table 4). If we add the number of baskets acquired by each woman through trade as an additional independent variable and calculate a multiple

<sup>8.</sup> The behavior sampling technique used to arrive at the input figures cited in the text is the same as described by Johnson (1975). It consists of making observations of the behavior of all villagers at random hours during each day. This information, plus location, time, etc., was coded on computer cards and analyzed. A total of 40,123 observations were made during the course of one year.

correlation coefficient, we find that r = 0.83. Although the figure for r increases slightly,  $r^2$  increases from 0.62 for the bivariate to 0.68 for the multivariate.



FIGURE 6a

Figures 6a and 6b are scattergrams with least squares line plotted to show the relationship between the amount of time devoted to basket-making (measured in minutes per day) and the age of the basket-makers.





Figures 6a and 6b are scattergrams with least squares line plotted to show the relationship between the amount of time devoted to basket-making (measured in minutes per day) and the age of the basket-makers.

Tables 1 and 2 show the amount of time each male and female spent weaving baskets and collecting materials. The column totals support the generalization made above that baskets used in manioc processing are made most often. Aside from being absolutely essential, these baskets are used very often and are subject to great stress, causing them to wear out quickly. The data in Table 1 clearly show that younger male basket-makers plait simpler baskets (e.g. the *sehecha*, *manade* and *waha*) while the older men plait a greater variety of

Т	٨	в	L	E	1
---	---	---	---	---	---

-

# A BREAKDOWN OF THE TOTAL TIME (min/day) EACH MALE SPENDS GATHERING MATERIALS AND PLAITING BASKETS

individual	Age		Gatherin	g time						Plai	ting time	•	_			Total time
number		kaana	leaves	mönätä	wana	cet u	kangwa	manade	matidi	sehecha	tönkoi	tudi	waha	waha t.	other	(mm/day) man)
Married											-		_			
1	62		5.0		2.5			20.4	20.1		15.2	5.0	15.2		10.8	94.2
2	44								10.0	2.5	15.2		5.0			32.7
3	41			5.0	2.5			10.0	2.0			8.0			2.5	30.0
4	40		2.5	5.0	2.5			2.5	5.0	2.5	5.0	6.7				31.7
5	33				2.5			5.0	2.5						2.5	12.5
6	32			5.0	2.5			5.0	8.5	8.0	3.0				5.0	37.0
7	29				2.5	2.5			2.5		7.5		2.5	7.5		25.0
8	24									2.5	5.0				2.5	10.0
9	23			2.5							2.5	2.5			2.5	10.0
10	21								5.0	2.5	11.7		2.5			21.7
11	20	2.5							2.5		2.5					7.5
12	19		2.5				2.6		2.5		2.6			2.4		12.6
13	18		2.5				2.6		5.0		5.0		2.5			17.6
Sub-total		2.5	12.5	17.5	15.0	2.5	5.2	42.9	65.6	18.0	75.2	22.2	27.7	9.9	25.8	342.5
Unmarried	!		_	_												
14	20	5.0			2.5			2.5	2.5		5.0		2.5			20.0
15	18			5.0					•		5.0					10.0
16	17								2.5							2.5
17	14								5.0							5.0
18	13	5.0						2.5		12,6			-		2.5	22.6
19	12									2.5			2.5			5.0
20	11		2.5					2.5								5.0
21	11			2.5												2.5
22	9									2.5						2.5
Sub-total		10.0	2.5	7.5	2.5	0	0	7.5	10.0	17.6	10.0	0	5.0	0	2.5	75.1
Total (mir	n/day/	/ 12.5	15.0	25.0	17.5	2.5	5.2	50.4	75.6	35.6	85.2	22.2	32.7	9.9	28.3	417.6

baskets, including more complex baskets (note that the youngest *tönkoi*-maker is 18 years of age).

Table 3 shows the amount of time needed to plait various baskets. These data were gained by watching an individual make the basket and timing him with a stop-watch. It should be noted that there is some variability (see *matidi* column) and that these times were gained by observing expert basket-makers.

#### TABLE 2

Individual number	Age	Time spent gathering <i>möñätā</i> (min/day)	Time spent plaiting wöwä (min/day)	Totals (min/day	)
Married					
1	60		25.2	25.2	
2	61		58.0	58.0	
3	43	5.0	6.8	11.8	
4	42		5.0	5.0	
5	42	5.0	11.8	16.8	
6	39		5.2	5.2	
7	38	_	25.2	25.2	
8	37	_	5.0	5.0	
9	27		6.8	6.8	
10	26			0	
11	25			0	
12	23	15.0		15.0	
13	23			0	
14	22	_	8.4	8.4	
15	21		2.5	2.5	
16	20		2.5	2.5	
17	18	—	_	0	
	Tota	l time per n	narried females	187.4	min/day
Unmarried					
18	14	_	5.0	5.0	
19	14	_	2.5	2.5	
20	14	2.5	—	2.5	
	Tota	l time per ur	nmarried females	10.0	min/day
	Tota	l time per al	l females	197.4	min/day

#### AMOUNT OF TIME SPENT BY WOMEN IN BASKET-MAKING ACTIVITIES

#### TABLE 3

#### Basket Material preparation \* Finishing\*\* Total hours Plaiting Tönkoi 3.00 7.00 3.00 13.00 Matidi .50 .50 .08 1.08 Sebecha 2.00 2.00 3.00 7.00 (3 hands) Manade 2.00 2.00 2.00 6.00 (2 hands) Waha 2.50 2.502.00 7.00 (3 hands) Waha tomennato 5.00 5.00 5.50 15.50 (medium) Tudi 2.00 \_\_\_\_10.00\_\_\_\_\_ 12.00 Duma .50 Wöwä 40.00 X haida'no .50 Cetu .50 - 2.75-3.25 3.50 7.75 .75 12.00 Kangwa

# APPROXIMATE TIME IN HOURS SPENT MAKING BASKETS, AS DESCRIBED IN APPENDIX II

\* Not including gathering time or time spent preparing twine or rope.

Including rims and reinforcements.

#### TRADE

Although the Ye'kwana were very active in the indigenous trading system of the Guianas, exchanging with other Carib cultures casava graters and blowguns for steel tools, shotguns, cloth, beads, etc., basketry is rarely mentioned as a trade item. Detailed accounts of Ye'kwana trade are given, but in the works of early naturalists and ethnologists, Humboldt, Schomburgk and Koch-Grünberg, no mention is made of the Ye'kwana trading away or trading for baskets. Trade in basketry appears to have begun in the middle of the 18th century with the Spanish and Dutch (Coppens, 1971, p. 34) and has continued to the present day (Coppens, 1971, p. 36, 54)<sup>9</sup>. It

<sup>9.</sup> It is possible, perhaps, that there was never a purely indigenous trading system in the Guianas, or at least it was never as widespread as it became after the Europeans arrived. It seems to have developed in response to differential access to European trade goods, as is demonstrated by the easterly movement of Indian manufactures and the westerly movement of European goods. On the whole, the

has changed recently, due to acculturational forces; new trade occurs between downstream and upstream Ye'kwana, and between Yanomamö and Ye'kwana.

In the lower Padamo River basin, because of its favorable geographic location, the Ye'kwana of Toki (and to a lesser extent those of Kwashii'ña and Mödeshihä'ña) are able to sell manioc farina, casava, and occasionally plantains and bananas to the Orinoco Salesian missions of Esmeralda, Ocamo, Mavaca, and Platanal, and sometimes to the government-supported cities of San Fernando de Atabapo and Puerto Avacucho. They also sell their justly famous canoes to government service agencies such as the División de Malariología of the Ministerio de Sanidad y Asistencia Social for use in spraying villages, distributing malaria pills, and providing limited medical services to the Ye'kwana and Yanomamö who live along the banks of the upper Orinoco River and its major affluents. These downstream Ye'kwana are able to purchase aluminum pots, steel tools, cloth, shotguns, and other industrial goods with the money earned in their sales. In contrast, the geographic difficulties of great distances and small rivers dotted with innumerable rapids prevent upstream Ye'kwana from transporting heavy items to the missions and criollo trading centers, where the items are desired<sup>10</sup>. Instead they bring light transportable items such as baskets, graters, blowguns, tobacco, pigments, and resins to the downstream Ye'kwana to exchange for industrial goods. During our year's stay in the Padamo River basin, the most acculturated downstream village (Toki) never traded any traditionally manufactured product to upstream villages, while the upstream villages always traded traditionally manufactured products to Toki in exchange for industrial goods. However, it would be false to conclude that intraethnic trade did not exist before the advent of cash-cropping, because it did certainly in the case of geographically isolated raw materials such as quartz for graters and the giant hollow and nodeless reed,

peoples of the western Guianas, except for the Pemon of the Gran Sabana, had poor access to European goods while the Indians of the eastern Guianas had easy access. Butt-Colson notes that the Akawaio middlemen "...stemed to be trading few items of their own manufacture to their neighbors". (Butt-Colson, 1973, p. 86).

<sup>10.</sup> The use of the terms "upstream" and "downstream" should not be confused with the distinction made by Arvelo-Jiménez of yuhuru'ña and anie'ña. Although all the Ye'kwana that we here designate as downstream are anie'ña, very few of those we designate as upstream are true yuhuru'ña. The Ye'kwana distinction that she lucidly describes is based on both geographical and cultural factors, while ours is mainly geographical and economic. For a precise definition of the terms, see Arvelo-Jiménez, 1971, pps. 14-16, 18, 20-23, and particularly p. 39.

kurata (Andruinana schomburgkii) used in the manufacture of blowguns, which are found only in the foothills of Marahuaca and the upper Ventuari River. Thus the points to be made are that whatever trade system did exist between upstream and downstream villages has been radically altered and that baskets now play a large role in the Padamo Basin.

After noting that the people of Toki had all the requisite materials for making painted flat baskets and pegalls, and that their skill in making the more common work baskets was equal to their upstream neighbors, we asked them why they no longer made these baskets for themselves instead of buying them from the upstream villages. To our surprise they told us that they had forgotton how to make them and that, besides, "Painted baskets are the work of upstream Ye'kwana and manioc farina is the proper work of the downstream Ye'kwana". Of the 10 men in Toki who are considered master basket-makers, only 2 know how to make painted baskets<sup>11</sup>. Thus, the disappearance of making the beautiful serving trays and pegalls is perhaps helping to maintain the tradition in upstream villages, because they now make them for trade.

Arvelo-Jiménez (1971, p. 39) plausibly explains the disappearance of traditional arts and crafts among the Ye'kwana in downstream villages as the result of increasing involvement in cash-cropping, which leaves little time for the manufacture of non-essential items such as painted baskets, ornamental stools and clubs, beadwork, etc. This result is undoubtedly true in the case of female arts and crafts. Since the woman does practically all the work involved with cash cropping (and the increase in work has been tremendous), she has little spare time to make her beaded aprons, burden baskets and graters which are the essential tools for the processing of manioc farina, Toki's single most important source of income. This change is indicated in Table 4, which shows the number of woman's *wöwä* imported to Toki, compared with the number exported from Toki (Table 5).

However, this explanation breaks down for the men, who are the real artisans of the village, making all but one of the 18 baskets, and almost every other handicraft. The only increment in labor caused

<sup>11.</sup> One has married into Toki from the upstream village of Mödeshihä'ña and the other, although born in Toki, spent a large part of his youth in the upper Caura village of Jiwiti'ña which is well known for its painted baskets. Most mature man (*inchomo*) of the upstream villages of Mödeshinä'ña, Kwashii'ña and Kononamä'ña can still make painted baskets.

by cash cropping among the men has been the need to clear larger fields for the women and to plait more farina container baskets (*matidi*). It is quite possible that cash cropping has led to some decrease in the amount of total work for the men, since the money gained from cash cropping has enabled them to buy such things as shorguns, fish hooks and outboard motors, which have greatly shortened the time needed to complete traditional male duties. In fact, from the sales of cash crops Ye'kwana tend to accumulate an oversupply of shotguns<sup>12</sup>, machetes, axes, fish hooks and other industrial commodities because there is little selection in the area on which to spend their money. Then why has the tradition of painted basketry disappeared in Toki?

A tentative answer to this question may lie in the social relations that bind Toki with the upstream Ye'kwana villages. As mentioned previously, downstream villages such as Toki serve as middlemen to upstream villages for industrial goods. For these heavy goods, the upstream groups trade light goods that can be easily transported, are desired by downstream Indians, and which have little demand by the criollo and mission traders. When an upstream trading party comes to Toki with their baskets paddles, tobaco, graters and blowguns looking for knives, fish hooks, ammunition, flashlight batteries, etc., their hosts find it hard to refuse them. Because they are fellow Ye'kwana and kinsmen, the Tokians do not want to offend them<sup>13</sup>. Therefore, the disappearance of the painted basket tradition in the downstream groups and the exchange between upstream and downstream villages of painted baskets and other traditional manufactures for the industrial goods may have been caused by the desire of the downstream groups to maintain amicable relations with their kinsmen. Thus, it

<sup>12.</sup> For example, one man possessed four shotguns.

<sup>13.</sup> Level, the headman of Kwashii'ña, led a trading patty to Toki in February, 1976. He brought a large quantity of *waha tomennato* and canoe paddles to trade for industrial merchandise. After 2 days he had traded all his goods. We were surprised that the Ye'kwana of Toki bought every canoe paddle, which they considered poorly made and highly priced, because they already possessed all the paddles they needed and some had made paddles themselves to sell on the Orinoco River. They said they bought the paddles because Level was the brother of Toki's headman and, besides, it was hard to refuse someone who had come so far.

A Ye'kwana from Kwashii'ña recounted a trip he made to Jiwiti'ña to buy some beaded aprons. When he inquired as to the price, he was told Bs 300, the price charged to tourists. He exclaimed, "How can you charge me that price when we are kinsmen! In the Padamo they sell for Bs 100!" The man from Jiwiti'ña relented and sold the aprons for Bs 100.

would be foolish for the Tokians to waste their time making painted baske's if they are obligated to buy them.

The nature of the Ye'kwana's reliance on baskets lies in the fact that for the processing of the manioc tuber, especially in the cases of the *manade* and *tönkoi*, there exitts no suitable western technological substitures. Another interesting example of the quality of Ye'kwana technology is the stone imbedded grater. Instead of using pieces of scrap tin or nails (which are much easier to obtain) to imbed in the grater board, Ye'kwana of Toki still make the long and arduous trip to the foo hills of Marahuaca to collect quar zite. Quartzite makes a grater which is superior to thore imbedded with metal because it grates the tubers more finely and with less effort, it is not so sharp as to damage fingers if they slip while grating, and it lasts much longer<sup>14</sup>. So long as they rely on manioc as their staple food, the Ye'kwana will always have a need for the traditional technology that has developed around it.

As mentioned earlier, buying baskets and other traditional manufactures is a way of maximizing leisure time, which is a common primitive response to new technology or cash income (Salisbury, 1962)<sup>15</sup>. The cash income they receive enables them to purchase trade goods to use in trade for baskets. It is more economical in terms of labor time to buy baskets than to make them themselves. The motive of increasing leisure time can help clarify Ye'kwana/Yanomamö trade. The Ye'kwana trade with the Yanomamö for the kinds of baskets they rarely trade for with other Ye'kwana. These baskets include *wöwä, iönkoi* and *matidi*. The manufacture of these baskets was originally taught to the Yanomamö by the Ye'kwana, for the Yanomamö traditionally never had the complex basketry necessary for the processing of bitter manioc<sup>16</sup>. Indeed, according to informants from both cultures, the Yanomamö never processed the tuber itself before they moved to the area 50 years ago.

All of the baskets made by the Padamo Yanomamö for manioc processing, except for the woman's burden basket, are copies of Ye'kwana

<sup>14.</sup> Some downstream villages now have motor-driven mechanical graters (cigüeñas) which are superior to stone graters but are rather expensive.

<sup>15.</sup> We were told by a Tokian that they buy the things they still know how to manufacture simply because they have the money. According to him, "Money has made us lazy".

<sup>16.</sup> Today more than half of the Yanomamö gardens on the Padamo River are devoted to bitter manioc. This is in sharp contrast to the central Yanomamö who have no contact with the Ye'kwana. Manioc accounts for only about 5% of the area planted in their gardens (Lizot, 1971).

baskets, al hough the Ye'kwana say they are not woven as tightly as they should be and are sloppily made. The tradi ional Yanomamö woman's burden basket is almost identical to the Ye'kwana *wöwä* in form and weave, but it is smaller. When a Yanomamö woman makes a *wöwä* for trade to a Ye'kwana woman, she makes it somewhat larger, thus adapting it to the work for which it will be used.

As can be seen in Table 5, making baskets for 'rade has not completely disappeared in Toki. Nevertheless, this fact merely qualifies the generalization that downstream villages do not manufacture baskets for trade. One example in the table is the headman of the village who is over 60 years of age and occasionally makes baskets for trade to the Yanomamö or other Ye'kwana of Toki. Because he is not able to participate in the economic pursuits of able-Éodied men, it is the only male occupation left open to him. The other example is a woman who makes lovely decorated girl's *wöwä* which she sells to downstream villages of 'he Cunucunuma River. She has recently undergone major surgery and has not recovered sufficiently to resume her normal female roles.

Tables 4 and 5 display the information collected on 46 separate basket exchanges. The rate of exchange is relatively fixed for long periods of time and is slow to react to national inflation. Were it not for the fact that the Ye'kwana have entered into the national economy, the exchange rates would probably remain absolutely stable because the inputs for their manufactures are constant. The Ye'kwana tend to think that rises in the price of industrial goods are only temporary. Only after the price of machetes, for example, main ains its increase for a long period of time, will they realize that it will not decline and only then will they alter the exchange rate. It is difficult for the Ye'kwana to understand why an aluminum pot or axe should increase in price when it has remained the same in quality and size. Once the downstream traders of industrial goods alert the upstream people to the fact that they will have to give more in exchange, the immediate reaction of the upstream people is to accept the higher exchange rate and then during the next trading trip, revalue their baskets at higher levels to make up the difference, and thus keep the exchange level even.

Aside from national inflation, other factors which determine the value of a basket are size and quality. This variation is readily evident in the valuations of a Ye'kwana  $w \ddot{o} w \ddot{a}$  (Bs 40) and a Yanomamö  $w \ddot{o} w \ddot{a}$  (Bs 20-30). Many people, believing that the Ye'kwana ex-

ploit the Yanomamö, would use this example as clear evidence of exploitation, but actually the Yanomamö *wöwä* is quite inferior to the Ye'kwana's because they are weaker (perhaps because they were not designed to carry up to 60 kg of manioc tubers), and their bottoms tend to break after about 3 months of use, compared to about 5 months for a Ye'kwana *wöwä*.

Although money rarely changes hands in these transactions<sup>17</sup>, all baskets have a fixed monetary value determined by the factors mentioned above. Once the monetary value is agreed upon by the two parties, the seller requests the equivalent in trade goods and the transaction is completed. If that which the seller wants in return is unavailable, payment will be delayed until the buyer can acquire the desired good. Although the seller is able to request any sort of equivalent trade goods, there is a strong tendency to exchange a particular kind of basket for a particular trade good, especially in the case of *wöwä* transaction. From a total of 19 *wöwä* transactions, 8 were exchanged for large aluminum pots and 5 were exchanged for 3-meter-lengths of red cloth. This practice is undoubtedly a holdover from earlier times when trade was carried on without the use of a common medium of valuation such as money, and trade items had only direct equivalences to specific goods.

In Toki intra-ethnic trade is mainly carried on with the two closest upstream neighbors, Kwashii'ña and Mödeshihä'ña. However, the vast bulk of the total incoming basket trade is carried on with the Yanomamö of the Padamo River, Rabai-teri in particular. The Rabaiteri Yanomamö live adjacent to the Ye'kwana village of Mödeshihä'ña and have acculturated towards the Ye'kwana style of living more than any other Yanomamö group on the Padamo. They have mastered nearly the full repertoire of Ye'kwana technology. The Yanomamö village of Toropo-teri, which is actually a section of the village of Toki, is the only Yanomamö village to which the Ye'kwana of Toki trade baskets. Sometimes a Yanomamö will come to Toki without baskets to trade and will ask if anyone needs any. If so, he will stay in the village and make the basket and receive room and board free from the Ye'kwana.

<sup>17.</sup> About the only time money is exchanged is when upstream Ye'kwana are passing by a downstream village on their way to *criollo* or missionary trade centers. They ask for money in exchange for their goods so that they can make purchases in the centers.

# TABLE 4

# ALL BASKETS TRADED TO TOKI DURING THE PERIOD OF ONE YEAR, 1975-1976

Buyer	Basket purchased	Place manufactured	Price: Goods paid
Ye'kwana t	o Ye'kwana:		
Cecilio	waha	` Kwashii'ña	Bs 15: 1 shirt
	manade	Toki	Bs 20: 1 knife, 1 box fish hooks
Enrique	small <i>waha tomennato</i>	Kwashii'ña	Bs 6: 1 box fish hooks
1	wöwä	Mödeshihä'ña	Bs 40: cash
	wöwä	Mödeshihä'ña	Bs 40: cash
	small <i>wöwä</i>	Mödeshihä'ña	Bs 40: cash
	waha tomennato	Upper Cunucunuma	Bs 15: 3 m red cloth
Julio	wöwä	Mödeshihä'ña	Bs 25: beads
0	small <i>wöwä</i>	Kwashii'ña	gift from daughter
Nelson——	—waha—	Kwashii'ña	Bs 10: flashlight
	waha	Kwashii'ña	Bs 8: 100 m fish line
Pedro S.	waha	Konona'mu'ña	Bs 8: small aluminum pot
Turin	sehecha	Toki	Bs 15: artificial lure
	waha	Kwashii'ña	Bs 15: can powder
	waha	Toki	Bs 15: 1 knife
	waha	Konona'mu'ña	Bs 10: scissors

-----

# Yanomamö to Ye'kwana:

) )

Cecilio	waha	Haiyamo-teri	Bs 20: hooks, line, needles
	wöwä	Rabai-teri	Bs 20: 1 collar
	wöwä	Rabai-teri	Bs. 30: 1 aluminum pot
Enrique	small <i>wöwä</i>	Rabai-teri	Bs 6: small aluminum pot
	wöwä	Rabai-teri	Bs 30: medium aluminum pot
	wöwä	Rabai-teri	Bs 30: 3 m red cloth
	wöwä	Rabai-teri	Bs 30: 3 m red cloth
	wöwä	Rabai-teri	Bs 30: 3 m red cloth
Jacobo	wöwä	Haiyamo-teri	Bs 30: medium aluminum pot
	waha	🖌 Haiyamo-teri	Bs 17: 2 m red cloth
Julio	wöwä	7 Rabai-teri	Bs 25: cash
	wöwä	Rabai-teri	Bs 20: 1 aluminum pot, scissors
	wöwä	Toropo-teri	Bs 20: 1 aluminum pot
	small <i>wöwä</i>	' Toropo-teri	Bs 20: 1 shirt
Nelson	tönkoi	Rabai-teri	Bs 20: 1 can kerosene
	wöwä	Rabai-teri	Bs 30: 3 m red cloth
	wöwä	Rabai-teri	Bs 25: aluminum pot
	tönkoi	Toropo-teri	Bs 30: 3 m red cloth
Pedro S.	wöwä	Rabai-teri	Bs 30: new dress
Sixto	wöwä	Rabai-teri	Bs 35: 3 m red cloth
Turin	wöwä	Rabai-teri	Bs 25: medium aluminum pot
	wöwä	Sedukurawa-teri	Bs 30: medium aluminum pot
	manade	Rabai-teri	Bs 20: cash

TABLE	5

.

٠

I.

# ALL BASKETS TRADED FROM TOKI DURING THE PERIOD OF ONE YEAR, 1975-1976

Vendor	Basket sold	Village	Price: Goods paid
Pedro S	tönkoi waha	Toropo-teri Toropo-teri	Es 25: 1 knife/ 2 cups Bs 18: 2 m red cloth
	manade waha	Toropo-teri Toropo-teri	Bs 50: medium hammock
Rosa S	small, decorated <i>wöwä</i>	Acana'ña	Bs 30: cash
	small, decorated <i>wöwä</i>	Acana'ña	Bs 30: cash

•

Trading usually takes place in the context of a visiting party whose members have long-standing trading relationships with individuals of the village they visit. Oftentimes they bring specific items that were requested during the last visit and teek new requests for future visits. At times the visitors also bring unsolicited items and try to trade these as well. Although the hosts don't have to trade for these items, they find themselves hard put to refuse if they are dealing with their relatives. It is much easier to refuse a Yanomamö, to whom they are not related and with whom their dealings are more impersonal and sharp.

Selling of painted baskets and other handicraf's to *criollos* seldom occurs in the Padamo River basin, mainly because the *criollo* merchants who used to visit the basin are now forbidden by law. The Ye'kwana felt that the merchants cheated them by buying their basquets for reasonable prices while charging them prices for industrial goods that were four to five times the cost of those goods in Puerto Ayacucho. Occasionally an upstream Ye'kwana will sell a few baskets to the Salesian missions along the upper Orinoco River, and more rarely still they will take them to Puerto Ayacucho to hawk in the streets, hotels or restaurants.

On the other hand, the Ye'kwana of the upper Caura were able to sell their baskets and handicrafts in great quantities to the mission at Santa Maria de Erebato. The mission used to sell and distribute them for the Ye'kwana to the tourist shops in Caraca<sup>(3)</sup>, Ciudad Bolívar and other metropolitan areas.

# IMPLICATIONS FOR SOCIO-CULTURAL CHANGE

Basketry in and of itself will probably not have a crucial role as an instrument of socio-cultural change in the Padamo River Basin. Elsewhere, such as in the upper Caura, basketry and traditional artistry may play an imporant role in providing a cash income (which inevitably leads to change) as long as there is an adequate demand by the national economy. However, in most Ye'kwana areas, regardless of how they are integrated into the national economy (through cash cropping, artistry or wage labor), the most critical factor that will determine the strength and rate of change is geography. Those Ye'kwana villages located on the lower parts of the major river systems of the upper Orinoco, which provide the main avenues of access to the national economy, are rapidly acculturating. Also, they receive the benefits of limited health care from the *Ministerio de Sanidad y Asistencia Social* and agricultural loans from the *Instituto Agrario Nacional*, and schools with Ye'kwana teachers have been set up in their villages. Ye'kwana villages in upstream areas are very little affected by the above agents of change.

Through time, due to current government initiatives, cultural differences between downstream and upstream Ye'kwana will broaden. Increasingly, upstream villages will come to rely on downstream villages for trade goods. Downstream villages will be in a position to economically and culturally dominate upstream villages. It is difficult to say how each group will adjust to this state of affairs. If upstream villages continue to rely on downstream villages for trade goods, then the current dependence and widening cultural differences will persist. However, if upstream villages cannot depend on downstream villages for trade goods (if, for example, there is no longer a demand by downstream villages for the goods manufactured upstream), or they no longer wish to trade downstream, and would rather deal directly with Venezuelan nationals, then their response will most likely be to migrate downstream, where the ease of river transportation would allow them easy access to the national economy.

## Appendix I

YE'KWANA	AND	SCIEN	TIFIC	NAM	AES C	DF I	MATI	ERIA	LS	USED	AND
<b>IDENTIFIC</b>	ATION	OF	BASKE	ETS,	AND	PA	ART	OF	ΒA	SKET,	FOR
	Wŀ	<b>HOIF</b>	EACH	MA	TERI <i>I</i>	۱L :	IS U	SED			

Material	Basket	Part of Basket
Amaamada (Hubebuia pentaphylla)	wöwä tudi	inner reinforcement lower rim
Amutu (Ischnosiphon obliquus)	kangwa* manade* tönkoi waha* waha tomennato* wutakä*	body body body body body body
Fwuduuhoi ( unidentified )	tönkoi	reinforcement

• Second choice material.

# APPENDIX I (Cont.)

Material	Basket	Part of Basket
Heshukudu (Calathea sp.)	manade sehecha*	lower rim lower rim
Kaana (Ischnosiphon arouma (aubl.) Koern)	deweke humudu kangwa* kodoma manade* tönkoi waha* waha tomennato* wutakä	body body and rim body body body body body body body
Kadahiyo (Ischnosiphon sp.)	manade	body
Kamawadi (unidentified)	tönkoi tudi wöwä	bottom loop rope carrying strap carrying strap
Kudai (Jessenia policarpa)	duma	whole basket
Kuhedi (seje) (Jessenia bataua)	duma manade sehecha waha waha tomennato	whole basket upper rim upper rim upper rim upper rim
Kungwata (unidentified - Linden family?) Kurawa (Annas parguasense camargo)	tönkoi tudi wöwä kangwa manade . sehecha tönkoi waha waha tomennato wutakä wöwä	bottom loop rope carrying strap carrying strap sewing (rims, etc.) sewing sewing sewing sewing sewing sewing sewing sewing sewing sewing
Madama (Leopoldina piassaba)	waha tomennato	upper rim
Mani (Monorobea montana)	see kurawa	coating kurawa thread

• Second choice material

MaterialBasketPart of BasketMöñätäähaida'nototal basket(Anthurium flexuosum)cetutotal basketmatiditotal basketmudoitotal baskettahihabody
Möñätä ähaida'no total basket (Anthurium flexuosum) cetu total basket matidi total basket mudoi total basket tahiha body
tudi body wöwä total basket
Odooma shinatai manade lower rim (unidentified) sehecha lower rim waha lower rim
Shaada tönkoi reinforcement stic (Sorocea quyanensis) tudi back reinforcemen
Shimädä waha tomennato upper rim (Gynerium sagittatum (aubl.) Beauv.)
Shiñätämanadelower rim(Securidaceae diversifolid)sehechalower rimwahalower rimlower rimwaha tomennatolower rim
Sösö kangwa dye spreader (unidentified) waha tomennato dye spreader
Tarutaru mapire inner lining (unidentified)
Wääna tönkoi reinforcement (unidentified - Linden family?)
Wana kangwa body (Guasdua latifolia) kumukö body manade body waha body waha tomennato body
Wanawanatönkoibottom rope loop(unidentified -tudicarrying strapLinden family?)wöwäcarrying strap
Wanudu wöwä body decoration (unidentified)
Wishu kangwa element color (Bixa orellana) waha tomennato element color

-

#### Appendix II

#### Technical Description

For our technical description of Ye'kwana basketry we will use the terminology developed by O. T. Mason (1902) and later used by Roth (1921) and Simpson (1944) in their descriptions of Guiana basketry. It is interesting to compare the terminology of these ethnologists with that of the Ye'kwana. Although based on different principles, the native classification describes Ye'kwana basketry as adequately as does that developed by the ethnologists.

The Ye'kwana classify all baskets into three major categories, not distinguished by form (e.g. flat, dished or bowl) or function (e.g. burden basket, serving tray or press) as are the categories of the ethnologists, but rather by closeness and/or direction of plaiting. Thus, the type *sadadame* includes all baskets of open work, regardless of weave or form (e.g. the *matidi, tudi* and *sehecha*)<sup>18</sup>. A second type, *töhe*, encompasses all work in which the individual elements of the weave are tightly woven, creating a closed, right-angled effect or a closed, radiating effect (e.g. *waha, waha tomennato* and *cetu*). Aku-diyedu includes plaited work that is also closed and usually woven at right angles, but has a diagonal or herringbone appearance (e.g. *kangwa, tönkoi*). Although the Ye'kwana classification is not as fine as that of the ethnologist's, it is more consistent in that it unequivo-cally classifies all baskets into one of three types.

When describing the separate parts or sections of their baskets, the Ye'kwana are far more explicit in their classificatory scheme than the ethnologists, who use terms such as "edge, foundation and body". *Tökahehudi* is the name for the body of a basket in general. *Shidia* is the term for the foundation on the outside and *ahantahädi* is the foundation on the inside of a basket. The *chahudu miti* is any portion of the body which is attached to a reinforcing piece that is not part of the integral rim. The complicated triple rim construction seen in all flat baskets is also reflected in Ye'kwana vocabulary: the topmost or integral rim is called the *chahia*, the middle rim, usually made of a split palm frond stem is the *chahudu*, and the bottom rim, usually a vine, is called the *chahudu*.

elerederederer of elerer of ele

<sup>18.</sup> This class also encompasses manufactures other than baskets which are woven in an open fashion, such as fish nets and hammocks.

Individual elements of the body are named *shechaha*; the weft is *tukahato* and the warp *yotadi*. Other special terms referring to particular baskets will be identified as the baskets are discussed below.

## 1. Baskets used for manioc production

#### Tönkoi (sebucán)

Kaana<sup>19</sup> elements are cut in quarters and scraped with a knife. Each measures close to 4 m for a finished basket 1.85 m long. Eighty centimeters from the ends, plaiting begins (Fig. 1e) in a twilled fashion (each weft element passing over and then under 3 warp elements) until approximately 60 elements have been added. The main body is formed into a cylinder by plaiting the loose ends of each side into the opposite side. The top area (Fig. 1c) is plaited in 2 sections which are later joined. Groups of 3 elements are gathered at a time and the ends turned underneath at edges and plaited back upon themselves and the sections decrease in width as they increase in length. The loose edges from the top of each section are tied with *kaana*. Now the top front section of the main body, above the starting point (Fig. 1e) is plaited and the edges are left loose at the mouth.

The main body is worked in a circular motion, reversing directions after each round. The effect of this twill weave can be seen in Fig. 1f. The claw of an anteater is often used to tighten the weave. After approximately 106 rows or 1.2 m of the body are completed, the circumference of the cylinder is decreased by adjusting the twill weave so that each weft element passes over and then under 6 warp elements. Several rows are worked at once, decreasing the size considerably. The final rows in each direction are a series of 2 elements passing over 6 elements.

One end of a strip of bark (*wääna*) is tied to a house pole and the other end is wrapped tightly around the loose ends at the bottom of the basket. Basket and bark are pulled until the hole is completely sealed. A different bark strip is then tied and knotted around the ends and the first strip is unwrapped.

Using twine made from *kurawa*, treated with *mani* (a vegetable gum), and threaded through a long curved needle, the mouth (Fig. 1d)

<sup>19.</sup> All references to basket materials are referred to by their Ye'kwana names. For scientific names, see Appendix I.

is finished by taking circular stitches over the loose strands which have been crossed over each other left to right and right to left. The two top segments are now untied, the loose ends overlapped and sewn across the back and front edges (Fig. 1a and b). Strips of bark are placed around the front lip (Fig. 1d) and the back of the top loop (1b) and sewn in a blanket stitch with resined twine (made from *wääna*). The front of the top loop (Fig. 1a) is reinforced with a carved and bent stick (from the *shaada* tree), which is covered with bark and sewn into place. The top loop is reinforced in this manner because it must withstand the greatest stress on the basket when the basket is stretched during the process of pressing manioc.

To complete the bottom end, the loose elements are divided in half and each half is tied tightly with a small strip of bark. The halves are folded over each other, creating a loop approximately 20 cm long (Fig. 1i) and the elements are tied tightly with bark at the top of this loop. Using *wääna* rope, 1 cm thick, two blanket stitches are taken approximately every 10 cm around the loop (Fig. 1i). A stick is used to help pull the rope as tightly as possible. The temporary bark ties are removed. The area at the base of the body (Fig. 1h) is closely wrapped with 3 m of rope. The wrap is tightened by tying the rope to a house pole and pulling it with the entire body. The end is tied, the basket pounded into shape with the hands and the loose ends are trimmed evenly.

The tönkoi's weakest point is just above the wrapped rope (Fig. 1g). When it breaks at this point, bark or vine is wrapped to extend its life while another tönkoi can be manufactured. Once the old tönkoi is replaced, its body will be cut into a rectangular flat mat and used in the cookhouse to line the shelf and wall where squeezed manioc is stored before casava preparation.

#### Deweke humudu (sebucán)

A variation of the tönkoi described above is the deweke humudu which is much smaller and is more simple in that the only weave used for the entire body is the same as that shown in Fig. 1f. The top and bottom loops are woven out of the same material as the body, similarly to other Carib sebucanes (cf. Plate 68, Roth, 1921). Thus, no bark, wood or rope reinforcements are employed and the deweke humudu is much weaker than the tönkoi.

#### Matidi (mapire)

Möñätä vines are lightly roasted (so that the bark peels easily), peeled and split into 4 narrow strips which are lightly scraped. Six elements are used to form a center hexagon (which, like all hexagons in a basket, measure: 2.5 cm across). New elements are added to form a row of hexagons and then a flat hexagonal mat 25 cm in diameter, consisting of 8 elements running in each of 3 directions. This mat is the bottom of the basket. Often during periods of heavy manioc production, several mats will be completed to this stage before going on to the next step.

Two very long weft elements (or, occasionally one) are plaited hexagonally; the spiraling weft passing "alternately over a strand of one and under a strand of another of two series of warp elements crossed diagonally" (Roth, 1921, p. 141). The spiral continues for approximately 12 rows creating sides measuring 30 cm high which increase in diameter from 22 cm at the base to 40 cm at the top.

No now elements are introduced in finishing the *matidi*. Rather, the diagonals crossing at the top edge of the basket are paired and several pairs are laid flat around the rim. Each pair is wrapped over those laid flat, pulled down tightly and gathered into the group. The process continues around the entire rim. (See closeup, Fig. 2a).

#### Sehecha

Kaana elements are prepared as for the tönkoi, except that each measures approximately 125 cm in length for a 3-handed sehecha  $(1 \text{ m diameter})^{20}$ . Three elements are held closely together while three more are plaited at right angles to create the closed middle of the basket, called the *chewana*. Twenty elements are introduced in an open twilled weave, the weft passing over and then under 2 warp elements, while the center 3 elements in each direction are treated somewhat differently (see Fig. 2b). The basket is rotated  $\frac{1}{4}$  turn and the process is repeated until 40 elements have been entered in each direction. Thus, the weft and warp elements become indistinguishable in the finished basket.

<sup>20.</sup> A "hand" is measured by the distance between the thumb and small finger of the fully-stretched hand. Each 20 elements measures 1 hand.

The mat is made octagonal by decreasing the number of woven stitches at each end of each row<sup>21</sup>. The total number of elements for a three-handed *sehecha* is approximately 175.

Two sets of rims are added to the sehecha. The lower rim, chahudu, consists of two hoops made from whole shiñätä vines which are tied onto the mat with kurawa. The outside, loose strands of the mat are bent towards the middle of the basket as the inside hoop is pushed into the outside hoop. A few stitches are taken to hold the chahudu rims together. Two more hoops, chatabudu, made of split kuhedi palm, which have been thinned slightly but are still green on the outside, are added to form the top rim by wrapping loose elements over the *chatahudu* hoops and sticking them under the *chahudu* rime. The chatabudu rim is sewn on in the following manner, using a heavy needle threaded with resined kurawa twine: A stitch is taken starting outside the basket between the chahudu and chatahudu rims, pulling the needle up over the top, forming a half-knot and then a loop. Two or three of the longest loose ends from the mat are twisted and inserted between the chatahudu hoops and through the loop. The needle is pulled sharply, closing the loop tightly and holding the twisted strands in place with a complete knot.

Stitches are taken every centimeter to create a very strong rim for the *sehecha* or *manade* or *waha* (see following sections). The *sehecha* usually breaks first where the body attaches to the rim and the hole is repaired by wrapping a whole *mönätä* vine through the body and around the rims.

#### Manade (manare)

The manade is constructed exactly as the sehecha except that wana is used for the body rather than kaana because it can be cut in much thinner strips. In fact, an even finer material, heshukudu, is preferred, but it is scarce around Toki. The fine material is desired because it creates a closer, although still open, twill weave necessary for sifting the fine flour preferred for casava. Also, the manade is made smaller than the sehecha, measuring only one or two hands in radius.

<sup>21.</sup> For a two-handed *sehecha*, the decreasing process begins after 20 elements have been entered in each direction, rather than 40.

#### Waha (guapa)

.

Although kaana may be substituted, the preferred material for plaiting the body of the waha is wana because it is stiffer and more durable. The wana elements are prepared as for the waha tomennato (see following section) except that they are rarely painted and are cut approximately twice as wide and thick.

The basic weave is a closed twill; the weaving formula is altered slightly at appropriate times to produce simple geometric designs. The *waha* usually measures two hands or 60 cm in diameter. The rims are identical in materials and are attached with the same technique used for the *sehecha* and *manade*.

#### Waha tomennato (guapa)

Six 2-noded wana, 4 for the body of the basket and 2 for the rim, are collected. Each node must be 2 hands long for a small waha tomennato, 3 hands for a medium basket, etc. The wana is allowed to dry for at least a day and then a knife blade is used to scrape over the surface to remove the green outer layer. Peeled sösö vine is scraped near the outer bark, producing a shredded wad which is rubbed under a casava grill to collect charcoal. It is wiped on the scraped wana, painting it black. Or, a red color is made from the pigment of the seeds of wishu. The wana tubes are then rewiped 3 times with fresh, uncolored sösö wads and allowed to dry a few minutes.

Each wana is notched 14 or 15 times around the open end and these sections are split down to the node. The outer, less pithy strip of each section is split and peeled down lengthwise and broken off at the node. Each of these loose strips is peeled in half again, keeping only the outermost edge of the wana. The strips are broken lengthwise into two or three narrower strips, thus creating an average of 29 very thin and narrow elements from each half of the original 2-noded wana. The strips are between 60 and 70 cm in length for a medium basket.

The pattern of the *waha tomennato* is worked diagonally, elements being placed at right angles. About 20 elements of both colors are twilled from the starting point, forming the rain (*konoho kudö*, see Plate V). Black (weft) elements are entered until very little space is left at the ends of the natural warp elements; more natural elements are then added to each side. The elements are often licked before plaiting, so they will not slip from position. The process continues until the design is complete. This flat mat of the basket is made octagonal in shape by decreasing the number of warp elements plaited at each end of each row. The final mat is approximately 40 cm across and has any of a great variety of central and peripheral figures and patterns plaited into it (see page 17 ff). Approximately 320 total elements are used.

Perhaps the most distinguishing feature in Ye'kwana basketry is the woven rim, or the *chahia*, of the *waha tomennato*. Rims may be bichrome or monochrome. The warp is formed by lining up 5 strands with blunt-cut ends together. While elements are held in the air, twill plaiting begins about 8 cm from the ends close: to the weaver, and continues away from him. Not only the individual elements but also the woven area is licked frequently for better adhesion; the twilled *chahia* must be very closely woven<sup>22</sup>.

After 22 elements are added, the outside ends of the woven elements are folded underneath and plaited back into the warp. This process continues from side to side until about 8 cm are left at the ends of the elements. New elements are then entered one at a time in both directions and the weave continues as before, until a total length of 1.25 m is plaited for the rim of a medium basket. The entire length of *chahia* rim is folded in half lengthwise (biting to firm the crease) and rolled into a spiral ball, tied together and set aside.

For the *chahudu* rim, the green outer layer and the inner edges of 2 *madama, shimädä* or *shiñätä* strips are scraped until they are very smooth. Two hoops are formed such that they will fit together snugly. The inside of the outer hoop is coated with *mani* resin. Both hoops are fitted onto the woven mat, the smaller on top and the larger underneath. Using a steel needle about 8 cm long threaded with resined *kurawa*, the weaver ties both rims onto one corner of the design, then the opposite corner and the two side corners, carefully centering the rim over the design. A few more knots are added. Loose ends of the weave are tightened by licking and pulling, and are folded towards the center of the basket while the inner hoop is pushed into the outer hoop. As many as 10 separate knots are made every 5 cm, keeping the rims very even. The bulges of excess weave are clipped so that they lie flat as they protrude from the rim.

<sup>22.</sup> The Ye'kwana stress the importance of weaving a *waha tomennato* well and judge its beauty by the quality of the *chahia*, the roundness of the basket, and the tightness and alignment of the pattern.

Two shimädä hoops, which form the chatahudu rim are prepared by cutting in quarters, peeling in half and trimming and scraping. One hoop is fit above the outer chahudu rim and tied on by looping 2 loose weave elements over it in an "X", pushing them under the outer bottom rim and pulling them down snugly underneath. These "X" ties are made irregularly around the upper rim, wherever the weave allows, approximately 9 or 10 times. The protruding ends of the body are trimmed evenly with the chatahudu rim and the other shimädä hoop is fit to the inside. With very fine resined kurawa, the two rims and the basket are sewn together using a blanket stitch every 4 cm.

Th *chahia* edging is placed over the *chatahudu* rim and between the *chahudu* rims. The *chahudu* hoops are loosened with a knife and the "X" ties are undone as the *chahia* is put in position and sewn into place by making knots around the *chahudu* rim through the *chahia*. Loose elements from both open ends of the woven *chahia* are plaited together to create a continuous border.

Wöwä

Möñätä roots are prepared as for the matidi. Thick möñätä elements are used for the warp throughout the basket; for the base weft elements are only slightly thinner than the warp elements and for the sides the weft elements are one-third the thickness of the warp elements. Both warp and weft elements are necessarily thicker at the base because they are under the most stress when the basket is in use.

The foundation is started by placing two bundles of 24 elements at right angles over two other bundles containing the same number of elements. The bundles are twined tightly four times around with two continuous *möñätä* weft elements. In this process the weft subdivides the warp bundles into 8 new bundles of 24 elements each. Double weft elements are entered and placed further apart as they are twined, one weft element passing in front and the other behind several warp elements at once, reversing directions for the next group of warp elements. With each spiraling turn the number of warp elements twined at once is steadily reduced until each double weft twines only a single warp element at the juncture of the foundation and sides. When the double weft twines only single warp elements, the sides are started by curving warp elements upwards. At this point thinner *mönätä* elements are used to reduce the size of the weft; the basket widens in diameter, increasing the separation between warp elements. Whenever they separate widely, additional warp elements are interposed.

After approximately 10 cm of the sides are plaited, one end of a woody amamaada vine<sup>23</sup> is attached near the center of the foundation.

The vine is continued in segmented spirals up the sides, being tied to the weft elements with a continuous strand of  $m \ddot{o} n \ddot{a} t \ddot{a}$  as the basket is plaited, until it eventually forms part of the rim. Periodically the thin  $m \ddot{o} n \ddot{a} t \ddot{a}$  weft is replaced with a black element made from the *humudu* vine, or the  $m \ddot{o} n \ddot{a} t \ddot{a}$  is painted red with *wishu*, and plaited for 2 to 4 spirals in order to decorate the basket.

At the top of the basket, all warp elements are trimmed evenly. Very thin *möñätä* elements are wrapped in a recursive figure-eight pattern running between each warp element. This edging is held in place by wrapping the uppermost *amamaada* reinforcement between every sixth warp.

#### Wutakä

Wide *kaana* elements are used for a *wutakä*. The basket is shaped like a *kangwa*, using a twilled weave similar to the body of a *tönkoi* (Fig. 1f). The rim is attached in the same way as for the *kangwa*, except the rim of the *wutakä* is made from *madama*.

#### 2. Miscellaneous baskets

#### Tudi (catumare)

Because it employs three different weaves, the *tudi* is one of the most complicated baskets the Ye'kwana make. The body of the basket is plaited hexagonally with a secondary weft, and wicker weave and coiling are used for the rims. The size of the basket made is determined by the intended user. Every other open-spaced hexagon is

<sup>23.</sup> The *amamaada* has been prepared by coiling and tying it into a hoop while still green, and allowing it to dry. When dry, the *amamaada* is a permanently shaped spiral made the size of the intended basket.

counted as one "eye" (chanudu) and 8 eyes are made for women and boys, 10 for men.

A temporary rectangular frame with a central crossbar is made from split *madama* and set aside. *Möñätä* is prepared as for the *matidi* except that only the two middle, widest strips are used from each vine. A mat the same size as the temporary frame is plaited such that loose ends protrude 30 cm from the top and 60 cm from the sides and bottom of the frame. At the bottom of the mat, warp elements are tucked and plaited back into it while weft elements are left extending. The temporary frame is now tied on with cotton string.

Pairs of the loose weft elements on the bottom and sides are pulled across each other, creating a new warp of diagonally crossed pairs. To form the corners, the warp elements are bent around the temporary frame. Sixteen new weft elements are entered and plaited down one side, around the bottom and up the other side to create a threedimensional "U" shape to the sides and bottom of the basket.

A peeled, unsplit *shiñätä* rim, 2.5 m long is added; the weave changing from hexagonal to wicker as two loose elements from the mat are wrapped over the whole *shiñätä* towards the inside of the basket and then pulled down tightly outside. They are plaited into the woven basket below the rim, over one pair, under the next pair, etc., approximately 4-5 times. This process of wicker weaving continues around the entire edge of the *tudi* (the *shiñätä* is twisted to create a smooth turn at the corners). Both ends of the *shiñätä* are cut at angles to allow a smooth fit, and they are tied with resined *kurawa*.

The final rim is a peeled  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  vine which is coiled with split  $m \ddot{o} \cdot \ddot{n} \ddot{a} t \ddot{a}$  strips. Approximately every two inches, the strips are coiled twice around both  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  and  $s h \ddot{n} \ddot{a} t \ddot{a}$  rims together, joining the  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  rim to the basket. Since the ornate coiling around the entire length of the  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  rim is of no apparent technical advantage and greatly increases the amount of work, it appears to be done for purely aesthetic purposes.

The temporary frame is removed and replaced with a new frame consisting of 4 sticks of *shaada*, specially selected with forked branches at one end. The sticks are placed vertically on the outside and inside of the back in parallel pairs. The forks (which have been trimmed to approximately 2 cm) are placed such that each braces both rims and each pair of frame supports is securely tied together with  $m \ddot{o} \ddot{n} \ddot{a} \ddot{a}$ 

strips. A long bark strip is added to serve as a tumpline and kurawa twine is used to lace up the open front of the *tudi*.

## Duma (catumare)

Once a suitable *kuhedi* or *kudai* palm is located, it is climbed, one palm frond is removed and the leafless part of the midrib is cut away. The paired leaves and midrib are used to make the *duma*. The number of leaves used is determined by the size of the load to be carried, 7 pairs for a small load and up to 13 for a large load. Another frond with a matching number of paired leaves and a tached midribs are cut. The two fronds are stood on end with the midribs parallel to each other. The inner leaves are plaited in a pentagonal pattern with the midribs forming a frame which rests against the back of the carrier. The outer leaves are plaited in the same way to form the sides and bottom of the basket. The loose ends of the leaves, devoted to the sides and bottom, are braided together to form a strong edge. A carrying strap, made of bark stripping, is tied to the basket.

The *duma*, a temporary backpack, is used only in situations where a *tudi* is unavailable.

#### Ähaida'no

The *ähaida'no* is made from  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  vines that have been prepared as for the *matidi*. A piece of roasted meat or fish is wrapped with large, coft leaves such as banana or heliconia, and the  $m \ddot{o} \ddot{n} \ddot{a} t \ddot{a}$  elements are wrapped tightly around the meat package in one direction and then another in a random wicker weave. A handle, similar to that of the *cetu* (see section below) is added. This handle is so atrong that once it is hung on the man's forearm, two or three women together cannot steal the meat in the basket by pulling on the base to break the handle. In fact, the women often resort to using a knife in order to cut the meat out of the basket.

## Cetu

Möñätä is gathered and prepared as it is for the *matidi*. A foundation is begun by plaiting 8 elements over and under one another, thus creating the warp. A single spiraling weft element is wrapped over and under each rigid warp element. After a few circular weft spirals are complete, secondary in erposed warp elements are added parallel to the original 16 elements (thus doubling the number of warp elements). After approximately 8 spirals are completed by the weft, the body is formed by bending the warp elements upwards and tightening them in o place with the weft.

The wicker weave continues for the entire length of the body. The bottle-necked appearance is controlled by using the weft to either comprets or expand the distance between the warp elements. The rim is finished in the same manner as the *matidi*. The basket completed with the addition of a strong, triple-stranded *mönätä* handle tied onto the thick rim and then coiled with a final strand of *mönätä*.

#### Kangwa (petaca)

For a medium kangwa  $(12 \times 22 \times 10 \text{ cm})$ , 11 nodes of wana are prepared as for the waha tomennato except that some are left unpainted, some are painted red or black, and some are half red or black and half unpainted.

:į

The bottom (*menudu*) rectangular frames are plaited first. Six natural elements are held with the left hand and 18 all-red elements are twilled. Red and natural elements are plaited until 25 are added in each direction. Elements which have been painted half red are plaited, leaving the natural ends free in an appropriate fashion to work the pattern of concentric rectangular frames.

The basket is rotated  $\frac{1}{4}$  turn and the pattern is plaited with the natural ends, leaving the red ends loose; the process is repeated with the remaining two sides. Thus the bottom consists of 5 frames, the last frame remaining incomplete at the corners of the basket. Occasionally a figure will be placed inside one or two frames for the *menudu*.

The corners are made by continuing the pattern of the last frame and pulling the elements of two contiguous edges in opposite directions. The elements are licked often to create better adhesion<sup>24</sup>. A side is completed and the process is continued around the basket.

-- CHITIRAL CONTEXT

<sup>24.</sup> The corners are difficult to make and take quite a long time to tighten with the fingernails. This is the main reason the *kangwa* takes such a long time to make (about 12 hours to plait once the materials are prepared) relative to its size.

The figures are plaited around the basket in a counter-clockwise direction. Each particular pattern is completed as the basket is rotated. The projecting ends are creased and bent towards the inside, and the basket with the rim unfinished is set aside while the other half, or top (*hiedutu*) is made, using the same procedure but often employing different patterns.

The rims of the top and bottom of the *kangwa* consist of strips of *kaana* which are sewn over the creased loose edges with resined *kurawa*, taking a stitch and making a half-knot every three fingers (Ye'kwana measurement equalling approximately 4 cm). The basket is creased at the corners and the loose ends are cut at the edge of the *kaana* rim.

Both halves of the box are fit together and a length of *kurawa* twine is tied around the outside rim of *kaana*, wrapped twice tightly around the basket and left in place for 4 days to hold the sides together and help shape the box.

#### Mudoi

We were unable to observe the construction of a *mudoi*. The basket is woven from split *möñätä* of two different thicknesses; thicker *möñätä* is used for the warp and primary weft, while thinner *möñätä* is used for the secondary twining weft (similar to the twining primary weft of the *wöwä*). Warp elements are cut twice as long as the intended length of the body of the basket so they may be folded at the base and mouth towards the inside of the basket to form the mesh, or trapping mechanism.

# ABSTRACT

Ye'kwana basketry is described in its full cultural context. Basketry is considered as an element that touches nearly every other part of a cultural system. As such, basketry is not just a segment of technology, but plays a multiple role in trade, symbolism and mythology, art, the sexual division of labor, ecology, and is an index of one's achievement of adulthood. We also consider the possible role of basketry in village development and how it links traditional upstream villages with acculturated downstream villages.

**....** 

#### RESUMEN

Este artículo describe la cestería Ye'kwana en su contexto cultural más amplio. La cestería se considera como un elemento que toca a casi todos los otros sectores del sistema cultural. De esta manera la cestería no sólo pertenece a la tecnología, sino que interviene en el comercio, el simbolismo y la mitología, el arte, la división sexual de trabajo, la ecología y constituye un índice de prestigio social en la vida adulta. También consideramos la posible influencia de la cestería en el desarrollo de los pueblos y la manera como relaciona los asentamientos tradicionales situados en las cabeceras de los ríos con los más aculturados de los cursos inferiores.

#### REFERENCES

ARVELO-JIMENEZ, N.

1971 —Political Relations in a Tribal Society: A Study of the Ye'kwana Indians of Venezuela. Cornell University Press, Ithaca, New York.

#### BUTT-COLSON, A.

1973 —Inter-tribal trade in the Guiana highlands. Antropológica 34: 1-70.

#### CIVRIEUX, M. de

1970 --- Watunna: Mitología Makiritare. Monte Avila, Caracas.

#### COPPENS, W.

#### FARABEE, W. C.

1926 — The Central Caribs. The University Museum Anthropological Publications, Vol. X. University of Pennsylvania, Philadelphia.

#### JOHNSON, A.

1975 —Time allocation in a Machiguenga community. *Ethnology* 14(3): 301-310.

# KOCH-GRÜNBERG, T.

1923 —Vom Roroima zum Orinoco, Vol. 3. Strecker und Schröder, Stuttgart.

#### LIZOT, J.

- 1971 —Economie ou Société. Journal de la Société des Américanistes LX: 137-175.
- 1974 —Contribution à l'étude de la technologie Yanomami. Antropológica 38: 15-33.

<sup>1971 —</sup>Las relaciones comerciales de los Yekuana del Caura-Paragua. Antropológica 30: 28-59.

1975 —*Diccionario Yanomami - Español.* (Traducción Roberto Lizarralde). Universidad Central de Venezuela, Facultad de Ciencias Económicas y Sociales, División de Publicaciones, Caracas.

# MASON, O.

1904 — Aboriginal American Basketry: Studies in a Textile Art without Machinery. Report of the U. S. National Museum (Smithsonian Institution) Government Printing Office, Washington, D.C.

#### RIVIERE, P. G.

1969 —Myth and material culture: Some symbolic interrelations. In: Forms of Symbolic Action. Proceedings of the 1969 Annual Spring Meeting of the American Ethnological Society. University of Washington Press, Seattle.

#### ROTH, W. E.

1921 —The Arts, Crafts and Customs of the Guiana Indians. Bureau of American Ethnology, Washington, D.C.

#### SALISBURY, R.

1962 — From Stone to Steel. Cambridge University Press, Cambridge.

#### SIMPSON, G. G.

1944 — Los Indios Kamarakotos. Revista de Fomento, Vol. III, Nos. XXII/XXV, Caracas.

#### WATSON-FRANKE, M.-B.

1974 — A woman's profession in Guajiro culture: weaving. Antropológica 37: 25-40.

#### WILBERT, J.

1975 —*Warao Basketry: Form and Function.* Occasional Papers of the Muscum of Cultural History, University of California Press, Los Angeles.

University of California, Santa Barbara Department of Anthropology Santa Barbara, California 93106 EE.UU.