# ANTHROPOLOGICAL PAPERS OF THE AMERICAN MUSEUM OF NATURAL HISTORY

### VOLUME XXXVI, PART III

THE MOUNTAIN ARAPESH

I. AN IMPORTING CULTURE

By Margaret Mead



By ORDER OF THE TRUSTEES

OF
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City
1938

### THE AMERICAN MUSEUM OF NATURAL HISTORY

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### PREFACE

This is the first of a series of papers on the culture of the Arapesh people of the Sepik-Aitape District of the Mandated Territory of New Guinea. These people were intensively studied by Doctor R. F. Fortune and myself, from December to August, 1931–1932. For the comparative discussions I have drawn upon our subsequent field experience among two tribes of the Sepik River basin, the Mundugumor and the Arapesh, and upon the collections from the regions anterior to the Arapesh and the Sepik River, which are now in the Museum. My part of the investigation was undertaken in regular pursuit of my duties in the American Museum and was financed by the Frederick G. Voss Anthropological and Archaeological Fund. Therefore, I owe particular thanks to the American Museum of Natural History, and especially to Doctor Clark Wissler, for the opportunity to make this two-year expedition to New Guinea.

Doctor Fortune's work was conducted under a grant from the Social Science Research Council of Columbia University. Collaborating throughout the expedition, we were able to share, and so considerably reduce, our expenditures, so that my thanks are due to both of these organizations which financed our respective researches. In regard to my field researches, my major thanks are due to Doctor Fortune, for the partnership that made it possible for me to work with people more uncontaminated and inaccessible than I could have reached alone, for cooperation in the field in the collection of ethnological materials upon which parts of this paper draw, for analysis of the phonetically difficult Arapesh language, and for accounts of parts of the men's esoterica and of events and ceremonies which occurred outside the village of Alitoa. Furthermore, Doctor Fortune made two long trips into the interior to obtain the Plains Arapesh and Abelam collections, organized and supervised their packing and transportation, and cooperated in the routine collecting at our field sites. I am also indebted to him for many of the photographs which serve to illustrate the discussion.

For preliminary orientation in the selection of a field, which finally resulted in the choice of the Arapesh region, I am indebted to Doctor Briggs of the University of Sydney who had made a survey trip in this region some years previously. For orientation in the relationship between the cultures I studied and neighboring cultures, I am indebted to Mr. Gregory Bateson and Mr. E. W. P. Chinnery. For administrative endorsement, I have to thank the Department of Home and Territories of the Commonwealth of Australia. For assistance, encouragement,

and hospitality on the part of members of the Government, I am indebted to His Honor, the Acting Administrator, Judge Wanless, to His Honor Judge F. B. Phillips, to Mr. Chinnery, then Government Anthropologist, to Mr. T. E. McAdam, and to the late Mr. Macdonald. I am especially indebted to the late Mr. M. V. Cobb of Karawop, and to Mrs. Cobb, who offered me the most extensive hospitality and permitted me to use Karawop Plantation as a base throughout the Arapesh work.

I have to thank my sister, Elizabeth Mead Steig, for the detailed analysis of the art style of the Abelam and Arapesh collections, Doctor Ruth Benedict for detailed criticism of this manuscript, and Miss Bella Weitzner for her tireless assistance in the complicated task of seeing it through the press during my absence from the country. I have also to thank Miss Marie Eichelberger, Mr. Paul Richard, and Mrs. Violet Whittington for assistance in the preparation of the manuscript and the plates.

MARGARET MEAD

S.S. Tapanoeli, Off Palembang, Sumatra March, 1936

### METHOD OF PRESENTATION

This is the first of a series of papers dealing with the culture of the Mountain Arapesh and its relation to the culture of the surrounding My report on the Arapesh was conceived and written as a unit. But owing to the exigencies of publication, it has been necessary to break the resulting monograph up into a series of papers to be published over a period of several years. Consequently, I have made such alterations and rearrangements of the material as were absolutely necessary for sectional publication, though the general plan still remains implicit in the organization of the sections which has been very slightly altered. Cross references have, of course, had to be made retrospective only and this, in some instances, detracts from the vividness of the material. The present paper consists of the original first and second sections; the only alteration has been to shift the discussion of the place of the Arapesh in the system of diffusion, from a statement introductory to the details of the local material culture, to a position as a brief conclusion of this This will be followed by sections on ritual, religion, social and economic organization and functioning, a diary record of the events of six months in one Mountain village with a systematic analysis of these events as illustrative of the functioning of the culture, the account of one individual's reaction to his own culture. The final paper will be a comparative section on material culture embodying a description of Arapesh imported material culture, with rather full reference to the Tchambuli and Mundugumor collections. This final section bulks large in the general proportions of the projected series, and because of the wealth of comparative material, it was considered too disproportionately large to place in the series. I have, therefore, broken up the description of the material culture into several parts. In this paper I deal with the local or domestic material culture, for which the Mountain Arapesh rely mainly upon their own efforts, and present only a very brief account of those manufactures for which they rely in part or entirely upon import. I have postponed the discussion of the very crude Arapesh forms to the later section, where they can be more profitably compared with the more elaborate imported forms upon which the Arapesh more exclusively depend for their inspiration. Similarly, in the discussion of painting on bark: Arapesh painting is a weak and pallid imitation of the flamboyant façade painting of the inland peoples and can best be understood in relation to it, so the detailed analysis of the work of teacher and assistant on an Arapesh painting has been postponed

to the section on the collection. All consideration of artistic styles is postponed to the final section. Ceremonial paraphernalia have been omitted from this paper.

The arrangement of any monograph is in itself a statement of method, but may be influenced by a large number of conditions extraneous to the author's methodological convictions. It therefore seems desirable to designate these extraneous elements at the outset, and to state explicitly the extent to which the sequence of papers, and the internal organization of the material, are significant.

The first limiting condition is that this is part of the report on a joint I did not study the whole culture; therefore, I could not, if I would, include all the aspects of the culture within this series. tor Fortune specialized in the language and in such parts of the culture as had a high linguistic relevance or which demanded a linguistic ear more sensitive than mine. He also witnessed or collected accounts of the men's rituals which were automatically forbidden to a woman and recorded events which took place beyond the borders of the village of Alitoa to which I was myself confined by a condition of my ankle and the roughness of the roads. It is immediately obvious that a division of labor, based partly upon a special aptitude, partly on sex, and partly on a differential ability to traverse native paths and to camp under exceedingly difficult conditions, does not lay a foundation for the division of material in any systematic way. Owing to the exigencies of publication, Doctor Fortune's material has been further subdivided so that the language might appear in a linguistic series, 1 causing a further extraneous breaking up of the material.

The second limiting condition is the previous publication of my Sex and Temperament, in three Primitive Societies,<sup>2</sup> with some one hundred and thirty pages devoted to the Arapesh culture. Here the emphasis is upon the ethos of the culture and the educational methods by which this ethos is imbued in the personalities of successive generations of Arapesh children. Thus one dimension of the culture has been separately treated, in order that I might make cross comparisons between Arapesh culture and those of Mundugumor and Tchambuli. Except for the inclusion of more general descriptive detail in the actual presentation of the educational system than would have occurred had it formed one section of this series of papers, the chapters of Sex and Temperament devoted to the Arapesh, may be regarded as springing from a system-

<sup>&</sup>lt;sup>1</sup> In press, in Publications of the American Ethnological Society, vol. 19. <sup>2</sup> New York, 1935; London, 1935.

atic approach, perfectly congruent with the approach of these papers. As their publication preceded this, I shall presume upon that fact and assume that the student will read them first, if he wishes to approach the culture in the way which is most consistent with the particular field methods I use, that is, by way of the developmental picture. If, on the other hand, the treatment, more usually called the "stages in the life of the individual," seems to the reader to come more aptly after a preliminary consideration of the culture from other points of view, these chapters can be interpolated at some other stage.<sup>1</sup>

My subsequent field-work in two other cultures of the same area introduced a third condition which shaped my treatment to a great degree. Furthermore, a little modern material is available on still other cultures of this area.<sup>2</sup> Also, the Museum collection contains specimens not only from the Mountain Arapesh, but from the Beach and Plains, the Abelam, and the Mundugumor and Tchambuli and their neighbors. Consequently, there are two circumstances of overweighting. First, the intra-area comparisons are drawn, not from those cultures where they would be most illuminating, but from those for which some details are at present available. This is a very important distinction in all comparative work, often ignored by the advocates of the historical method. Second, because comparisons for the material culture are drawn from a wider area than the details of non-material culture, the area of comparison contracts and expands in the different sections, without any theoretical justification.

This disharmony has been increased by the fact that the Arapesh is the most significant of the three major collections which I brought back. I have the largest amount of data about it and it happens to illustrate, more completely than any previous collection, the conditions under which the material culture system of an importing New Guinea culture is built up. At the same time, the Tchambuli and Mundugumor collections are unique at present, as far as I know. As each of these cultures has a highly consistent and characteristic decorative style, it is desirable that at least a few key examples of these styles should be published as soon as possible. In order to publish these key examples, I have frequently overstepped the strict methodological requirements of the historical method.

In the first section of this paper, I have attempted to place the Ara-

The reader most interested in a sociological approach will find a short discussion of the Arapesh from this point of view in Competition and Cooperation in Selected Primitive Societies (New York, 1936).
 For details, see p. 155 and Fig. 1 on which map the location of field-work is shown.

pesh culture in its setting and to describe, as well as possible from our present very inadequate sampling of the material, the culture area within Here I have relied almost equally upon the methods which have been developed by the Americanists during the last thirty years in such classical studies as those on The Sun Dance of the Plains Indians, 1 The Concept of the Guardian Spirit in North America, and upon Professor Radcliffe-Brown's work on Australian kinship, demonstrating the way in which the same principles produce similar forms in different kinship systems in various parts of Australia. The extraordinary diversity of the cultures of New Guinea and Melanesia has led to a serious neglect among their students of all the problems of relationship between localized forms and the forms prone to develop in the area, and occurring among neighboring tribes.

In the second section (p. 202) I have introduced a form of presentation designed to facilitate the use of the material by students. divided it into two parts: first, a general treatment; and second, I have presented the detailed material upon which the general statements in the first part of the section were based. As the mass of ethnographic literature increases, it becomes, I believe, increasingly unjustifiable to present the material in systematic reports in such a way that selective reading for the total cultural emphasis becomes impossible. past, when the use of monographs for isolated comparative treatments of infanticide, head hunting, cradleboards, age societies, test themes, snowglasses, or outriggers was the only type of contingency for which the individual author had to arrange his material, it was perfectly justifiable merely to classify as many details as were possible formally, under any customary heading. But with the present recognition that cultures must be treated, not as chance arrays of essentially unrelated traits, but as highly integrated systems, the student must learn to think comparatively in terms of systems, not in terms of isolated traits. The only way in which material can be so presented that a student can acquire a real comparative knowledge, is to use the methods which have already been well established in the experimental sciences, in which it is possible to read an account of an experiment without ploughing through every de-Yet, the detail is always there, ready for the student to turn to at Most of us fail to realize that in ten years our work will be read almost exclusively by students who have a far greater mass of material to cover than had we. Therefore, in dividing a section into

Spier, Leslie, This series, vol. 16, part 7.
 Benedict, Ruth Fulton, Memoirs, American Anthropological Association, no. 29, 1923.

two parts, a general statement followed by a mass of supporting material, I have endeavored to meet the needs of those students who will want to grasp the main outlines of the culture and who also may need to check any general statement against the particular details upon which it was This method of presentation is, I think, more valid than the one that I used in Social Organization of Manua, in which the material was divided into three parts: one for the reader who wanted the outlines of the social organization; a second, for the reader who wanted the details of general theoretical significance; and a third, for the student of the specific concrete details of Polynesian ethnology. The second part was separated too drastically from the first so that the student cannot turn to the particular series of details upon which any given generalization was based. Furthermore, the relationship between any generalization and the order of detail from which it is drawn is of great theoretical significance, and this relationship should be given some sort of spatial reality.

This paper may be regarded as an introductory statement of the position of the Arapesh in this culture area as well as an introduction to a detailed consideration of the culture of the Mountain Arapesh as seen from the village of Alitoa. In cultures in which there is some correspondence between political and cultural boundaries and a degree of interchange within the area, permitting some degree of standardization. it is possible to write about their characteristics as if the observer stood outside and looked down upon a well-defined social system. Among the Arapesh, as among so many New Guinea peoples, this condition does The individual Arapesh does not see his culture as a whole. not obtain. nor does he distinguish the customs of his linguistic unit from those of the adjacent language group, if he indeed even clearly notes his linguistic boundaries. Each local community, sometimes only a hamlet, sometimes several hamlets, occasionally three or four villages, presents an aggregation of widely diffused traits peculiar to it. From this narrow vantage ground each individual sees the behavior of the members of neighboring communities as becoming steadily more diversified from his own as the distance increases between the communities involved. Each community is a center of many lines of diffusion, which cross and re-cross in arbitrary ways, variously determined by the topography of the country, the natural resources, the immediate state of feuds and alliances, all only partially interdependent factors. The ethnographer or the museum collector who gathers every object found in an area and records the series of non-material traits observed among a people who 152

speak the same language, and publishes these results as the "culture" of the people who speak such and such a language, is doing great violence to the actual conditions. In attempting to see the Mountain Arapesh system from one point of observation, Alitoa, and recording those things that were made there and those that were imported, those that were old and those that were newly copied or bought from the Coast or the Plains, I am, I think, remaining as true to the actual conditions as possible. The alternative, a detailed survey of conditions from village to village, would demonstrate the extraordinary diversity of both material and non-material culture traits. It would also illustrate lines of diffusion as well as stages in the diffusion of any one trait, but would fail to indicate how these widely diffused traits are integrated differently within each small community, to produce the great variety of highly contrasting cultural emphases which are so characteristic of New Guinea.

Before presenting the minutiae of one such integration, that of the Mountain Arapesh as seen from Alitoa, it is necessary to sketch in the background, the characteristics of the area upon which this tiny community draws, with differential preferences and extraordinary ethnological certainty.

### DESCRIPTION OF THE AREA

#### GENERAL CHARACTERISTICS

The northeast coast of New Guinea is the territory called Kaiser Wilhelm Land by the Germans during their colonial period, and is now part of the Mandated Territory of New Guinea (Fig. 1). This study was made from Alitoa, a mountain village, a scant two days' inland from the coast and directly south of Dakuar on the beach, among a people who had no name for the entire linguistic group, no political unity, and no accurate knowledge of the geographical limits of their distinct culture and language. It is not possible to speak of them as a tribe, or even to speak of their culture as if it were a unit, but because the habits of English thought require that a people be named, we have called them the Arapesh.<sup>1</sup>

The area occupied by the people who speak this language is indicated on the map (Fig. 2), on which the hamlet names selected as definitive by the government census takers are also shown. Although in some instances their selection has been arbitrary and unjustified by earlier usage, the name of an unimportant hamlet being taken as the name of a whole locality, the natives have so readily made the necessary adjustment, that it seems more convenient to use them, as no violence is done to the actual locality divisions by the substitution of one hamlet name for another.

It will be seen that this area includes a coastal strip stretching from Dakuar to Sawom, a mountain section extending over the Prince Alexander Ridge, and a small section abutting upon the Sepik Plain. The three sections fill a wedge-shaped territory of approximately three hundred square miles. Because of their lack of political unity or tribal

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<sup>&</sup>lt;sup>1</sup> A simplified spelling of the word for human beings. I make no attempt in this paper to do more than approximate the spelling of native words.

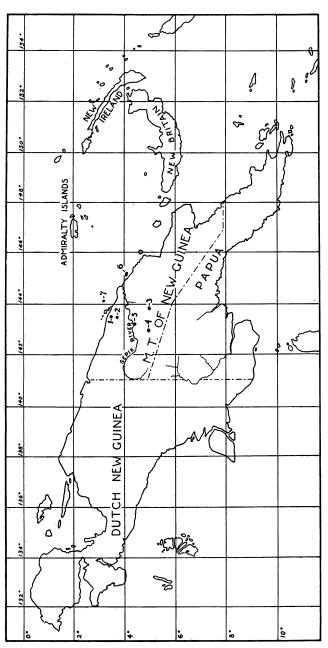


Fig. 1. Map of New Guinea showing Location of Field-Work (especially drawn upon in this paper). 1, Arapesh (But the Sepik; also called Dörfer, or Villages River); 4, Tchambuli, on Aibom Lake, south of the Middle Sepik area; 5, Iatmil, Spräche); 2, Abelam (called Tshwosh by the Iatmül); 3, Mundugumor (on the Yuat River, a tributary, on the south side of Middle Sepik tribes; 6, Manam Island; 7, Wogeo Island.

consciousness, it is particularly necessary to consider these people first in their wider relationships. 1

This wedge of Arapesh country lies between two main lines of travel and diffusion:-

### A line skirting the Pacific Coast from Aitape on the northeast to

<sup>1</sup> The discussion of this area of northeast New Guinea is based upon the following sources of information:

Field-work by Doctor Fortune and myself in 1931-1933, among the Mountain Arapesh, the Mundugumor, and the Tchambuli.

Field-work by Doctor Fortune among the Plains Arapesh, the Beach Arapesh, and among the

Abelam.

Information upon the distribution of linguistic groups and some salient features of the social organization collected by Mr. E. W. P. Chinnery in the Wewak District in 1931.
Unpublished material on the Iatmül tribe furnished us in comparative discussions by Mr.

Gregory Bateson.

Information upon the distribution of linguistic groups and some salient features of the social organization of the peoples in the northeast section of the Aitape District, collected by Mr. K. Thomas, at one time a patrol officer stationed at Aitape.

Thomas, at one time a patrol omicer stationed at Atape.

Information upon the Abelam culture obtained by myself through an Arapesh interpreter, from a group of Abelam men passing through Alitoa.

Information upon the natives of Suwein, Abelesihim, and Urat, obtained by myself, and upon the natives of Wanimo, Nugum, and Warimo, by Doctor Fortune and myself. For all of these peoples we had to rely upon one pidgin English speaking informant from each tribe.

Information upon the natives of Murik and of Maramba (Lower Sepik culture) and of Kairru,

Information upon the natives of Murik and of Maramba (Lower Sepik culture) and of Kairiru, obtained from one party each of pidgin English speaking natives, by Doctor Fortune and myself. Information obtained during a one-day stay in Yambon (Upper Sepik culture) and a three-day stay in Washkuk, working through pidgin English, by Doctor Fortune and myself. Observations without any work with informants made by Doctor Fortune and myself while traveling through the Abelesihim villages of Banak and Kofi on the northeast coast, and the Lower Sepik villages of Andoar and Yuarimo.

It should further be held in mind, that the information on Arapesh trade and on the importations said to come from Murik and from the nearby islands, is based upon the testimony of Arapesh natives; that information about the relationships between the Mundugumor and their neighbors of the upper Yuat and the Yuat hinterlands, is based upon the testimony of Mundugumor natives, and that information about the natives of the Tchambuli hinterlands, is based upon the testimony of Tchambuli natives. of Tchambuli natives

In citing material obtained from one native people about another, or from individual and isolated informants from tribes which were not otherwise studied, I have tried to confine myself to matters about which the informants supplied spontaneous and convincing detail which did not conflict with the other available evidence. In spite of such precautions, however, the material on tribes not specifically studied cannot be regarded as having a very high reliability. I present it here to suggest problems and stimulate further investigations.

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pp. 245-291, 401-451, 1932).

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Hogbin, H. Ian, Native Culture of Wogeo. Report of Field Work in New Guinea (Oceania, vol. 5, pp. 38-337, 1935).

Hogbin, H. Ian, Sorcery and Administration (Oceania vol. 6, pp. 1-32, 1935).

Fortune, R. F., Arapesh Texts (Publications, American Ethnological Society, vol. 19, in press). Collections:

Collections:

Collections:—
Extensive collections were made by Doctor Fortune and myself among the Arapesh, the Tchambuli, and the Mundugumor peoples. These collections included a considerable number of extra-tribal objects, the origins of which were known either to the vendors themselves or to other members of the tribe. Doctor Fortune further made extensive collections among the Abelam and the Plains Arapesh. These collections were available as material upon which to base conclusions concerning diffusion.

This is a field-worker's report, not an elaborate comparative work. I have made very slender use of old publications on the material culture of the region, as I believe that the mere record that an article was found in a locality is relatively valueless, without supporting information about its origin, route of importation, etc. I have used contemporary sources on the non-material culture of related regions because this work was all done sufficiently from one point of view to make comparisons profitable. For example, several of the field-workers quoted have investigated the form of sorcery known as vada, see below p. 174, with reference to the previous work done by Doctor Seligman and Doctor Fortune on this difficult subject.

the islands off the mouth of the Sepik on the southwest. Along this line there is contact between peoples and exchanges of goods and customs on land and by canoe.

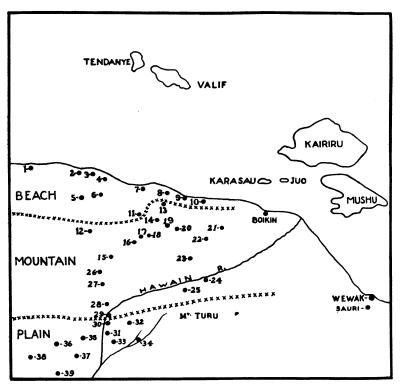


Fig. 2. Map of the Arapesh Country. Beach Villages: 1, Sawom, 2, Kauk, 3, Balam, 4, But, 5, Loanum, 6, Kuminum, 7, Simain, 8, Dakuar, 9, Banak, 10, Kofi, 11, Sublamon. Mountain Villages: 12, Albast, 13, Maguer, 14, Waginara, 15, Liwo, 16, Bugabihiem, 17, Kobelen, 18, Umanep, 19, Kotai, 20, Aotogi, 21, Mowia, 22, Yiminip, 23, Hamisuk, 24, Suapali, 25, Numidipiheim, 26, Alitoa, 27, Numonihi (Numinahi), 28, Wihun, 29, Boinam. Plains Villages: 30, Boinip, 31, Bonaheitum, 32, Tapeno, 33, Biligil, 34, Kairiru, 35, Kaboibis, 36, Ilapweim, 37, Ybonimu; Border Villages between Plains Arapesh and Abelam: 38, Ulup, 39, Gualip.

2. A line along the edge of the Sepik basin on the north side of the mountains where all traveling is necessarily on foot and contacts are much more restricted. It will further be seen, by reference to the map (Fig. 1), that the Sepik River turns so as to form two sides of a quadrilateral of which the Pacific Coast forms a third side, so that the Arapesh-

speaking people live in a region bounded by waterways on three sides, making contact and diffusion easy. The fourth side of this territory is cut by the Torricelli Mountain Range which divides the country northeast of the Arapesh into two inhabited areas, a narrow coastal section and the hinterland lying between the Torricelli Range and the Upper Sepik.

In any discussion of distribution of peoples and cultures of this region, it is necessary to include the peoples on the south bank of the Sepik River, who are distributed along the Yuat, Keram, and the Southeast and Southwest rivers, and thus provide channels through which material and ceremonial culture reach the Sepik from the southern mountain ranges. An increasingly frequent contact exists between the inhabitants of the Aitape-Sepik District and the Madang District, mainly due to the intermediary canoe peoples of the Schouten Islands. The Schouten Islanders were, in turn, in ancient communication with the Admiralty Islanders—who once made trading voyages there and the Madang coast was also open to canoe-brought influences from southern New Britain, so that this part of the New Guinea mainland was in touch with the Bismarck Archipelago at two points.

I propose to discuss this region as a culture area, without confining myself to a too narrow or systematic use of the term. It is an area within which the same basic ideas recur repeatedly and throughout which traffic in material and non-material items of culture is common. most general terms, the area may be said to be characterized by: 1, instability of habitat, with abundant evidence that peoples possessing a culture adapted to one environment have removed to another; 2, great linguistic diversity, accompanied by wavering linguistic allegiance on the part of families in border villages, and even larger units; 3, lack of political unity beyond the borders of a small village cluster; 4, localization of industry, trade as a definite institution, and the absence of any completely self-sufficient social units; 5, a self-conscious diffusion of non-material traits, coupled with a premium upon new importations, resulting in continual loss and reimportation of similar traits; and 6, extremely divergent ethological emphases in the local interpretation of very widespread social forms, such as the dual organization, the initiatory system, or the practice of sorcery. We may now consider these general characteristics in somewhat more detail.

There is no clear-cut distinction in the Sepik District between coastal

<sup>&</sup>lt;sup>1</sup> Parkinson, R., Dreissig Jahre in der Sudsee (Stuttgart, 1907), 351.

seagoing people and inland peoples unfamiliar with the sea. All along the northeast coast are areas inhabited by inland peoples who have extended their territory to the sea, but who have adopted very little seagoing practice. The Arapesh are one such people. They have villages on the seashore, and a few canoes, borrowed from the Island people, without alteration or even the invention of a special vocabulary. They use these canoes, which are ocean-going in original design, almost exclusively for fishing in the salt marshes, and remain a land-bound people. but receptive to influences brought to them by sea. Similarly among people speaking languages said to be related to that spoken by the Iatmül peoples of the Middle Sepik, some tribes are seagoing, as are the Wallis Islanders, some completely land-bound, as are the Nugum, a Plains people to the southwest of the Arapesh, and some, like the Iatmül people of the Sepik River, are expert river-canoe men using canoes without outriggers. Other peoples, like the Mundugumor now living on the Yuat River, a portion of whom have only recently taken to canoes. have not yet made any efficient adjustment to life on the edge of a river. This distribution is typical of the whole area, which exhibits every evidence of centuries of cross-currents of contact and shifts in material culture and social custom. Consequently, each linguistic group has become, in some measure, representative of the more general cultures of the region and gives very little evidence of its original cultural affiliations or type of habitat. In the linguistic field, the position is just as shifting.

If it were possible to assume that the various linguistic groups remained relatively stable, only increasing or decreasing in numbers from generation to generation, the linguistic affiliations would provide some sort of stable vantage point from which to consider the distribution of material and non-material culture traits.2 It might also be possible to view the culture traits shared by an entire linguistic group as to a certain extent the original elements of its historical culture. It seems to be characteristic of this area that language stability is relatively low and the boundaries between linguistic areas are continually shifting.

<sup>1</sup> The Arapesh refer indiscriminately to Valif and Tendanye islands as "Wallis" and do not distinguish accurately between them. Therefore, when I make an Arapesh attribution to "Wallis," I also am not able to distinguish between them.

2 In this section, in which I am primarily concerned with the discussion of diffusion, it seems relevant to continue to use the term trait, even though its usefulness in functional analyses of culture has been seriously challenged. It will be used in this paper for identifiable units of cultural behavior in any department of culture, whether it be a method of making taro croquettes rolled in grated coconut, a method of divining with the bones of the dead, or the custom of exchanging sisters in marriage. To fail to recognize that culture items of this sort may be diffused from tribe to tribe, during which process they may be, what the analytic diffusionist describes as, isolated traits not yet integrated in the new cultural setting, is as confusing as to deal with parts of culture in a functional analysis as if they were discrete items.

of Melanesian culture are familiar with the condition in a mixed linguistic area, in which natives habitually understand, although they may not speak, one or more languages besides their own. Consequently, the area in which trading goes on, ideas are exchanged and intermarriage is possible, is wider than the single linguistic group. Nevertheless, in most regions which have been reported, there has been at least an apparent stability in the allegiance of any given local group to its language, while similarities in syntax and vocabulary bore witness both to common origin and to contemporary linguistic interchange. Doctor Fortune reports this situation for the D'Entrecasteaux Islands and this appears also to be true in the Admiralty Islands, where the languages we were able to sample, although mutually unintelligible, exhibited strong indications of both genetic relationship and of contemporary borrowing of vocabulary.

But in this preponderantly non-Melanesian region of New Guinea, the situation is even more confused. Villages on the border between two mutually unintelligible, and sometimes most remotely related linguistic groups, will display a mixed allegiance: some families and some individuals are bi-lingual while some speak only one of the two lan-During such periods of instability, both groups, the people speaking the language which is being partially abandoned and those speaking the one in process of adoption, are uncertain as to how to classify the linguistic allegiances of the village in question. Custom also becomes more unstable. Some families retain the former culture while embracing the new language, others adopt changed customs with the change in language. Such a village was Ulup on the border between the most southern Arapesh and the most northern Abelam-speaking villages. Neither Arapesh, nor Abelam, nor the inhabitants of Ulup itself, were certain of their linguistic and cultural affiliations, when Doctor Fortune investigated them. Similarly one section of the Mundugumor-speaking people had gone to live permanently closer to another more western language group and were losing their ability to speak Mundugumor.

These linguistic shifts may have happened many times in the course of centuries, so that certain border villages or even clusters of many villages repeatedly changed their allegiances, each time with important cultural repercussions. An example of such a condition is to be found in the Tchambuli tribe who live in one big settlement on Aibom Lake, southwest of the Sepik River. The Tchambuli speak a multiple gender Papuan language which is considered very difficult by the culturally

related peoples, the Aibom and the Iatmül. These neighboring people do not speak Tchambuli, but instead rely upon a simplified Iatmül which is used as a trade jargon throughout this part of the Sepik Valley. The five hundred Tchambuli, as far as is known, share their language with no other people, although it shows a morphological relationship to Arapesh, and the language of the inhabitants of Washkuk Mountain (above Ambunti). Some twelve years ago the Tchambuli were finally routed by continual head-hunting raids of the Palimbei Kankanamun division of the Iatmül peoples, the settlement was split up, and the inhabitants of the three hamlets fled in as many directions, taking refuge with three different linguistic groups. Under the Pax Britannica they have returned to their old village site, retaining their Tchambuli speech, but with a far more intimate knowledge of the language of their hosts and with incipient dialectical differences between the speech of the three hamlets, which presumably either directly or indirectly reflect this last and probably also earlier contacts with these different linguistic groups.

So, while it is possible to make a map which will be definite for all hamlets centrally situated in a linguistic area and only indeterminate for border villages in regions without a trade jargon, such a map would be accurate only for a given generation, and would give no real picture of what the conditions had been over a long period of time. The present distribution of languages, imperfectly known as it is, shows patches of related languages at great distances from each other, e.g., Arapesh, Tchambuli, Washkuk, and another multiple-gender language reported near the post of Marienberg. If it were possible to demonstrate that the peoples who speak these related languages also have related cultures, the proof would not be decisive that the present culture was, in any sense, anciently connected with these languages, and had been retained by the peoples who retained that speech.

The lack of any form of political organization capable of integrating more than a few hundred peoples is equally conspicuous for this area. The typical picture is a cluster of hamlets, bound together by ties of intermarriage, ceremonial coöperation and perhaps coöperation in head-hunting raids, but within which there is little genuine integration, no centralized system for punishing offenders, no institutionalized leadership, and no mechanism for preventing any one of the associated hamlets from forming stronger ties with hamlets outside the temporary aggregation. The entire region depends upon kinship ties as the major social mechanism and the tendency, so conspicuous in Central Poly-

nesia and in Africa, of elaborating kinship ties into effective political superstructures is lacking.

The Sepik villages containing from two hundred to a thousand people and, lightly federated into war-making groups of some three to four villages, are the largest population integration for the area. villages are excessively democratic, with no political head, and are held together by a most unstable form of conflicting dual organization. Furthermore, head hunting occurs even within an Iatmül village itself, and head-hunting decorations can be worn for the death of a fellow The most extensive political organization yet reported for the region occurs at Manam, where there is hereditary chieftainship of each of the thirteen villages; in Wogeo, the position of the kwolkwol, or village headman, while similar, seems to have carried less definite powers than did the Manam office. With these outstanding exceptions, the region is prevailingly democratic. The autonomous group is in most cases the localized gens. Several such groups may cooperate irregularly and intermittently in the performance of large ceremonies or in head Even among the Iatmül the gens is still the autonomous unit though there the gentes are less sharply localized.

Warfare varied throughout the region, from an elaborate headhunting system which validates all male activities and ceremonials among the Iatmül, to a virtual absence of any war pattern and a complete absence of head hunting or any form of war honors among the mountain-dwelling Arapesh. Cannibalism is reported for only a few scattered regions, in Suwein, Matapau (?), Mundugumor, ceremonially among the people of the Lower Keram, and for peoples located in the interior between Marienberg and Wewak. But even in the areas lacking head hunting, such as Arapesh and Nugum, the familiar pattern of trading for material and non-material culture with a people who are regarded as enemies, occurred. And throughout the Sepik region, the trading party lured into the village, only to have their heads taken, is common enough. It is reasonable to suggest that these customs of close and almost daily relationship between small groups which are, however, on basically hostile terms, is perhaps as important a deterrent to the formation of larger political units, as is the lack of positive political forms.

In localization of industries, this part of New Guinea closely resembles the even more widespread Melanesian pattern. Communities of the Polynesian type in which small groups, or even households, were practically self-supporting, do not exist. A great many of the com-

munities are only partially self-supporting in the matter of food, depending upon frequent and fixed markets to provide them with fish in exchange for carbohydrates, or sago for fish. Even where communities are self-supporting in foods, other forms of dependence occur, for weapons, tools, tobacco, lime, currency, valuables, etc. Associated with the localization of industries is a regular institutionalization of trade, the institution of the trade friend, definite trade routes, paired trading relationships between adjacent communities, and the regular market in which one kind of food is exchanged for another. This trade crosses every type of boundary, linguistic, social, and geographical, and forms the basis for the purposive diffusion, sale, and exchange of ceremonial paraphernalia, magical charms, methods of divining, new forms of social organization, etc. This mutual interdependence takes a great variety of forms. The Arapesh are self-supporting as far as food goes, but depend upon lines of hereditary trade friends for their supply of The Mundugumor have rich and fertile lands and weapons and tools. export tobacco, coconuts, and areca nuts to their more poorly situated inland neighbors who are the craftsmen, makers of pots, sleeping bags, The Tchambuli are only partially self-supporting for They exchange fish for land products and also manufacture sleeping bags and do wood carving for export; in return for these they received shell valuables with which they purchased carbohydrate foods Practically every possible combination and balance beand tobacco. tween local natural resource and the export of raw materials or of manufactured objects occurs. Very often more complicated conditions occur, as in the methods by which decorated turbo shells reach the Middle Sepik region.

The turbo¹ shell is collected and exported by "Wallis Island" fisher folk, but it is ground and ornamented with coiled basket work among the interior Nugum people, and then passed on to the Iatmül, Aibom, and Tchambuli peoples of the Middle Sepik region, where it is used as currency. The position of the Nugum as finishers and ornamenters of the shell is quite arbitrary, nor is there any way of judging how long they have occupied this position. Similarly, tridacna shells, from which are made the large rings used by the Arapesh as currency, are gathered on the seacoast and on "Wallis," but are finished not only on "Wallis" but by the farthest inland Arapesh group, on the edge of the Sepik Basin, and by the inland Nugum people.

In all studies of the mechanisms of diffusion, I believe more explicit

<sup>&</sup>lt;sup>1</sup> Pidgin English (henceforth abbreviated P. E.) Talibun.

recognition should be given to the differences between diffusion of elements which are merely new versions of the cultural stock-in-trade of an area, e.g., the Sun Dance, and the diffusion of elements which are intrusive and alien to the fundamental usages of an area, e.g., herding in North America, or the idea of original sin in Polynesia. Within each type of diffusion, it is further possible to distinguish different orders of compatibility and incompatibility between the diffused trait and the receiving culture. Its reception or rejection may depend upon structural, functional, ethological or ideological similarity or non-similarity. Where, however, the diffusion is of the first type, the type with which I am concerned in this study of New Guinea, there is a high probability of the acceptance of a trait with one type of fundamental dissimilarity, because of the weighting given by other types of similarity. an acceptance of a trait which is, for example, ethologically incompatible, but structurally compatible with the local culture, it is possible more readily to isolate the specific ethological modifications which the receiving culture makes in the course of integrating the trait.

Although every New Guinea people takes some part in this continuous interchange, there are many different types of interdependence. On the material culture side, are peoples like the Mundugumor, who export food for manufactured objects; or like the Mountain Arapesh, who are self-supporting in regard to food, but import their most important tools and weapons; or like the Tchambuli or the Iatmül, who rely on the almost daily exchange of one kind of food for another. In the domain of non-material culture we may distinguish the peoples who frankly buy and sell ceremonial elements as articles of trade, like the whole dance complex trading area of the Wewak coast and adjacent islands; people like the Iatmül, who absorb the culture of their neighbors, without specifically trafficking in it; people like the Mundugumor, who are merely self-contained, in the possession of a highly integrated artistic style; or people like the Abelam and the Tchambuli, whose artistic style has widespread repercussions and who manufacture decorated obiects for export. We find cultures which lack a fixed artistic or ceremonial style, for contrasting reasons: the Mountain Arapesh, because of their inability to retain successive importations; the Iatmül, because of an absorptive and retentive ability in excess of their powers of integration.

Yet in most parts of this area trade does not have the same significance as, for instance, in the Admiralties, where people live by trade, or among the Massim, where it is linked with the great ceremonial

superstructure of the Kula. Although isolated individuals may live by trade, it is not trade that is emphasized, but mutual interdependence. Each community is poor in many things and must look outside its borders for them. The members of each community are accustomed to use materials or artifacts which they can only obtain through some form of exchange. So exchange becomes, not as among the Admiralty Island people, the object of life, but the basis of life. The simplest peoples think in terms of the constant interchange, not only of material things, but also of techniques and non-material traits.

We find this willingness to exchange built up into self-conscious patterns of diffusion of dance complex, religious rites, forms of initiation, sacred musical instruments, etc., and supporting many of these is the sanction of fashion. It is the new dance,—not the newly invented but the newly imported dance,—which has the most prestige and the older dances are lost in the enthusiasm over the new. (The most conspicuous exception to this attitude are the Iatmül who regard themselves,—and with considerable right, to do so,—as already possessing every desirable cultural form in the area.) The slower and more inexplicit forms of diffusion also occur, these result from contacts of travelers, intermarriages, etc., but the significant point is that social forms of a type which in other areas appear to be so firmly inter-knit with the local social organization as to be inconceivable as borrowed traits, such as moiety divisions, or forms of marriage, in New Guinea are explicitly trafficked It is, of course, probable that all the forms so lightly handed from tribe to tribe have a genuine congruence with the underlying emphases of the area, and it is even likely that the tribe which now imports them may have relinquished these particular forms some hundreds of years ago.

The contrasts in ethology are another striking general characteristic of this area. Communities which have very similar food habits and which draw upon the common culture of the area, will be found to differ enormously in the affective values upon which they place a premium. In no known part of the world, other than New Guinea and its surrounding islands, are such extraordinary contrasts found within such narrow distances. A violent culture, like the Mundugumor, draws on the same general forms as do the artistic Tchambuli, or the mild, peaceful Arapesh. Individuals reared in these different, highly localized cultural systems, understand each other's techniques, eat each other's food, and, very often, sing each other's songs, and dance each other's dances. They will often be able to understand, if not to speak each other's languages. But on any matter relating to emotional values, to attitudes

towards sex or children, towards pride, or fear, or shame, there is an unbridgable chasm between them.

This whole area of New Guinea therefore presents a curiously blurred picture in which there are no self-supporting cultures completely cut off from their neighbors and in which the limit of homogeneous culture seldom goes beyond a thousand people, and sometimes cannot be said even to include all of the people resident in one small village of two or three hundred people. Among the simpler peoples, such as the Arapesh. the Nugum, and the Abelesihim, there is no differentiated social structure for preserving records of the diversity of language, custom, and material culture to which that group has been exposed in the course of centuries. Among these people, therefore, the hamlet or the locality tends to present a relatively homogeneous picture of a given time; for example, in Alitoa it is possible to record five methods of divining, but only one, the most recently imported method, is in use at the present time. If abandoned custom leaves any permanent trace, it is in the effect it has had upon the culture of the people as a whole, or upon the direction or emphasis of some aspect of it. But these effects are so assimilated that the culture presents a comparatively homogeneous picture.

The preliminary reports of Wogeo and Manam suggest a similar leveling of divergent cultural influences. It is different, however, with the elaborate cultures of the Sepik River, especially the Iatmül, who represent the most complex culture, shared by the largest number of people, in this part of New Guinea. While it is impossible to prove, it seems a reasonable assumption that Iatmül culture owes most of its complexity to its organized ability to absorb and retain diverse cultural elements received over time from the surrounding peoples. This is made possible by diversification of social structure, so that gens, moieties, and age grades each play a part in the preservation of separate usages and ceremonies.

This is, then, an area unevenly populated with peoples speaking a series of mutually unintelligible languages and yet bound together by close ties of trading dependence for the necessities of life. This description applies equally to the Melanesian-speaking peoples of the coastal islands, to the people of very simple, uncomplex culture like the Arapesh, and to the highly organized Sepik River peoples. If this picture be held firmly in mind, it will now be possible to form an idea of the general culture of this area, upon which each people, at some periods more actively than at others, has drawn.

<sup>&</sup>lt;sup>1</sup> The present tense may be taken to apply to the period 1931-1933.

### SPECIFIC CHARACTERISTICS

It is a region very imperfectly known as yet and any generalizations made about it must be accepted with the greatest caution. There are many complete gaps in our knowledge and others where the only source of information is a hurried vocabulary and a few items picked up by a busy patrol officer. Undoubtedly there are small groups, and possibly large ones, who offer exceptions to every statement which can be made at present. Nevertheless, it seems worth while, on the basis of such information as exists, to try to give a brief statement of the most salient characteristics of the area, principally because the Arapesh-speaking people can only be understood in terms of the widespread pattern, the main items of which they share with people in many distant groups.

In the field of material culture, it is necessary to make a distinction between techniques which a given people employ themselves at the present day, techniques which they encounter in the form of finished work of the details of which they are ignorant, and techniques which they see practised, but never practise themselves. For example, some Arapesh hamlets at present practise the art of carving wooden bowls; the members of other hamlets have seen the carving in process, but have never attempted it, while people of neighboring linguistic groups purchase the bowls without ever having seen a bowl actually made. Any given hamlet may change from one position to another within a period of twenty years; the carving of bowls may be abandoned, the adjacent hamlet which had never made bowls, may begin to do so; the distant hamlet may take its cues from the presence of the bowl and some general knowledge of the technique of wood carving and attempt to copy one. Tradition as to how long an art or craft has been pursued in any one place may sometimes cover a slightly longer period. It may be possible to judge at least the relative age of a craft by the degree of dependence which neighboring peoples place upon the manufacture of a given group, but even this is deceptive. For example, after the introduction of iron tools among the Iatmül, the Tchambuli people, although preëminent in canoe craftsmanship, began to buy their canoes from the Iatmül; but, subsequently, when they obtained iron, a half generation later, they resumed their manufacture.

Just as the manufactured product travels, providing a continual stimulus to the technician at a distance, so in agriculture the seed and cuttings travel. There is a continuous process of borrowing seeds, sometimes accompanied with special magic, sometimes not. Therefore, to find a people at present dependent upon one variety of taro, is no

guarantee that this special variety was eaten by their grandparents; it may even have been eaten by their great-grandparents, abandoned by their grandparents, and reintroduced by their parents. amination of the complex of social ceremonial surrounding a particular food or industrial process may, but does not necessarily, give some clue to the length of time that it has been used in that particular group. The Mundugumor were in the habit of reimporting their vam magic from adjacent peoples and importing it in dissociation from any species The Mountain Arapesh observed the same taboos in respect to the short, hairy yam which the Plains Arapesh observed towards the long yam. The Plains Arapesh, however, completely disregarded any taboos about the short yam. This may mean that the Plains Arapesh had imported the short yam, without taboos, and that subsequently they imported the long yam with taboos. Or it may mean that originally they had the same taboos connected with the short yam as the Mountain Arapesh, but, after importing the long yam, with or without the same taboos, they shifted the emphasis, or that they had the long yam first and later imported the short yam without giving it any importance. In the same way sago is imported and planted, or sago lands are captured from neighboring peoples. Among the peoples at present primarily dependent upon worked sago, as are the Mundugumor, upon imported sago, as are the Tchambuli, or upon exporting sago, as are the Washkuks, there are undoubtedly peoples who in the past were more dependent upon taro and yams.

If, therefore, a piece of technology, a form of social organization, a myth, or a religious belief, a dance step, or an ornament is now found in several parts of this area of some 312,000 square miles, it seems a safe assumption to list that trait as having been available to most of the linguistically diverse peoples of the area at some time in history. The only exceptions to this generalization would be those traits known to have been introduced under the influence of white contact from regions not believed to have had any relationship formerly to the Sepik District. Without including every detail in the list, we can proceed to a general statement about the whole region.

In kinship structure, the dominant pattern seems to be one of localized patrilineal clans, with a strong compensatory emphasis upon the matrilineal lines. This emphasis upon the mother's line varies from a matrilineal moiety system in Wogeo, to a strong ceremonial stress upon matrilineal relationships among the Iatmül, to a slighter, less-defined but warm relationship to the maternal kindred among the Ara-

pesh. The kinship terminologies show many indications of cross-cousin marriage, which actually obtains among the Tchambuli. The Arapesh share, with some of their Melanesian-speaking neighbors of the adjacent islands, a form of kinship system in which mother's brother and mother's brother's son are called by the same term; the sisters of these men are called mother, with the usual extensions in the descending generations. In the Sepik Valley is found a different kinship structure in which there seems to be a dominant tendency to identify members of alternate generations. This system among the Mundugumor has assumed the peculiar form of unilateral descent lines, with totems and names, which are reckoned through alternate sexes in each generation, and are called "ropes." Among the Iatmül, the Mundugumor, and the Tchambuli, the repetition of names in alternate generations inherited through the mother, or given by the maternal gens, is an important element.

Moieties may be also said to be a characteristic social form for this area. The evidence suggests that there are two forces at work in the area: first, social forms which tend towards the formation of opposed groups, and second, a phratral organization of ceremonial life, a concept, so articulate, that it can be readily diffused from culture to culture. The Arapesh have two sorts of dual organization, both are virtually functionless, except for their value in oratory; one is vaguely connected with feasting and the other as vaguely associated with the initiatory cult. In one instance, in a schism between the localities which are now Kobelen and Umanep the members of one locality found themselves all belonging to one half of the dual division associated with initiation, and so split again, taking as their totems two varieties of the emblem bird, the hawk.

Mundugumor has no moieties, but what was virtually a system of unnamed moieties resulted from the operation of the system of ceremonial friendship with extensive exogamy provisions. This system of ceremonial friendship, in combination with a moiety system and a rigid division of the ceremonial life in accordance with it, has reached its highest recorded development among the Banaro.

Congruent with the presence of moieties is the system of ceremonial friendships and rites which depends, as Mr. Bateson has shown for the Sepik Region, upon closely identifying individuals who stand in a real or classificatory brother-in-law relationship of symmetrical opposition to each other. Hereditary relationships of this sort, in which the two individuals perform ceremonial exchanges and other acts similar to those

<sup>1</sup> Bateson, op. cit., Naven, Chapter XV.

which occur between affinal relatives and between a man and his maternal kindred, are to be found among the Arapesh, the Abelesihim, and again among the Mundugumor and Tchambuli. They have received, characteristically, their highest elaboration among the Iatmül, and their closest social integration among the Banaro.

An initiatory system based upon an opposition between adult males, on the one hand, and women and children, on the other, is also characteristic for this entire area. The men's cult, into which must be initiated the boys of the group, family line, hamlet, gens, age grade, or locality, of each of which variations occur, is represented by one or more supernaturals which are never seen, but are impersonated by various sound-making instruments. Occasionally, various ceremonial paraphernalia which are shown to the initiates, such as masks or slit gongs, are included in the same linguistic category with the sacred sound-making instruments. I have used the pidgin English term, tamberan, to apply to all of these, in the hope that it may be adopted into the vocabulary for this area, as it is already in widespread use as an equivalent for the various native terms.

This tamberan cult varies enormously in details. For example, the strength of the ban upon women's knowledge of its secrets varies from threats of death among the Aitape coastal peoples, through fear of death by black magic among the Arapesh, to the occasion of serious village brawls in which deaths may occur among the Iatmül, to the amused and very superficial concealment of the women's knowledge among the Tchambuli, and finally, to the actual initiation of the more aggressive women among the Mundugumor. Similarly, the soundproducing instruments may be flutes, garamuts,2 bull-roarers, water drums, seed and small coconut whistles, sago trunk whistles, etc. struments which are used for play, or as part of the secular dance in one area, will be jealously guarded from the women's eyes in another. the same varied fashion, there is a tendency to absorb into the cult any remarkable and rare imported object. As a result, decorated netted bags, made by the Abelam women on the north bank of the Sepik are regarded with awe as part of the tamberan cult in Mundugumor. cult also functions in different ways in integrating the men's activities among the Iatmül around a permanent men's house; for inter-locality coöperation among the Arapesh; and for the rare occasions of intralocality coöperation as in Mundugumor.

Mead, M., Tamberans and Tumbuans in New Guinea (Natural History, vol. 34, pp. 234-246, 1934).
 P. E. for slit gongs.

Despite these marked variations, it is possible to distinguish an underlying pattern. All adult men should be initiated into the cult. If there are several separate sets of tamberan objects, the initiation may be graded by age, as among the Iatmül; or, it may be split into a number of separate ceremonies without fixed order where various kinds of flutes are owned by different descent groups, as among the Mundugumor. The initiation is always staged as an aspect of some opposition between the men and the women, either in physical nature or in ethos. women and children always act as audience, either at a respectful distance, merely contributing to the drama by their frightened departure, or as the delighted spectators of scenes in which the initiated are paraded, or as both. In all reported accounts of the initiation officially given to the women and children, the men are conscious of telling a tale. awe and respect for the cult objects are supposed to differ from the attitudes which are consciously, and with elaborate pantomime, in-The account given to the women, usually exstilled into the women. plains the sufferings which the initiate is to undergo. This is expressed in the form of a statement that he is to be eaten by an initiatory monster —the crocodile who "bites" novices on the Sepik and the cassowary who "swallows" them among the Arapesh—and that subsequently, probably but not necessarily, he will be disgorged. The initiation ceremony, in addition to revealing the secrets to the initiates, includes some form of torture, but this varies from tribe to tribe. Among the Arapesh, where the whole institution is kindly and benevolent in tone, the incision is the most important element, with a gauntlet run between men armed with nettles as a secondary feature. The Iatmül emphasize an elaborate scarification and a series of tortures carried out in an irresponsible bully-The Mundugumor have introduced the use of fire as well as ing spirit. rather indiscriminate cutting with a crocodile's tooth, while the Wogeo emphasize the cutting of the boys' tongues to make them supple for flute playing. There is usually some idea that these tortures are connected with growth, although in the cultures in which the emphasis is now primarily sadistic, as among the Iatmül and the Mundugumor, these elements may be re-phrased either as an excuse for bullying, or merely to define the position of an uninitiated man in an unflattering way.

It is also possible to distinguish a single plot or theme underlying the diverse symbolisms of the various initiatory forms. The most widespread myth behind the *tamberan* observances is that some part of the ceremony was stolen from the women who were its real discoverers. In the swallowing and re-emergence of the novice, in the emphasis upon the separation from the women, and the introduction of the novice to the men's group, and in innumerable minor details of ritual, the symbolic attempt of the men to assume the physiological rôle of the women, is apparent.

It is customary to describe all of the local cultures of this region as having a tamberan house. It is important, however, to distinguish between the tamberan houses used only for ceremonial purposes and regarded with awe, the Plains type; those which combine the features of a men's club house and a ceremonial house, the Iatmül, Tchambuli, and Aibom type; and those constructed for the purposes of a ceremony only, afterwards becoming dwelling houses, the Mundugumor type. In both the Arapesh and Mundugumor systems there is no permanent men's house which can serve as a center for community life, where men can gather and have a life distinct from that of the women. in the Middle Sepik River cultures, there is a formal structural base for the differentiation of the men's lives from the women's this is lacking among the simpler peoples, both to the north and to the south. use the term "tamberan house" for those houses the principal purpose of which is to shelter the sacred tamberan objects for a shorter or longer period. I shall use the term "men's ceremonial houses" for the houses of the Sepik type which combine the functions of the tamberan house with those of an ordinary men's club house of the Melanesian type.

There is in this area no other socio-religious trait which has anything like the universality or importance of the tamberan cult. 1 Probably second in importance are the marsalai<sup>2</sup> cults of supernaturals who inhabit various unsavory sections of the bush, especially water-holes, and are embodied in snakes, lizards, and crocodiles, and occasionally, in other animals. These supernaturals are usually associated with descent They may be held in some measure responsible for illness and death, especially of women and children. Marsalai beliefs are integrated, from time to time, with the tamberan cult. For example, one set of initiatory flutes in Mundugumor represents marsalais of the bush, another the marsalais from the water; the water drum is, in both Mundugumor and Tchambuli, the voice of the crocodile marsalai, etc. Marsalais play the slightest rôle among the Iatmül, although only a more

¹ The use of the term "cult" here is not entirely satisfactory and should be regarded as merely a substitute for a more clumsy term like "socio-religious complex."

¹ Mead, Margaret, The Marsalai Cult among the Arapesh, with Special Reference to the Rainbow Serpent Beliefs of the Australian Aborigenes (Oceania, vol. 4, pp. 37-53, 1933). In this paper I discuss my reasons for adopting the Pidgin English terms, marsalai and tamberan. See also, A Reply to Review of "Sex and Temperament in Three Primitive Societies" (American Anthropologist, n. s. vol. 39, 558-561, 1937.)

detailed distribution study of adjacent regions can determine how closely related the Iatmül and Tchambuli shamanistic spirits are to the marsalais of the simpler peoples. Miss Wedgwood found hardly a trace of them on Manam. The bush marsalais tend to be closely associated with ficus trees and so are related in some places to the much more widely distributed Oceanic belief in the wood sprites. The other most fixed aspect of the marsalai cult appears to be an opposition between women, sex, menstruation, and birth, on the one hand, and the sacred places of the marsalais on the other. Marsalais, in their most familiar forms as two-headed multi-colored snakes or as crocodiles, may be regarded as closely related to the male sex in its opposition to the female sex. Consequently, it is possible to make a series for the whole region which includes men, musical instruments, especially flutes and bullroarers, marsalais, particularly as snakes and crocodiles, and long vams. as opposed to women, symbolized by menstrual blood, the blood of birth, and the odor of recent intercourse.

In its various ramifications this sex opposition may be said to be the most basic socio-religious pattern for the entire region, embracing as it does the initiatory system, the *marsalai* system, and the division of agricultural labor, centering in the sacredness of yams. The basis of the sacredness of the yams, as specifically male symbols, seems to lie in the cults associated with the very long yams, but this sacredness has also spread to include shorter yams. Yam gardening is men's work and certain precautions must be taken to keep menstruating women and recent sexual activity separated from the yams. In Arapesh, a man whose wife is menstruating is debarred from entering his yam garden; the infidelity of a wife will ruin the yam crop; and a man must protect from dangerous female contact his right arm with which he hunts and plants yams. In Mundugumor a neighbor's yam garden may be ruined if a couple copulate there.

It is characteristic of the diversity of this region that contrasting forms of this dynamic opposition should occur. Among the Urat, directly north of the Arapesh, the emphasis has been reversed and yams are felt as dangerous to women, rather than women as dangerous to yams. Yams are said never to be decorated there, as it would make them too aggressively dangerous. In the village of Suapali, on the border line between the Abelesihim and the Arapesh, even more aberrantly, a man has to place his packet of yam-magic herbs in his wife's vulva before

<sup>&</sup>lt;sup>1</sup> For this belief in Manus, see Fortune, R. F., Manus Religion, An Ethnological Study of the Manus Natives of the Admiralty Islands, Philadelphia, 1935 (62).

planting or his yams will not grow. This latter twist is more unusual, but is sufficient to show that a highly charged interrelationship is a fairer description of native attitudes than is any blanket statement that women are antithetical to agriculture.

This same instability of direction of symbolic emphasis is shown in the matter of the sacred flutes. Mr. Bateson found that the Iatmül flutes are undoubtedly phallic symbols, even to the copulatory rhythm in the flute music, and that they may be regarded as symbolic of the entire male ethos. 1 Among the Mundugumor, however, a sacred flute, with a carved head representing a crocodile, was the valuable dowry of the eldest daughter of a "rope," and an eloping girl took pains to steal her sacred flute when she fled with her lover. Among these people also, the dangerous symbol which can never be seen by women without doing them damage is an elaborate carving of a snake. The men dance with these carvings between their legs and they are sometimes placed in the fishing ditches of the enemy to do damage to their women. The type of double twist in symbolism which may occur is also illustrated in the Arapesh taboo upon the eel. It is ritually tabooed to boys during their period of growth; to the fathers of newly born children; to men who have killed; and to men who have just made a ceremonial presentation of vams to the community. Here the danger situation has been made specific to the male sex and their own virility is the danger against which the Arapesh males must be guarded during rites de passage.

The practice of sorcery occurs throughout the reported region, but takes several distinct forms, so that it is not possible to make a single characterization for the entire area. The two most conspicuous patterns which have been distinguished so far are the exportation of exuviae and the practice of vada.<sup>2</sup>

The exportation of exuviae is a special and highly developed sorcery pattern which, so far as I know, has not been reported for other regions of Oceania or of the primitive world. The essentials are the theft or deliberate obtaining, by ruse, of the exuviae of the victim. This material is then exported beyond the community lines and entrusted to professional sorcerers who, for a price, perform black magic upon it. When death occurs, it is possible to place the blame beyond the limits of the community and so transfer to the foreigner the anger and bereavement felt at a death. This exportation of exuviae is lacking among the Iatmül

<sup>&</sup>lt;sup>1</sup> Bateson, G., Music in New Guinea (The Eagle, St. John's College, vol. 48, 158-170, 1935).
<sup>2</sup> The term vada (Seligman, C. G., The Melanesians of British New Guinea, Cambridge, 1910, 187) has become so widely recognized that its position as descriptive of this type of sorcery may now be taken as established. See also Fortune, R. F., Sorcerers of Dobu. The Social Anthropology of the Dobu Islanders of the Western Pacific (London, 1932), Appendix II, 284-287.

and on Wogeo and Manam, but it is extremely widespread, and occurs as a practice of spirits, though not of mortals, as far north as Wanimo. It is a characteristic pattern for the regions adjacent to the Arapesh. The Beach and Mountain Arapesh export to the Plains, the Plains Arapesh export to the Abelam; the Nugum people export to the Muschu Island people: and the Suwein natives export to nearby islands. The pattern again reappears among the Mundugumor, who export exuviae to their more southern neighbors of another language, and among the Tchambuli where each hamlet exported to the others. The distribution is such that the absence of the usage in any one place cannot be set down to ignorance of the practice, but must be regarded as significant of the principal emphasis in that culture. The Urat follow the procedure of using exuviae for black magic within the community. The Suwein natives use the sorts of exuviae more customary in Melanesia, including nail parings and hair, which are characteristically excluded from the categories used by the majority of the known land people, who make a classification of exuviae which emphasizes only the wet and unclean excretions of the body.

The second common sorcery pattern, vada, occurs with the same wide The essence of vada is an encounter in which the sorcerer distribution. intimidates his victim, magically removes his entrails, sews him up again, and sends him back to his village to die after a specified period of time. This method is one of the chief theoretical causes of death in Manam and Wogeo, although Doctor Hogbin does not believe that it is actually practised on Wogeo and Miss Wedgwood's account<sup>1</sup> is not specific as to whether she believes that it occurs or not. The whole nature of the practice is such that it is very difficult for the field-worker to distinguish between phantasy and myth, on the one hand, and actual practice resulting in the death of specific persons on the other. Wanimo people believe that it is practised by the people of Wanip-ontop and the Murik informants gave an account almost identical with Miss Wedgwood's description for Manam. The Arapesh had heard of it, but had no belief that it was practised in their midst. The Mundugumor believed that it was practised by the people of the Upper Yuat. who had, however, tried in vain to practise it upon them. Mr. Bateson obtained a long detailed account among the Iatmül.

It is certain that the belief in vada is less heavily institutionalized than is the pattern of the exportation of exuviae and that it lends it-

Wedgwood, Camilla H., Sickness and Its Treatment in Manam Island, New Guinea (Oceania, vol. 5, 64-79, 280-307, 1934-1935).
 Hogbin, H. Ian, Sorcery and Administration (Oceania, vol. 6, 1-32, 1935).

self more readily to fantastic constructs. It is notable that in the regions where the exportation of exuviae is the principal sorcery pattern, there is scant reliance upon divination and strong reliance upon actual detective work. A practice which is so concrete lends itself to detection in purely realistic terms.

In Arapesh and in Mundugumor are found less specific beliefs about disease and misfortune, including deaths of infants, sores, and chronic diseases, which are variously integrated with the *marsalai* cults so that it is necessary to make mock offerings to the *marsalai*, and with taboos connected with the sanctity of *tamberan* objects.

The masked dance is another widely distributed trait of this area. These masks, called in pidgin, tumbuans, may be associated with the tamberan cult in any given locality but are primarily distinct from it; at least, usages connected with them tend to be diffused in other contexts and to receive distinct integrations. The tumbuan is a masked figure, in which a disguised dancer performs for the benefit of an audience that is ignorant of the identity of the dancer, or at least has not been present during the green-room period which preceded the final presentation of the spectacle. The two principal types of masks are those woven from rattan, which most frequently cover not only the head, but the shoulders of the dancer, and wooden masks distinguished by the presence around the rim of a series of holes to which the disguising vegetable materials are attached. The commonest materials for covering the rest of the person of the dancer are either croton leaves or shredded sago shoots which have been treated and dved in the manner customary for women's aprons. These tumbuan masks are customarily named, and various bits of ritual usage, magic, dance, and song are associated with them. Although they have been reported in fair integration from Manam, their mobility is the most distinctive feature of their use on New Guinea itself. The purchase of these masks and their accompanying rituals is a feature of inter-group life everywhere. Even where large numbers of diverse masks appear as the property of family lines, as among the Iatmül, they occur as dissociated elements, the details of the ritual having very slight apparent relationship to the rest of the culture. Murik and related villages near the mouth of the Sepik, are said by the Arapesh to specialize in the purchase and re-sale of these masked dances, as a way of distributing more efficiently their local products, ornaments of Nassa shell, pandanus baskets, and grass aprons.

<sup>&</sup>lt;sup>1</sup> Mead, M., Tamberans and Tumbuans in New Guinea (Natural History, vol. 34, pp. 234-246, 1934).

The Murik canoes voyage all along the northeast coast, vending their material and ceremonial wares to the Beach people, who, in course of time, sell them to the more inland villages. While this Murik development is a particularly self-conscious exploitation, it may be regarded as a logical extension of the continual buying and selling of tumbuan objects and dances which goes on over the entire region. Among the Mundugumor it was customary for individuals to purchase such tumbuans and to absorb them into the pattern of tamberan objects owned by family The art of making the tumbuan was acquired with the original model. In the diffusion of these objects, the selling group may do some conscious sorting: for example, the Dakuar people took certain elements out of the Shené dance before they sold it to the inland village of Kobelen; the Tchambuli people sold a fourfold masked dance to Mentchuat without the associated fourfold division, because they claimed that the Mentchuat people were incapable of understanding its intricacv.

Closely associated with this continuous interchange of masked dances but less widespread, is the interchange of skilled workers. Thus, the Plains Arapesh employ Abelam artists to paint the façades of their tamberan houses; the Tchambuli import the great wooden faces for their tamberan houses; the Nugum import Plains Arapesh carpenters to build the tilted ridge pole tamberan house for them; the Mundugumor import house-builders from the villages to the northeast to finish the gables of their houses, the style of which they have just recently imported. This tendency may express itself now in one way, now in another; a group may sometimes own a skill which their neighbors have not yet acquired, but may later become the petitioners of that very group for a different skill.

In the matter of marriage, it is possible to make only one generalization that its forms are associated with continual strife and quarreling. The most characteristic patterns are patrilineal residence, including burial of the wife in her husband's place; an extended levirate (forbidden in Manam); and the permitted practice of polygamy. Urat is the only completely monogamous locality of which I have any record, although Doctor Hogbin reports that polygamous marriages usually do not last in Wogeo. The institution of sister-exchange is irregularly distributed throughout the area and is known as a possible way of handling the marriage problem everywhere that I have been. It has been highly institutionalized among the Mundugumor and the Banaro and is an optional pattern among the Iatmül. Various preferred marriages which contain

an element of repeat also crop up. 1 Child betrothal is also very common, occurring among families of rank on Manam and Wogeo, as a regular aspect of the marriage with the mother's brother's daughter<sup>2</sup> in Tchambuli, and as the second term of a sister-exchange among the Mundugu-It is the basis of the Arapesh marriage system.

To students who are best acquainted with areas in which diffusion is confined to less basic traits, it may seem unjustifiable to list such a highly integrated institution as a form of marriage in this cavalier fashion. answer to such objections. I need only cite the fact that the natives themselves are so conscious of the possibilities and mechanisms of diffusion that they themselves are able to discuss the matter. So one Arapesh native remarked, "On the Plains they pay for their wives; on the Beach they are beginning to exchange sisters; we in the Mountains stand halfway between these two customs, for we pay a little for our wives but we also like to exchange sisters when that is possible." When it is remembered that "logically incompatible" marriage systems have been reported for the Iatmül, this adds further strength to the contention that in this region of New Guinea the most apparently complex and fundamental aspects of social structure can be diffused as units.4

It may be said that these peoples have no absolute attitude towards their culture as something that always has been. The possibility of change or rearrangement or revision, of loss and of gain, are quite consciously recognized. The pride of the Iatmül does not permit them to recognize the possibility of borrowing from the simpler peoples; but even they take up no absolutist attitude towards their institutions, while peoples engaged in active importing, like the Arapesh, or active exporting like the Tchambuli, regard culture as infinitely subject to human manipu-This attitude only differs from our idea of "progress" in that these New Guinea peoples have no idea of unilateral development, and no goal beyond the attainment of the status, artistic, economic, or technical, of some neighboring tribe, or the preservation of a superior cultural position by additional aggregation of borrowed traits.

¹ Cf. the Iai marriage among the Iatmül, Bateson, Gregory, Social Structure of the Iatmül People of the Sepik River (Oceania, vol. 2, 245-291, 1932), by which a man marries a woman descended from the patrilineal group into which his father's father married (this marriage also occurs among the Nugum); the Manam marriage, in which a man marries the daughter of his father's father's sister's son, and so the girl returns to cultivate her paternal grandmother's garden (Wedgwood, Camilla H., Report on Research in Manam Island, Mandated Territory of New Guinea (Oceania, vol. 4, 373-403, 1934), 388], and the Mundugumor marriage in which a man was expected to marry his mother's father's mother's brother's daughter's son's daughter [Mead, Margaret, Sex and Temperament in Three Primitive Societies (New York, 1935), 182-183]

² For a discussion of this Tchambuli marriage and its theoretical significance, see Fortune, R. F., A Note on Some Forms of Kinship Structure (Oceania, vol. 4, 1-9, 1933).

³ Bateson, Social Structure of the Iatmül, op. cit., 279-280; Naven, op. cit., 88-90.

⁴ In similar fashion the varun system of ceremonial friends found among the Mundugumor shows every evidence of having been borrowed complete from a people having a structure like that of the Banaro, as it is not integrated with the Mundugumor system and the Mundugumor have no idea how to make new warun if an old warun relationship is spoiled by intermarriage.

Another widespread emphasis in this region is the opposition between the young and the old, with various ritual prohibitions designed to preserve the old from too close contact with the vigor of the young. prohibitions take the form of forbidding the old to eat sago worked by the young, as in Arapesh and Urat; forbidding the parent generation to receive food or water from an own child, as in Iatmül; forbidding the parents to eat after the children, for fear they will then grow old and die; forbidding the children to walk in their father's footsteps, as in Mundugumor: or forbidding a mother to be present at the delivery of her daughter, as in Warimo and Arapesh; or forbidding the daughter to step over the carrying bag of her mother, as in Arapesh and Abelesihim. tion between the essential nature of young and old is differently phrased, depending upon the ethos of the culture. While among the Iatmül the father takes a position in the back of the house and is most careful never to overplay his seniority; among the Plains Arapesh and the Urat, the whole emphasis is upon right food prohibitions and discipline for the young men, in the interests of the greater authority and prestige of their elders, up to the period when one or more children are born to them. The opposition between ages may be expressed in insistence upon generation endogamy as among the Mundugumor who feel that sex relations between individuals classified as members of successive generations are equivalent to incest: this distinction may be refined to include elder and vounger siblings, a characteristic development upon the Sepik, where adjacent siblings are uneasy with one another (as among the Iatmül) and the younger brother treats the elder brother as the elder treats the father, It seems clear that the idea of the aged as a group deas in Tchambuli. clining in sexual vigor and of the young as a group waxing in sexual vigor is basic to the whole region; but this may be refined into an age-grade system as among the Iatmül, where the fathers actually protect their sons from the hostility of their "elder brothers" at initiation. The Arapesh have also elaborated the point so as to equate the pre-adolescent and senescent, but do not treat the matter as a direct opposition between generations.

Whatever the local variations, this emphasis provides a background for the initiatory system, for the regulation of the distribution of food, and for a multitude of small taboos and observances by which the young are educated in the locally acceptable attitudes towards their elders, whether these attitudes be actually protective, or strongly hostile. This age opposition illustrates particularly well what may be said to be an apparently fundamental aspect of this whole region. The most widespread

traits cannot be traced to diffused complexes of traits, but rather to the presence of underlying ideas of such a general character that any one of them can occur in a given locale in a positive or negative form. So the contrast between men and women, which is perhaps the most basic idea of the region, may be expressed in friendly and solicitous terms, or in terms of sex hostility; either the men or the women may have the dominant ethos in the culture, which may make strong efforts to mute the aggressiveness of the males to the female norm, as in Arapesh, or to stimulate the females to the male norm, as in Mundugumor. Both attitudes are compatible with the underlying emphasis.

The same observation can be made of the *marsalai* cult. The supernaturally tinged relationship between men and their ancestral bush may be phrased in terms of sorcery and fear as among the Mundugumor, of slight ritual observance, as among the Tchambuli, or of friendly and disciplinary protection, as among the Arapesh.

On the basis of these widely diffused general formulations about sex, age, the nature of the bush, the need for initiation, the possibility of a dual organization, any detail of cultural behavior is diffused freely in every direction. It is quite possible that some detail which a given group taught its neighbors on the east in one generation, may be re-imported by them from the west, generations later. Simultaneous importation, from two opposite directions, is a continuous phenomenon among the Arapesh, who import stone adze blades from the east and from the west, and spears, netted bags, and pots from both directions. The fact that such a manufactured object as a spear has been locally differentiated, so that those which come into the mountains via the Beach have rectilinear designs, while those imported from the Plains have curvilinear designs, is in no sense a proof that the use of spears in the two regions which now manufacture them had originally two separate origins.

The most characteristic attitude towards death in the region is a strong valuation of the bones of the dead. Although earth burial seems to be the most widespread pattern, there are many variations in burial customs: earth burial, exhumation and secondary burial (Arapesh), desiccation by smoking (Mundugumor), burial in a partly open grave and subsequent decoration of the skull (Tchambuli), exposure on platforms in the bush (Wanimo), etc. But for all localities where the matter has been reported at all, there is a strong valuation of either the skull or of other bones, more usually of one of the bones of the forearm. Arapesh, Abelesihim, Suwein, and the reported Sepik River tribes all take the head of the dead. In the head-hunting areas, the heads of relatives are elabo-

rately treated with a mixture of clay and oil, and among the Iatmül there is a conscious attempt at portraiture. The Arapesh merely keep the skull somewhere about the house. The magical use of the bone dust from the preserved bones of the dead is also widespread. The Arapesh have a well-integrated pattern of chewing the bone of a dead male ancestor with a little ginger, as protective, hunting or gardening magic. Just recently, in the last four years, they have bought from their neighbors a method of divining which is based upon chewing the bone of a dead male ancestor who will later inspire the diviner while he is in a putative state of possession.

The emphasis upon some material remains of the dead is accompanied by a very slight emphasis upon ghosts, or relationships with the spirits of the dead. A slight immediate fear of the ghost is characteristically reduced, in time, to a few formal ancestral curses, in which one relative can invoke the spirits of dead relatives against a descendant, and to the occasional use of the ghosts as alibis in sorcery divining. The idea of reincarnation has been reported only among the Iatmül. From the existing material, it may be said that a close relationship between the living and the dead, in which the will of the latter as personalities is enforced upon the former, is not a characteristic feature of this region. The feeling that does exist regarding the dead seems to have crystallized in the treatment of the bones, in the importance of names, and supernaturals associated with gentes or with family lines—marsalais, or shamanistic spirits.

I have postponed the discussion of material culture until the end, for if we accept the argument in favor of regarding any widespread trait as having been accessible at some period generally to the peoples of the region, this may be accepted most strongly in the matter of material culture, where the manufactured object itself travels and may be re-absorbed into any context.

The pig and the dog are domesticated throughout this region, with some emphasis upon the use of the dog for hunting, but in village life greater attention is paid to pigs than to dogs. They are fondled and talked to more, and tend to show the kind of highly socialized behavior which we associate with dogs, especially shame when discovered in forbidden acts. The interchange of pigs, characteristically carried suspended from a pole by their four feet, frequently takes place over many miles of territory. This is not only true of little pigs which are traded between trade friends in different localities, but also of full grown pigs which are ready to be eaten. Young dogs are also exchanged from one locality to another. When we reached Arapesh a mysterious dog disease had killed

over three-quarters of their dogs; they were just beginning to obtain new ones in trade from the unaffected adjacent region. When we reached Mundugumor a year later the same disease had just reached them, coming overland and cutting a wide swathe. The entire region so affected would have to import dogs from outside the range of of the epidemic. Domestic fowls occur on the Sepik River and in the fen lands and adjacent plains. They are said to resemble Malay fowls. It must be remembered in this connection that there was once a Malay trade route from Dutch New Guinea over the Torricelli Mountains to the Yellow River. At present, the sacrifice of a fowl is a regular ceremonial feature in Iatmül and Tchambuli cultures and white fowls' feathers are constantly used as headdresses.

Wild game is sparse and limited. There are cassowaries, tree kangaroos, ground kangaroos, various species of phalanger, and small mammals resembling the bandicoot. The methods of hunting these animals are similar and widespread. The presence of bush pigs, descended from domestic pigs, adds a little to the supply of larger game. There are no people who live entirely by hunting.

The cultivation of sago grubs varies. The Arapesh merely avail themselves of the grubs which gather in any rotting sago trunk. Others purposefully fell sago palms which are then covered to make them rot the faster and thus accumulate a supply of grubs. The latter technique is practised throughout the region between the Keram and Yuat rivers. The people who inhabit the central fens between these two rivers depend extensively upon smoked sago grubs. Their river-dwelling neighbors report that for their feasts they erect poles on which smoked sago grubs are fastened to a girth of several feet. The people of Kambaramba, on the Lower Sepik, are said to keep young crocodiles in pools. With the the pig, the dog, and a few fowls, this completes the animal husbandry techniques known for the region.

Although there is a tremendous difference in the amount of sago possessed by different localities, two practices, besides the purchase of sago in markets or along trade routes, continually tend to equalize these differences. These are the purposive planting of sago palms and, where transportation conditions permit, the purchase, at a distance, of unworked sago palm trunks, which are then towed back to the village of the purchaser and worked there. The characteristic treatment of sago in this region is to keep it moist, either by hanging packets in the rain, as among the simpler people of the Wewak District, or by keeping it in the great sago storing pots characteristic of the Sepik River. The most usual

method of cooking the sago is called in pidgin "turn-em sacsac" and consists in making a rapidly thickening viscous mass by combining moistened sago with boiling water.

The river, beach, and fen peoples depend principally upon sago, with some yams, while the mountain and plains people tend to substitute various forms of taro, both the varieties which have to be re-planted before the shoot has withered and those which can be stored like yams for sev-Both taro culture and sago-working involve the labor of both men and women, while the yam culture, because of the various surrounding taboos, tends to be almost exclusively male. The relative amount of work done by women on both taro and sago also varies from area to area: among the Beach Arapesh, women sometimes cut down the logs and chop up the pith in addition to working it through the strainers: the Mountain Arapesh feel that this is too difficult work for Among the Mundugumor, the bulk of the sago-working is done by women and young adolescent boys; while among the Tchambuli, where the women assume the full responsibility for fishing and most of the responsibility for manufacturing, the men do most of the little garden work which is done, even when it includes growing taro. Yam culture, therefore, is the only form of food growing definitely linked to one sex which is important in the psycho-sexual symbolism of the area.

Tobacco is grown, with greater or less success, in most of the area. The Abelam and Nugum peoples are famous for their tobacco which they trade to the northeast coastal and island peoples; the Mundugumor high lands along the Yuat are equally well suited to tobacco growing. Among the Mundugumor it is almost entirely a woman's activity, with the large polygamous households depending for their wealth upon the tobacco growing of the many women. In the mountains, among the Arapesh, tobacco is cultivated by both men and women. Tobacco is prepared for export and sale in a great variety of ways: the Nugum and Abelam and Plains Arapesh do it up in long packets, round in cross-sections and tapering at each end, and covered with the spathe of the limbum palm; the Yuat River people wrap it in ovaloid coils of rat-The cigarette wrapped in banana leaf is typical of the area. general, it may be said of tobacco that it is regarded as an important trade object, that the greatest variation is in its preparation for the market, that it is surrounded with a definitely commercial aura, and is extraordinarily unintegrated with the social-ceremonial life. important in the light of the current discussions as to possible origins of tobacco in New Guinea. While the chewing of areca nut is an essential part of many magical ceremonies, tobacco remains distinctly secular. Its only use in connection with the supernatural is when a half smoked cigarette is classified as exuviae, available for sorcery, or when a cigarette is charmed and given to a girl by a youth to obtain her favors.

In connection with the habits of food cultivation in this region the widespread habit of formally distributing and exchanging seeds, slips, cuttings, etc., may be mentioned. This receptivity to plants, both foodgiving and with magical or cosmetic properties, is a general characteristic of the whole area. The Arapesh will even accept and plant seeds, the very name and use of which is entirely unknown to them; they never see a foreign fruit fall to the ground without commenting on what may grow from its seeds. Arapesh Mountain villages contain plants, the use of which is known, but which have never been re-named, the importation name being lost. This receptivity and self-consciousness about planting take other forms. When the Arapesh plant a coconut it is done with ceremony, and as a gesture of friendliness and solidarity a man plants his coconuts on the land of another, sometimes at quite a distance. larly, records of the genealogy of coconut palms and of the origin of sago clumps are kept for a long time. Also, the Arapesh have a ceremony. abullu, in which a man distributes his surplus long yams for seed, from which he may not eat even unto the tenth generation.

This same receptivity and formal distribution of seed is found conventionalized in a different pattern on the south bank of the Sepik, in the Here the essence of an inter-locality ceremony is Yuat-Kolawali area. the distribution of some article of food as a memento of a feast. habitually distributes coconuts, Mundugumor, long yams. The people say articulately that these can be planted and so the feast will be remem-During a feast in which we participated in Mundugumor, some bush people brought us a present of a pair of fowls, which Doctor Fortune presented to the leader of the feast. He immediately sent back word that he would keep the fowls and let the hen lay; when the chicks were hatched he would send one to each of the villages which had participated in the ceremony. Similarly, when I left New Guinea, I gave a female cat to one of my house boys; his immediate comment was, "When she has kittens, I will send them about and about, one to each boy from a different village who ever came to talk with you."

This general attitude towards the distribution of foods and animals has undoubtedly had profound effects, in the past, in distributing local products throughout the area and in the quick dissemination of introduced strains of pigs and fowls, pawpaws, etc. A few years ago, the government official at Wewak distributed to the natives a large number of seeds which have been enthusiastically accepted, even in the Plains villages, where white contact has hardly penetrated. In watching the distribution of maize, French beans, lima beans, tomatoes, cucumbers, pumpkins, water melons, onions, etc., it is interesting to note the association of the characteristic tendency towards local specialization in respect to the new foods. One locality tends to specialize in tomatoes and so feels itself excused from any attempt to grow maize, another concentrates on cucumbers. The surplus crop is then exchanged from village to village. The observation of a general economic principle working under new conditions is a particularly convincing demonstration that it is fundamental to a given region.

Perhaps the most basic cooking practices are a prevailing tendency to boil food, supplemented by pancake-making on the Sepik River, and roasting in the hot coals in the mountain and plains regions. out the region, pots are used and absolutely depended upon, except for water carrying, for which bamboos and hollowed coconuts are more frequently employed. Congruent with the use of pots and boiling is the making of soup, and the use of many kinds of greens, some of which are planted in the regular gardens and some gathered wild in the bush. this connection, it is necessary to mention a food classification which is prevalent throughout this region, that is, a division into basic carbohydrates and garnish. In the first class fall sago, yams, taro, sweet potatoes (said to be introduced), and green bananas; all other foods, among them all meats, are classified as garnish, to which is applied the pidgin English word, abus. As meat is the infinitely preferred garnish, the word tends to mean primarily game. The term abus is also used for frogs, caterpillars, grubs, etc., and for coconuts and greens, both of the latter being regarded as substitutes for meat in making a meal palatable. This division of foods produces a demanding state of mind, even among the worst-fed people, for they are concerned not only with quantity and quality, but always consider whether both categories, basic food and garnish, are represented. This requirement of a mixed diet, as a rule, cuts across the divisions of food by age grades, which tend to be more specific, but among the Plains Arapesh and in Urat, where all meat, even grubs, is denied to young men, they almost coincide. It is characteristic of the whole area that meat is never regarded as food which is to be relied upon for actual bulk; this belief that meat is always garnish results in gorging, if they are accidentally provided with more than an ounce of meat.

general, none of these people like to eat meat without a starchy complement. Coconuts are used in the grated ripe form; coconut oil has only very local distributions.

In sleeping habits, the most striking distinction is between the peoples who sleep on pieces of bark around a fire upon which they depend for warmth, even in their thoroughly closed-in houses, and the inhabitants of the Sepik Valley who use plaited mosquito bags (cylindrical sacks ten to eighteen feet long, plaited of reeds, bast, or sago leaves, and distended by bamboo hoops) and neglect to wall their houses in very thoroughly as the bags provide a suffocating temperature. This difference in sleeping habits alters the significance of the fireplace in the two regions; in the Sepik Valley it is definitely specialized for cooking, and such taboos as not lighting the cigarette of the mother from the fire beside which her son or daughter and his or her spouse have slept and had intercourse, have not been found. Instead, the special effect connected with sleeping and sex is definitely attached to the mosquito bag.

The typical house form is rectangular. In the Plains area, and this also includes the remote Mountain areas such as Washkuk, the house is built on the ground, while along the beach, in the river, lake, and fen countries and in the adjacent areas influenced by them, it is raised on Diffusion in house form, as in everything else, is operating in two For a long time, the pile house, walled with plates of sago bark, has been penetrating further and further into the Mountain Arapesh country. But about six years ago, under the stimulus of a native religious cult which spread from the coast and prophesied an earthquake and a flood of scalding water, the natives of Alitoa reintroduced the Plains form of house built firmly on the ground, retaining, however, the feature of walling with sago bark what wall space was not accounted for by the sharply sloping roof. Apparently connected with these two house forms, the ground house with sharply sloping roof, practically triangular in vertical cross-section, and the pile house, with walls three to five feet high between floor and roof, are two methods of manipulating the ridge pole to produce greater complexity of form. In the ground house, the ridge pole may be tipped and may vary from that in the simple dwelling house (Fig. 3) to the elaborate men's house in which it is supported in front at a height of some seventy to eighty feet from the ground (Fig. 4) and slopes downward at an acute angle to a support some six feet high, the whole having almost the shape of a high three-sided pyramid on a triangular base. This house form is also found in the extreme hinterland south of the Sepik. It also survives as a children's toy,



Fig. 3. Plains Arapesh House, Ilapweim. Notice the sloping ridge pole and the Plains Arapesh man wearing the very valuable shell necklace (boishukerai).

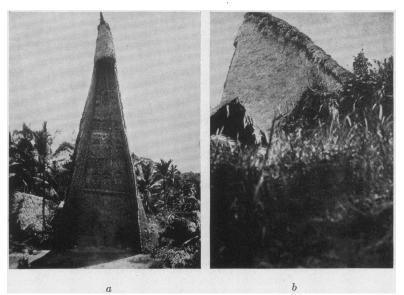


Fig. 4. Tamberan House of the Plains Arapesh, Ilapweim, 1932. a, Note the man seated to the left, for scale, the novice's headdress leaning against the house painted in the form of a huge face, and the row of carved faces and figures beneath the painted façade and the low covered entrance; b, Rear view showing the steep slope of the ridge pole.

woven of rattan, in Tchambuli. Here they speak of the tip-tilted ridge pole house of their bush neighbors as a "cassowary house," making the very obvious comparison between the long neck of the cassowary and the steeple end of the house.

The second method of varying the house ridge is by the addition of high sloping poles at each end so that the ridge has the form of a half moon. Among the Tchambuli the two tips of the half moon are virtually steeples, slender cylindrical structures covered with thatch. elaborated pile houses vary according to whether the house is treated as definitely having a front end, or whether the two ends are treated as equal or at least analogous. Whenever one end is regarded as the front and of greater importance than the other end, greater ornamentation is likely to follow. One variation of this tilting ridge pole house has a formal likeness to the other house form, that is, when an extension of the ridge pole is built into an overlapping gable. The very simple Washkuk house, with a horizontal ridge pole only about seven feet from the ground, has an extension of the entire roof, with the front wall set back some four or five feet, to form a covered porch. This same porch is reported for the Plains Arapesh. In the tamberan houses of the Plains Arapesh and the Abelam, this front extension of the two sides of the house has been tremendously reduced, but there is a bell-shaped thatched extension from the tip of the steeple which serves as some protection from rain for the painted façade. Such extensions, some of them shallower, are found again in the horizontal ridge-poled houses in the mountains, where they have been imported as part of the raised house form. They are also reported on the Lower Sepik and on the Yuat River. It is impossible to tell with which house form they were originally associated and they have probably been diffused as independent elements.

This high gable in the straight ridge pole house in turn forms a convenient transition point for encorporating features from the tipped ridge pole type of house. Father Becker¹ describes the typical Aitape coastal tamberan house as having the crescent-shaped ridge, but the projecting gables of ends are differentiated, one being the "end of the spear," the other of "the bow and arrow," in conformity with the local legend which associates the tamberan cult with two brothers, one a spear man, the other a bow man. In the Arapesh mountains, the largest houses are usually built with only one peaked gable supported by a sloping spear; and sometimes arrows also. This form, in which the back of the house remains square but the front peak protrudes, is also found in the Lower Sepik vil-

<sup>1</sup> Manuscript on The Parak.

lages and has come overland to the Mundugumor people, who have added the additional feature of a great rattan chain suspended from the peak of the roof, which is also found among the Abelam and the Plains Arapesh.

Without insisting upon any constant lines or single direction of diffusion, this area may be said to have two simple house forms, the ground house and the pile house, and two important elaborations, used most

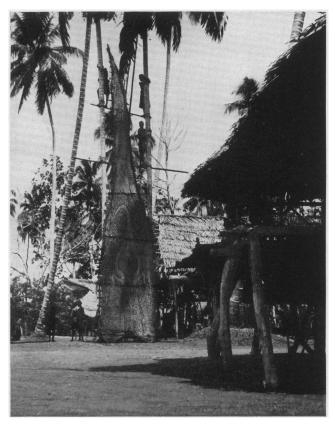


Fig. 5. Mundugumor Bark Painting used in Yam Ceremonial. Note that the triangular shape resembles the façade of a Plains Arapesh tamberan house.

often for tamberan houses, but also for yam houses and the houses of important men in regions where the tamberan house is less permanent: a tipping of the ridge pole and an over-emphasis, decoratively and structurally, of the face of the house; and an elevation of each end of the ridge and a similar treatment for each end of the house.

The most interesting example of the possible diffusion of single items of house structure is to be found in the vam-feast decorations of the Mundugumor which are similar in appearance and construction to the front of an Abelam tamberan or yam house (Fig. 5), but which have no houses It is impossible to say whether these triangular built behind them. sheets of painted sago bark sewed on a cane background originated as decorative elements in a feasting scene, or were borrowed from the design The Mundugumor vam decoration could, with equal of the house-front. ease, be a lifted house front, or could serve as a basis about which a house could be built. These yam-feast decorations are structurally meaningless as used at present. With a great deal of labor, a huge triangular patchwork of sago bark is constructed and a design painted on it. (It is interesting that the whole piece is treated as a unit for purposes of design, while in the Abelam façade type each row of sago bark pieces is treated as a unit, the series of rows being joined like a mosaic.) After it is painted, it is set up against a scaffolding in the center of the village to serve as a display element and afterwards stored as a memento in the rafters of the house of the feast giver. Among the Mountain Arapesh the distinction between an imported dancing shield and a piece of sago bark used as a façade decoration for a tamberan house is very slight. equally possible to trace unstable cross influences among wooden and rattan masks and the flat wooden faces and rattan faces used to decorate the gable ends of Iatmül and Tchambuli men's houses.

The use of sago palm leaves for thatch is distributed over the entire area, with the thatch prevailingly sewn by men in contrast to the more familiar Oceanic island usage. While the construction of the thatch is fairly standardized and uniform, the methods of bonnetting the ridge pole vary enormously; each locality has its own techniques and none of them is very adequate. The use of coconut palm mats in the construction of temporary structures is also widespread. On the Plains, the Arapesh thatch their dwelling house with whole sago palm leaves; this method is occasionally found in the Mountains also and recurs in temporary and bush structures in other localities. Where the walls are finished separately from the roof, two principal forms are made of sago bark plates fastened with supports of elephant grass stem, which are characteristic of the Wewak Beach region and of some of the adjacent islands, and of slender saplings placed horizontally and tending to shrink and let in a great deal of air. The latter are found in the Sepik Valley associated with the use of mosquito bags. There are two widely distributed ladder forms, that in which a series of steps are cut in a single log and the Iatmul type in which cross-pieces are lashed to two heavy uprights. Limbum (P. E.) palms are used for house flooring throughout the area, with variations to accommodate fireplaces, sleeping places, etc., in which bamboo or elephant grass is used instead. The pith is removed and the outer surface bruised with an adze to render it flatter and more pliable.

Clothing, in which wide variation occurs, is one aspect of culture which the natives most consciously manipulate, export, import, and improvise. There is a very definite concept of style and fashion, in the strict sense of the word, as it has come to be used in modern European times when a court determined the mode. The importation of new styles may be followed by a complete abandonment of old ones as among the Arapesh, where the Mountain villages are some fifteen to twenty years behind the Beach people, or may result in a segmentation of generations, as among the Mundugumor, where the very old women cling to the styles of twenty years ago and each younger age group affects a newer fashion. Only the Iatmül appear to have reached a sort of proud stability into which alien modes of dress are not accepted. But among the other peoples occurs the whole phenomenon of fashion-setting, which is shown in the greater prestige attached to the Beach peoples' fashions and an anxious humility and imitativeness on the part of the more inland peoples.

Despite this insistence upon changing fashions, the variations which make such an enormous difference are often very slight, as when a new headdress which combines a rattan headband and a phalanger fur band is eagerly imported by a people who have long had both, but have never combined them in one headdress. The clothing and ornament which are subject to this stylistic diffusion are women's grass aprons and belts, men's belts, men's headbands, armlets, and leglets, and various forms of necklaces, breast bands, and earrings. Under the same general heading should be placed the hairdress, fashions in nose and ear piercing, The cockscomb haircut (Fig. 16) is a recently imand in scarification. ported mode in Arapesh and a prevailing style on the Sepik River. principal variations in the women's double aprons are in color, relative length of the back and front, the occasional substitution of barkcloth for one apron, and various elaborate additions, like fringes and knots. The most basic pattern, however, consists of two aprons worn front and back, usually discrepant in length and most frequently manufactured from young sago shoots, shredded and dyed.

It is worth noting that it is in the men's pubic coverings which are least subject to changes in fashion, that small locality differences are very marked. The typical Melanesian mal of rough barkcloth has

penetrated in parts of the Mountain regions of the Wewak District. The flying foxskin, variously ornamented with shells, is worn in the Sepik The Nugum wear fresh green leaves shaped into cones. Until about ten years ago, in the more inland regions, among the Plains Arapesh and Abelam peoples, the Washkuk and the Mundugumor, the men Clothes for the women seem to have preceded those for the men throughout this region, with the fashion emphasis upon women's The style emphasis for men has been upon the head, on various ways of dressing the hair and substitutions of wigs (the Southeast and Southwest rivers, and Tchambuli), and rattan-chain curls (Abelam). Nevertheless, the adoption of some pubic covering by men has followed the same pattern of diffusion, importation from another locality accompanied by payment for the copyright. Today, returned work boys on the Arapesh Plains, where the mal has not yet penetrated. are required to pay their own community before they adopt clothing, in advance of the whole community's buying the privilege from their more seaward neighbors.

Five principal types of weapons are found in the area: the bow and arrow, spear, club, dagger, and spear-thrower. The bow is simple, strung with rattan or bamboo; the arrow is of bamboo, tipped with wood or bone, or with a shaped bamboo blade. The spear is constructed from a single shaft of hard wood or has a separate head, the blade being either carved of wood and barbed, or made of bamboo or bone. The club is of a single piece of heavy wood, the dagger of cassowary or human bone. Bows and arrows are manufactured by the Wapi peoples inland from Aitape, the Suwein, the groups at the headwaters of the Yuat, and the bush people of the Tchambuli region.

If the shield and either the spear or the bow and arrow were originally associated, this association is no longer maintained. The Mountain Arapesh import their bows and arrows from the Coast and their spears from the Plains as well as from the southwest and have no knowledge of the shield. The Mundugumor people use the shield (Fig. 6) in fighting with the spear; although the hunting bow and arrow are sometimes used in warfare, this is regarded as unfair practice. The bush peoples of Tchambuli all use wooden shields (Fig. 7) while the Washkuk made a very large ovaloid leather shield (Fig. 8).

While the distribution of spears and bows and arrows appears to be arbitrary and to have been influenced by various contradictory waves of diffusion, probably in opposite directions, the spear-thrower, as a strictly functional weapon, is used in connection with fighting in river

Throughout the Sepik Region there is found a narrow dugout canoes. canoe, with slightly shovel-shaped stern and a very narrow hull in which the men stand and the women sit to paddle. This canoe has no outrigger and requires a great deal of dexterity to keep it upright. amount of energy necessary to throw a spear disturbs the spear-man's precarious balance. The spear-thrower, with its light dart and the



6 (80.0-8400).Fig. Shield used in fighting with the Spear, Mundugumor.



Fig. (80.0-8137).buli. (Imported from the south.)



(80.0 - 8232)Fig. Wooden Shield, Tcham- Leather Shield, Washkuk.

artificial extension of the thrower's arm which it provides, is ideal for canoe fighting, but has not been adopted beyond the region where canoe The Mundugumor were still too fighting is an accepted mode of battle. unaccustomed to the water to risk fighting from canoes. Although they possessed several spear-throwers which they had captured in raids on the Lower Sepik peoples, they preserved them merely as curiosities. The Yuat River was so narrow that the Mundugumor could attack passing canoes from the banks, and would therefore very likely have precluded their adoption of canoe warfare, even after they became more familiar with the use of canoes.

The whole area was, of course, in the stone age and the making of celts for adzes and axes was localized like all other manufactures. The adze is the most typical tool. For fine carving, a tooth, either of some small marsupial or of a pig, hafted straight into a short handle, has a wide distribution.

Throughout this area some form of shell or tooth valuable is used as currency, but with enormous local variation. The currency list includes the Nassa shell fished at the mouth of the Sepik, the gold lip, the Turbo, the Conus sawed in cross-section, small cowries, the Ovalis shell, a crude form of tambu or strings of even discs of shell, dog's teeth, marsupial teeth, pig's tusks, tortoise shell, rings of Tridacna shell, etc. Trade in the materials which any given people use as valuables is a regular part of New Guinea commerce. In addition to their diversity, the units tend to be large and to be personalized, and sometimes named. net bag or a basket for a shell ring or an ornamented Turbo shell, results in bargaining on both sides, the possessor of the valuable arguing its merits as loudly as the owner of the bag or basket. This tendency to attach sentimental and personal values to the most available materials for currency militates against the development of any real currency in the area. for in most cases no one will admit that two similar valuables are genuinely "interchangeable."

Two principal forms of communication are used in the area: gong signals, which are very imperfectly developed and usually restricted to the locality or even to narrower limits and mnemonic devices, made of leaves, flowers, vines, etc., to which the pidgin English term tangget may, with propriety, be applied. These mnemonic devices vary from simple recordings, such as a series of knots in a piece of rattan which show how many pigs a man has fastened, or how many valuables he has paid for his son's wife, to elaborate compositions which contain all the totemic leaves of the individuals concerned in a transaction. Among the peoples of the mountains, on the north bank of the Sepik, the tendency is towards the symbolic use of special plants for simple communication, so a certain nettle will be placed in the tangget to indicate sorcery intent, a request for help, etc. On the Sepik River itself, there is a high development of totemic leaves and their ceremonial use. Where an Arapesh who wishes to bind another over to peaceful intent, will merely tie a green croton leaf in a simple knot, a Mundugumor who wishes to patch up a quarrel between two individuals will make the tangget in which he

expresses his commands to them to cease fighting, from the totemic leaves of the two ropes (alternating sex descent lines) to which they belong. Similarly, when an Arapesh wishes to express his determination to have nothing to do with a certain relative, he ties certain croton leaves together over his doorway. A Mundugumor, similarly angered, will put his own totemic leaves in his own armband. The Mundugumor usage, and the related Tchambuli usage in which the totemic leaves are part of the decoration of a gift of talibun shell, bear a strong resemblance to the plant emblem as reported by Williams for the Orokaiva.

As the use of these various mnemonic devices, cut, twisted, knotted, and combined from plant materials, is so much wider than the particular totemic use of the plant emblem, as found among the Sepik tribes and among the Orokaiva, it seems fair to suggest that we have here the combination of two tendencies towards the mnemonic use of plant materials and towards the association of plants with descent lines. The result, in the region where the two coincide, is the extensive use of personal totemic plants for purposes of statement or of recording attitudes. The tangget can be employed as a purely personal record of some numerical transaction, as a public notice within the community, as when a man hands one to another publicly or publicly displays one expressing anger, or grief, to send a message at a distance, or as a calling card. So the Plains sorcerer leaves his calling card in a Mountain village and the trade friend leaves A man may send a palm leaf with ten leaflets cut short, to indicate to a trade friend that he wishes ten packages of sago, the rest of the message being sent verbally.

The first use of the *tangget*, as a personal record, has not been very highly developed. It is used for a count of days before a feast or a payment is due, of items in feasts, or the number of feasts. It is most commonly made of chopped-off palm leaflets, knotted rattan, or a series of coconut riblets called in pidgin English *noks*. The Arapesh use a long piece of rattan to measure the number of yams which they assemble for a certain kind of feast, but recording devices of this sort have, in general, a most elementary development.

The second use of the *tangget*, as a formal public notice of an intention or attitude, has been more elaborated and extends far beyond the borders of this area. Among the Arapesh, the inclusion of other symbolic objects, as the piece of *limbum* bark from which a pig is fed, a piece of yam, an empty sago sheath and a spear and two arrows in the symbol which indicates that a man will not permit his wife to feed any more pigs, is

<sup>1</sup> Williams, F. E., Orokaiva Society (London, 1930), Chapter VIII.

typical of such extensions (Fig. 9). The Iatmül, with their genius for elaborating all of the simpler patterns of the region, have developed these symbolic constructs into complex exhibits used in their totemic debates and symbolic records of the exploits of the dead in their mortuary ceremonies.

The third form, the message at a distance, is slightly developed, but is a very strong sanction in the minds of the people. If a tangget has



Fig. 9. A Formal Public Notice composed of Symbolic Objects, Mountain Arapesh.

been sent or left, it proves that the intent is strong, that the tale is true, that the request must necessarily be complied with. The white man's writing has fitted very neatly into this highly tinged respect for the tangget. There is frequent use by the natives of any piece of writing which may come to their hands. It may be used by one native who cannot read, to intimidate others who also cannot read, into doing what the possessor of the compelling bit of writing desires.

The use of *garamut*<sup>1</sup> calls for communication is known throughout the reported *garamut*-using area, but it is only slightly developed. In its simplest form, a *garamut* call merely means that something is happen-

<sup>&</sup>lt;sup>1</sup> A garamut is a slit gong, hollowed from a tree trunk. It is sufficiently distinctive of New Guinea to deserve to have the pidgin English name encorporated in ethnological terminology.

ing and brings everyone within earshot hurrying to the scene. This use is closely associated with the tendency to beat a garamut in anger, when outraged, or aggrieved, and to gather people together to sympathize over an injury or to avenge a wrong. The Arapesh attempt a few different garamut calls, but actual experience demonstrates that they can very seldom distinguish among them. The Mundugumor have absorbed garamut calls into their descent-line system, so that each rope has a special call. These calls—no longer used for all the members of a rope, who are never on close or intimate terms with each other,—are now combined to give every individual within a small locality an individual garamut call; if two men are full brothers, one will add his mother's call or the other his wife's, etc., to distinguish them. In Tchambuli men's houses have their *garamut* calls by means of which each summons its own members and the sisters' sons of that gens. It is typical that the Arapesh garamut calls are specialized to events and to the expression of emotion, the Mundugumor to individuals, and the Tchambuli to the ceremonial groups, while the Iatmül have calls for individuals, groups, and occasions.

Another peculiarity of this region, and one which it also shares with many parts of Melanesia, is the low valuation of either personal religious experience or of any form of automatism, or genuine possession or seizure, in which the performer is really beside himself. Sporadic cults with a claim to possession appear. Two youths in Alitoa who had been initiated into such a divinatory cult simulated violent seizures, but experiment showed that they were in complete possession of all their faculties. Although shamanistic performances are highly developed on the Sepik River, there is barely a pretense at genuine possession. The Tchambuli shamans stop in the middle of a performance to joke and converse with the onlookers. Among the Iatmül, the onlookers occasionally have fits of trembling. These are the only reported forms which even approach the semblance of seizure, and in these cases the diviners or shamans must always be taught by some previous performer.

But, on the whole, there is a striking absence of institutionalization of unusual personal experience, or of religious practitioners who are in any way segregated from the normal. In dealing with the *marsalais*, the eldest man of the descent group involved can act as priest; in dealing with the *tamberans*, it is the older men, or the men of a certain age grade, who perform the mysteries, while both black and white magic are

<sup>&</sup>lt;sup>1</sup> See account of Iatmül shamanism in Bateson, Gregory, The Social Structure of the Iatmül People, ibid., 414-421.

purchased or inherited possessions of individuals who are not otherwise distinguished in the life of the community. The Iatmül religious system, of which that of the Tchambuli appears to be a rather pallid version, contrasts sharply with the rest of the area in its greater emphasis upon the continuing disciplinary acts of spiritual beings, whom mortals have to placate by payment. The more characteristic picture is to attribute all evil happenings to malicious magic or to capricious offense or occasionally to reasonable offense taken by some marsalai, or to the careless infraction of some ceremonial prohibition. It is notable that nowhere in this region is there any concept of luck or chance, nor is there the belief that an individual can become permanently the prey of supernaturally hostile forces so that all that he does is attended with evil. Even the Mundugumor who, in their oral history, distinguish the fortunes of a man who has persistently been the hero of one contretemps after another, do not call bad luck, either real or acquired, an attribute of a man's personality. The Iatmül come the closest to this conception in their belief that the practice of black magic recoils upon the sorcerer. But this belief should rather be assimilated to world-wide beliefs that the black magician will lose his closest relatives, rather than to any sense of an inalienable evil destiny or the presence of a permanent curse. worth noting, that congruent with this lack of recognition of luck there is also no form of gambling or betting in this entire region. With the exception of the Mundugumor belief that only the child born with an umbilical cord around its neck has the vocation to be an artist or craftsman, there is surprisingly little arbitrary differentiation of occupation on the basis of either hereditary or supernatural sanction. Individuals tend to follow the directions in which their gifts or preferences lead them. The various occupations are not surrounded by special prerogatives which would separate those who practise them from the fate of the average man. The transvestite is unknown in the region.

The musical patterns of the region, unless they are stabilized by the presence of flutes, as on the Sepik, have the same instability as the other aspects of culture. Among the Arapesh can be heard songs which differ markedly in melodic pattern and have been traded in from all directions, probably over a long period of time. Unless a certain song pattern becomes definitely associated with a ceremonial, which, while originally imported, tends to become a regular part of the ceremonial pattern of a locality—as with the abullu yam ceremony among the Mountain Arapesh (see below p. 336),—the songs, like other traits which are subject to fashion, tend to disappear in time. First the people only "hear

them," but no longer remember how to sing them themselves; later, they fail to recognize a song which was sung by every member of the village forty years ago. Dance steps are also diffused as parts of ceremonies so that it is impossible to name any dance step as being characteristic of a given people.

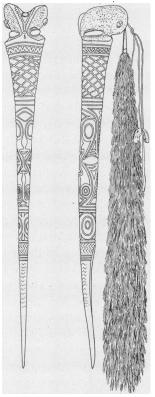


Fig. 10 (80.0-8778). Dagger of Human Bone, Wash-kuk.

The art styles of the region are so exceedingly rich and varied that it is possible to discuss them only in terms of the techniques used. Of these, the most widespread are: carving in the round and in low relief, both types depending upon the application of paint to emphasize the design; painting pieces of sago bark with clay; etching on coconut shells, very young coconuts, and gourds (all these designs depend upon

lime to bring out the design); and etching on bone, especially on the daggers, knives, and lime spatulas which are made from a cassowary leg bone and by the Washkuk from human bone (Fig. 10). The natural features of the bone are variously utilized: e.g., sawed through in cross-section the bone becomes a parrot's head. Less widespread is the carving of flat pieces of bone to use as ornamented hairpins with feathers suspended from the tip and the ornamentation of pottery by the application of carving techniques and by modeling to the outer surface.



Fig. 11 ab (80.0-8421, 8416). Pottery Pot Rests, Mundugumor. (Imported from Dimili and Yaulu.)

Among the Aibom people pottery has been elevated to a principal art. They model whole figures in clay and by manufacturing pieces which resemble fragments have even learned to commercialize the habit of the surrounding peoples who conserve and regard as sacred the sherds from their large jars. The Dimili and Yaulu peoples, east of the Mundugumor, have recently introduced the carved effects on the outer surface of the very brittle pots they make. They are also distinguished by manufacturing a special kind of pottery pot rest (Fig. 11); this is made by the men, while the plain pottery is made by the women. The pottery fireplace, a huge pot with a stepped design on the upper edge, is also peculiar to this area. It is made in both Aibom and the Wompun hamlet of Tchambuli and is used by Tchambuli, Aibom, and Iatmül peoples.

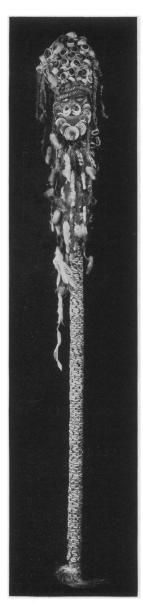


Fig. 12 (80.0-8437). Sacred Flute, Mundugumor.

The construction of masks, small faces, anthropomorphic headdresses, human breasts, etc., of wickerwork is also found on both sides of the Sepik and as widely distributed as Washkuk to Nugum. The Tchambuli have an elaborate development of large wickerwork masks of many different styles while the Abelam have a rich development of bird-faced masks with which they decorate their long yams. The fabrication of anthropomorphic figures out of cord is found among the Abelam and again among the Iatmül, Mundugumor, and Tchambuli.

The characteristic lime spatula for the region is slender, round in cross-section, and serrated so as to produce a harsh grating sound when it is drawn in and out of the mouth of the lime gourd. Worth noting, also, is the presence of the chain constructed of plaited units which vary from minute links, each measuring only about a quarter of an inch, to great chains which swing from house fronts, in which each link is over a foot in diameter.

With the chain must be considered another widespread decorative technique characteristic of this region; that is, the attachment of extraneous objects, such as feathers, fur, animal teeth, tassels, etc., to the various masks and wooden carvings. It is this element, more than any other, which gives a theatrical and impermanent aspect to New Guinea art. The most carefully carved mask will carry around its edges small holes for the attachment of some of these decorative pendants. The pieces which reach a museum, or, for that matter, which repose on

<sup>&</sup>lt;sup>1</sup> As a note of warning to those who attempt to draw conclusions from Museum material, I should like to describe an ornament which was imported by the Arapesh, they said, from Murik. From one side hung one of these tiny chains, from the other a chain of the same size wrought in iron. A feather was attached to the end of each. The student of material culture, even without a bias in favor of culture contact, would have been tempted to put the little plaited chain down to imitation of the iron chain, when actually, chain-making is found over the whole region.

the shelves in the men's houses, always have an unfinished appearance, waiting to be repainted and bedizened for some occasion. The articles which are made of the most permanent materials, such as wood and bone, do not give any real indication of the gaiety and splendor of New Guinea material culture because they must always lack these perishable decorations, a great proportion of which are made from flowers and colored leaves and fruits.

This decorative fashion not only applies to the objects which have a definite theatrical use, such as masks, headdresses, bull-roarers, flutes, etc., but is also extended to such simple everyday articles as pillows, stools, lime spatulas, etc. In the Museum collection, the Mundugumor flute (Fig. 12) represents the most complex development of this extraneous or pendant decorative tendency. The whole character of the figure is derived from the mass of chains, feathers, bits of fur, shells, hair, snake vertebrae, etc., suspended from the very simple little wooden figure used as a foundation. This same tendency in Mundugumor art is responsible for the encrustation technique found in the application of cowrie shells to the whole surface of the bamboo flutes. It appears again in an isolated bit of mosaic work which we collected in Tchambuli and which was said to have been made by the Mentchuat people.

An argument might be advanced that many of these extraneous ornaments are the displacements upon a carved figure of ornaments usually worn by a human being; for example, bits of dyed sago are tied in the nose and in the ears of carved faces wherever these happen to occur in wood. Although this is a frequent use of the pendant ornament technique, it is not by any means the only one, and may be a purely accidental combination.

With this brief survey of the region as it is now known through publications and collection, I will turn to an account of the Arapesh group, to a description of their local material culture and the ways in which they encounter, accept, or reject the many influences in material and non-material culture to which they are exposed on all sides.

## DAILY LIFE

## THE MOUNTAIN ARAPESH<sup>1</sup>

The Mountain Arapesh live in a precipitous, infertile country where it is exceedingly difficult to find any level spaces on which to build a hamlet or plant a garden. The whole arrangement of their villages, and the terminology they use, implies a village located on the very slightly leveled summit of a razor-backed ridge. Occasionally, a man will build a house or two in a valley, and small temporary shelters are built in the gardens and near sago patches, but the assumption always is that a hamlet is located on the top of a hill, so that its central place is surrounded by houses which back up on steep slopes on every side. Alitoa was the largest hamlet which we saw in the mountains, it contained twenty-eight houses in all, counting the most diminutive ones, and eighty-seven people had residence rights there. Most hamlets were much smaller, containing only five or six houses, and without ground space adequately to accommodate the crowd which would gather for a feast.

For a piece of ground to be a wabul, that is, an inhabited place, as opposed to merely ground, it must contain a central plaza (agehu). is often only a few square feet of weeded clayey ground, on which a few stones are stood in a row, the tallest only a foot high, and on which several coconut palms are planted. Around the agehu and to the very edge of the precipices grow a large number of sacred and useful plants and shrubs, plants used for magic, as dyes, as decorations, in ceremonials.

A large hamlet like Alitoa will contain more than one agehu. is also a tendency for each man of importance to have his own agehu, so that in Alitoa there were four small cleared sections where feast dishes might be laid out or ceremonial payments made. Not all of these agehu contained ancestral stones, however. On the agehu itself, a small unwalled house is occasionally built. This is merely a roof of unworked sago leaves, or possibly of worked thatch, set up on four poles to provide a shelter from rain. Here the men of the hamlet sit in the evenings and chat with visitors. The village plan has no fixed place for a tamberan house. Large tamberan houses are very seldom built in the mountains, where space is so limited and the people are so poor. Instead, a small rectangular, pile-type house will be specialized as a tamberan house and

<sup>&</sup>lt;sup>1</sup> This description is based upon personal observation of the villages of Dakuar, Waginara, Umanep, Liwo, and Alitoa, supplemented by Doctor Fortune's photographs and descriptions of the villages of the Plains Arapesh, which I did not see, and his descriptions of Boinam, Wihun, Alipinagle, Ahalesimihi, Kobelen, and Magahine, and a large number of smaller hamlets. The present tense refers to the years of field-work, 1931–1932.

allotted a few characteristic decorations, corner plates of painted sago bark, a gable protruding from the ridge pole, with a slightly raised ridge pole end, and a spear or so and a few arrows protruding from the gable. For such a *tamberan* house, there is a deeper protruding roof extension from which long fringed decorations of shredded sago leaves hang. Occasionally, a coconut leaf mat is stood in front to shelter the doorway



Fig. 13. Family Group in the Doorway of a Pile House, Alitoa. Kule, Ilautoa and Mausi are in the doorway. Note the ladder form, the bamboo water carriers leaning against the house wall, and the detail of sago bark wall shingling.

even further from the eyes of onlookers. This *tamberan* house may be actually smaller than the larger houses in the village.

The houses are of two types: the pile-dwelling (ulypat) and the ground house (aulap). The pile-dwelling has two forms: a box-like structure, the rectangular shape of which is relieved only by a semicircular shelter over the door, thatched with worked thatch, and the form in which the roof projects beyond the house walls to a peaked shelter, supported by an extra post, and which is thatched with unworked sago leaves (Fig. 13). Both types of the pile house are rectangular in ground-plan, raised about four to six feet from the ground, with a small door at one side of the center post which supports the ridge pole. The roof is

thatched and the walls are closed in with overlapping sago bark shingles, fastened to an inner framework by pieces of rattan, which hold an outside covering of bundles of split elephant grass, placed vertically. The ladder is either a notched log (Fig. 13) or a rarer form, probably a result of foreign contact, in which the rungs are passed through holes in the side supports.

The groundplan and construction plan of the ground house are identical with the pile house, but the ground house lacks floor and the piles. A center log on the ground is equivalent to a similar center board in the floor of the pile house. These houses are either covered with worked thatch or with whole leaves, and represent the older form of Arapesh Mountain house.<sup>1</sup>

The houses face either inward, towards the plaza, or are placed parallel with it. Only when there is an extra amount of room does the front door face outward from the center of the hamlet. Very often, there is so little space, and the ground slopes so sharply, that the front and back piles, or those on the two sides are of very uneven length. They vary in length from sixteen feet for a very large house to ten feet for one built for an adolescent boy or for cooking. The very large houses have wide semicircular roof extensions decorated with sago palm fringe. They may also be ornamented with corner plates of painted sago bark. They are spoken of as yam houses, for here the yam crop is stored and here an important man will receive this guests. Cooking and sleeping are usually done elsewhere.

Beneath the houses firewood and food are neatly piled, especially if a feast is imminent and it is only then that a large hamlet is in full use. Against the outside of the house lean the long bamboo water carriers, which are imported from the Plains, and which the Mountain women use almost exclusively. Along the narrow ledges where the house walls meet the floor, lies a spatula-shaped stick (neitip) used to remove offal from the village floor. Occasionally, the bare unadorned skull of an ancestor, or one of his bones, may be seen lying there also, treated with friendly neglect. In the walls also may be seen a man's head of hair, in its basketwork ring, if he has just cut it off,—for the Arapesh vacillate between the short-cropped headdress which is most convenient for hunt-

<sup>&</sup>lt;sup>1</sup> A second form of ground house observed in Alitoa represents a compromise between the old form, in which the thatched roof sloped down to the ground, and the imported pile house with its sago bark shingled vertical sides. In this form, the house is built on the ground still floorless, but it has short vertical sides, shingled with sago bark. The front of the house is also shingled with sago bark instead of being loosely thatched. This form is said to have been invented to meet the threatened cataclysm which reached the Arapesh as a rumor from the Wewak messiah cult of 1930. It was as yet uncertain whether or not it would survive beyond the life of the few examples which had been built to meet the cataclysm.

ing in the bush and the psyche knot style used on the beach (Fig. 14). In the outside wall, the *wiya* vine used to measure the number of yams laid out in the *abullu* harvest ceremony is sometimes placed.

Around the foot of the palm trees are raised mounds, one for each tree, a usage probably related to the palm planting methods of the flood regions of the Sepik, for they serve no practical purpose on an Arapesh



Fig. 14. A Mountain Arapesh Man, Ombomb of Alitoa, 1932, wearing a Headdress of a Bird of Paradise Feather. His hair is arranged in Beach style, confined in a basketry cylinder.

mountain top where the rains drain off very quickly into the valley below (see Fig. 15). People sit or lean against these mounds when many congregate. One or two crude undecorated *garamuts* stand under the houses near the plaza.

The Arapesh house typically has no rear door, but sometimes, when both ends are on good raised ground, there may be a simple rear door, or a very small ladder and little opening for the dog. The doors are of two types: a composite door, suspended by rings from a cross beam

and fastened by an outside stick secured by two large rattan rings one on each side of the door, or one constructed for each occasion by piling up long pieces of sago stalks (ponkol) in a permanent framework. When a family leaves the village they close their house, but no charm is used to protect the property which is left within.

All level land and the center of the village are spoken of as *yapu-genum* (literally, good, suffix meaning "pertaining to a place)" while all precipitous land, especially the declivity characteristically surrounding a



Fig. 15. The Village Plaza. The agehu of Ulaba'i, Alitoa (Fig. 25u), showing the mounds around the coconut palms against which people lean.

village, is called yaweigenum, or a bad place. On the steeply sloping "bad place" are placed menstrual huts (sho'wet), frail, conical structures of sago palm leaves supported on a haphazard framework, made by women; on the slope and in such huts, in time of rain, infants are also born, so that the village may be protected from the blood of birth. These slopes are also used for latrines, which are specialized by sex, if many people are in the village. They are also spoken of as the place of the pigs. Here afterbirths are placed in trees and the special ceremonial meals are thrown away. Sections of these declivities may come to be

associated with the supernatural, either with a *marsalai*, or with the wild taro which often grows there. When this happens, no food or personal leavings of any kind may be discarded in that part, as it would be delivering the individuals concerned to supernatural forces.

The village site, the wabul, is primarily a place where trees, shrubs, and magical herbs grow, and where people gather for feasts. It is not thought of as a permanent residence spot, even for the group of people who have houses there. Most people live in what are known as sho'-ubeli wabul (P. E. liklik place), tiny hamlets containing a half dozen houses at most, only one of which is likely to be of any size and importance, and often only one or two of which are pile houses. These small hamlets are theoretically gens owned. The distinction between gens membership, therefore, and residence in a small hamlet, is maintained in the phrases, atip awhilap, one gens, but wabilip, a gens-of-the-place, meaning a gens which shares a large hamlet site, a debebili (large) wabul, with one's own gens.

The small gens hamlet, which, under the present form of fluid social organization is seldom inhabited only by gens members, is identical in form with the larger village. In the largest hamlet in a locality, however, two or more gentes may be represented with as many small plazas, but in the small hamlet there is traditionally only one plaza. If space permits, there is always the possibility of adding the members of other gentes permanently and thus changing a small hamlet to a large one. In most cases, however, the space only permits about a half dozen houses to be built, and one gens remains nominal owner of the whole. One of these hamlets may have a small tamberan house as well as a large well-built yam house. The women also build menstrual huts, although there is some feeling that it is not as necessary to observe the menstrual taboos in the small places as in the large ones—the menstrual hut does not have to be built so far from the plaza.

Formerly, the dead male members of the gens, their wives, and unmarried children, were buried in the plaza of the hamlet and a small house was built over the grave. Today, under government supervision, graveyards, fenced off and ornamented with crotons, are being built in the principal villages at which government inspections are held. Burial actually in the plaza is not, however, an important issue, although the feeling that men and their wives should be buried on the husband's gens land, is important.

Usually all wood and water have to be carried uphill to the village; the women are accustomed to complain about spending much time in the village because the work is so much harder. The sites for the small hamlets tend to shift from generation to generation; the residences in gardens and sago patches are even more casual and mobile. Conversely, a village site in which the palm trees have grown much taller than the houses—and it is by their height that the people measure the age of a village—is much less willingly abandoned, partly because level land is so rare, partly because of the richer associations and the number of trees and plants which grow there.

The village ground is kept bare of weeds and is periodically swept clean with brooms made of a dried limbum flower, galo'it (Fig. 76d). This is women's work. Each woman keeps the ground about her own house tidy; the space is so small that there has to be very little pressure put on by anyone. Every effort is made to keep the village free from offal and refuse. A special implement, called a neitip, a flat spatulate stick about three to four feet long, is used to remove pig dung. Stones are piled under each house. On these the tall cooking pots can be supported when cooking is done out-of-doors in fine weather. On feast occasions, fires are built in the centers of the plazas by placing large logs with their ends touching; but, on ordinary occasions, only very small fires are made, to conserve the meager supply of firewood.

The children run in and out of the different houses; the women of any household are likely to be found having breakfast in any other; cooking is done now in one house, now in another; and the assumption is that every resident is a member of the same family. When rifts do occur, either between members of the same gens or between members of different gentes resident in the same village, the angrier person usually leaves the village at once, as it is not felt to be supportable to live so close to one with whom one is not on good terms.

There are no fowls, but pigs and dogs wander about as freely as the children, with occasional altercations over pilfered food or spilt water. Little pigs are tied by one leg, or kept in the house; very large pigs are sometimes blinded with lime so that they will not wander too freely in the village and get into mischief. A man who refuses to blind his pig and so protect his neighbor's property, is criticised, but nothing is done about it.

The inside of the houses is very dark; the only light comes from the overhung doorway and through chinks in the shingled walls, which widen a little as the sago bark dries and shrinks. Cooking stones and cook pots are set on the continuously burning fires in the square fire-

places edged with sago branches and filled with earth and ashes. The smoke from the fires thoroughly blackens the inside of the house. In the larger houses extra objects like pots and plates are piled on a straight shelf built across the back. Most houses lack such shelves and piles of yams, taros, and coconuts, occupy the floor at the back of the house. A few treasures, such as feather ornaments, may be rolled up in an areca palm spathe and stuck in the rafters. A net bag or so, filled with other small possessions, may be hung up. A few spears and a bow and arrows rest in the rafters. Over the fireplace is hung a crude round tray for smoking meat. But, with the exception of the store of yams, very few families own more property than the whole family can carry on their backs when they move from one place to another.

Whenever the family moves, it is furniture, and sometimes sprout and seed, which must be carried; for a removal is almost always made on an entire absence of food, except perhaps a few sticks of sugar cane and bamboo shoots for the children. So the women carry in their net bags, the one or two little wooden pillows, the type in which a carved wooden top, decorated at each end, is set on four legs made of a heavy rattan (Fig. 82), a couple of cooking pots, two or three wooden plates, and a pottery serving dish or so, the coconut shell spoon of each child, any half completed handiwork, netting or plaiting, and a small bag inside the larger one, containing the family store of rings and shell money. Or, these last may be left, together with the very large pots and plates only used at feasts, quite safely in the house in the village until the next occasion for a large gathering.

With this preliminary sketch of the appearance of the village, we may turn to the people. They do not present a uniform appearance. very marked difference between the lighter skinned, less hairy, smallerheaded Beach people, who show apparent similarity to the Melanesianspeaking peoples of the islands, and the short, squat, large-headed, hairy people of the Plains, is blurred among the Mountain peoples. On the whole, they may be said to be a small people, with occasional much taller ones—the tallest man whom we measured (Wenah) was five In skin color they vary from a very dark color, alfeet eleven inches. most as dark as a full-blooded Negro, to a skin almost light enough for a Malay. The same variation is found in feature. In physique also, the men vary from the lithe leptosome type to the more long-waisted pudgy type which would presumably, under more favorable food conditions, put on weight. Among the women, some are slender, narrowhipped, high-breasted, others, broad-hipped and full-breasted. The latter type is the more admired. There is a superstition that the high-breasted women are unwomanly and suckle their children from only one breast, permitting the other to atrophy. Both men and women are thin and underfed and show a considerable number of mouth breathers. New-born babies are very thin; children of two and three show the characteristic distended abdomen and under-developed legs which accompany a rachitic condition. The distended abdomen and bad posture are characteristic of many adults also, especially of the men.

The hair is prevailingly coarse, black, and frizzly. In the Mountains I saw no individuals with the soft brown curly hair characteristic of some Polynesians and to be found occasionally, for example, in Manus. Newborn infants have soft hair which is sometimes light brown in color. The eyes of the new-born are a violet blue which does not disappear entirely until six and seven years of age.

Diseased conditions are not particularly conspicuous. It is not a malarial country and the mountains are free from both flies and mos-There is a certain amount of framboesia; occasionally, one sees a sore which has resisted treatment, even by the Government medical authorities, for years. There is a small and unimportant amount Both the simpler ringworm and tinea imbricata occur, of hookworm. with an incidence of serious cases of about two to three adults in each hundred people. The only very stout people whom I saw among the Arapesh were men completely covered with tinea. The other response to the disease is extreme emaciation. The skin infection called kuskus (P. E.), which is a compound of penicillium and scabies, occurs sporadically. Probably the most serious diseases are those attacking the feet, plantar yaws and bad tropical ulcers, which tend to get worse rather than better because of the constant walking about in muddy roads: the black mud of the lowlands seems to be particularly infectious. It is significant that the Arapesh ascribe all serious sores, framboesia, ulcers, and boils, of which they have a good many, to local magic, and do not attempt the elaborate search party procedures which have to be followed when an illness ascribed to sorcery occurs. It is difficult to give any opinion about causes of death, but the social expectation seems to be a slow wasting away. All death is ascribed to the same kind of sorcery and so types of diseases are not distinguished.

<sup>&</sup>lt;sup>1</sup> This tendency to use only one breast, so that the other abscesses and dries up, is characteristic of this whole region. A small sample set of Sepik River photographs presented to the Museum by Doctor William F. Coultas, contains half a dozen examples. It is possible that most peoples have an explicit prescription of this one-sided method of nursing, which, for some reason, is lacking in New Guinea. It will be worth while for other field-workers to ask specifically about this point

is that ptomaine poisoning from putrefied meat is a frequent cause of illness, and very possibly of death.<sup>1</sup>

Artificial ornamentation of the body is limited to piercing the ears in two places, piercing the septum of the nose for both men and women, and piercing the nose just above the nasal tip for women. At adolescence girls are scarified with a sharpened piece of bamboo. As no lime is rubbed into the scars, keloids do not form, and within three or four years the series of wavy parallel lines, rows of dots, and an occasional half scroll which have been cut on the upper back and in the small of the back disappear. Boys are incised when they are initiated. There is no tattooing.

Women habitually wear their hair short, while men, as habitually, wear theirs long, cutting it off in mourning, and as an occasional relief from head lice. Women vary between shaving their heads entirely or shaving them so as to leave a cockscomb band along the top of the head. This method of dressing the hair for women and children of both sexes is found all along the coast and among the lower Sepik peoples. When the men let their hair grow very long, they confine it in a basketwork ring, or in a netted band which has been overlaid with shell work; both of these are imported, the first from the islands, the second from Murik.

The everyday costume of an Arapesh man consists of a G string of breadfruit bark, rough, unadorned, usually ragged at the end, which is brought around the waist, twined asymmetrically at the back, and allowed to hang down in front. He may also wear one or more sets of plaited armlets. Very occasionally, he will add some feast ornament. More usually, however, if a man is feeling unusually gay or happy, and especially if he is young, he will add fresh flowers or green leaves to his costume rather than some heavier and more permanent form of ornamentation. When he walks about, his costume is completed by a net bag slung over one shoulder or a small basket plaited of coconut leaves, which he carries in his hand, or under his arm. This contains his lime gourd, a long gourd (Fig. 62) with only the simplest of designs burnt on it, and a serrated lime spatula with which he can make a harsh grating sound to announce his coming, preface a speech, as one would clear one's throat, or demonstrate disapproval of something that another has said.

The everyday costume of an Arapesh woman consists of a pair of aprons usually of a simple brown color, unrelieved by any dye or pat-

<sup>&</sup>lt;sup>1</sup> In reply to questions about extreme defects, I received accounts of two cases of apparent epilepsy, a brother and sister; one case in which the individual was said to be unable to hear what was said to him and had continual quivering fits, and one case of a dwarf who was covered with tinea, unmarried, and worked at anyone's behest. I saw none of these cases.

tern (Fig. 55). At present the style is to wear them long in front and short behind; on the Beach, the reverse pattern obtains. Only the young girls wear dyed aprons on everyday occasions. They are suspended by a slender cord from the stoutest part of the thigh; a plaited belt (Fig. 56), which bears no relationship to the apron, is worn about the waist. This non-functional belt is an interesting example of the piecemeal manner in which fashions diffuse in this part of New Guinea; a belt of the same type, plaited in the same way, is worn by Manus women as a support for their aprons. The woman also wears



Fig. 16. Arapesh Girl wearing a Net Bag. Souatoa, Daughter of La'abe of Alitoa, wearing her hair in the cockscomb style imported from the Beach, and a child's net bag.

plaited armbands and possibly narrower plaited bracelets. Around her neck she may wear a string of dog's teeth or the teeth of some small animal, or a necklace of shell money, interspersed with dog's teeth. In her ears are usually two sets of earrings, a composite of dog's teeth and bits of tortoise shell. In her pierced nose she thrusts a small greenish cornucopia-shaped shell, with a red parrot feather stuck in it, or more usually, merely a roll of leaf or a bit of stick, keeping the shell and feather ornament, the sign that she is a married woman, for state occasions.

These are fresh water shells, imported from the islands, and it is the duty of each man to provide his wife with one. Little girls dress like their mothers, but often wear only rolls of leaves in their ears and bits of sticks in their noses. A woman always carries a net bag, containing her lime gourd, if she has one, with its very simple uncarved and unserrated spatula, her own and her little children's spoons, rolls of shredded bark ready for twining into cord, small bundles of beads and ornamental seeds, a little tobacco and banana leaves for making cigarettes, some areca nut, and perhaps a few *Piper betle* catkins<sup>1</sup> and a few flying fox bones which she uses as needles. She habitually uses an old, stained and faded net bag. New bags, on which the patterns are still bright, or bags with elaborate designs are reserved for festive occasions.

Small children are completely unclothed, except for an occasional capricious ornament. Little girls put on aprons at about four, but wear them only irregularly until they are seven or eight, taking them off in fits of anger, in illness, or simply as a symbol of regression. Small boys assume the G string, without ceremony, at about eight or nine, and wear it more regularly, although they are willing to take it off if they develop a skin infection under the tight waistband. Mothers make aprons for their small girls, but little boys make their own G strings sometimes helped a little by an older boy.

For dances and feast occasions, all of the imported and cherished finery is brought out. Men, as well as women, wear earrings; long pieces of mother of pearl shell are thrust through the septums; necklaces are worn; and elaborate imported headdresses, armbands, and leglets are put on. The face painting appropriate to the various imported dance complexes may also be worn. The women wear gayer aprons, dyed in reds and blacks, more necklaces and armlets, and more earrings. The men wear bark belts about which brand new extra long barkcloth G strings are wound tightly several times. Dressing up is regarded as appropriate for the young; middle-aged people, whose sons have been initiated, do not as a rule dress up. The feast scene is, at best, a very simple one when compared with the costumes of the Sepik River or coastal British New Guinea. Only two or three birds of paradise will be seen in quite a large crowd and many of the ornaments are frayed and old.

Mourning costume is unimportant. A widow wears a black apron and a widower a black G string. Women also wear two forms of im-

<sup>&</sup>lt;sup>1</sup> In this region, the people do not chew the fresh leaf of the pepper plant, but the little gray-green catkins. The leaves are only chewed when the catkins cannot be obtained.

ported mourning. One form, distributed along the coast to the southeast, consists of long pieces of twine suspended from both the nose and ears, for a widow, and only from the ears, if a woman mourns a relative. The other mourning costume is imported from the northwest and consists of netted armlets, leglets, and necklace, decorated with Job's tears. The Arapesh make very little of death and would be offended at using a mourning costume as dress regalia as the Manus do.

The Arapesh are often covered with mud, but can very seldom be said to be dirty. They bathe whenever they pass a stream. stay at home in the village, the women and children troop down together to get water, and to bathe, and the men will take occasion to bathe some time during the day. They set tremendous value upon a soft skin and are too sensuous to enjoy being dirty; even the children ask to be taken to bathe. Little babies are bathed in the village, in the stream of water which flows from a tipped bamboo water carrier. After bathing, in their pleasure at feeling fresh, people put leaves and flowers in their hair, or smear a little red paint on their own bodies, on the children, or on the pig. At the same time they have no exaggerated feelings about dirt and sit quite comfortably on the damp clay, so that their thighs are often plastered with dry mud. This is in strong contrast to the behavior of the Beach people who detest the gritty sand and take the greatest pains to keep themselves and their possessions out of contact with it. The Arapesh make practically no use of oil, nor do they use any sort of perfumes, except as some casual flower or leaf may be aromatic and They are quite unobsessive on the subject of filth of any sort, lifting a micturating child away from their own bodies if possible, and expressing open and unabashed disgust at faeces on the path.1

In posture and gesture, ease and expressionism with a low degree of stylization, is the rule. There is no formal way of sitting; both men and women sit either with legs outstretched or crossed, without rigid insistence on any fixed form. People tend to sit rather than stand and to relax whenever possible. Almost always, lying behind any change of position, is the feeling of hard work either just completed or about to be undertaken. When people spend the day at home, they use the verb for sleep, and are very likely to spend most of the day lying on their sago

¹ It is necessary to stress this point at some length because it is very possible to confuse attitudes and overt behavior in such a matter as personal cleanliness. The imperviousness to dirt which Doctor Roheim described for the Central Australians may be a significant psychological attitude or it may be due to the scarcity of water. The Arapesh, with a better supply of water, but no more of the obsessive attitudes towards dirt than the Australians, nevertheless enjoy the physical sensation of a freshly bathed skin. The Manus, on the other hand, are obsessive on the subject of filth, but lack any developed sensuousness, and so, surrounded by salt water, they are actually not as well bathed as are the Arapesh in the midst of their muddy roads and infrequent springs.

bark beds beside a little smouldering fire. Women nurse their children in pleasant relaxation.

There is very seldom a feeling of industriousness or busy work about an Arapesh group. The rhythm of life consists of hard heavy tasks, clearing bush, fencing, planting, harvesting, carrying pigs, going on long journeys, setting and watching traps, working sago, for the men, and carrying, planting, weeding, harvesting, fetching firewood and water, and cooking, for the women. Their hands are almost always too tired for the small tasks like plaiting a belt or an armlet, threading beads, netting a bag or a fishing scoop, binding a new point on a spear, or fashioning a feather ornament. So the men sit and smoke, or chew a little areca nut—and the Arapesh are not, in any sense, excessive addicts of either areca nut or tobacco—and talk quietly among themselves, while the women cook and play with the babies, and the children sit about playing with their lips.

A very poor and inadequate diet containing, at best, only a few ounces of protein a week, long trips up and down the steep trails, and the anxiety which comes from too little to eat and a multitude of possible tasks, dull their spirits a little. Behind this dullness, lies the damp heart-chilling cold of the mist-covered mountains, in which even articles inside strong boxes were covered with furry mold. The children's most habitual position is to hug themselves, giving them always a slightly bowed, slightly crouching appearance. Therefore, the tempo of life is a little slow in the village and the people are a little cold, always slightly hungry, and more than a little anxious. Yet there is very little irritation or quarreling and even less gossip; the small mixed groups by the fires tell slightly funny stories at which everyone laughs, speculate idly on distant sounds, or sit and sing songs until the cold drives them indoors.

The quiet of the village scene is sometimes broken by halloos from the next mountain top. This is the standard method of communication, the shouter raises both hands above the head to give more breath and the words are cried out in a special pronunciation which corrects any chance of their not carrying, so  $Wabe^h$ , which, when spoken, carries the merest whisper of an aspirate, becomes when shouted,  $Wabeh\bar{u}$ . Sometimes there is the sound of a distant garamut being beaten, but as the Arapesh have never developed any consistent system of garamut calls, this conveys no news, but provides only a peg upon which to hang the gentle, lagging, laughter-padded conversation. Occasionally also, the quiet is shattered by an older man or woman of importance delivering a harangue, sometimes addressed to an individual who has been dilatory

or recalcitrant, sometimes as a general homily to the young. The voice of the admonishing elder rises and falls, the scolded person neither answers nor hangs his or her head, for the rebuke is not felt as directed against him, but rather as a relief to the feelings of the person who is talking. Similarly, a man who is angry or disappointed will come home and hack violently at his own palm tree, while a man who is feeling particularly happy will sit all day playing on a hand drum, singing to himself.

There is a convention that all important conversations, challenges between exchange partners, announcements of important plans, agreements between important men, etc., must be conducted in very loud tones. loud tones are an earnest not only of the importance and cultivated aggression of the speaker, but of the importance of the matter under Sometimes such discussion takes place between two men seated at some distance from each other, but at other times two older men will sit side by side in quite a small house and shout their conversation so that the whole village will hear them. The children stir uneasily in the midst of all this simulated aggressiveness; they are not given adequate clues to recognize it as play acting, and this adds to their tendency later in life to try to drown out the older men's conversation with their drumming. At a feast, of course, this imitation contentiousness may always brim over into a real quarrel and the young men dread the older men's loud-mouthed oratory.

This low tempo of village life disappears before a feast, which the Arapesh regard with all of the seriousness of the over-worked and the poverty-stricken. Food is always scarce, although no one ever starves; so also no one is ever fed enough. The small supplies of food which will keep, sago and yams, have to be husbanded very carefully, if there are to be any feasts at all. There are not nearly enough coconuts and the trees are almost always under a taboo, in preparation for a feast. To obtain meat for a feast means several weeks of concentrated hunting. The slender spoils, perhaps one tree kangaroo, as the largest, and a few smaller marsupials, are smoked and smoked, while the hunters attempt to add enough meat to make a fitting display. Firewood must be laboriously accumulated by the women and girls; all the extra supplies of yams and taro must be carried up the mountain; green leaves for cooking pig and for serving must be brought.

In the intervals of preparation, when a yam garden is harvested, or when the hunters return with meat, there is dancing. Here again, the low tempo of life is revealed, for dancing is more of a duty than a pleasure. The rule is that a dance, once begun, must last until dawn. In the

early evening, the young boys and an older man or so, will get up enough enthusiasm to decorate themselves with flowers and leaves and stretch new tympanums on the hand drums. A meager fire is kept burning on the plaza, but it never blazes brightly enough to illuminate the scene, and is hardly strong enough to keep the mothers who nurse their babies beside it, warm. Wood must not be wasted; it must be kept for the feasts when many strangers will be in the village. The men dance in Those who have hand drums with unbroken tympanums dance with them, in a slow wheeling movement, in which the participant hops now on one foot, now on the other, while beating his hand drum. Around the men the women walk slowly, nowadays with pieces of bright red or white cloth over their heads, and a child swaving precariously half asleep on the shoulders of each. While the women take turns dancing and rest near the fire when they are weary, the babies, sometimes fast asleep, are passed from one dancing woman to another. grows colder, the muscles, which are more adapted to climbing and straining under loads than to the rarely employed dance steps, ache in the Anxiously, wearily, the people watch for the dawn, and remember the belief that there are charms to make a dancing night last longer. In the morning, the village is full of crying children, and parents who walk about, still in their dance finery, ill at ease and without any idea of what to do with themselves next.

So the occasional dance does not destroy the feeling that preparation for a feast is hard work. Every relative, every connection by marriage. helps with some slight contribution. For the few days before the feast, some women arrive each day, laden with sixty to seventy pound loads in their net bags suspended from their foreheads, their jaws shut like traps beneath the pressure, their faces bathed in sweat. The men carry a pig, or a log for the fire, or wood for house building, on their shoulders. a method which makes it possible for them to sing and shout as they walk along. For this very simple reason, a party of men carrying loads will impress the observer as gay and comradely, a party of women, as sullen and taciturn. But if the observer follows those same women into the village, watches them slip the heavy bags from their foreheads and throw away the little pad of leaves which they wore to ease the pressure of the string, their expression will be seen to change immediately, their set jaws relax, smiles replace the look of strain, which is an adjustment to the method of carrying, and no expression of an attitude.

The morning of a feast, the whole village is astir, the women peeling and boiling taro, each big black pot, some of which are two feet tall,

being watched anxiously for fear it will crack in the flames. must be boiled, then mashed with a wooden pounder, ready to be made into croquettes for which every man in the village is grating coconut. Arapesh do not have the grinding-seat which is so characteristic of the islands, but instead use only a little toothed piece of mother-of-pearl shell (see Fig. 76b), on which all the pressure must be provided by a tiring wrist stroke. Many of the men and women who are cooking for the feast have bloodshot eves and a pallid, weary look, resulting from another odd industrial adjustment, the way in which they work sago, sitting down to it, rather than standing up, so that the bitter sago sap shoots into their eyes and irritates them. The game, which has been dried and re-dried until it is a meager bundle of desiccation just on the edge of putrefaction, has already been brought into the village, tied up to a pole and decorated with streamers of red and green leaves, just as the Plains Arapesh carry their big yams. The pig which is to be eaten has already been fastened to a pole. Perhaps it has already been carried many miles, for pigs pass from hand to hand, from relative to relative, to exchange partner, back to relatives, carried now five miles in one direction, now six miles in the other, before they reach the point where they are to be killed and distributed. Once a pig has been fastened in this way, it may never be unfastened, and returned to a normal life; it must be passed along until someone is willing to receive it. carriers watch the tired animal anxiously, hoping that it will not die, and there are many taboos to promote its welfare. In the feasting village, it now lies, protected from the sun by palm leaves set up to form The whole scene is marked by bustle and anxiety. be enough to eat? Will the village be too crowded? Will someone fall ill or die and plunge the whole gathering into a frightened rout? Will so many people close together end in a quarrel? Many of those who are present will not have been in a similar large crowd for two or three months, perhaps longer. They are keyed to life in small groups, in small hamlets, in garden work groups which contain only four or five related men and their wives and children, to working sago or hunting in They are shy country people, unused to crowds, appresmaller groups. hensive of crowd pressure.

The visitors arrive in solid groups, the women wearing highly patterned bags, the men painted and in festive attire. The scene will vary according to the nature of the feast, whether it is a feast to the mother's brother of a novice, or one in preparation for a larger feast, or part of an exchange of some piece of ceremonial between localities. If possible. several such feasts are combined and the food of one is converted into the food of another; pieces of pig change hands many times, just as the original pig changed hands. While the people are gathered, small transactions, like the payment for a wife, or the repayment of old affinal exchanges, are made. The basic problem of feeding two or three hundred people for two to three days remains, and while the hosts eat nothing at all, even some of the visitors may go hungry. There is not room enough to sleep in the houses; many people must sleep on the ground underneath. The slopes used as latrines are inadequate to the needs of so many people. The children, tired and confused by the anxious crowds, fret and cry.<sup>1</sup>

The crowd of people push and mill about on the narrow plazas, lie close together in discomfort under the houses, hunger and resent their hunger, and begin to melt away. Some of the hosts are also likely to leave before the end, taking quick offense at some hasty scolding word from an overtaxed relative. Finally, the feast is over; the visitors go home; and the hosts give the little family feast, the feast to wash the hands, and the feast given by the men to the working women, in appreciation of all that they have done. The accustomed group is alone again, still larger than its wont, but safer. Rapidly, the same day, because there is no food left in the village, the people of the village depart in little laden groups, for the bush hamlets, for the gardens, away from the feared crowd. The feast is over; six months or two years may elapse before they are required to give another.

Meanwhile, the economic life goes on, always with a slight and hardwon surplus which can be sent to exchange partners and relatives in other localities, to help with their feasts and to be banked against future returns when another feast must be given here.

The basic food crop is of the greatest importance to any understanding of the rhythm and content of the economic life of Oceanic peoples. Each has its own necessary adaptation which is of such an order that each forms a sort of complex within which socio-ceremonial elements become firmly embedded. The four major carbohydrate dependences of this area may be said to be taro, sago, yams, and bananas. Sago and yams are functionally interchangeable, in that both can be stored for a period of time; taro and bananas are similarly interchangeable in

<sup>1</sup> The extent to which small children cry on different occasions of this sort may be used as a valuable index to the amount of tension present among the adults. To the Arapesh, a feast, a dance, a crowd of any sort, are occasions of strain and worry. To the Mundugumor, such occasions represent the only times when peace is guaranteed and people may relax and enjoy themselves. And despite the greater tenderness of the Arapesh mothers, their children wail at a feast; the Mundugumor children are, on the whole, quieter and more cheerful than in everyday life.

that they provide a continuous stop-gap, but highly perishable food, which can be used to supplement the less perishable foods. They may be combined in various ways. For instance, the Samoans grow taro in large communal plantations and rely upon bananas as a stop-gap; the Dobuans make the same use of bananas in a yam combination. But, even within these similarities, there will be differences between the peoples who depend upon yams, which means a definite harvest, a period of plenty and festival, and a time of scarcity preceding the next harvest and those who depend upon sago which can be cut at any time, measured carefully to any need, and provides the maximum control over the food supply, obtained by any people in this region, as it is independent of drought or errors in estimation. It is therefore not an accident that the Sepik peoples with their rich all-year round ceremonial life, depend upon sago, and not upon a more variable garden crop.

There is a further important contrast between these three main crops, for bananas are only a subsidiary crop which takes the place of taro, in combination with yams or a nonperishable type of taro which is functionally equivalent to yams. The yam complex may be briefly described as follows: the yams are principally cultivated by men; they are planted and harvested calendrically; their growth is believed to be dependent upon various supernatural forces; and the tendency is to treat them as persons, endowing them with mobility, consciousness, and emotions, in varying degrees in different cultures. A society dependent upon yams will tend to have a ceremonial life concentrated in the period following the harvest; the garden work will follow a definite rhythm with everyone doing the same thing at the same time. A complete description of such a yam-dependent society is given in Doctor Fortune's Sorcerers of Dobu.<sup>1</sup>

At the other extreme of dependence are those who count primarily upon sago. Conspicuous in the sago-working complex is the coöperation of men and women in a series of carefully defined steps, the paucity of magic and ceremonial, and the ability of the society to muster food supplies for ceremonial at any time of the year with a minimum amount of waste and faulty calculation. Not even with the development of cereals did primitive peoples reach such a degree of independence as is given by a plentiful sago supply. It is interesting how often sago working is combined with very conspicuous-localization of food-getting activities. It is much safer for a people to abandon agriculture or sago

<sup>&</sup>lt;sup>1</sup> Fortune, *ibid.*, passim. No statement of this sort of course is absolute; a society can use yams as other societies use taro, or imperishable taro as other cultures use yams, but it does seem correct to suggest that there is a kind of positive and repetitive congruence here.

working themselves and rely entirely upon fishing, as do the Manus and the Tchambuli, rather than raise an uncertain garden crop, if the groups with whom they trade work sago for them. At the same time, to maintain a good supply of sago requires intelligent planning and planting of trees which will not produce a crop for ten years or more, so that the dependence of a people upon sago does not mean the development of a casual, economic planlessness.

The taro complex contrasts with both of these in that it is a continuous crop, requiring frequent re-plantings, and cannot be stored for any long period. In its continuousness it is closely allied to the other tasks which fall more usually to women, cooking, and gathering firewood and water, the tasks which are completed one day only to be repeated Taro, perhaps because it is more associated with women than with men in a region where men are the only suitable traffickers with the supernatural, is not as closely bound up with supernatural usages as are yams. 1 Its use prevents the lean season which precedes a regular harvest, but it also discourages a calendar, discourages large scale feasting, and emphasizes a limited ceremonial life. At the same time, there seems to be a tendency for taro gardening to be done in groups,2 where yam gardening is often a less social matter. Having no set season, taro need not be planted simultaneously. There is always need for replanting so that the possibility of giving and receiving help can be more It is actually possible to suggest that the cultivation of taro always tends to be more highly socialized and that when the supernatural is invoked, it is in general terms; the ancestors are asked to make all the taro grow, or the whole taro plantation is purified from misfortune, while the yam cult tends to be more individualistic and more competi-This is an adhesion, however, which would only be significant within narrow limits and which may very easily be upset.

I have discussed these three complexes in this general way first because the Arapesh depend upon all three foods and comprehension of the backgrounds of each is important to an understanding of their economic system. The Arapesh garden economy is based upon the cultivation of perishable taro; they have sago patches which are faithfully re-planted by each generation for the next; every man grows yams, and yams and sago are greatly depended upon for feasts, but the rhythm of the gardening life is based on taro. This does not mean that the Arapesh were

<sup>&</sup>lt;sup>1</sup> A conspicuous exception to this statement is The Taro Cult of the Orokaiva, cf. Williams, F. E., Orokaiva Magic (London, 1928), 3-101.

<sup>2</sup> Examples are the taloloa of Samoa, and the clan taro gardens of the Orokaiva (Williams, F. E., Orokaiva Society, London, 1930, 44).

originally a taro people—although there is a strong probability that they were—but that at some time in their history the work habits which are most strongly associated with taro became dominant. The frequently made garden, the continuous petty harvesting, and, if a feast is to be given, the need of planting a special garden for it, all set the pattern. This is found characteristically in Samoa also where, for instance, any plan to build a new house must be preceded by a plan to plant special To these considerations must be added the great scarcity of level land and its extreme barrenness, conditions which make large gardens in which many people work side by side, impossible. same time, for each little patch of taro which is planted, it is necessary to build a fence, a laborious task on these precipitous slopes. varied demands are met by individuals re-combining in small gardening groups, now a man and his two brothers and his brother-in-law clear and fence a space on his land; a month later, he helps his mother's brother and his cross-cousin clear and fence a similar space; while, in a third month, he works with one of his brothers, his father's brother and his father's brother's son, on still another clearing. He may send one wife. or both, if he has two wives, to plant with their own kin also. As a result, each woman is planting in one place, weeding in another, harvesting for the daily needs of her household in a third, and watching for the maturing of the taro in some plot assigned to the needs of a feast or a ceremony in still another. This pattern makes it possible for the clearing and fencing on the men's part, or the weeding and harvesting on the women's part, to be done in groups. A little meat can be served because there are others than the hunter's own family there; there are extra people to look after the babies. The members of the group have all of the values which they derive from small warm working confedera-Without the reinforcement given by these ethological factors, the preference for a little company, for feasting others, for shared life, there is no guarantee that the taro pattern would be the one which dominated the society.

As it is, the planting of yams, which furnish about a fourth of the carbohydrate diet, is fitted into the intermittent coöperative taro planting pattern; a number of men make a garden together and each man plants some of his yams in four to six different gardens. This makes it impossible for all the members of one locality to plant at the same time so that yam planting and yam harvests are staggered throughout the year. The imported calendar (p. 282) contains names of months which are designated by the condition of the yams. The Arapesh therefore faced the

alternative of keeping the idea of a calendar and permitting the names to become merely formal, or altering the names, or what seems on the surface a much less likely procedure, retaining the names in their original meanings and abandoning the idea of a calendar altogether. This is what they have done. The names of months can be applied to a time period characterized by a stage of work, as we might use the term Spring Cleaning Week for one member of a community and not for another. So upon being asked what month it is, a man who is at present not concerned with any yam crop of his own will answer, "Hm! Well, I think they are harvesting now in Mohiligum. We can call this moon, 'the moon of yam harvesting.'"

Without a guiding calendar and the continuation of the pattern of small mobile working groups, each member of which is also a member of other working groups of the same type, yam planting and harvesting is spread throughout the year. The community harvest and the yearly lean season are both eliminated and people eat yams the year round. Thus, a series of irrelevant factors have combined to produce a more elastic economy than is usual when yams are the main diet.

The Arapesh tend to put the planting and use of sago palms and coconut palms in the same class. Both are scarce; both must be planted carefully for one's children; both must be reserved for special occasions. People never work sago for their own use, only for feasts; at feasts, the packets are so thinly distributed over a wide community, that it means that all the sago is consumed very quickly. This use of sago is also consistent with the faulty methods of preserving it, for although the Arapesh like the sago moist and regard it as spoiled if it becomes thoroughly dried out, they have not developed any method of keeping it permanently wet, as do the Sepik people in their big pottery jars. This means that sago must be worked for a given occasion and used quickly before it has become dry and spoiled.

Just as their agricultural procedure represents a fusion of two different food-growing techniques, so their meat-using procedures represent a similar combination between hunting and the dependence upon domestic pigs. The rhythm of ceremonial life which depends upon an accumulation of surplus food is, of course, very different, in proportion to the people's dependence upon seasonal hunting, special runs of fish, additional application to hunting or fishing or upon a supply of domesticated animals which can be allotted to a feast months in advance.

<sup>&</sup>lt;sup>1</sup> Something of this kind has happened in the Zuñi calendar in which the names of the six spring and summer months are repeated to complete a twelve month year and the names of these months refer to growing plants, etc. Parsons, Elsie Clews, Notes on Zuñi, Part II, Memoirs, American Anthropological Association, vol. 4, no. 4, 1917, 300 seq.

In analyzing the Arapesh meat patterns, the hunting pattern appears to be the older one, because there is throughout an emphasis upon an emergency situation. The statement is not, "We must hold a ceremony, therefore we must collect meat," but rather, "When enough meat is found, then we will hold a ceremony." The ceremonies for which special crops of yams and taros have been grown, will be postponed from week to week until enough game has been found; sometimes searches for arrangements to acquire domestic pigs are also fitted into this same pat-A domestic pig which injures its foot, or enters a trap, is immediately fitted into the concept of a large game animal which has been killed and must be eaten. It is fastened and sent off to someone to whom one owes or might well come to owe meat, and, like the carcass of a dead cassowary or tree kangaroo, can never be unfastened until it is to be eaten. Domestic pigs form an important item in the food economy of most Pacific Islanders. But this insistence upon an irreversible sequence, so that the pig once fastened is doomed to be eaten at once, is not a usual part of the pig-eating complex, and seems to have a very obvious relationship to the patterns which accompany trap hunting. That it is trap hunting, not spear and bow and arrow hunting, which sets this pattern is also quite clear. The few Arapesh men who specialize in hunting set a series of traps, snares, and deadfalls which they visit periodically. Although this trapping is done with some eye to the habits of the animals, nevertheless catching one is always unforeseen. Once caught it must be disposed of; if one has no need of meat for a ceremony, it must go to someone who has, one who will use the meat and later return an equal amount. Arapesh life is filled with people waiting for a little meat; a man is building a house but he won't summon all of his relatives to help him thatch it—until he has some meat; a baby is born, but the mother cannot be released from her taboos until a feast of meat is made to the midwife; a novice has been initiated, but he cannot cut off his rings, which his mother's brother gave him, until he makes presents of meat to the So it is, to end mourning, to sweep away the ashes of mourning, to cut off the widow's apron, to wash the hands of those who have helped to bury a relative, etc. The events of each individual life set up periods of taboo, of ritual observance, which can only be ended by a small feast of meat, often demanding only a few pounds, or as in the feast of the midwife, a small bird. This interrelationship between the irksome taboo which must be ended and the feast of meat serves as a continual small stimulus to the provision of meat; people will accept a gift which they might otherwise hesitate over because they need it to use ceremonially. Later, they will repay it and it will be used in the same way.<sup>1</sup>

A kind of superstructure on this basic interchange of small pieces of meat, is the system of exchange partners called buanyins. Buanyins are hereditary in the male line, belong to different gentes and, theoretically, to different sides of the iwhul-ginyau dual organization. To one's buanyin one may give a substantial gift of meat at any time and careful accounts The receiving buanyin then distributes this meat in small sections to all of his supporting relatives who use it for their small ceremo-This disposes of larger amounts of meat, bush pigs, cassowaries, and tree kangaroos, than can easily be disposed of en masse, as a gift to a relative. From one's buanyin one can demand a return, as one cannot from one's relatives, so that a gift of game to a buanyin is virtually a method of banking a kill. Amusingly enough, perhaps, because of the assimilation of the fastened pig to the killed animal pattern, a buanyin must also accept a live pig if it is offered to him, and later repay it in the same way.

The meat which forms a very minute and inadequate part of the Arapesh diet comes from three sources, the final distribution of small shares of big feasts, which may include two or three localities by the time all the gifts to relatives are made; the small ceremonial feasts, in which some dozen or more people share, and very small pieces of meat which are the results of children's trapping, finds of caterpillars or sago grubs, or casual kills in the bush of some small animal or bird.

The daily food, therefore, consists of taro from one's own garden, occasional yams or sago which usually reach one through a ceremonial distribution of some kind, a tiny bit of garnishing meat, occasional coconuts also from a ceremonial distribution—except in the case of a nursing mother—and a good supply of greens, part wild, part grown in the taro gardens by the women. Bananas, sugar cane, bamboo sprouts, pongapong (P. E.), breadfruit seeds in season—the breadfruit of this region is so coarse that only the seeds are eaten—and the vegetables which have been introduced from white contact, maize, cucumbers, pumpkins, melons, pawpaws, French beans, lima beans, and tomatoes—all fall into the class of extras which serve to make the daily and insufficient taro and yams more palatable, if often little more nourishing.

<sup>&</sup>lt;sup>1</sup> For an extended discussion of the function of rite de passage periods as stimuli to economic activities, see Fortune, R. F., Manus Religion: An Ethnological Study of the Manus Natives of the Admiralty Islands (Philadelphia, 1935).

# COMPARATIVE NOTES ON BEACH ARAPESH VILLAGES

The Beach villages are ranged along or near the seacoast. is fertile and easily cultivated, with an abundance of sago within easy reach of the villages. Salt marshes and small salt lakes provide safe fishing, for although each Beach village owns a canoe or so, the Arapesh do not like to venture out to sea. The canoes are of the type used by the adjacent Islanders. The Arapesh have made no technical improvements upon these, nor have they added their own terminology, relying upon either pidgin English terms, borrowed terms, or extended terms, e.g., they call the platform by their own word for shelf (alit). in these Beach villages is definitely an intrusive and essentially an unassimilated element. When a Beach man builds a canoe he does so with the help of an Island gift friend who supervises his work. adjustments which the Beach Arapesh have made are the use of the very large dip fish net, called a lak, used by men, and a large dip net usually made from very coarse net bags sewn together, rather than properly However, they do have a netting needle and use the gauge and both of these devices are unknown in the interior. They rely mainly upon the bow and arrow for hunting and for game birds have an abundant supply of wild duck on the small lakes.

Under Government influence, the villages have been arranged in rows, with a planted path of coconut trees. As the Roman Catholic Missions have had schools established in the Beach villages for many years, there is no tamberan house and the only ceremonial objects are the very handsome carved garamuts which are arranged along the coconut palm bordered roadway. These garamuts are said to come from Kairiru; all of the garamuts in Dakuar were of one general design. They are six to seven feet long, with a low relief all-over design on each side and handles at each end, characteristically showing a full relief human figure or human face on the upper surface, and either a carved phalanger or a supporting conventional design below.

The most marked contrast between the Beach and the Mountain villages is in the size of the houses. Dakuar boasts many houses sixty to sixty-five feet long and about thirty feet wide. There are also smaller houses, the rectangular type, raised on posts about three to six feet from the ground, and provided with veranda supported by a separate set of posts (Fig. 17). These large houses are only used as storehouses, work-

<sup>&</sup>lt;sup>1</sup> See comparative list of canoe-part terminology in use on this coast, collected by Georg Friederici, Wissenschaftliche Ergebnisse einer amtlichen Forschungsreise nach dem Bismarck-Archipel im Jahre 1908: Beitrage zur Volker- und Sprachenkunde von Deutsch-Neuguinea (Erjanzungsheft Nr. 5 der Mitteilungen aus den Deutschen Schutzgebieten, Berlin, 1912), 264.

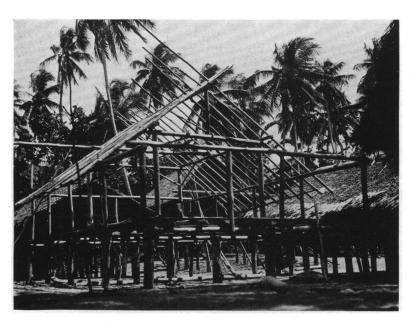


Fig. 17. Construction of a Beach Arapesh House, Dakuar, 1932.



Fig. 18. Making a Coconut Palm Leaf Mat, Dakuar. Examples of fine large houses of the Dakuar form may be seen in the background.

rooms, and for cooking, but never for sleeping. Instead, the people sleep in small shelters on the sand. These are put together in many haphazard ways, walled in with *limbum* spathes, or with double mats of plaited palm leaves. A fence to keep out the sand borders the beach, but many of these small shelters are built on its seaward side. The space under the houses is also more extensively used in the Mountains. Enclosures for dogs and pigs are found under the houses, while in the Mountains, little dogs and pigs are kept inside them.

Everywhere the effort to keep out of the sand is apparent. Little standards made of branches are frequently stuck up on the sand; bags and baskets are hung on these; and people do not sit on the sand, but on coconut leaf mats. The beach is used as a latrine and people do not bathe in the sea when they rise in the morning, but wash their faces in fresh water just as is done in the Mountains. Water is carried in coconut shells or in buckets made of folded *limbum* spathes.

The village is large, containing several hundred residents. The houses are built in a continuous line along the beach. The observer from the Mountains is immediately struck by the contrast between the fine large houses, which are much more carefully built than are any houses in the Mountains, and the little disreputable sleeping and working shelters clustering about them, while in a Mountain village there is a gradual transition from the largest house to the smallest.

The houses are thatched with sago leaf and walled with sago bark shingles; these are placed much closer together than in the Mountains and the edges are more frequently cut into decorative scalloped patterns. These shingles are secured on the outside by vertical bundles of split elephant grass. The lashing of the elephant grass to the bark shingles is done more carefully and with more attention to decorative effect than in the Mountains. A deeper ledge between the wall of the house and the outer extension of the house floor is left than in the Mountains, and on this ledge are kept such articles as fishing gear and stones for cooking pigs. Bows and arrows are hung outside the house on a special frame. The shingles are also decorated with cassowary eggs, shells, cassowary bones, pigs' jaw bones, crab shells, and pieces of dyed grass skirts. Children's drawings in charcoal appear on the outside of the houses, with the same designs as those used in the Mountains.

The house form differs from one type found in the Mountains, only in the addition of the veranda. This is sometimes walled in with *limbum* spathes or coconut leaf mats in unformalized ways and is said to be due to white influence. Occasionally, in the houses with the walled-in ver-

andas there is a door at the side of the veranda. The entrance to the house is built at one side of the center pole; the threshold is raised a little from the veranda floor, and the door is faced with sago stems. The doors are all of the suspended type used in the Mountains, but in Dakuar I observed only one instance of a carved wooden board at the base of the door, said to be a prevalent style in Kobelen and Umanep. The doors all work on rattan rings; the shingling of the sago stems is close and the

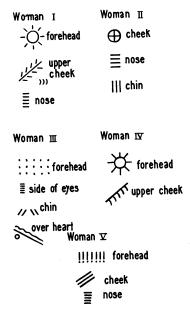


Fig. 19. Women's Tattooing Designs recorded in Dakuar.

fastening more ornamental than in the Mountains. Both types of ladler occur, but the true ladder is more frequent.

The interior of the house differs from the Mountain houses mainly in the greater height and the absence of extra fireplaces for sleeping fires. The round smoking basket shelf of the Mountains is replaced by square shelves suspended from the ceiling by the four corners. The large houses are filled with tobacco leaves, each leaf suspended singly from the rafters, instead of being spread on frames as is done in the Mountains. The four-pointed hook is in use everywhere.

In the large villages there is much more appearance of industry than is ever seen in the mountains. Limbum spathes, of which the Beach

people make extensive use as wall materials, floor mats, water buckets, and, when fastened together and suspended from the forehead, as a woman's carrying container, are drying everywhere, spread out under heavy stones. Mat making from palm leaves, done by men (Fig. 18), and the dyeing of sago shoots for women's aprons, are also conspicuous.

In physical appearance, the main differences are the greater prevalence of the Island type of headdress, the long loose psyche knot encircled by a basketwork ring, for the men and the tattooing of the women (Fig.



Fig. 20. Dakuar Women. The woman on the left is carrying her infant in a cloth sling made in the form of the barkcloth sling also used in the Mountains.

19). The women carry their babies in barkcloth slings (Fig. 20) and use net bags only slightly, while there is extensive use of Murik baskets and limbum containers. Their sago shoot aprons are much smarter and of a different style from those found as one ascends the Mountains. Many carry netted bags from Suwein.

The material culture is one of greater wealth and diversity, although there are only a few more articles actually manufactured in Dakux. The people make pillows of the anvil type, ornament a round gourdas a lime container, and carve a different type of lime spatula. They import heavy black pots for cooking from Arle and Tumleo (Fig. 21) and a thin red pot (very similar in form to a Mbuke pot, Admiralty Islands) from Kaup, which they use for heating water. They have very few of the pottery serving dishes (sehen) used in the Mountains, but many more large fine wooden plates and deep wooden bowls, deeper than those preferred in the Mountains. A large flannel-like leaf is placed on the plate under the food when serving.

Rattan swings suspended under the houses, in which babies are hung, and from the limbs of trees, in which children swing, are very conspicuous. Children are also put down in the sand and left alone, as they would not be in the Mountains. The whole pace of life is slower, with less anxiety and a greater feeling of wealth and reserves than is found in the Mountains.

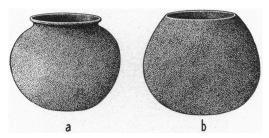


Fig. 21. Types of Pots imported from the Islands. a, Pot of thin red clay from Kaup; b, Plain black ware pot from Arle and Tumleo.

## Comparative Notes on Plains Arapesh Villages

The following sketch of Plains Arapesh villages is based on Doctor Fortune's reports and photographs. The village is built around a central plaza, at one end of which stands the tamberan house which is from sxty to ninety feet high. The tamberan house is so situated that its sladow wheels across the plaza square and the sun very seldom strikes full upon its façade. About the edges of the plaza are a few small, unwilled structures, under which the old men sit, protected from sun and ran. The tamberan house is triangular in each cross-section, the ridge pole sloping steeply down to terminate some three to six feet from the grand. The two sides protrude from the façade in front to protect it from the weather. The façade is constructed of strips of sago bark painted in continuous designs crossing the front of the building (Figs. 4, 22). The steeple is topped by a broken pot and under the belfry-like extension

hangs a rattan chain with huge links, from the end of which a wooden ball is suspended. Across the front of the *tamberan* house, at a height of about thirty feet, is a wide wooden panel, carved in high relief with a row of human heads, interspersed with a row of female figures, with exaggerated genitalia. Below this, is a thatched paneling to the top of the tunnel-like entrance, and parallel with the entrance is a band of sago bark shingling.



Fig. 22 (80.0–7194). Unit from Horizontal Frontal Panel of Tamberan House Plains Arapesh.

These tamberan houses are not used as gathering places, but only to house sacred objects, which include small and large carvings made from whole tree trunks which lie prone on the floor. The larger ones are covered with smaller grotesque designs. The four central pillars of the tanberan house are also carved.

The dwelling houses of the Plains Arapesh are all built on the ground and show a less marked version of the sloping ridge pole design which reaches its extreme development in the *tamberan* house. Fig. 3 shows such a house under construction. These houses are that hed with ago

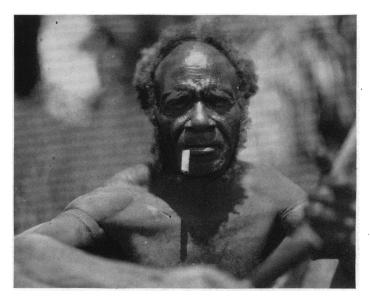


Fig. 23. A Plains Arapesh Man, 1932.

leaves which have not been stripped and reworked; the whole leaf is simply laid on the framework, giving the houses a shaggy appearance.

In physical appearance, the Plains Arapesh are heavier, with larger heads than the Mountain people. The men are naked, and wear short beards under their chins, which are plucked clean. Their foreheads are shaved into a dome-like design (Fig. 23) so that the face appears almost surrounded with hair. The young girls are naked until marriage, after which they wear a set of very diminutive aprons, the ventral apron being of dyed sago shoots, the dorsal of barkcloth carefully pressed into a series of decorative tucks. Instead of piercing the end of their noses, they pierce one nostril and wear a short string of very fine shell money



Fig. 24 (80.0-6946). Bamboo Ring Cutter.

suspended from it. The commonest ornament worn by the men is a large *Ovalis* shell, suspended from a necklace of small rings (Fig. 13).

A Plains village, like a Beach village, is concentrated; the people live in the village and go out to their gardens during the day. There is also much more of an air of activity; the men are at work twisting pieces of bamboo to make ring cutters or actually cutting rings from *Tridacna* shell (Fig. 24) or in some villages making pots. The women are all busily at work making net bags which form an important export.

The chief food differences in the Plains lie in the greater scarcity of sago, the greater reliance upon the type of taro which has a series of small sprouts, the use of long yams, and the practice of regular planting, which results not only in a regular harvest period but also a period of scarcity shared by the whole community. They bake more often in the open fire and make fewer soups than the Mountain people, and, in general, pay much less attention to the amenities of cooking. They do not use the bow and arrow, but only the spear, and rely a good deal in hunting upon set fires and communal drives in the dry kurnae grass.

### SUPPORTING MATERIALS

### INTRODUCTION

In this section I plan to begin the type of treatment which I shall use throughout the remainder of this series, that of presenting a mass of detail which fills out, illustrates, and supports the more general discussion which has preceded it. I feel that an appendix does violence to the spirit of a scientific paper in which the reader may be assumed to be interested in the finer detail, as well as in the rough generalization, and in which it is desirable to preserve a formal and structural relationship between the raw data and the abstractions drawn from it. The reader not interested in those particular materials can omit them without loss of continuity to the beginning of the next section.

I am also following here the division to which I referred in the introduction. I present here only the detail of daily activities and leave considerations which involve a discussion of the art style based on the analysis of a large number of specimens, now in the Museum collection to the future section on the collection itself. I am postponing the discussion of ceremonial paraphernalia of all sorts. In this way the reader should obtain enough data upon the material conditions of Arapesh life to follow the discussion of the social life without the cumbersome detail of analysis of individual specimens.

#### House Building

The Arapesh possess no special arts of village Planning a Hamlet. construction. They practise no forestry, as do the Iatmül, but rely entirely upon chance to provide them with suitable building material. group methods of house building make it possible to bring materials from quite a distance. Each man who is helping brings a few from some part of the bush where he has been hunting or cutting sago. Beyond the necessity for leaving a small cleared space, sometimes only twenty-five to thirty square feet, the village does not need to be planned in any special Trees which have been planted are respected in the choice of house sites and the house will be cramped or placed at an angle to avoid damaging even quite a young tree. If possible, however, the houses are placed four square to each other, with the doors either opposite, parallel, or at right angles to each other. Very occasionally, a house may have a door facing away from the center of the village. This is most likely to occur if there are several small plazas, or if the house in question is a very small one, part of a cluster of houses.

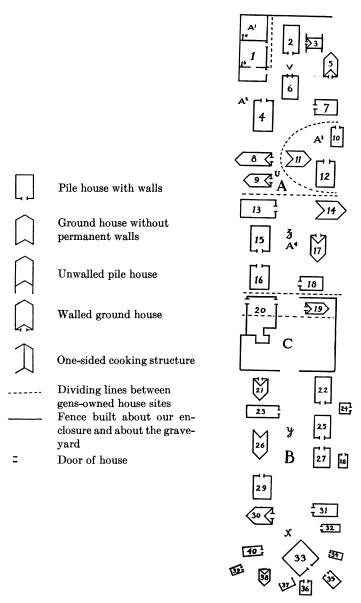


Fig. 25. Plan of Alitoa Village. A, Alitoa; B, Walinuba; C, Section of ground assigned to us; A¹ and A³, House sites belonging to the gens, Dibatua'am; A², House sites of the gens, Uyebis; A⁴, House sites of the gens, Kanehoibis; B, House sites of the gens, Toto'alaibis; x, Plaza (agehu) of Balidu, Sumali, Baimal, and Kule; y, Plaza of La'abe and Ombomb; z, Plaza of Aden; u, Plaza of Ulaba'i; v, Plaza of Bischu, Wutue, Wabe, and Matasues.

In the plan of Alitoa village (Fig. 25), it will be seen that the door of House No. 6 faces away from the center of the village, on the small plaza, V, used by the members of the Uyebis gens, to one of whom House No. 5 belongs. The fact that House No. 33, the finest in the village, has no door opening upon the plaza, X, must be explained by the fact that No. 33 is primarily a show yam house, and facing on the plaza is the decorated front with a wide overhanging roof beneath which visitors can sit. The absence of a door in the front of the house merely indicates delicately that the house is for the storage of yams, and to provide outside sitting and lounging space, and that the interior is still too new and fine to be used. This attitude towards a very new decorated house is common.

The village is not fenced, except in response to white influence, as is the case in fencing the cemetery which has been built to comply with Government regulations, or in fencing off the space around a Government rest house to keep the pigs from intruding upon the attention of a traveling official. There is also no ditching, except the ditches which are dug inside the upper wall of ground houses, in order to keep the runnels of water from draining right into the house floor. Trees are planted according to no particular plan; land is not made perfectly level even though it serves as a plaza. The little mounds about the foot of each palm tree are the only resemblance to the elaborate village plan of the Middle Sepik.

House Types. The basic Arapesh house type is a gabled structure (Fig. 26) with a central ridge pole resting upon two supporting posts, and two wall plates parallel with the ridge pole, supported upon shorter posts. Across the wall plate and the ridge pole are laid a series of rafters. These intersect on top of the ridge pole and along this intersection is laid a supplementary ridge pole, used for bonnetting the ridge. This form persists in every house, except the conical menstrual hut which is built by women. The principal structural variation lies in the alteration of the height of the six main posts and that of the four side posts in relation to the height of the two center posts. When a pile house is built, the height of the two center posts is increased to from seven to fourteen feet, and a platform, supported on four heavy piles, is set within this structure.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> When Kule was thought to have died, Amito's made the point that they would put his body in the new and beautiful yam house which Baimal had just built. To be willing to defile such a new house, which they themselves did not yet use for everyday living, was instanced as a special sign of affection.

affection.

2 In the present Beach type of house, which is sometimes sixty feet long and twenty-five feet high, the house itself is set within the limits of the platform, so that the posts supporting the roof pass through the floor of the platform, leaving a wide ridge at the base of the house wall upon which articles may be stored. Note also (Fig. 17) that the two center posts which support the ridge pole in the Mountain Arapesh house have been replaced by two short posts which are supported on transverse beams.

The platform is not encorporated in the house structure itself, the two are merely combined under one roof and within one set of walls.<sup>1</sup>

The other most fundamental variation in house form (Fig. 28) is in the methods of roofing and walling; each of the known methods may be used in either the pile house or the ground house. The variations in

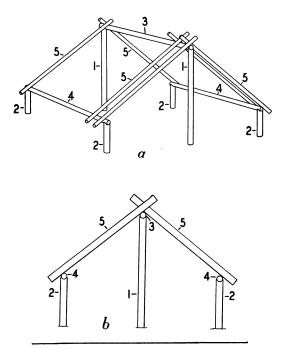


Fig. 26. Basis of Arapesh House Form and Exact Form of Unwalled Shelter used as Cook House and Lounging House in Hamlet. a, Side view; b, Front view. 1, One pair of posts supporting ridge pole; 2, Two pairs of wall posts supporting wall plates; 3, Ridge pole; 4, Wall plate fitted in notches in center of upper ends of wall posts; 5, Rafters.

roofing consist in the use of worked thatch sheets of sago leaflets, or large sago palm leaves attached longitudinally to the thatching lathes, producing a very shaggy house, with overhanging sides. Considerable difference in appearance is also produced by varying the number of rows of thatching sheets; poor, hastily constructed houses may have only three or four rows, while well-built and more ambitious houses may have

<sup>&</sup>lt;sup>1</sup> It is interesting to note that this essential lack of structural relationship between the framework of the roof, and the platform which forms the floor, is found also among the Orokaiva. Williams, F. E., Orokaiva Society (London, 1930), 69.

twice or even three times as many rows. Even more variation obtains in the walls (Fig. 28). They may be left entirely open in either a pile house or a ground house; they may be walled only on one side in a temporary ground house; they may be constructed of a double framework of bamboo between which whole sago palm leaves are thickly piled, or of thatch sheets fastened vertically to the side framework, or of coconut palm leaf

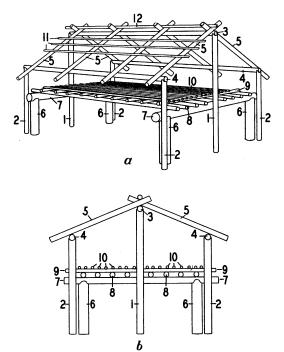


Fig. 27. Side and Front View of Arapesh Pile House. a, Side view; b, Front view. 1, Posts supporting ridge pole; 2, Wall posts; 3, Ridge pole; 4, Wall plates; 5, Rafters; 6, Floor piles; 7, Main floor plates; 8, Longitudinal floor plates; 9, Transverse floor plates; 10, Flooring of *limbum* or elephant grass; 11, Longitudinal lathes to take thatching; 12, Supplementary ridge pole.

mats, fastened either vertically or horizontally. All these methods are characteristic of the ground houses and used only as temporary measures in pile houses. Lastly, the walls may be constructed of shingles of split sago bark, which are arranged on the sides in a series of overlapping rows resembling clap-boarding, supported on the inside by strips of bamboo and on the outside by strips of elephant grass, with decorative rattan fastenings. Almost all pile houses have this type of walling and although

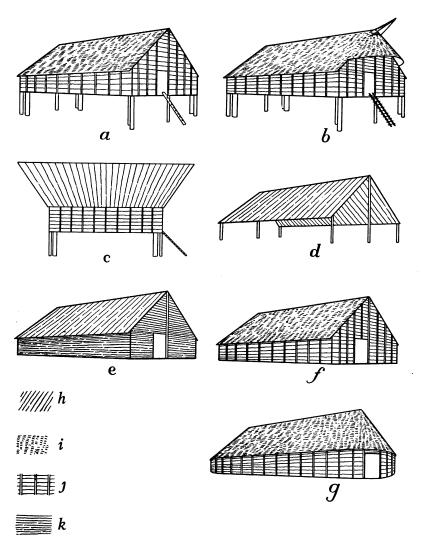


Fig. 28. Current House Forms among the Mountain Arapesh. a, Square pile house, worked thatch; b, Pile house with ridge spur at front end and semicircular projecting roof, worked thatch; c, Pile house in which ridge pole projects further than wall plates, thatched with whole leaf; d, Unwalled lounging structure; e, Ground house, roof of unworked thatch, walls of coconut leaves; f, Ground house, walled with sago bark shingles; g, Ground house, walled with sago bark, rounded ends; h, Whole sago palm leaf thatch; i, Worked thatch; j, Sago bark shingling; k, Coconut palm leaf walls.

quite a few ground houses have it today, it is said to be recent adaptation resulting from the Wewak Messiah cult.<sup>1</sup>

The third most important variation is in the numerous projections, extensions, and additions to the ridge pole and gable ends of the house.

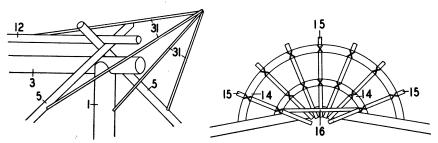


Fig. 29. Decorative Ridge Spur, Side View, of Arapesh House. 3, Ridge Pole; 5, Rafters; 12, Supplementary ridge pole; 31, Four light rods of elephant grass, forming ridge spur.

Fig. 30. View of Projection over Doorway (alitem) of Arapesh House, from beneath. 14, Rings of heavy rattan; 15, Radiating strips of bamboo; 16, Short strut attached to the gable end so as to leave a small triangular section exposed. The upper surface is thatched.

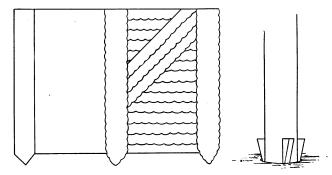


Fig. 31. Detail of Decorative Sago Bark Shingling on Arapesh House. Front of Balidu's Big House, Alitoa Village Plan, No. 33 (Fig. 25).

Fig. 32. Wedge used to steady Post or Pile in Hole.

These supplementary elements are more usually applied to pile houses, but in some cases have reverberations in the ground house also. They are first, a *map*, the construction of a ridge spur at the front end of the house by attaching a triangular framework of elephant grass to the end of the ridge pole, thatching this to the raised point and attaching

<sup>&</sup>lt;sup>1</sup> See above, p. 204.

pendent streamers of shredded sago leaves to the parallel bar (Fig. 29); second, by the construction of a semicircular veranda roof alitem (Fig. 30). As there is no veranda, if the roof is large, there must be an extra light pole to support its outer extremity. (There was one ground house in Alitoa (Fig. 25, No. 21) in which this method of constructing a semicircular roof had been encorporated in the roof, and the ends of the house walled in, in a rounded form to conform to it (Fig. 28g). easily be interpreted as a survival of a round house, but the above seems the more plausible interpretation in the light of all the known evidence.) A third superficial structural variation is achieved by permitting the projection of a shelf, built inside the front gable of the house, outside, and thatching this over. This shelf is called an auwhat. A fourth variation of the ridge pole is obtained by extending it well beyond its supporting posts, in a peaked overhanging veranda roof, a form probably related to the Plains type of house in which the walling of the front of the house begins well back under just such a roof.

Variations are also introduced in the relative dimensions of the length and breadth, so that a house can be built perfectly square, or slightly wider than it is long, or twice as long as it is wide. By altering the relative heights of side and center posts, the gable end may be peaked or flattened. Least variable in the houses I measured was the height of the sides. Whether this represented the height from the ground to the wall plate or the height from the floor to the wall plate, it was about two feet. The one exception to this rule is in the completely unwalled ground house which is used as a lounging house and as a shelter against rain and sun (Fig. 25, No. 11). In such houses the roof angle is slight and the side posts may be four feet from the ground, approximating more closely the height of the side posts in a small pile house.

In addition to variations in roofing and walling, in superficial structural additions, and in dimensions and proportions, houses may also differ in the supplementary decorative elements. The edges of the sago bark shingles may be cut into patterns either in serrated designs or broader scallops. Some of the shingles may be arranged at right angles to others, or parallel to the gabling, to decorate the front wall of the house (Fig. 31). Fringes may be added, either to the end of the ridge spur, called a map, or to the edges of the semicircular veranda roof, or along the edges of the house floor where they hang down, partially hiding the piles. These fringes are of two types; one is a very fine shredding of sago palm leaves (buwhi') in which the leaflets are not separated from the stem which holds them together (the type most frequently used

along a straight edge like the side of the house), and the other consists of approximately inch-wide streamers of sago leaf, each of which is crimped in a half inch pattern and attached separately (wauwilan). Additional decorations in the form of paintings on the corner sago bark plates may be attached either to a fine new house for keeping yams, or to a tamberan house. Simple houses do not always have these corner plates; instead, the two edges of the rows of sago bark shingles are simply brought together roughly at a right angle; but in better built houses shield-shaped pieces of unsplit sago bark are placed at each corner to face it. On these, designs may be painted with colored clays, usually before the sago bark is attached to the house, sometimes afterwards. A tamberan house also has a shield-shaped piece of painted sago bark stuck in the gable and a carved spear or so projecting from underneath the ridge spur.

In surveying these variations, it is possible to make certain suggestions as to origin. It seems certain that the ground house, still the principal house type of Wihun and Boinam, was the original form and that the use of unworked thatch for dwelling houses, and also of sago leaves for wall materials, was the older form. The source of worked thatch is not, however, so clear, as it is found on the tamberan houses of the Plains, but not on the ground houses used as dwellings. evidence suggests, however, that worked thatch was imported into the Mountain region from the Beach and that this has been the case also with the use of the floor raised on piles, the form of the floor, the sago bark shingling and the decorative cutting of the bark, the semicircular veranda roof, and the ridge spur. The painted designs on the pieces of sago bark fastened on the outside of the house, have their sources, however, more apparently in the painted bark facades of the tamberan and yam houses of the Plains. While the semicircular veranda roof appears to have come from the Beach, the outjutting ridge pole with the overhanging peak shelter is closer to the Plains.

Differences in usages are also suggestive. Among the Mountain Arapesh the space underneath the house is used for a sleeping place by the men who are ceremonially unclean, as a mourner, or one who has killed another, or the father of a newborn child. As an alternative to using the space beneath the house, a small ground house may be built instead. The floor of a pile house must be kept undefiled by any condition of ceremonial uncleanness. Women who are unclean because of the shedding of blood, either in childbirth or in menstruation, must, of course, leave the level part of the village for a temporary shelter con-

structed by themselves over its edge. Thus the Mountain Arapesh make a ceremonial distinction between the floor of a raised house and that of a ground house, and this distinction is of the same order as that between the village level ground and the slopes which surround it. In the Plains, the veranda space, which is merely ground space under an overhanging roof, is the equivalent of the "underneath the house," or its substitute, a ground house in the Mountains. The interior of the ground house, inside the front wall, is the equivalent of the house floor of a raised house. It is also interesting to note that the Waskuk, who speak a multiple gender language, also have a ground house, with an extended veranda space roofed and walled on three sides.

The only other important specialization of use occurring, today, is that as far inland as Alitoa, houses spoken of as yam houses and tamberan houses must be built upon piles. (The yam houses are simply more highly decorated and better built houses in which a yam crop is stored initially and which are later used as dwelling houses.) But this is merely because the pile house is now the handsomest type of house known to the Mountain Arapesh. Either ground houses or pile houses may be used for cooking, sleeping, or storing, although there is a tendency to store perishable objects in the pile houses where moisture cannot attack them. Little pigs and dogs are kept as often in one type of house as the other in the Mountains. On the Beach special dog houses are built underneath the house for a litter. Because of the labor involved in flooring, a pile house is always more work to build, but ground houses are sometimes as neatly thatched with thatch sheets and walled with sago bark shingles as are the pile houses. Very often a ground house will be much bigger than a pile house standing beside it.

There is one slight sociological difference between the ground house and the pile house used as a dwelling. The ground house is structurally adapted to a division between men and women: a large beam is sunk transversely across the center of the earthen floor; there are two doors, the back one to be used by the women in their cooking, while the front one is used by the men and their male visitors. This has no genuine ceremonial significance, but is rather a practical device to prevent the women from climbing over the men as they go back and forth when preparing a meal. If a ground house is built in some situation where a back door is impracticable, the dividing log is placed lengthwise in the house and two doors are constructed at the front, one on either side of the center post, one for the men and their visitors, the other for the women. In the construction of the floor of the pile house (Fig. 35), this

transverse center beam, a little nearer the front of the house, is retained. However, it does not serve the same function for the pile house, possibly because of the great labor of constructing a ladder, or possibly because of the greater elaboration of the superficial structural features of the front gable and door. As a rule, the pile house has only one door, used by both men and women. The back of the house, marked off by the center floor beam, is merely a storage place.

Preparations for house building range all the way from following a passing whim, to careful planting of special gardens. Building a new house is an integral part of any large ceremonial undertaking. who is the "trunk" of a big feast almost invariably builds a new house to hold his yams, or to shelter the tamberan when it comes. house must be built with ceremony. The owner must make several feasts for those who help him, even though a large part of the assistance is still rendered informally by his relatives and associates. saying that "a man who has meat can build a large house and have it decorated," which means merely that a ceremonial house must be built in accordance with all the ritualistic forms. Sometimes a household will build a large house without ceremony; sometimes a man who wants to cheer himself up, or who happens to be feeling especially cheerful, will decorate quite a small house with streamers and cut edges of shingles. or his friends may do this for him casually. Meat may sometimes be the stimulus to house building rather than its justification. a man who has made an unexpected good kill, as of a tree kangaroo, and finds that he does not owe it to anyone, nor has any close associate who is engaged in any ceremonial, may decide to sink the posts of a new house, because he has the meat with which to give a small feast. building a small house, a man and his brothers may do this in a few days. entirely by themselves, assisted only by such of their associates as chance to pass that way during the interval. A man will not pass by a friend or relative who is engaged in house building without lending a hand for a while; if one enters a hamlet and finds a partly completed house and the owner absent, one may very likely stay a day and add the rafters or work a little thatch; and if one knows that a house is under way in a certain place, one looks out for building materials in the bush.

There is no special skill in house building; small boys of ten and eleven help with any house which is being built, and boys of seventeen and eighteen will build houses by themselves. Although some men are more skilful than others in painting sago bark, anyone may attempt a painting at any time, so that there is no assurance that the more skilled

person will be asked to do it. The general premium upon doing other people's work rather than one's own means that A is likely to cut the decorative shingles for B's house and B to cut them for A's and each will feast the other, without reference to the fact that A is highly skilled and B only slightly so.

Steps in House Building. The first step in house building is to plant the two central posts (nyidime) which are to support the ridge pole (maduk). Holes are dug with a sharpened digging-stick called selipo'a; the hole itself is called iwat. The posts have already been cut and sometimes, but not always, the bark has been peeled off. For these four posts (lawa) which support the wall plates (bigap), and for the four piles (uloh), the wood of the me'aba and 'waot trees, or ulawhip in a pile house, is used. The ridge pole (galiat) in a pile house is made from ales, sabit, alabas, or uwhalo wood. For lighter poles, the wood of sadis, yada, ehelibo, mogabolan, and maulihapeu could be used, while the very light posts used in small ground houses were made of myimati and uwhalau. Thatching lathes can be made of a great number of light woods.

Although the posts and piles have been cut before the post holes are dug, there is no attempt to measure the circumferences of the posts accurately. Instead, an ample hole is dug and then small wedges (idap) are inserted (Fig. 32) to steady the post. Posts which fork at the desired height are selected and the fork is merely trimmed to provide a secure resting place for the end of the ridge pole or the wall plate. It is not customary to use posts of sufficient diameter to make it possible to cut special notches to receive these, so that the builders had to search until satisfactorily branching trees were found.

The order of house building depended somewhat upon the materials available, but it was customary to finish the roof structure and set the piles and lay the cross beams for the floor structure before any flooring or roofing was added; the order in which the basic structure of roof and floor was completed was, however, uncertain. As a ground house (aurap) has exactly the same structure as a pile house (ulipat), without the addition of the floor, I shall describe the building of a pile house, and the reader need only omit the floor construction for the ground house.

After the ridge pole is raised on the two center posts, the four side posts which support the wall plates are sunk and wedged and the wall plates laid in notches also formed naturally. Across the wall plate and projecting some six to eight inches below it and some six inches above

<sup>&</sup>lt;sup>1</sup> The ethno-botanical specimens collected for the Arapesh were unfortunately too damaged for identification, so that I can merely record here the native names for the materials used.

the ridge pole are laid a series of light peeled poles (wahega), which serve as rafters. These need not be of the same size and may vary from five to three inches in diameter. No great care is taken to trim them to the same length. Sometimes they use rafters from an old house which are much longer than those cut for the new; no attempt is made to correct this. The general feeling is that it is a mistake ever to cut a piece of building wood if it can possibly be used as it is, for it may later be re-

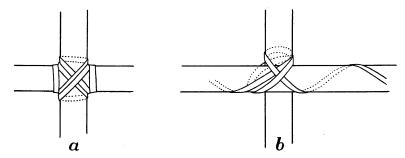


Fig. 33. Details of Rattan Knots used in House Building. a, Ideal form of a single knot; b, Ideal form of running knot.

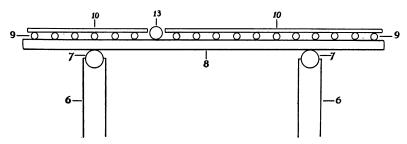


Fig. 34. Side View of House Floor. 6, Floor piles; 7, Main floor plates; 8, Longitudinal floor plates; 9, Transverse floor plates; 10, Flooring; 13, Transverse center floor beam.

quired for some larger structure. These rafters are laid a few inches apart. But here again there is great variation; in hastily constructed small houses they may be eight and ten inches apart; in more carefully built larger ones, as close as four inches to each other. The rafters are tied to the wall plate and to the ridge pole, with heavy unsplit rattan or light flexible bark, depending upon their thickness. Arapesh tying is exceedingly careless. There are two ideal knot forms. Fig. 33a illus-

trates the form for the single knot and Fig. 33b the knot form for fastening two objects set at right angles to each other. I made a study of several houses and found that these forms are only approximated in most cases and that the ideal form occurs only about once in every ten knots; it varies somewhat with the individual worker, but not enough so that there is an apparent difference between completed houses. Here, of course, it must be remembered that every house has been worked on by from three to thirty people, so that it is not surprising if there are no permanent records of individual differences to be found in finished structures.

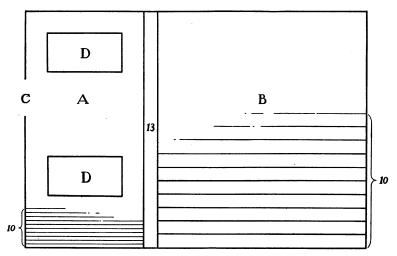


Fig. 35. Diagrammatic View of House Floor. A, Living section (witinum); B, Storage section (but); C, Doorway; D, Fireplace; 10 in B, Flooring, usually of limbum palm; 10 in A, Flooring, usually of bamboo.

At this point, or previous to the laying of the rafters, the four heavy piles (uloh) are sunk,¹ and wedged in exactly like the posts. These posts vary from eleven to thirty-two inches in circumference in the houses I measured.² A square notch (aberap) is cut in the center of the top of each pile. The two main transverse floor plates (tabak) are simply set in these notches without any additional fastening or wedging. Six to ten longitudinal floor plates (auten) are then laid on top of the tabak and lashed down with heavy kunda (P. E., wasigu) (Fig. 34). At right angles to these floor plates are laid transverse floor plates of bamboo (alap) which

Beach houses have as many as fourteen heavy piles, but I saw no Mountain house with more than four.
 See Table showing sample dimensions of houses in Alitoa.

provide the springiness for the floor. Parallel with the two tabak and taking the place of about three alap, is laid the transverse center floor beam (karipom) which divides the house floor (Fig. 35) into two sections. The front and shallower section used for cooking and sleeping is called witinum and the rear and deeper section is called but. The witinum section is then floored with pieces of split bamboo lashed to the alap, while the but section is floored with planks of limbum wood, prepared by removing the center pith and beating the thick bark with an adze until it is sufficiently split longitudinally to lie almost flat. The pieces are then lashed to the alap with whole rattan. Theoretically, all of the

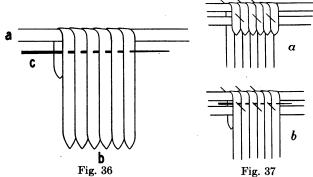


Fig. 36. Detail of Thatch Sheet, Mountain Arapesh House. a, Bamboo rod; b, Leaflets; c, Pin of sago stalk bark.

Fig. 37. Method of bonnetting the Ridge Pole of an Arapesh House. a, Loose end of thatch sheet; b, Pinned end of thatch sheet. The rod is of bamboo, the pin of sago stalk, the transverse pin of elephant grass.

floor, except the initial transverse plates (tabak), resting in the square notches of the piles should be lashed together. Actually, some of the lashing is usually omitted, especially when any individual auten or alap floor piece is so long that it projects beyond the basic structure and is in less danger of slipping out of place.

We may now return to the roof. In the intersections of the rafters, above the main ridge pole, is laid a light supplementary ridge pole (waliwan)<sup>1</sup> made of alup wood. This will serve as the framework for the bonnetting of the ridge. Across the rafters are tied a large number of longitudinal thatching lathes, called balauwit, made of very light wood, and occasionally of elephant grass. The thatch sheets or the whole sago

<sup>&</sup>lt;sup>1</sup> It is interesting to note that the word for main ridge pole, maduk, and the word for the heavy floor plate, tabak, are both feminine, whereas the word for supplementary ridge pole, which is very much lighter than either of these, has the masculine ending. Without comparative linguistic work, the importance of this fact cannot, however, be estimated.

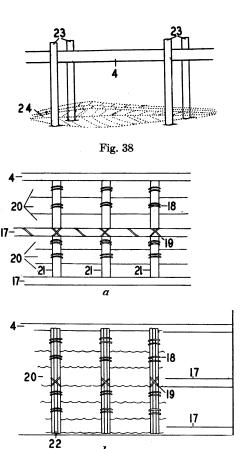


Fig. 38. Detail of Wall of Arapesh Ground House, Type E. 4, Wall plate; 23, Uprights of split bamboo arranged alternately inside and outside 4; 24, Palm leaves piled one upon the other.

**b** Fig. 39

Fig. 39. Shingling for Arapesh Pile House Walls. a, Inside view; b, Outside view. 4, Wall plate; 17, Longitudinal lathes for attaching sago bark shingles; 18, through binding of split rattan; 19, Rattan wrapping which attaches 21, vertical lathes, to 17; 20, Sago bark shingles, rough side in; 21, Vertical lathes; 22, Triple vertical battens which support shingles.

palm leaves are fastened to these with an irregular running lashing of bark or split rattan.

Thatch sheets (ala'elip) are always made from sago leaflets; I found no use of coconut palm leaflets or of sugar cane, or kunae grass. sheets are made by men and are sometimes five feet long, although often only about three feet. The rod (wiha) is of very light bamboo, or elephant grass, and the leaf is bent over at the base to overlap it by about six inches. A thin pin of sago bark (budep) is run through the leaflets. parallel to the rod (Fig. 36). The ridge is bonnetted (Fig. 37) with thatch sheets (pogap) which are much longer and narrower than the sheets used on the rest of the roof. The leaflets are bent over the rod in the middle of the leaflet instead of near the base so that the sheet is These are laid along the ridge pole and an extra piece of bamboo or elephant grass is laid along the loose edge of the thatching sheet and lashed in place. Short sharpened pins of elephant grass or bamboo (do'wen) are thrust through the thatch in between the supplementary and the main ridge pole. This is an exceedingly poor method of bonnetting and most houses leak along the ridge. Where the roof is merely thatched with unworked sago leaves thicker bundles are fastened along the ridge.

Sago bark shingles are used in walling a house, except in the case of temporary ground structures designed for lounging, cooking, etc. In these a method (Fig. 38) very similar to the fencing of a garden is used. Two sets of bamboo uprights are lashed to the wall plate, in pairs, one inside and one outside the wall plate. Sago palm leaves are piled between the double row of uprights so created and battened down to form a thick matted wall. Sometimes mats (yalo'wip) of coconut palm leaves are used to supplement this leaf wall, and very frequently these mats are used to wall in the front of such a temporary structure.

In most houses, even ground houses with steeply sloping roofs which leave very little wall space not already enclosed by the roof, sago bark (baiyag) is used. For finer walls, the inner surface of the concave sago stalk is used. The stalk is cut along the sharp edge, the pith is cut out, and the bark smoked by holding it pith side down over a fire of coconut leaves. This scorches off the remainder of the pith and makes the bark flexible enough to straighten it by placing it smooth side down in the sun weighted with stones.

These sago bark shingles overlap each other and are supported by

<sup>&</sup>lt;sup>1</sup> This same technique of laying horizontal walling material between two sets of uprights is used on the Beach, only there the material is sage stalks or light poles.

two sets of uprights, the inside ones are thin wooden slats (nubulul) fastened to the galiat, wall plate, above and to the outermost auten pole on the floor level. This framework is arranged first and against it are placed the shingles with supporting double or triple upright bundles of split elephant grass (toawetch)(Fig. 39), which are fastened through two shingles with split rattan lashings (mopweais). The sides of the house are completely walled up; the corners in the better houses are finished with shield-shaped convex pieces of sago bark, lashed at the edges.

The wall of the front and back of the house depends upon the kind of finish which is contemplated. In the simplest type of pile house, the sago bark shingles reach to the gable, usually leaving a small triangular. opening in the very peak of the gable face. This is sometimes filled in with an extra thatch sheet or a coconut leaf mat. If there is to be a ridge spur of either the short or long type, this opening may be left a In other cases the opening may be left from a height of about two feet below the ridge, at which point the rounded veranda roof Across the top of the shingled wall, a shelf (auwhat) laid on the inside across the end of the house, may extend outward to form a projection which can be thatched to produce a simpler type of veranda roof. Where, however, the owner does not intend either to embellish the ridge pole end or add a veranda roof, the shingling may reach to the ridge pole, and a special facing of narrow longitudinal pieces of sago bark may be laid parallel with the two front wahega poles, giving the effect of barge boards. In very elaborate houses there may be both a decorative treatment of the shingles, (Fig. 31), and a decorative structural addition.

The ridge spur may be very short, with the supporting rods only a foot or so in length, in which case it is called a gitua'i, or with the rods two and a half to three feet in length, when it is called a map (Fig. 29). The principle of construction is the same. A slender rod, of elephant grass in the gitua'i, of wood in the map, is laid on the supplementary ridge pole and supported at an obtuse angle by three other light rods, each one of which is lashed against the roof frame to maintain the angle of the ridge extension rod. The central rod is lashed against the center post (nyidime) and each of the side rods is lashed to the most forward rafter (wahega). This concave triangular structure may be thatched, as it always is, if the large map type is built, or merely decorated with streamers if the smallest gitua'i type is used.

If the veranda roof is merely an extension of an internal shelf (au-

<sup>1</sup> As in a Maori house.

what), it consists of a straight projection on which sheets of thatch are fastened in such a way that they will drop at an obtuse angle over the front door. The more elaborate type of veranda roof is called an alitem (Fig. 30). It varies in structure in being placed high in the gable, fitting against the sides of the roof, so that the whole structure is more than 180 degrees, or in being fitted against the flat front of the house, so that it forms an accurate semicircle. The radiating rafters (souwul) are drawn together at the back and lashed to a wooden cross piece and support two or more semicircular bands of heavy rattan (wagap). This

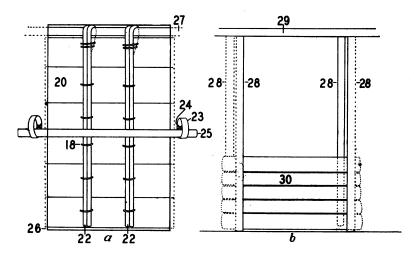


Fig. 40. Detail of Arapesh Doors. a, Sliding door; b, Built-up door. 22, Double battens of bamboo; 23, Rings of rattan which support 25; 24, Attachment of 23 to wall of house; 25, Stick for fastening door; 26, Facing band of bamboo; 27, Bar on which door slides; 28, Side supports which, with 29, form a frame into which cross pieces (30) are piled one on top of the other.

whole structure is then thatched and edged with decorative fringes. It may extend as much as seven feet from the front of the house, in which case it is usually supported by a very light wooden pillar.

One side of the doorway of a pile house is formed by the central post (nyidime). It is usually raised from six inches to a foot above the house floor. Sometimes it is faced with pieces of sago stalk, concave sides inward, fitted around the edges of the shingled wall. Doors are of two types: a true door (teluto), and a composite barricade which is the form of gate used in gardens (Fig. 40). In the teluto type, it is made of a series of heavy sago shingles, fastened together as in walling. It is

suspended on rattan rings from a cross-piece over the doorway and can be fastened by passing a heavy stick (idap) across the middle through two rattan rings (pwelega), about ten inches in diameter, which are lashed to the house wall on each side of the doorway. This type of door occasionally has a narrow worked plank carved in low relief at the base.1 In the composite type, two sets of uprights are fastened in the doorway. one inside and one outside, and when residents wish to shut the door they pile a set of sago stalks up in between these uprights. kept house has a series of sago stalks of the same length which are reserved for making the door; in the more shiftless households, or in old and neglected houses, any pieces of wood, firewood, broken water carriers pieces of limbum bark, etc., are used instead, and the door has a different aspect each time that it is closed.

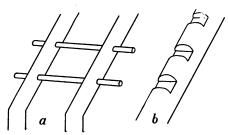


Fig. 41. Types of Ladders. a, New form; b, Old form with steps cut in a single log.

Ladders are of two types (Fig. 41), of which the notched log (bauwag) seems the older, while the baguhas type, in which worked rungs are set in holes in the two side supports, is probably introduced.

Inside the house, the only structural details are shelves (alit) laid lightly across the thatching lathes, and the fireplaces. Of the latter there are usually two, because of the taboos affecting elderly people who are prohibited from eating food cooked on a fire beside which younger people have had intercourse. The fireplace (magas) is made by laying a base of limbum spathe and sago bark in a square edged with pieces of sago stalk (bulusuhein). This is lightly covered with three or four inches of earth, which later is covered with wood ashes. A few large stones to support the cooking pots complete the fireplace. Over the fireplace hangs a smoking tray (Fig. 44, top row, center) made of split rattan: a circle about eighteen inches in diameter is filled in with a very loose

<sup>&</sup>lt;sup>1</sup> These planks are common in Kobelen and Umanep, and rare in Dakuar, where, however, the same designs are found on surf boards, a recently introduced usage.

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The difference in measurements between the ridge pole height and height of side posts indicates the height of the gable and so the angle of the roof. Note:

The difference in measurements between the height of side posts and height from ground indicates the height of the side wall of the house from floor to wall plate.

# HOUSE TYPES IN ALITOA (FIG. 25)

No.	House Type	No.	House Type					
1	Extra large pile house, without ridge spurs, or projecting roofs; two side entrances, partition wall.	20	Our house, land owned partly by Kanehoibis, partly by Toto- alaibis					
	Result of builder's experience of European architecture	21	Small walled ground house with rounded ends					
2	Very small, walled pile house Very small, unwalled pile house	22	Medium-sized walled pile house, undecorated					
4	Medium-sized pile house, no decorations	23	Medium-sized walled pile house, roofed with unworked sago leaves					
5	Ground house with leaf walls	24	Menstrual hut, cone-shaped, built of sago palm leaves					
6	Large pile house, round roof projection	25	Large walled pile house, un-					
7	Small pile house, no decorations	00	decorated					
8	Very long walled ground house	26	Large ground house, with no front and leaf walls					
9	Small well-walled ground house	27	Small walled pile house, decorated					
10	Small walled pile yam house	<b>2</b> 8	Very small walled pile house, falling down					
11	Unwalled lounging house	29	Medium pile house, no decorations					
12	Pile house, no decorations	30	Small walled ground house					
13	Medium, walled pile house, decora-	31	Medium-sized walled pile house					
	tion projection, and plates	32	Small decorated walled pile house					
14	Lounging ground house with no front and leaf walls	33	Very large decorated pile house					
15		34	Small pile house					
15	Medium-sized walled pile house, undecorated	35	Small pile house					
16	Small walled pile house, un-	36	Small pile house					
	decorated	37	One-walled ground shelter					
17	Walled ground house	<b>3</b> 8	Walled ground house					
18	Very small walled pile house	39	Very small pile house					
19	Walled ground house	40	Small pile house					

checker weave and is hung from the ceiling by a double rattan. No hooks are used in the Mountains. The inside of the thatch is used as a convenient place to store small articles, bits of magic herbs, pieces of paints, etc. The beds are simply particularly large, heavy pieces of sago bark, which are laid about the fireplaces.

The house, and the ground under it, are swept with brooms (galo'it), which are simply the dried flowers of the limbum palm<sup>1</sup> (Fig. 76d). The appurtenances of cooking are very simple and consist merely of a pair of tongs (Fig. 76a) made by bending a banana stalk, and a stirring stick (Fig. 77).

## METHODS OF CARRYING AND STORING

Through the entire Sepik District the daily carrying is done by The load is suspended from the forehead and hangs down the women. The net bag or the bark basket are the most typical containers, but sometimes it is merely a bundle made of limbum palm sheath. When men carry, the burden is suspended from a carrying pole, the ends resting on the shoulders of two men, the method used for transporting pigs or bundles of game. Or, the load is slung over the shoulder, as is a heavy log for a feast fire or for a house post. When carrying small articles, such as a personal bag or a bag of food when traveling without women, the net bag or the coconut leaf basket is suspended over the shoulder. A cord used to suspend a load over the shoulder is called an alap, the same word applied to the forehead band of a netted bag. The only time that a woman uses a shoulder suspended band, is in the Beach custom, followed by some Mountain women, of suspending a child under the breast, by means of a band of breadfruit barkcloth called a beim (see Fig. 20).

The Beach Arapesh do not manufacture any adequate carrying bag for women. They make several kinds of coconut leaf baskets, but these are used either by men or to keep food; they are not suspended from the forehead. The Beach Arapesh are dependent upon imports, either the two kinds of baskets obtained from Murik, both of which can be suspended from the forehead, or netted bags, imported from the Mountain people. Their only local container is a makeshift: a cigar-shaped bundle of *limbum* sheath, suspended from the forehead by worked cord

<sup>&</sup>lt;sup>1</sup> In this connection it is interesting to note that whereas the Island peoples make their brooms of coconut leaf ribs, which are also used to burn ornamental scars on the arms, among the Arapesh, the children use the *limbum* flower stems to make the ornamental scars which they call by the same name as the word for broom. This suggests that the custom of burning scars reached the Arapesh defined as "burning scars on the skin with the glowing straw of a broom."

or bands of heavy bark. While the men have small baskets plaited in checker work from strips of coconut leaves (Fig. 42) for small bags to contain rings, for instance, they depend upon netted bags from the interior and upon the very tightly netted bags imported from Suwein. Both the Murik baskets and the Suwein bags are highly valued by the Mountain people, the baskets because they are more fashionable and also because they resist rain, and the little Suwein bags because other people cannot see what is inside them. The Mountain people are always engaged in controversies as to the possible contents of their netted bags; whether such and such a bag did have so many rings in it or

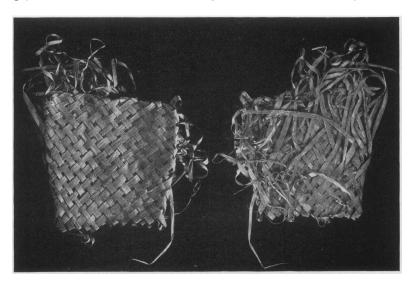


Fig. 42 (80.0-6746). Beach Arapesh Type of Basket, Front and Back.

whether one had been given away for sorcery or whether a small bundle of exuviae could have been among the contents of another bag. The wide mesh of the Mountain type of netted bag continually exposes them to these arguments. However, only a few Murik baskets (laba) and Suwein netted bags (lo'in) are found in the Mountains, where the dependence instead is upon their own manufactures of netted bags and upon imports from the Plains and from Abelam, supplemented by a few baskets from the Nugum (Fig. 43). Whereas on the Beach one sees a great deal of carrying in limbum sheaths, in the Mountains their use is largely confined to carrying little pigs and as a favorite material for wrapping tobacco for export on the Plains.

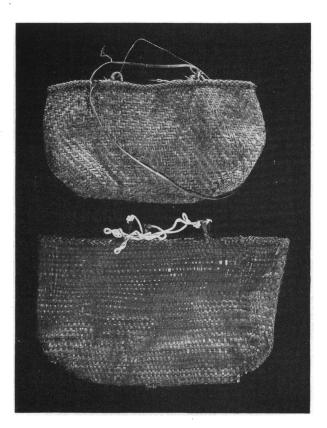


Fig. 43 (80.0-6761, 6760). Types of Baskets imported from Nugum.

On the Beach water is carried in buckets made of a single piece of limbum palm sheath (udup), folded and furnished with a vine handle. Further in the Mountains these palm sheath buckets are replaced by the most characteristic water carrier of the Pacific, the hollowed coconut shell with a cord attachment. These are gradually supplemented and finally replaced entirely, as the Plains are reached, by bamboos (anip), sometimes as much as ten feet long. In Alitoa, the coconut and the bamboo are used together, but for different purposes. A small infant will be washed from a coconut water carrier, but an infant several months old is held beneath the spouting end of a tipped bamboo. The Mountain people make special trips inland to their gift friends to obtain these large bamboos which do not grow in the Mountains.

Very small netted bags are used for keeping rings, dog's teeth, and other ornaments, while feather, cassowary quills, and fur used for adornment are stored in short lengths of bamboo which have been split down one side to receive them.

Foodstuffs are kept in piles on the house floor, or, if there is only a small amount of taro, or greens, it may be left hanging in a netted bag until needed. Yams are piled, in assorted lots, all over the floor of the house specially designated to contain them.

Small articles, like flying fox bone needles, incising tools of bandicoot teeth, etc., are usually stuck in the house thatch rather than placed in a container. Bits of clay paint, or dried herbs for magic, may be tucked away, wrapped in an old piece of barkcloth or a bit of coconut palm sheath. The roof of the average dwelling house is a regular storehouse of small articles.

## USE OF COCONUT PALM LEAVES AND OF BASKETRY TECHNIQUES

The Mountain Arapesh are distinctively users of netted bags. Co-conut palm leaves are treated in very simple and rudimentary fashion as compared with the utilization of these flexible leaves by many Pacific peoples. They depend completely upon the structure of the leaflets as attached to the midrib, and make no attempt to use them separately to build up more elaborate and finer baskets, as is done on the Beach (Fig. 42). The men do all the work with coconut palm leaves which is congruent with the fact that they also work the sago palm leaves into thatch. The simplest object made from a palm leaf is the fire fan (Fig. 44, top left). Eight leaflets left on one side of a midrib, which has been paired thin with a knife, are plaited together and tied in four knots.

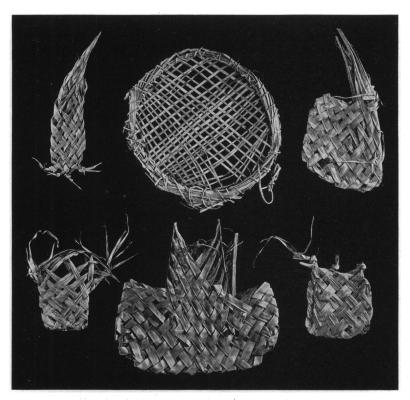


Fig. 44 a-f (80.0-6741, 4747, 6744, 6740, 6742, 6745). Models of Beach Forms of Coconut Leaf Basketry. Top Row, left, Fan used as a bellows; center, Tray used in drying meat.

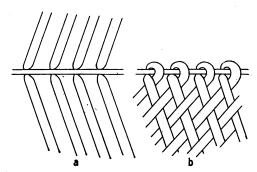


Fig. 45 (80.0-6743). Making a Coconut Leaf Mat. a, The coconut palm leaf before plaiting is begun; b, The beginning of the mat.

The next most complicated object made of palm leaves is the *yalo'ip*, a mat made from a single large palm leaf and used sometimes to replace sago bark sheets, as a mat for sitting, or as part of the wall of a temporary house. Fig. 45 shows the initial steps in making such a mat. It is

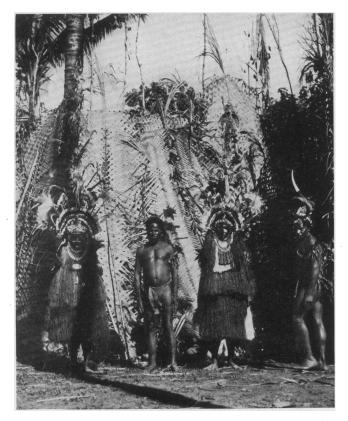


Fig. 46. Double Mats used to make Temporary Enclosures for Ceremonies, Kobelen.

very weak and flimsy on the knotted edge furthest from the midrib. The drawing is of a model. The mats vary from four to six feet in length and from three to four feet in width. Much stronger double mats, in which each edge is formed by a midrib, are made on the Beach and can be seen in the photograph of a temporary wall in Kobelen (Fig. 46).

The usual form of palm leaf basket is the basic type for the Pacific,

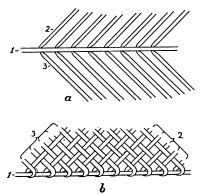


Fig. 47. Initial Steps in making an Ordinary Basket. a, The leaf; b, The beginning of the basket.

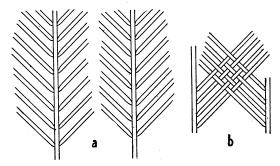


Fig. 48. Initial Steps in Making Ceremonial Baskets.



Fig. 49. Plaited Beginning of Coconut Palm Leaf Basket, Beach Form.

but varies in its construction technique in using the leaflets on both sides of the midrib as in the mat, instead of merely a single strip of leaflets along one side. There are two formal openings, that is, two ways of providing two triangular sections which are then joined, with knotted corners and a plaited bottom edge so that the midrib, paired down some-

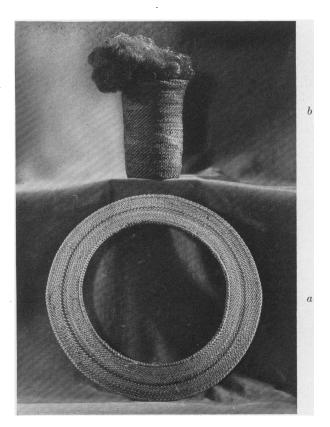


Fig. 50 a-b (80.0-6920, 6922). Imported Headbands. a, Coiled, from Nugum; b, Twilled, from the Beach.

what, forms the rim. In the opening (Fig. 47) the midrib is bent in the middle, while in the second form (Fig. 48) the rim consists of two parallel pieces of midrib. This latter is better suited to making a very strong basket, as the center of two coconut leaves can be used. When a man uses such a basket, he usually works a large enough space for his arm in the center under each side of the rim, so that he can fit it

over his shoulder. This is the principal use to which these baskets are put.

A more elaborate basket, called a *selauh*, is used in the exchange of food between ceremonial feasting partners (*buanyin*). Fig. 48 shows the beginning of this form of basket and Fig. 42 the finished basket; the midrib is used to make the two pinnacled sides instead of for a rim. This is a purely temporary basket made for the one feast only; it has very little endurance.

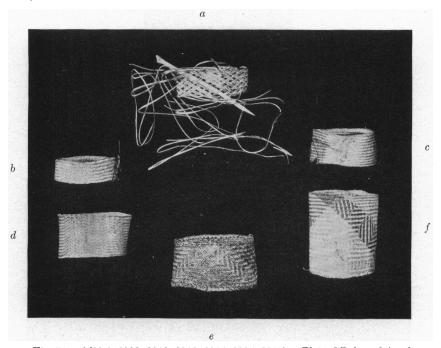


Fig. 51 a-f (80.0–6902, 6910, 6912, 6914, 6905, 6915). Plaited Belt and Armlets. a, Belt in process; b-d, f, Mountain Arapesh; e, Nugum.

Fig. 44 illustrates alternative forms of small coconut leaf carrying baskets used on the Beach, all of which employ the midrib in some way. Fig. 49 shows a Beach form in which a true checker work basketry technique is used; coconut leaflets are cut into long strips about a half inch wide, two sets of twelve strips are placed at right angles to each other, and plaited into a simple checker work, the edge is formed by folding each strip back on itself, in a typical matting technique.

The Mountain Arapesh only possess the checker work technique in



Fig. 52 (80.0-6925). Chain from Nugum.

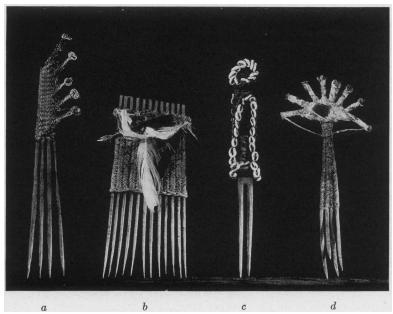


Fig. 53 a-d (80.0-6964, 6962, 6963, 6959). Wickerwork Combs. a, b, Nugum; c, Murik; d, Abelam.

one very rudimentary form, that of the round tray used for smoking meat.

Most Mountain houses contain one or two meat drying trays (Fig. 44, upper row, middle) which are suspended from the rafters over the fireplaces whenever there is meat to be smoked over the fires. These trays are circular and about a foot to eighteen inches in diameter. A simple checker work mat is made of half-inch strips of split rattan or very young bamboo, with the ends of the strips left quite long. Then a strip of sago bark, about a third of an inch wide, is fitted over the edges of the checker work and the ends of the strips are bound into this basic rim by a long narrow strip which acts as a running binding, gathering the ends into a compact bundle of varying thickness.

The only other approach they make to true basketry is in the technique of making belts and armbands (Fig. 51).

From the Nugum they import a strong basket called an 'obin (Fig. 43), of a simple checker work technique with a strong double plaited rim and reënforced loop handles. These, however, are reasonably rare and they make no attempt to copy them. The superior technique of this Nugum basket is consistent with their superior wickerwork and basketry techniques as displayed in their headbands (Fig. 50) of both coiled and twilled work, their fine armbands (Fig. 51), and their delicate chains (Fig. 52). With the Abelam, the Nugum share the making of very fine armbands and also the wickerwork combs (Fig. 53) which again the Mountain people make no attempt to copy.

The Mountain Arapesh import a funnel-shaped wickerwork hair band from the Beach (Fig. 50), but do not make this.

On the whole, their knowledge of basketry is very slight; they are content to import without attempting to copy, and to rely almost entirely upon netted bags.

#### FIRE-MAKING

The method of making fire is by the usual type of fire plough, which is called *lawag matoa'owi*. Coconut husks (*lo'we'u*), used as tinder, are held under the cupped hands of the assistant. The Mountain Arapesh know of the fire saw, but do not use it.

Matches have been a much-valued acquisition from white culture. They handle them in an interesting transitional way, still carrying dry tinder to start the fire from a match instead of from a fire stick.

#### CORD AND STRING MAKING

Both men and women know how to make cord. The cord the men use for hunting gear must be made by a man; if a woman made it, the animals would avoid the trap. For ordinary light cord, nyumateuh bark and amut bark are used, while for the men's heavier netted bags, for beadwork thread, and for the belting of women's aprons, amoga bark is also worked into a fine cord. This is also used for making the heavy ropes used in the large game snare (see below, Fig. 71). The abies vine is worked into a cord to bind the dip fish net. Whichever of the three principal barks are used the procedure is the same.

Young saplings, about six or seven feet high, are cut and brought in a bundle to the hamlet. Transverse cuts are made in the bark at intervals of ten to twelve inches. Then longitudinal sections of bark. one and a half to two and a half inches wide, are stripped off. inner layer is separated from the outer layer of bark with the teeth. Then the bast is scraped with a shell scraper (yaluq). The worker holds the strip of bark in her left hand, steadying it at the base with her foot, and works down, holding the scraper in her right hand. The pulp comes off in a juicy disintegrated form. The pieces of scraped bast are then laid on a roof to dry in the sun, for about an hour. a flabby soft appearance; the longitudinal strands do not show up sharply, as they do in the material used by the Manus (kop). To make cord. two pieces of bast, each about half an inch wide, are used. Each pile is rolled on the thigh, the forward roll is given with the palm of the hand, the backward roll with the thumb. The two piles are then joined at one end and the rolling repeated. If the cord does not roll easily a little wood ash is sprinkled on the thigh. Any loose ends left out of the finished cord are burnt off with a live coal lifted up in the ordinary This method is also used whenever there is any necessity fire tongs. for severing a thread. It is not customary to make a long cord; instead the woman netter always keeps a supply of dried bast in her work bag and makes the cord as she needs it. She keeps the two or three vards of worked cord wrapped about her hand, using the thumb and This is far clumsier than using a reel. little finger as a reel.

The Mountain Arapesh women make very simple net bags; the men construct a simple hand fish trap, following a style imported from the Nugum. Their net bags are very simplified versions of the elaborate net bags made by the Abelam, and, in some forms, by the Plains Arapesh.

### CLOTHING

Making a G String. The men's G string (eshap) is made from breadfruit bark. A piece of breadfruit branch about three to four inches in diameter and about two feet long is cut and the bark loosened by beating it with another stick, as it rests on a stone, very often one of the ancestral stones in the center of the village. Water is sprinkled on it to soften it. When the bark is loosened, it is repeatedly folded and beaten, until it reaches the desired length. It is fastened with a double twist behind and the end piece hangs down in front making an extra flap. For dress occasions a wide bark belt is fastened around the waist and an extra long G string is wrapped twice about the belt, to keep it spread out and give it form. For mourning, this ordinary type of G string is dyed in the black mud of a pig's wallow.

Women's Aprons. The generic name for women's aprons is abaga. They are made of shredded sago leaves and vary only in relative length, elaboration of the upper section where the skeins of shredded leaf are joined to the waist band, and in color. The basic principle is two widths attached to one cord, which permits the two aprons to sag to the stoutest point of the thigh. The simple belts, which the women also wear, serve no function in supporting these aprons. All women know how to make ordinary aprons and very small girls of five and six assist in the preparation of the materials. Dyeing, and the more elaborate braiding of the tops, are specialized arts known only to a few women.

The upper shoot of the young sago palm is used; this shoot is called a dub. It is split, the ribs removed, and the outer thin sheath on each side of the leaf detached with the teeth and peeled off. A bunch of these, eight or ten of them, are tied to the toe and then the sheath is split off entirely. The bunch is then wrapped into a loose knot around the hand, is repeatedly scrubbed on the knee and shaken out, for about half an hour. This produces the crinkled effect.

The woman then prepares four lengths of four-ply cord, and a fifth longer section. She also fashions the special cord loop (mege) which fastens the aprons, by making a loop about her toe, attaching a long cord to it by the middle of the cord, and double buttonhole stitching it all around. This loop is attached to one end of the waist line and the woman pulls the waist line through it, when she puts her aprons on.

After the skeins of sago leaves have been softened and dried in the sun, the woman takes a large skein, about three inches in diameter, and knots it. The knot is held in place between her great toe and her

second toe, while the woman separates the skein into small lots of about twenty shreds each. Each of these smaller skeins is knotted, but the knot is uncompleted (Fig. 54a). After she has prepared a sufficient number of these strands she fastens the working cords upon which they will be strung.

There are four base cords, and a fifth, a longer cord which is used to fasten the skeins on the other four. In order to keep these cords taut, she fastens them about her waist, keeping them distended by attaching

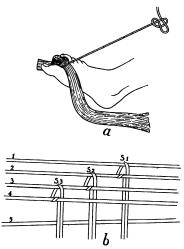


Fig. 54. Making Woman's Apron of Sago Fiber. a, Separating the skeins; b, Knotting the skeins (S<sup>1</sup>, S2, S3) into loose cords (1-4) with pull cord (5).

one end to her great toe. The extra length needed for this extension is obtained by fastening a piece of bark or string to the end of the measured cords, so that the whole length will go around her waist and extend around her toe; or else she fastens a cord tight about her chest, securing the base cords at one end, while her great toe holds them at the other. The four cords (Fig. 54b, 1–4) furnish the base for the attachment of the skeins, the fifth (Fig. 54b, 5) ties them in. Three skeins are worked in at a time, the first passing about Cords 1 and 2, the second about Cords 2 and 3, and the third about Cords 3 and 4. The three knotted skeins are then pulled taut so that they are practically vertical, and Cord 5 is passed about the three, then Cords 1 and 2 around Skein S1,

between Cords 2 and 3 around Skein S2 and then around S3 between Cords 3 and 4, knotted once, and drawn tight. It is interesting to compare this technique with that used in beadwork, and to notice how much closer these two are, than is the beadwork technique to the dog tooth technique. She works in the proper number for the longer front apron, and then, cutting her skeins shorter, and leaving a length of cord to bridge one thigh, she works the shorter back apron in the same way. The simplest apron type is now complete; the sago shreds fade to a deep brown, and this is the ordinary attire of the women.

A variation can be introduced by dyeing the skeins before the aprons are made. The dyeing is as shrouded in mystery as the other parts of the manufacture are open and casual. Every woman does not know the method; young girls will take their skeins of sago shreds for dyeing to a woman who is dyeing. Even dyeing the skeins black, which is done by merely leaving them in the black mud of a pig's wallow ('igo weshes) must be accomplished secretly. The dveing is done at night, inside a ground house, and a very large pot is used. The principal hazards are: that the pot will crack, that the dye will be uneven, that the skeins will catch fire while they are being pushed down into the boiling dye. various leaves used as dyes are gathered in the day time. knows a great number of these leaves; some are secret and some not. It is not necessary to use all of them, and often some of them cannot be The recipe is adaptable also, for now the pods from the tree which has been recently introduced in Alitoa and simply called sanikwe (blood), are added to the various bright leaves. Two kinds of leaves are used: dyeing leaves and those used to cover the boiling pot. variety is rolled in longitudinal bundles, and then, with a knife which has never touched meat, chopped into thin layers on a limbum spathe. As these leaves seem to produce varying depths of color, the tight little lumps are probably responsible for a certain spottiness and unevenness in the dye. A little water is first boiled in the big pot, then alternate layers of leaves and sago shred skeins are added until the pot is full. Finally, when the top is reached, alehesilib, senaruk, and buluhin leaves are added in order and the whole is covered with the big flannel-like leaves of the pwega which wither in the heat of the flames, but do not catch fire. A little lime may also be shaken in from the woman's lime On the occasion when I watched the whole proceeding, the women also used aliban and kalobalolip vine leaves (which are bright red on one side and have a hairy stem), the bark of the malahas and the yehoo' trees, and sanikwe pods. As the potful boils down, more water is

added, more sago skeins, and more dyeing leaves. The skeins are stirred and readjusted with a pair of new tongs. They are boiled for about four hours, lifted out with tongs, wrung out, and spread on the thatch to dry. The skeins so dyed vary from a deep cardinal red to a color almost like tangerine.

Two-colored aprons, the natural color with a few skeins of red, are called *milu'*, those which are many colored, black with two shades of red and natural color, are called *miligepia*, and the black and red aprons



Fig. 55 (80.0–7184). Woman's Apron of Sago Fiber.

which are also braided at the top and arranged in a series of overlapping layers of different lengths (Fig. 55) are called *wulus*. Although the *wulus* is far superior to the other types of aprons, its superiority is attained simply by varying the basic pattern, by separating the heavier skeins into a series of layers, after they have been tied into the base cords. Each layer is braided into a series of very small tight braids and cut straight at a different length.

Women wear old aprons when they are menstruating; as the inner layers of the sago shreds become stained, they break them off and throw them away. Very often a woman makes herself a new set of aprons during her menstrual seclusion; in any case, she is likely to wear a fresh

one when she emerges. With the exception of the new aprons which are assumed by a girl on her emergence from her first puberty seclusion, there is no special occasion upon which new aprons are obligatory, but cutting off the widow's mourning apron is ritually performed.

Belt and Armband Making. Both men and women make belts and arm and leg bands (P. E. puspus) from split vines. The amuting and wahen vines are used. The vine is split to a long slender length, varying from one sixteenth to one quarter inch in width. The band is begun

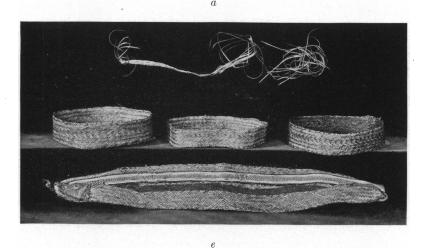


Fig. 56 (a, 80.0-6901; b, 80.0-6904; c, 80.0-6908; d, 80.0-6909; e, 80.0-6911). Plaited Armlet and Belts. a, Armlet in process, Mountain Arapesh; b, Woman's belt, a Mountain Arapesh import from Murik; c-d, Women's belts, Mountain Arapesh; e, Belt made in techniques of three localities, Mountain Arapesh, Murik, and the Solomon Islands.

like the coconut basket (Fig. 49). Four strands are placed at a right angle to four other strands and plaited the desired length. Then, with flying fox bone used as a bodkin (Fig. 51a), the long ends are threaded back through the loose network, filling the interstices and making a closer plait. The bodkin is worked to a point and grooved on one side. It is inserted in the plait in the direction the returning strand is to go, the groove side up and the point towards the worker. The strand is then slipped through against the point and along the groove.

The belts vary from two and a half to four inches in width and the armlets may be as narrow as half an inch (Fig. 51).

The two commonest variations in the plaiting are the patterns called "fish" (Fig. 51d) and "coconut leaf" (Fig. 51f). Very fine examples are imported from the Nugum (Fig 51e). A coarse type of belt made of a

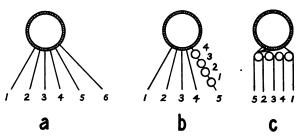


Fig. 57. Steps in making a Beaded Band with imported Small Beads. a, Completion of supporting ring; b, Beads threaded for first row; c, Completion of one row.

light red vine is imported from Murik by way of the Beach (Fig. 56b). One particularly interesting example was obtained of a composite belt (Fig. 56e) in which the broad base is local Mountain Arapesh, the next widest band red of the Murik type, and the narrow central braid definitely Solomon Islands, probably brought to New Guinea by a returned work boy.

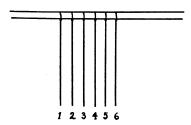


Fig. 58. Manus Method of Stringing Beads. Beads are strung on 6; 5, 4, 3, 2, and 1 are passed through a bead in turn and pulled tight. This is interesting as an example in which techniques do not spread in Melanesia, although the finished product may be very similar in appearance.

Beadwork. Beadwork is a recently introduced art confined to very narrow armbands. A thin double thread is rolled and for a four-bead band six threads are fastened to the toe of the worker. (This is the same

technique for holding it firmly as that used in making the women's aprons.) Five of these threads are plaited together, the sixth is wrapped around the plait for one inch, then doubled back to make a stiff loop. The five threads are fastened along the edge of the loop with button hole stitches made by the sixth thread, which is then discarded (Fig. 57a). Four beads are then threaded on thread (Fig. 57b, 5). No needle is used, but the thread is worked to a point. Thread 1 is then run through each of the four beads, b¹-b⁴ so that 5 now lies to the left and 1 to the right (Fig. 57c). Then Threads 2, 3, and 4 in turn are pulled through Thread 1, but not through 5, the beads being separated so that Thread 2 goes between b¹ and b², Thread 3 goes between b² and b³, and 4 goes between b³ and b⁴. This procedure is then repeated, stringing the four new beads on Thread 1.

In the Manus method, the beads are strung as illustrated in Fig. 58. Beads are strung on Cord 6 and Cords 5, 4, 3, 2, and 1 are passed

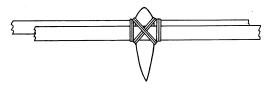


Fig. 59. Method of stringing Dog Teeth, showing Tooth and Strands of Bark-cloth.

through the beads in turn and pulled tight. This is interesting as an example in which techniques do not spread in Melanesia, although the finished product may be very similar in appearance.

Dog Teeth Stringing. Stringing dog's teeth is men's work and is another interesting example of the Mountain Arapesh dependence on a very few techniques. Two soft pieces of barkcloth, about an inch and a half wide, the remains of a worn G string, are fastened to a loop around the toe. Each dog's tooth is secured in turn between these two strands (Fig. 59) by ordinary cord, tied in one of the two ideal knots used in house building.

Decorated Bark Belts. The single specimen of a decorated bark belt obtained is an interesting illustration of the process of diffusion and loss among the Arapesh. Purely on chance, as I had never seen or heard of such a belt there, I asked if they knew of the decorated bark belts of the type found in British New Guinea. A few older people had heard of them, had seen one or two, yes, people used to make them. Finally,

it was suggested that Wutue, a man of about forty-five, might still know how; his father had made them, it was believed. Wutue was summoned and produced the belt, scratching the design on the bark very lightly; the assimilation of the design to the usual wooden bowl border design (cf. Fig. 80) is obvious. There is very little possibility that this design represents those once used on decorated belts which were probably imported some time during the last generation, made for a period, and

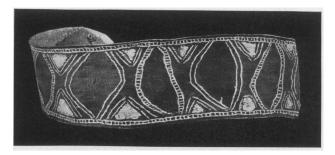


Fig. 60 (80.0-7178). Bark Belt with Incised Design.

then abandoned. What Wutue had remembered was the general fact of a bark belt, approximating a certain width, decorated with a scratched design; he then proceeded to make one from this very vague memory pattern with which the Mountain Arapesh so frequently operate. It is also interesting to note that unless I had asked for such a belt, I should never have heard of it. The decorated belt was a culture trait on the verge of extinction, surviving only in Wutue's dull and unenterprising mind, and there was no ceremonial need, no event which could call it again into being.

## TOBACCO GROWING AND SMOKING

The Mountain Arapesh grow tobacco and occasionally have a slight surplus which can be used for trade. It is grown by either men or women. We made no record of any ritual. It is dried on a fan-shaped bamboo frame called an *atuga*, about two feet long and eight inches wide at the top (Fig. 61). After drying, the tobacco is wrapped in a piece of *limbum* palm spathe to make a cylindrical bundle tapering at each end. They distinguish four varieties of tobacco, *misisial*, *tabonal*, *baluwes*, and *aheliuh*. Until the importation of European pipes, only cigarettes were

used. The Sepik practice of making a cigar out of the whole leaf of the tobacco plant is not known. Three varieties of banana leaf, wapu, belehitep, and aloap are used to make the cigarette wrapper. The tobacco leaves are spread over a fire to dry and are crumbled before they are rolled into a cigarette in a wrapping which has also just been spread out to the fire.

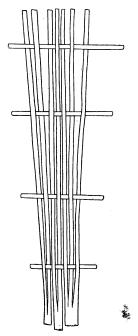


Fig. 61 (80.0-6943). Screen for drying Tobacco Leaves (atuga).

#### Areca Nut Chewing

The areca nut is called *bub*. It is chewed by men, women, and children with the catkin of the pepper plant (*washus*) instead of the leaves. Both areca nut palms and pepper plants are planted and owned.

The Mountain Arapesh make their own lime (aloh) to chew with areca nut, but the small spiral shells, also called aloh, from which the lime is made have to be obtained from the Beach. A Mountain man returning from the Beach, otherwise lightly laden, will bring up a large basket of these shells. To fire them, dry sago palm stalks about three feet long are obtained and a layer spread on the ground and covered with shells; a

second layer is placed at right angles to the first and again covered with shells, and so on, until the shells are exhausted. This is then fired. The hot shells are then picked out with a pair of tongs and laid upon a curved piece of sago bark (bag). The lime-maker then pounds the shells with the butt end of a stick, the handle of a knife, a sago pounder, or any makeshift pestle. Then he spreads a layer of amlaiwelu leaves over the

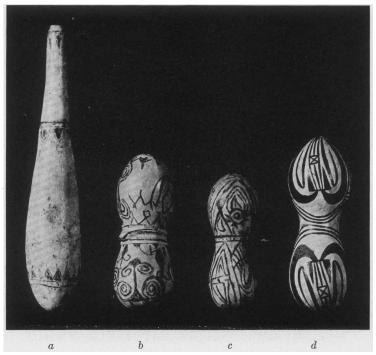


Fig. 62 a-d (80.0-6471, 6469, 6470, 4914). Decorated Lime Gourds. a, Typical Arapesh lime gourd imported from the Plains; b-c, Manus type gourd, Arapesh decorated; d, Typical Manus lime gourd from which designs of b and c were drawn.

half pulverized shell and presses them down with his hands. This is said to keep the lime warm and it is left in this way for about five minutes. He then brings hot water, and his assistant, who may be a child as young as four or five, stirs the lime with a piece of bamboo or another stick, while he slowly asperges about a quarter of a cup of hot water over the shells with a bunch of leaves. He then replaces the leaf covering and presses down upon it again and adds a layer of banana and other dried leaves, and presses all of this down tightly with his hand, for about five



Fig. 63 (80.0-6306). Coconut Shell Lime Container.

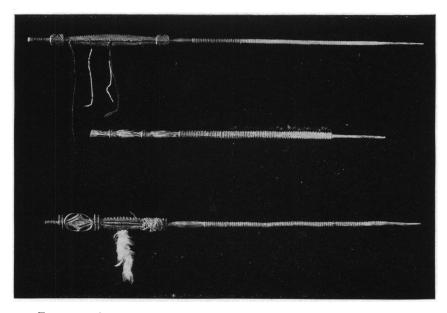


Fig. 64 a-c (80.0-6968, 6970, 6969). Lime Spatulas imported from the Plains.

minutes. When he opens this, the pulverization is complete. He stirs it a little more with the stirring stick used before, and then, making a funnel of ti or coconut leaf, pours it into the lime gourd containers. There is no ritual or magic associated with this process and it is done very easually, in an odd moment.

The gourds used as lime containers are imported from the Plains and are very slightly decorated (Fig. 62a). Two interesting specimens of a gourd of Manus type were obtained from the village of Numonihi. A returning work boy had brought seed from Manus and after it fruited had attempted to decorate the gourds in Manus style. A typical Manus

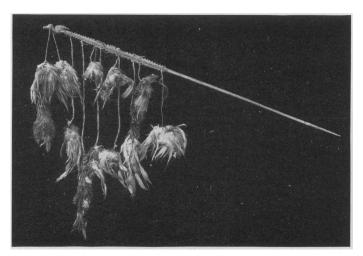


Fig. 65 (80.0–8336). Lime Spatula showing Homicidal Pendants, Lower Sepik.

lime gourd is shown here for comparison (Fig. 62d). Occasionally, a coconut shell container (Fig. 63) is used.

The Mountain Arapesh do not practise breaking their lime gourds or throwing lime ceremonially, as is done on the Sepik. To break someone's lime gourd is a definitely hostile or punitive act.

The spatula is either a very simple stick, or a serrated spatula imported from the Plains (Fig. 64). These latter are used only by men and men of standing, accustomed to express impatience or disapproval in gatherings by loudly rattling their lime spatulas against the mouth of the gourd. This custom is found on the Sepik also. Fig. 65 is a

beautiful Sepik River specimen with homicidal pendants, obtained in Mundugumor.

For the old, whose teeth are too worn to chew it, the areca nut is prepared in small carved mortars.

### GARDENING

Owing to the precipitous nature of the country and my own lack of facility in climbing, I was not able to make any study of gardening. Doctor Fortune made frequent excursions to native gardens, recording the yam magic procedures, and these data will form part of his future publications. Pending their appearance, I shall merely reproduce a photograph (Fig. 66) of a yam garden, which he took, showing the stripped trees standing dead and white among the growing plants, the piles of newly dug short yams lying on the ground. I shall briefly describe the planting usages as obtained from the replies of natives to my questions.

A new garden spot is cleared each year, although the old one may still be used for the banana crop and greens planted the year before. Usually, separate taro and yam gardens are made, but this is not essential. Most gardens also contain some varieties of greens, a few bananas, and a little sugar cane. When it is desired to make a new garden, the place is marked off with marking sticks (yogwas). The next day the underbrush and the trees about the edge of the garden plot are cut. Then all the small trees are cut down and the men climb the big trees and lop off the branches. The cut trees and the branches are strewn over the ground. The heavy work is done by men and the lighter work by women. A month is then allowed to elapse until the strewn branches die and then a fire is started with bundles of dead palm leaves at the edges of the plot, and it is burned towards the center.

Next comes the fencing, the heaviest work in making a garden. The fence is constructed of rows of horizontal poles (wopalus), saplings three to five inches in diameter and about ten to twelve feet long, laid between pairs of uprights (uloh) and secured with a running lashing of a heavy coarse vine. The garden gate slide is called ulo'wit, literally post-door. No implements are used in the garden, except the natom, a digging-stick, merely a sharpened piece of unornamented hard wood, a limbum flower broom (galo'it), and the neitip, a grass cutter, a straight sago wood stick, which is now being replaced by the knife. A large garden shared by several families, which is almost invariably the case, usually contains a roughly constructed ground house seldom kept in good repair.

The major distinctions are between taro, banana, and greens gardens, planted by women, and yam and sago patches planted by men. For yams, either the whole yam is planted, or in the case of the long and composite yam imported from the Plains (P. E. mammies), two eyes are planted. Taro, depending upon the species, is either planted from the rhizome or from one of the sprouts. Certain species of greens are planted from seed, in preparation for which the ground is first brushed off with



Fig. 66. Yam Garden, Mountain Arapesh. Note the dead trees which have been stripped of their branches and the piles of yams which have just been dug. A visiting Plainsman is seated in the middle of the garden.

a broom. Piper betle is also planted from seed imported from the Beach. Areca palms, bananas, sago, and certain greens are planted from slips. Breadfruit is planted from seeds and coconut palms are, of course, planted from a sprouting coconut. I have already discussed the Arapesh receptivity to foreign seeds. I shall discuss the planting and cultivation in the village, of plants used for magical and industrial purposes, in connection with the discussion of the use of herbs in rites de passage in a later section.

The Mountain Arapesh preserve only vestiges of a calendar and calendrical lore concerning planting. They count their year by the Pleiades and say that they should plant when the Pleiades are just coming up and that if they plant when they are just going down it will kill the yams.

When yams are planted at the zenith, they will climb well. Actually, they plant their yams when a planting group is finally ready to do so, only taking care not to leave the yams in the yam house so long that they sprout, as they did the year that the people were so frightened of the Wewak Messiah cult. Meanwhile, they also have a knowledge of names of moons, some of which apply to yam planting. They have lost, however, the idea that a given moon has a given name; instead, if Individual A or Group A are taking out yams, then the moon (or month) becomes for them, "The moon when we take out yams." As one of them commented to me, "You count the moons, we only know their names." But actually, it means that they only know names for moons by which further to symbolize any current activity. The only months which are synchronized in any way are wabih and molai, the months when the Pleiades descend. The moon names which I was given, as the consensus of opinion of an Alitoa group, were as follows:—

Wabih, The Pleiades is descending now
Wolai, The Pleiades is gone down
Sauman, We eat alan fruit
Bidigul didenegul, We harvest yams
Sagen, We finish taking out yams
Shatuen, The yams are in the house and we cut the bush
(This is one of the best known moon names.)
Maluen, We plant yams
Uliegen, Yams are all planted
A pibili wahebis, We cut trees in the garden
Nibilaben, The yams planted, hungry, we eat sago
Ilianyunyunuk, We get cane and bananas from deserted gardens

A time of scarcity is called *nibia* and a time of plenty is called *teshuik*. The relationship between the Mountain Arapesh habits of planting and harvesting, the division of labor, the treatment of seeds, etc., will all be discussed in a later publication.

### SAGO WORKING<sup>1</sup>

Sago is planted in clumps wherever low suitable ground can be found. The plots are often a long way from a hamlet or garden house so that it is not unusual for a group of people to go and live near a sago patch for several days, while working a supply of sago for a feast. Men cut the sago and women wash it. This is the Mountain division; on the

<sup>&</sup>lt;sup>1</sup> My descriptions of sago working and trapping are based on construction of and demonstrations with models in the village.

Beach, there are some women who can cut sago also, but the Mountain people feel that this work is too hard for women. Young boys and girls may work on sago which is not to be eaten by the elders of their own locality.

Cutting the Sago. A sago tree is felled and one half of the trunk is split off for the length of section which the man plans to work that day. In one day a woman can wash the sago cut from about a three-foot piece of trunk. The working man sits on a flat piece of sago bark (bag) with his feet straight out in front of him, braced against the piece of sago trunk which he is cutting. He holds a sago cutter (gun), which may be either an ordinary adze fitted with a broken adze blade or an adze handle fitted with a special stone sago cutter, which imitates exactly the shape of a piece of bamboo (Fig. 67). These latter are imported from Aitape. He works with a straight up-and-down stroke. The broken bits are gathered on a piece of limbum spathe lying at his right. When this becomes full they are dumped into the upper end of the trough.

Construction of the Washing Apparatus. Two stout sticks (uloh) are stuck in the earth, crossed and fastened together at the cross with a vine, so that the fastening reaches the navel height of the woman who is going The whole washing apparatus is called magig (pl. magto wash the sago. A large stout branch of a sago palm is selected to serve as a washing trough and a few pieces of the green bark (budin) split off from the narrow end, to be used later. At the wide end, the trough is supported on the crossed sticks, and at the opposite end on a notched stick (ulowhi') set about a foot high (Fig. 68a). The trough is lashed firmly to the notched stick with a piece of vine. A squarish piece of coconut palm sheath fiber (madag) is placed near the center of the trough (Fig. 68b) and fastened in place with a small, crescent-shaped piece of green sago bark, which fits into the concave center of the trough. This is called This strainer is further held in place by green sago bark *ueham*, tongue. pins, made from the pieces originally split off the trough, which are simply bent double and bound at the top with any fiber at hand (Fig. 68c). A piece of coconut palm sheath fiber, called adag, is placed and weighted down with a stone at the extreme lower end of the trough.

A receptacle of *limbum* spathe is laid on the ground to receive the drainage from the washing trough. A specially large piece is selected, where a wide rooted branch joins the trunk. The wider end is split twice (Fig. 68d) so that it can be folded to make a three-sided container. At the other end, at the point where the piece of *limbum* spathe narrows, a stick called a *pauigal* is placed to keep it open. Two short logs (tokon,

pl. tokonahas) are placed on each side of this receptacle (Fig. 68e), and short green sago bark pins (do'en) are stuck in along each side to hold the sides of the receptacle (lo'won) up. The broken sago pith (so'wehas) is placed in the upper part of the trough; the woman holds one hand under the trough and presses the sago through the sieve (madag); it runs down into the bark receptacle on the ground where it settles. When this gets too full of water, a rim is pinched to let the water out.

The sago is now gathered in a moist lump and placed upon a row of overlapping pieces of coconut sheath, called *medalis*. It is wrapped in these and squeezed up and down in the lower end of the trough, to remove the water.



Fig. 67 (80.0-6401). Sago Cutter.

The next step is to dry it. The leaves are opened up and the sago is spread out again and cooked under a light screen of sago palm leaves. When the fire dies down, the ashes are brushed off with a broom made of fresh green leaves (wishes).

It is now ready to tie up. A row of sago leaves are laid edge to edge on the ground and the lump of sago is set down on them (Fig. 68f). They are brought together at the top to leave about a third of the height of the packet extending above the sago. These are bent over and tied with a vine which is also wrapped two or three times around the packet, which is then hung up for two or three days in the rain.

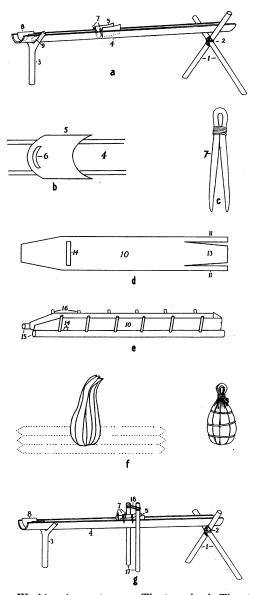


Fig. 68. Sago Working Apparatus. a, The trough; b, The strainer, top view; c, Pin used to fasten strainer; d, Method of preparing bark for receiving receptacle; e, Receiving receptacle set up; f, Wrapping the sago and the completed bundle; g, Beach Arapesh deviations.

## Vocabulary:

She gulu' laho, They cut sago
Kwa shum laho, She washes sago
Sha saise laho, They cook sago
She pulubelu, They brush off the ashes (from the sago)
She pishesh, They fasten up the packets
Atin lahein, One packet
Ahat, ahatog, Sago which is still mixed with water

Beach Deviations. In the Beach method of working sago, the apparatus is a little better made (Fig 68g). The madag is supported in the center of the trough by a frame consisting of two uprights (abagi), one on each side of the trough, fastened together with a vine attachment (ileheuh), to which the upper edge of the madag is clipped with two additional clips. Also, the medalis is made of several pieces of fiber sewed together, instead of merely using pieces which are laid in such a way that they overlap.

### HUNTING AND TRAPPING

The Mountain Arapesh depend upon traps, snares, deadfalls, and the bow and arrow for securing game. Their attitude towards hunting is, however, completely symbolized in the deadfall. They dig a pit, cover it, and wait for something to fall into it. Even when they actually walk about in search of game, they are usually moving from trap to trap with a bow and arrows in their hands, hoping that some game will happen to them, rather than conceiving themselves as in active pursuit of it. Any game animal which appears, is pursued and not caught, is immediately classified as a marsalai and not a real animal at all, and so the hunter is exonerated from any condemnation for his failure.

All work in connection with traps and snares, including the manufacture of the cord used, must be done by the men, as women and hunting are regarded as antithetical. Small boys learn first to shoot with miniature bows and arrows of sago stalk, which they make themselves, and to build rat traps. The only type of pursuit of game in which women may take part is fishing for eels, prawns, and small fresh water fish, in the mountain streams. Women are also permitted to accompany a hunting party into the bush to smoke the game.

The Arapesh legends contain the word for flying fox net  $(jauisok^u)$ , but the Mountain people assured me that they caught flying fox by lopping off the branch of the trees where it rested and did not use nets.

Several plants are used to poison fish in the streams. The most important of these are *manoloh* bark and *ashus* sap.

The Mountain people use a hand dip net, called a me'a'ol. The accompanying sketch (Fig. 69) is made from memory and may be incorrect, as my one specimen was lost. The mesh is made of strong cord with the usual netting technique. The end nearest the handle is called halim, the Arapesh word for enemy, and is the place of good snaring; the end furthest from the handle is called awahan; the whole frame is called ahais.

Rat Trap. This simple rat trap can be placed anywhere and boys of eleven and twelve know how to construct one. It is called an *epibtam* nat. A log (belebidje) (Fig. 70a), about five feet long and seven to nine inches in diameter (these are optimum measurements and there is un-



Fig. 69. Hand Dip Net (drawn from a sketch by the author).

doubtedly often greater variation) is placed on a convenient level spot. Two sticks, one with a naturally forked end, about three and a half feet long are placed on each side of the log (Fig. 70a). The stick with the forked end is thrust into the ground, forked end at the top. Short pieces of elephant grass (4), about a foot high, called ulawhiyal. are placed at the other end of the log, and are called dokwen, the name of the transverse pins used in bonnetting the ridge pole. A small bamboo arch (5) ('nowhip) is fastened at the side, at about half the middle of the Along each side of the log (Fig. 70b) a row of elephant grass stalks (banip) (6) about three feet high is placed, passing between the nowhip (5) and the log (1). A slender horizontal tie stick, about two inches in diameter (buten) (Fig. 70c, 7) is rested in the fork of the ulawhiyal and lashed firmly (Fig. 70c, 8) to the end of the log with a heavy vine To the other end of the buten is fastened a double vine (Fig. 70c, 9) (butemiuh), which is attached at the lower end to a short stick (bigap), about fifteen inches long. When this stick is thrust under the nowhip, the arch of elephant grass, the connected vine (9) is tightened and raises the end of the log (1) up to the level of the top of the notched stick (Fig. 70a, 2). Bait (Fig. 70c, 11), like a piece of rotten pawpaw or

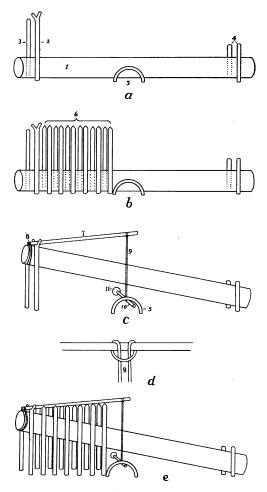


Fig. 70. Construction of a Rat Trap. a, First step; b, Second step; c, Fastening horizontal tie stick; d, Detail of fastening tie stick; e, Set trap. 1, Log which gives the blow to the victim; 2, Upright with natural fork; 3, Stick which supports log on other side; 4, The elephant grass sticks which support log at other end; 5, Arch of elephant grass; 6, Fencing sticks of elephant grass; 7, Horizontal tie stick; 8, Vine joining 1 and 7; 9, Rope of vine used to set trap; 10, Straight spring stick; 11, Bait.

taro is fastened on the other end of the *bigap*. When the rat gnaws the bait, the *bigap* is pulled out from the *nowhip* and the log drops upon the rat and kills it.

Large Game Snare Trap. This trap (Fig. 71) is called a dowen. It is used for catching cassowary, pig, tree kangaroo, wallaby, and pha-

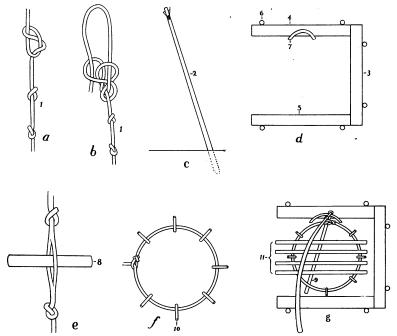


Fig. 71. Large Game Snare. a, First step in making noose; b, Second step in making noose; c, Planting the sapling; d, Making frame of foot trap; e, Inserting cross stick in rope; f, Fastening spread noose in place; g, The set trap. 1, The noose; 2, The sapling; 3-5, Side of trap; 6, Upright sticks holding trap in place; 7, Arched spring; 8, Cross stick used to fasten rope down; 9, Stick used to spring trap; 10, Short sticks used to spread noose; 11, Flat cross pieces placed on top of spread noose.

langer and is placed unbaited in the known runway of one of these game animals. A stout bark rope, about a yard long, is used. About five inches from one end, two simple knots are made, about an inch apart; just below these two knots a noose (Fig 71a and b) is made. Between them the rope is divided in half, forming an opening. The free end is then fastened by wrapping it round and round a sapling (wolita) about

five or six feet long (Fig. 71c) which is thrust into the ground. On the ground a three-sided square is made by placing a piece of wood, or a small log, about three feet long (Fig. 71d), on two short pieces about eleven or twelve inches long. Four short upright stakes of elephant grass are thrust in at the corners, to keep these side pieces in place. A small arch (nowhip) of green wood is fastened in the ground on the upper inside edge

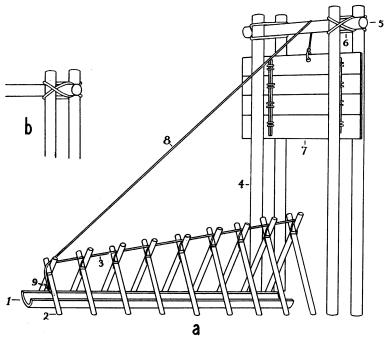
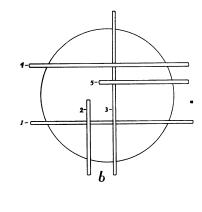


Fig. 72. Pig Trap. a, Set trap; b, Detail of fastening the frame of the dead-fall. 1, Piece of a sago trunk; 2, Cross stakes which constitute the walls of the trap; 3, Rattan fastening cross stakes together at the point of juncture; 4, Uprights (four) making frame for falling door; 5, Top of frame; 6, Rattan fastening top of frame to uprights; 7, Door; 8, Vine which fastens door; 9, Short stick attached to vine (8) and caught under the outermost cross stakes.

of the square. A small piece of the green wood of which the *nowhip* was made is broken off and thrust through the rope between the two knots. This is called a *migasin* (Fig. 71e, 8). The rope is now pulled down until the sapling (Fig. 71c, 2) almost touches the *nowhip* (Fig. 71d, 7). The rope is passed inside of the *nowhip*. A stick about seven inches long

(Fig. 71g, 9), bigab, is passed between the nowhip and the migasin, the rope passing under it. The rope is then adjusted so that with the noose at the juncture of 7, 8, and 9, it will just fit the square, outlined by the pieces of wood 3, 4, and 5. It is laid down and fixed in position by a series of small sticks (Fig. 71f, 10), about eight to nine inches long (bigabis). Over these are laid a series of flat sticks about ten inches long

(Fig. 71g, 11). They rest on 9 (Fig. 71g) at one end and on the ground



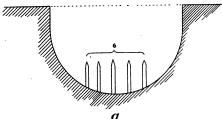


Fig. 73. Deadfall. a, Diagrammatic view of top; b, Cross-section. 1-5, Cross pieces, numbered in the order in which they are placed; 6, Spears or sharpened sticks.

inside 3 at the other (Fig. 71g). This forms the footfall over the noose. When the animal steps on it, it releases the stick, 9, and so allows the sapling to snap back into position. The footfall is covered with dead leaves and débris. There is no bait.

Pig Trap. This trap (Fig. 72) is called djena, djenahas. The bait is made of a sago bark trunk, of which a five foot length is split open and laid in the bush where wild pigs are known to run. An enclosure of crossed sticks about three and a half feet high is built over this piece of

sago bark. These sticks are called *uloh*. The same word is used for house piles and the people speak of this as "building a house for the pig." These slanting rafter sticks are fastened together by running a piece of very heavy rattan along the intersection, and underneath the projecting points along each side (Fig. 72a). The rafters are graduated

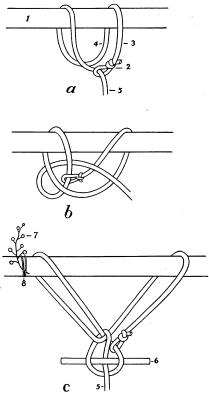


Fig. 74. Bird Snare. The first and second steps in setting the snare are those shown in Fig. 71 a and b. a, Third step in setting snare; b, Fourth step in setting snare; c, The set snare. 1, Branch of a tree; 2, Noose knot; 3, Front loop; 4, Back loop; 5, Free end of cord held in hand; 6, Small stick which releases snare; 7, Bait of berries; 8, Binding of bark which attaches both to branch of tree.

in height so that, while they are the full three and a half feet at the entrance, the angle is less acute at the rear end, flattening the structure to make it impossible for a pig to escape. At the opening a framework is built by setting up two sets of double posts. (These are called bigab, the

usual word for the release stick in other traps, in Alitoa; but in Maguer, they are called man, manehas.) At the top a cross-piece is fastened between these sets of posts by a heavy rattan binding (Fig. 72b). Then a door, exactly like a house door, a little wider than the distance between the posts, is made (Fig. 72a). This is called alitem in Alitoa and teruto in Maguer. A me'eli' vine rope is measured and fastened at one end in the middle of the top of the trap door. Then it is passed over the top horizontal bar of the framework and carried down at a diagonal to the opposite end of the trap, where it is secured under the rafters by an eighteen-inch stick fastened to it, and then caught under the rafters. The pig enters the trap to eat the sago; as it gnaws at the sago, it dislodges this stick and the trap door falls.

Deadfall. This is called bigab, the word which has appeared in two other contexts in the terminology of trapping, that of the releasing stick and of the frame of the drop door. A pit is dug and either old broken spears or sharpened sticks (alel) are thrust into the earth bottom, points upward (Fig. 73a). Across the top is laid a flimsy structure (Fig. 73b) of cross-pieces (bigab) which will break with the weight of an animal. Old leaves and débris are laid over this framework to conceal it.

Bird Snare. This bird snare (Fig. 74) which is called utik, has to be operated by a watcher as it is not self-releasing. A very fine cord is used, of which several yards may be needed. The branch of a tree, frequented by the bird desired, is chosen. The snare is made by tying a slip knot in the cord, as in the snare used in the dowen, large game snare (Fig. 71a and b). After the first two steps, the noose is spread and laid over the branch of the tree (Fig. 74a). The front loop (Fig. 74a, 3) is then pushed back through the back loop 4. Then follows the fourth step (Fig. 74b). The two loops are spread apart on the branch (Fig. 74e) and a short stick (migasin) is fastened in the retaining loop. A bait of berries (7) is bound to the limb with bark (8). The watcher remains concealed below, holding the cord, 5, in his hand, and whistling an imitation of the bird call. When the bird alights, the cord 5 is pulled, the releasing stick (6) falls out, the two loops pull together and the bird's foot is caught.

#### Cooking

The Mountain Arapesh take a great and consuming interest in food, in its production and preparation. Meager as is their diet, there is, nevertheless, a great emphasis on balanced meals and on variety and tastiness, even though the items which contribute to the variety are pitifully small in number. Cooked food, a meal, and a small feast are all

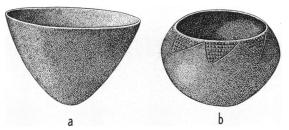


Fig. 75. Types of Cooking Pots used in the Mountains.

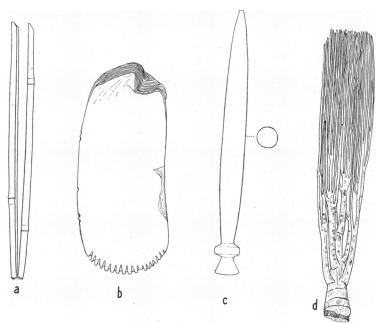


Fig. 76 a-d (80.0-6466, 6937, 6948, 6942). Household and Cooking Implements. a, Fire tongs; b, Serrated shell coconut scraper; c, Coconut husker; d, Limbum palm flower broom.

called by the same word, woligen. So they will say that a child cries for woligen or that a village is giving a woligen. The most important distinction recognized in food preparation is that between the basic carbohydrate food, yams, taro, or sago, and the garnish. Garnishes are meat of all sorts, including caterpillars and grubs, as well as coconut meat and various types of greens. The Arapesh conception of meat is distinctly that it does garnish, that it contributes flavoring rather than definite bulk to the meal. A meal of carbohydrates which does not include any of the garnishing materials is a pauper meal, the kind a widower prepares for himself as he disconsolately bakes a few taros or bamboo shoots in the fire.

The carbohydrate base and the garnish may be combined in two ways by adding separately cooked bits of garnish to separately cooked yams, taros, or sago, or by cooking together in soup. Greens and grated coconut are used most frequently in this latter way in everyday living.



Fig. 77 (80.0-6944). Stirring Stick.

Cooking, with the exception of making samehas, the coconut-sago croquettes for feasts, is women's work. Men butcher the pigs and smoke meat on a hunting trip, if unaccompanied by women, but this is regarded as undesirable. Whenever possible, women are taken along on hunting trips.

Cooking Utensils. Cooking is done either on the indoor fireplace or out-of-doors on a temporary fire. Boiling is the standard method of preparation for both carbohydrates and proteins. Pigs are cut into pieces small enough to fit into the large pots; other game, which has not already been cut up for smoking, is similarly treated. The cooking pots are called marip and are purchased from the Nugum and Plains Arapesh peoples. They are of two types (Fig. 75ab). The flaring type has a pointed base and while the food is mixed in it, must be supported in a flattened coconut husk. Then it is supported on large stones (sala'wiuh). The large cooking pots are very highly valued and every feast preparation is marked by great trepidation lest the pot crack. Occasionally, the woman cooking is badly burned in such an accident. For everyday cooking within the house, the smaller, rounded top pot is used. Cooking utensils consist of a pair of banana bark fire tongs (alu'oteuh) (Fig. 76), a few empty coconut shells to use as spoons and skimming utensils, and a long worked rod (edap) (Fig. 77) to stir soup, also to turn sago. The coconut scraper which is attached to a wooden seat is not known, but a simple piece of pearl shell (yalugip) shaped like an adze blade, and serrated at one end (Fig. 76b) is held in the hand. A small sharpened wooden peg, with a knob at one end, called a pwish (Fig. 76c), is used to open coconuts, and a bivalve (yalug) shell is used to scrape the outer skin of vegetables. Greens are wrapped in tight bundles and chopped up with an imported knife. In the preparation of taro and coconut croquettes the taro is mashed with a taro pounder (pas) (Fig. 81).

The food is served in wooden bowls, on wooden plates, and in the smooth heavy pottery bowls designed for serving rather than cooking and called *sehin* (Fig. 79). During a feast, when there is a shortage of serving dishes, green banana leaves may be used. These are regarded as espe-



Fig. 78 (80.0-6474). Coconut Shell Water Carrier.

cially suitable for serving sago jelly balls. Soup is sometimes served to children in large coconut shells. The eating utensils are a coconut shell spoon, a casually picked up stick for sago jelly, and a cassowary bone knife usually worn either in the armlet or in the hair. The latter is now being replaced by a knife carried in the personal bag.

The housewife preparing to feed her own small household usually has at hand, either taro or yams, a few bundles of greens, perhaps one or two coconuts and, if she is fortunate, a little bit of protein—a couple of ounces of smoked meat left over from a feast a week ago, a rat which one of the children has caught, or a bird which a relative has sent in. For such occasions she usually makes soup (yabi'). The yams or taro, or a little of each, are scraped or peeled, cut into smaller pieces and boiled with

coconut milk, more of which is added from time to time as it boils away. Bits of cut greens and small pieces of meat are also added. It is stirred with the *edap* rod (Fig. 77) and skimmed with a coconut shell. When the soup is cooked, it still contains large soft lumps of yam or taro, which break up under contact with the coconut shell spoon with which it is eaten. Soup of this sort is the customary food at all seasons and practically any other type of cooking is limited to a feast occasion, even though it may include only two or three households. On such a diet, the average adult receives about three pounds of carbohydrates a day and about five ounces of protein a week.

The distinction between a meal and a feast lies in the general Arapesh attitude that all good foods must be shared, that the hunter may not eat



Fig. 79 (80.0-6451). Pottery Serving Dish, Nugum.

his own kill, and that the yam surplus must be given to others. are initiated in two ways: either because there is an occasion which demands one, such as building a house, or releasing the parents of a newborn child from their taboos, or ending mourning; or because there is a special supply of food which is so good that it signals a feast. often these two sources are combined, that is, the feast for an occasion waits upon the accident of a little meat coming to him whose duty it is to give it. Even finding a treeful of caterpillars (oshogu) is a signal for a feast; the oshogu are given to a relative or a buanyin and appropriate So, while in foods are prepared to accompany the caterpillar dainty. everyday life meat is a rare garnish, an occasion becomes a feast when the starting point is meat about which specially prepared carbohydrates can be grouped as background. Very often the proportions of meat in a meal and in a vaunted feast do not differ considerably, but the native feeling and the way in which the other foods are prepared divide the two very distinctly.

The chief feast foods are pig and other game, sago, and a plentiful

supply of coconuts. As I have said, any meat is the signal for a feast; sago is rare and carefully husbanded for feast occasions; most of the coconut palm trees are under taboo the greater part of the time, to insure a good supply for such occasions. I will give below the principal methods of preparing feast foods which I observed in Alitoa. I do not believe that this is an exhaustive list, even for the Mountain Arapesh, but I found them exceedingly poor informants when asked for recipes.

Butchering a Pig. A pig which is to be eaten, is caught and fastene l to a heavy pole, the forelegs tied together at one end, the hind legs at the other. Once a pig has been so "fastened," it can never be unfastened, but is carried tirelessly up and down the mountains, passed from one recipient to another, until finally, it reaches someone who wishes to keep In rests between these periods, it lies on its side, protected from the sun by coconut leaves stuck in the ground to form a tem-It is killed by the man who will be the "trunk of the porary screen. feast," by placing a stick across its throat and strangling it. singed over a coconut palm leaf fire. Then an incision about six inches long is made in the side of the throat, a long slit is made down the side, and the skin removed. The hind legs are cut off, the lower jaw is severed. Similar slits are made in the other side and the front legs are then cut off. The entrails are removed and stomach and guts cleaned with water. The womb is kept as a special tidbit. The children make a ball of the bladder, but it is possible that this is an introduced custom. The pieces of meat are then boiled with leaves of mountain fern, in large pots over the top of which large green nyumais leaves are fastened.

Dishes made of Sago. Sago is served at a feast in two principal ways: in a soup and as a thick jelly in the form of round cakes. The soup is made by sprinkling a very small amount of sago in hot water and adding a large amount of finely cut greens. It is served before the greens are very thoroughly cooked. This dish is often served to guests early in the morning of the day upon which a large feast is to be held. To prepare the more substantial dish, which is called in pidgin English "turning sacsac," the sago is crushed and mixed with a little cold water to form a paste. Boiling water is then poured over it, causing it to jell in a thick viscous mass. A small amount is then dexterously twisted about the stirring stick and placed on the serving platter. These small amounts, about two inches in diameter after they have settled, are distributed all over the platter. They are eaten by twisting a small amount about a stick. Occasionally, sago so prepared is further rolled in grated coconut meat to make a croquette.

Taro and Coconut Croquettes. The taro is peeled and boiled in a large pot. After it is thoroughly softened, the water is drained off and the soft pieces are piled on a piece of *limbum* spathe and thoroughly mashed with a taro pounder. The mashed taro is formed into small balls and rolled in grated coconut. The peeling, boiling, and mashing of the taro is women's work; grating the coconut meat, moulding the balls, and rolling them in the grated coconut is regarded as highly skilled work and is done by men. The white croquettes are then arranged on black wooden platters and add a very decorative element to a feast scene.

There are many special ways of preparing small rare delicacies. Bamboo shoots are merely broken off and cooked in the open fire. The large hairy caterpillars (oshogu) are wrapped, while still alive, in leaf bundles to which red hot stones have been added. These bundles are placed in the hot ashes and firebrands are leaned against the outside. They are also sometimes cooked au naturel in the fire. Breadfruit is roasted in a hot fire until soft and then broken up and the seeds removed and eaten. Except in rare instances, the flesh is regarded as too stringy and tough to eat.

One of the few complicated cooking techniques is the preparation of the alipep, fruit of the alusaibo tree. I did not see this fruit, but the method was described to me. The fruit is baked in the open fire, broken open, the flesh removed, put into a tightly netted bag and hung in a running stream for two or three days, then it is taken out, wrapped in an ahulualug leaf, and baked in the hot ashes. The natives say that the material leached from this fruit is so strong that it will kill eels which are in the stream. Nevertheless, they do not recognize it as poison, but merely as a strong sharp substance which "fights,"—their usual statement to cover the extremely salt or extremely bitter.

Since the coming of the white Government, the Arapesh have added maize, beans, cucumbers, pumpkins, and tomatoes to their gardens and to their bill of fare. Maize they permit to ripen almost to the hardening point and then cook it in the open fire; pumpkins and cucumbers are also baked in the open fire; beans and tomatoes are treated as greens.

One notable point about their cooking procedures is the lack of the earth oven. Cooking in the ashes of an open fire designed for boiling is a common practice, although, except in very special kinds of foods, always regarded as inferior. But they have not a trace of a genuine earth oven.

# IMPORTS AND MOUNTAIN VERSIONS OF IMPORTS

Mountain Arapesh material culture may be conveniently divided into three sections: first, techniques in which the Mountain Arapesh are entirely self-sufficient, such as house building, trap making, etc.; second, manufactures in which they produce a very crude version of some much more highly developed form found either on the Beach or in the Plains; and third, articles for which they are entirely dependent upon import. The preceding section has dealt with the first category. In accordance with the original plan of this series, articles in the second category will be dealt with in a future paper presenting a detailed analysis of the entire collection, but it seems desirable to give a brief summary of these articles here, to make the preliminary picture of Arapesh material culture inclusive, if only in outline.

# LOCAL ARTIFACTS, CRUDER FORMS OF BEACH TYPES

Under this heading, come wooden bowls and platters used for serving food, taro pounders, composite pillows, arrows, and areca nut mortars. The Mountain Arapesh make all of these and in sufficient numbers so that it is possible to characterize a Mountain style, as opposed to the Beach style. They seldom export them; they rarely make enough for their own use; and imports from the villages nearer the Beach are found in every Mountain village. The Arapesh wooden bowl is a rough oval varying from a depth of about six inches to a flat platter, about two inches high (Fig. 80). The bowls are carved from the wood of heavy The bowl has two flanges placed opposite each other on the upper outer sides of the rim, with two holes inserted in each through which cords may be passed. The outer border and the center of the outer surface of the base are invariably, though often very crudely, decorated, the former with a design in low relief, usually conventional like a circle or a star, or occasionally, the representation of a lizard. lightly incised border design consists of a narrow decorative field between two sets of parallel lines; within this area is a single or double design in which horizontal units alternate regularly with short vertical The design may encompass the entire bowl, or there may be breaks in the continuity. The bowls are painted black and given a rough polish.

The taro pounder is definitely associated with the making of taro croquettes; it is found in more elaborate forms on the Beach and is unknown for the Plains. However, while Mountain forms (Fig. 81) show,

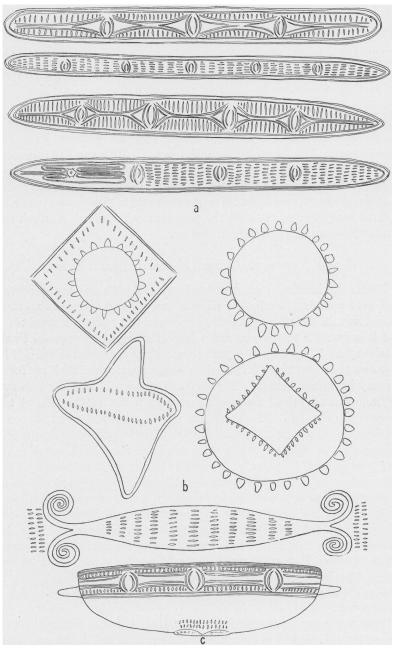


Fig. 80 (80.0–6431, 6445, 6434, 6443, 6436). Form and Decoration of Wooden Bowls. a, Rim decoration; b, Outer base decoration; c, Complete bowl showing all decorated areas.

on the whole, a degeneration of typical Beach designs, there is also apparent the definite influence of Plains conventions in the treatment of the decorative human figure on the handle. The taro pounders vary from fifteen to thirty-one inches in height and from five to ten inches in circumference at the base. They are roughly circular in cross-section and squared off to produce a pounding surface at the base. The handle

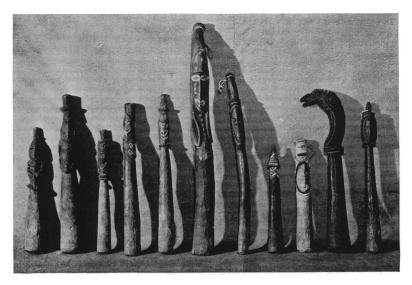


Fig. 81 a-k (80.0–6733, 6728, 6618, 6729, 6726, 6614, 6615, 6616, 6613, 6735, 6731). Taro Pounders. The first two are Beach types, the remainder are Mountain Arapesh types.

is always decorated, a third to a half of the total height being given over to ornamentation. Sometimes the decoration is above the grasping point, as in the Beach forms, but sometimes the two are merged. The main design theme seems to be a human figure, usually very much simplified and slurred in the Mountains. Very slight conventional decorations also occur.

The composite pillow (Fig. 82) is another Beach import lacking on the Plains. The pillows average about fourteen inches in length. The head piece is a flat ovaloid in cross-section, varying from half an inch to two and a half inches in width, and from one half to two and a half inches in thickness. This is divided into three sections, the slender oval be-

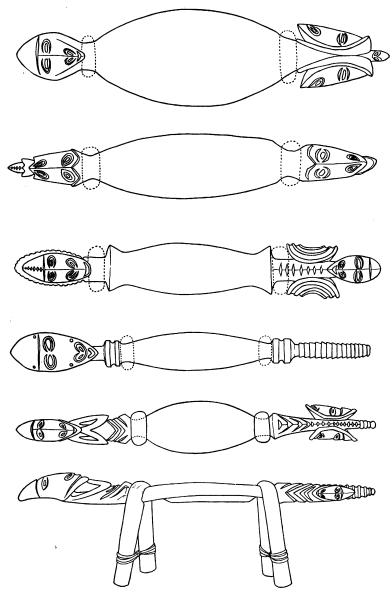


Fig. 82 a-f (80.0-6366, 6368, 6365, 6379, 6364). Composite Pillows, Mountain Arapesh. The drawing at the bottom shows a complete pillow; the others represent pillow tops and their decoration.

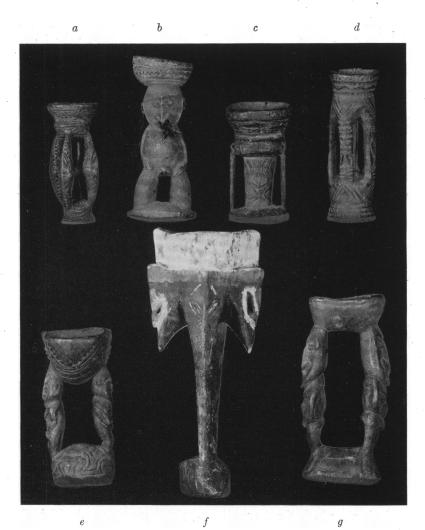


Fig. 83 (a, 80.0-6983; b, 80.0-6990; c, 80.0-6987; d, 80.0-6985; e, 80.0-6984; f, 80.0-6982; g, 80.0-6986). Areca Nut Mortars. c, d, e, g, Beach Arapesh; a, b, f, Mountain Arapesh.

tween the pillow legs on which the head rests, and extensions at each end which are typically carved into representations of human or conventionalized animal heads. Along the base is a perforated ridge in which decorative tassels may be put. The legs are formed by heavy pieces of rattan bent over the head piece at each end of the oval center and tied securely underneath. As in the taro pounders, some Plains influence may be seen in the degenerated Mountain forms.

Areca nut mortars (Fig. 83), carved of wood, and standing usually about six inches high are made in the Mountains, following Beach designs. The form is that of a shallow bowl, supported on a pedestal base, consisting either of columns or caryatid figures. The Mountain examples are very crude indeed.

The Mountain Arapesh rely entirely upon import for their bows (Fig. 84), but they make a few simple forms of arrows (Fig. 85a). The basic form of their arrows, either of imports or local copies, has a simple bamboo shaft neither notched nor finished at the butt end. Into the proximal end of the shaft is fitted a wooden head carrying a sharpened tang. The junc-The heads ture is reinforced with a rattan or cord binding. of the imported arrows vary enormously in barbing and decoration; the one extreme exception is the arrow with a wide bamboo head, which the Arapesh most often make locally and which also resembles a local spear form. They also make a multiple-pointed bird arrow, used principally by children, in which sago spines form the prongs and heavy straw the shaft. I collected no evidence to suggest that there was such a thing as an Arapesh arrow form; there are merely imported arrow forms which the Arapesh are able to mend, or of which they can re-combine the parts or even occasionally make a new crude example.

Fig. 84 (80.0-6594). Diagrammatic Representation of an Imported Bow showing Bowstring, Attachment Form, and Decorative Units.

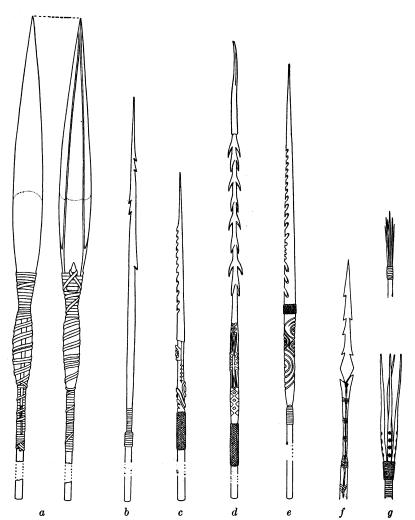


Fig. 85 a–g (80.0–6574c, 6555, 6533, 6551, 6536, 6560c, 6575, 6580). Types of Arrows used by the Mountain Arapesh. g, The lower figure is a Type G arrow, the upper is a child's arrow. a, b, and g are sometimes made locally.

# LOCAL ARTIFACTS, CRUDER FORMS OF PLAINS TYPES

The principal local artifacts of which the Mountain Arapesh merely produce cruder forms which are much more highly developed on the Plains, are: net bags, incised work in coconut shell and bone, carved human figures, spears, and clubs.

Net bags (Fig. 86) are an essential part of the Mountain Arapesh economy, but only a few Mountain women know how to make them and the only form of decoration known in the Mountains is crude painting with a bright ocher-colored root. The Mountain-made bags are small, on the whole, being most usually phrased as the gift of a woman to some male relative for use as a personal bag. For all decorated bags and for all large strong bags, or exceptionally small fine ones, the Mountain

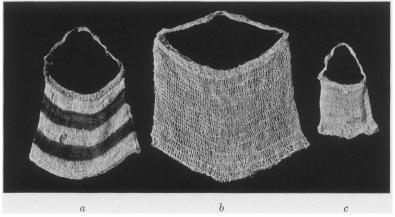


Fig. 86 a–c (80.0–6807, 6803, 6810). Net Bags. a, Plains Arapesh; b–c, Mountain Arapesh.

Arapesh depend upon import. The same techniques are used by both Plains and Mountain women. The cord is made as described above (p. 268). The netting is begun by fastening a wide loop of cord taut about the knees of the netting woman, who is seated cross-legged. The first row of loops is fastened along this starting cord and the number which form the bottom of the bag, determines its width. Successive rows of loops are fastened to these first loops, round and round. When three or four rows are completed, the starting cord is removed. The bag is shaped by combining loops and given a firm rim. A handle is made with the same stitch, but placed at right angles to the original mesh to form tighter loops. Both Plains and Mountain women work without

any gauge or bobbin, and with a clumsy length of cord, several yards long, which has to be pulled through each loop. The worker keeps her supply of bast near by and only prepares cord a few yards ahead of her need. It is notable that on the Beach, where there is no knowledge of net bag-making, netting with a mesh gauge and bobbin has been imported, probably from the Islands.

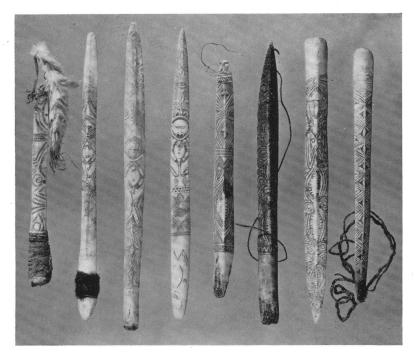


Fig. 87 a-h (80.0-7044, 7088, 7081, 7093, 7045, 7098, 7007, 7041). Ornamented Cassowary Bone, Abelam.

In all incised work on cassowary bone and coconut shell, the Mountains look to the Plains rather than to the Beach for inspiration. Among the Abelam, and secondarily, among the Plains Arapesh, there is a high development of incised work on cassowary bone (Fig. 87), in the form of daggers, food knives, and flat hair pins from which feather ornaments are hung. The Mountain Arapesh follow the simpler lines of this development in the bones used and the area decorated, but the designs themselves are mere scratches. Mountain Arapesh work in coconut shell consists of spoons and tops. All these forms are found in far greater

elaboration on the Plains. The top (Fig. 89) is made from a shallow coconut shell disc, with a hole cut in the center, through which a peg about two and a half inches long is inserted. The discs vary from cup shapes about two inches in diameter to shallower ones three to three and a half inches in diameter. The upper surface is decorated with a series of crude scratches showing no relationship in design to the elaborate specimens which occur among the Abelam. The game<sup>1</sup> itself is played at harvest; it occurs in an attenuated form on the Beach and has been reported from Wapi. I collected tops similar in construction, but profoundly different in design, in Tchambuli and Mundugumor.

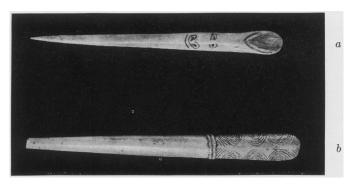


Fig. 88 ab (80.0–7120, 7121). Crude Cassowary Bone Hair Ornaments, Mountain Arapesh.

The Mountain Arapesh spoon (Fig. 90) is a slender section cut from a large coconut shell so that about an eighth of its total surface is used for the spoon. One end is left as it was cut from the round, and the other, cut from the heavy apex of the shell, is narrowed down, but left as thick as possible, to leave sufficient material for shaping into the head of a bird. This spoon is a heavily stylized and an extraordinarily unvarying version of the rich variety of spoons and coconut shell bowls found among the Abelam. It represents one of the few instances in which the Mountain Arapesh have been able to develop and hold a style of their own.

Very few examples of carved human figures are to be found in the Mountains; they have, as far as is known, no functional use, but are merely made occasionally as toys. They are very crude, following Plains inspiration, where the carved figure is a definite part of the decoration of the interior of the tamberan house.

The top game will be described in connection with harvest ritual in a later paper.

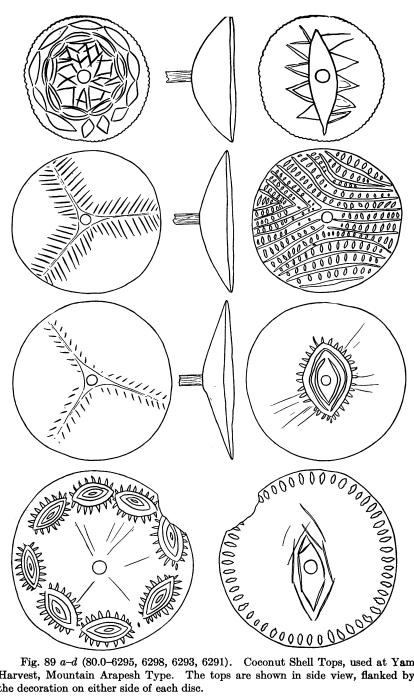


Fig. 89 a-d (80.0–6295, 6298, 6293, 6291). Coconut Shell Tops, used at Yam Harvest, Mountain Arapesh Type. The tops are shown in side view, flanked by the decoration on either side of each disc.

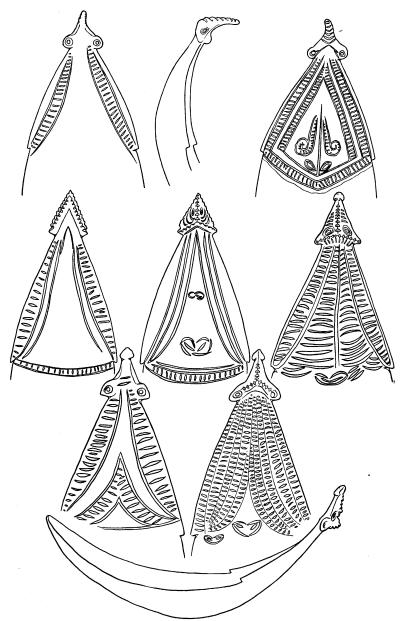


Fig. 90  $a\!-\!d$  (80.0–6084, 6080, 6088, 6094). Co conut Shell Spoons, their Form and Style of Decoration.

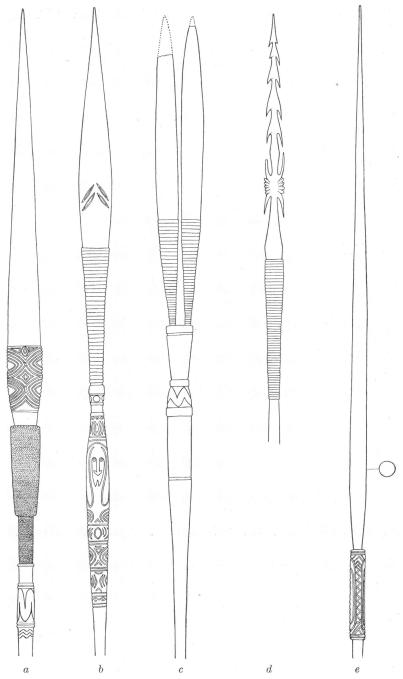


Fig. 91 a-e (80.0–6506, 6483, 6510, 6481, 6504). Spear Types used by Mountain Arapesh. a-c, Type A; d, Type B; e, Type C.

Clubs and spears (Fig. 91) are also imported from the Plains and simpler versions of them made in the Mountains. Although the Plains people use both weapons, the more developed spear form shows evidence of Abelam workmanship, while the center of club manufacture seems to be the Plains-Mountain border area. Very occasionally spears of Sepik River manufacture enter the Mountain region via the Beach. The imported spears are of three main types. Type A is a spear with a wooden shaft and a lance-shaped, unbarbed head, of bamboo or wood, with or without a short bamboo counterpoise. (This spear closely

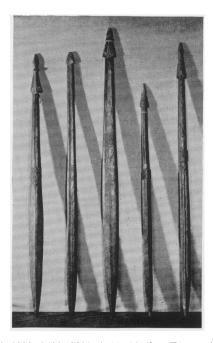


Fig. 92 a-e (80.0–6603, 6599, 6600, 6598, 6602). Types of Wooden Clubs.

resembles the common bamboo-headed arrow and is the type most often attempted by the Arapesh.) Type B is a spear with a wooden shaft and short barbed wooden head, in which the bamboo counterpoise is typically absent. The barbs are bilateral or quadrilateral and either regular or ornamented by a reversed star arrangement. (The local variants have very simple barbs and occasionally are double-headed.) Type C is a spear with a slender wooden head, round in cross-section and sloping at both distal and proximal ends, inserted into a bamboo

shaft of approximately the same length or a little longer. The imported spears are elaborately carved and decorated with various complicated twilled patterns in cord and rattan. The local versions can all be described as much simpler forms of the imports. It is impossible, from the existing material, to identify any given type as most typically Mountain Arapesh, although if mere frequency is considered, a very simple, bamboo-headed form of Type A, seems the most probable candidate for precedence.

The club (Fig. 92) which is the characteristic weapon for hand-to-hand brawling and therefore particularly typical of the Arapesh, who have no war pattern, is cut out of a solid piece of hard wood. The clubs range from forty-five to fifty-seven inches in length and from two to three inches in width at the widest point. In cross-section, they are typically a flat lozenge shape, varying towards a shallow triangle in which one side is, in many instances, practically flat. The handle varies from a triangular protuberance with a knob at the top to a more elaborate and very stylized form in which the simple handle surmounts a wide triangular handle, serrated on the two sides, and decorated with a scroll design in high relief. Near the middle of the club is a longitudinal or square decorated section which sometimes protrudes beyond its width. This decorative band is carved in high relief or actually raised, and occurs only on one side.

## IMPORTS WHICH THE MOUNTAIN ARAPESH MAKE NO ATTEMPT TO COPY

The greatest dependence of the Mountain Arapesh is in the matter of bows, stone tools, and cooking pots. They can re-string a bow and re-haft an adze, even cutting a new haft, but this is the limit of their skill. If a celt breaks, they reappropriate it to sago cutting. They obtain their adzes and axes (Fig. 93), already hafted, from the interior and also from the coast. The celts from both directions are somewhat triangular in shape, but those said to come from the interior, have a pronounced ridge and a more widely flaring base. But as stone tools are no longer used and many intermediate forms were found, the evidence on this subject is poor. The haft of a large adze, a small carving adze, an ax, and sago cutting tool with its tube-shaped stone, all follow the same pattern. A shaft is cut from the branch of a tree in such a way that part of the trunk can be used to form the foot. Against the foot of the shaft there is then lashed what I shall term the blade support, a round branch which is fastened at near right angles to the shaft, in the split

end of which the stone blade is inserted. The foot of the blade support sometimes juts out and may be carved in full relief. The hafting fastening consists of an interlocking rattan lash and a series of rattan rings which are plaited tightly at the narrowest point and forced down over the part which holds the stone by blows from a wooden tool shaped like an adze and made for this purpose.

All of the bows collected among the Mountain Arapesh were of the same type (Fig. 84) and were said to have been imported via the Beach

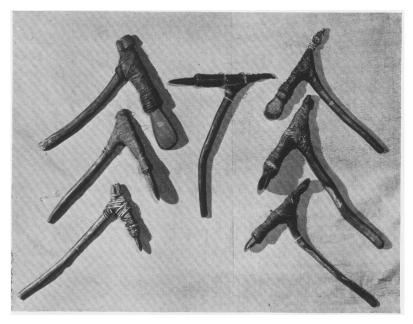


Fig. 93 a-g (80.0–6397, 6386, 6387, 6392, 6396, 6385, 6399). Types of Imported Stone-Bladed Adzes and Axes.

from the direction of Aitape. The bow is plain, made of hard wood, averages about seven feet unstrung, is a flat ovaloid in cross-section, often with a low relief ridge along the belly, and tapers to a point, round in cross-section, at both horns. The outline of the bow is identical for both horns, but the decorative treatment is quite different. At the distal end is a long panel of low relief carving and decorative rattan wrappings of feather and cloth, when they occur, are at this end. The tip of each horn carries one or two heavy rattan rings, which are so tightly adjusted to its increasing width that they prevent the rattan bowstring from slip-

ping further towards the center of the bow. There are no notches to hold the bowstring. (Fig. 94 shows the method of stringing and the arrow release used.) Their other major dependence, pots, are entirely imported, a few from the Beach, who obtain them by trade, and the majority directly from Plains and Nugum potters (Figs. 75, 79). Other important imports are the valuables used as currency.

The ring is the chief valuable among the Arapesh. These rings are made of tridacna gigas shell and vary from three to four inches, the size



Fig. 94. Arrow Release, Alitoa, 1932. A posed picture of Wabe to demonstrate both the method of arrow release and the bowman's stance.

of those in common use, to very large rings, sometimes eight to ten inches in diameter, which are specially named and very highly prized. All of them are imported. As they are imported from both Beach and Plains and continually pass back and forth, the localization of origin is exceedingly doubtful. They are made by the Plains Arapesh who obtain the shell on the Beach and are said to be made by the Nugum and by the natives of "Wallis" Island. Fig. 95 shows the variety of type found among the Mountain Arapesh, including the ring "with a nose" which they call the hornbill (dubalin), said to come from the

Plains (Fig. 95e), the simplest form of ring, which is a simple flat disc called simply *iwan* (Fig. 95d), said to come from the Plains and from "Wallis," and the type of ring called *Wabilok* (Fig. 95b), said to be made by the Nugum. All rings on which decorative sets of parallel lines have been scratched are said to have come from "Wallis." Very small rings, only about one half to one and a half inches in diameter (Fig. 95a)

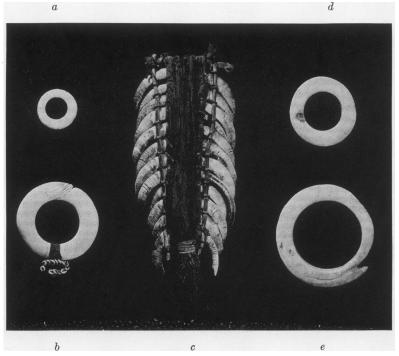


Fig. 95 a-e (80.0–7066, 7063, 7148, 7062, 7061). Rings and Pig Tusk Ornament.

are obtained from the Abelam and used in earrings and as part of necklaces, but do not play any rôle as currency. From Murik, little spiral unclosed rings called *leho* are obtained. These are also used simply for ornament.

Some of these rings are decorated with little tabs of cord work into which a few *Nassa* shells have been worked (Fig. 95b). The idiosyncracies of these tabs might some day be used to work out the path which the rings had followed, although, of course, it would still provide no in-

formation about origins. The main structural variations are between the hornbill type and the plain ring; all of the rings approximate to a flat surface.

Although rings are the standard valuable in which to express important exchange and ceremonial payments, other shell and tooth ornaments may be used interchangeably with them. These are mainly strings (buluhas) of a rough worked shell money (tambu) of the type found in Manus, but a great deal coarser, with the discs about a quarter of an inch in diameter and badly worked, strung with a series of animal teeth, usually dog's teeth arranged at intervals of an inch to two inches. These are imported from the Nugum and the locality in which they are manufactured is not known. Necklaces of dog's teeth (aun) which the Arapesh themselves know how to put together when they are provided with perforated teeth,—I found no evidence of a drill,—can also be substituted for rings in ceremonial payments. Occasionally other ornaments of pigs' tusks (Fig. 95c), or strings of shells may be interpolated in one of these payments, as also at times a small trade knife may be, but the standard valuables remain rings, shell money, and dog teeth necklaces. Unstrung dog's teeth are occasionally used as currency in dealing with the Islands, so the woman's nose bone is purchased for three or four dog's teeth.

Further considerations of Arapesh imports fall under two heads, first, the ceremonial setting within which they are imported or subsequently used (this applies particularly to elements of dress, to musical instruments, and to masks and other dance paraphernalia) and second, the relationship between Arapesh decorative forms and those of the surrounding areas from which they either import, or to which individual Arapesh are exposed in the course of travel. The question of ceremonial paraphernalia will be included in a subsequent paper on religion and ritual and the whole problem of artistic forms can only be illuminated when the detailed analysis of the specimens in the collection is published.

# THE MOUNTAIN ARAPESH SEEN AS AN IMPORTING CULTURE

In later papers, I shall discuss the Arapesh social, economic, and religious life, but I wish to conclude this first paper by placing the Arapesh in relation to the currents of purposive and of inexplicit diffusion to which they are continually exposed. The very simplicity and meagerness of their material culture lends itself to such an analysis.

The Mountain Arapesh are an importing culture, but nevertheless, they are self-sufficient in regard to food, shelter, and basic clothing. They depend upon no daily market for an essential part of their food They grow their own areca nuts and tobacco and coconuts; they carry shells up from the sea and make their own lime. Superficially it would seem that they are less dependent upon outside peoples than the Tchambuli, or the Iatmül, who rely upon frequent markets for food, or the Mundugumor who manufacture none of their most pressing household necessities. But, while the Mountain Arapesh are thus superficially self-sufficient they are dependent on import for tools, weapons, and cooking utensils. Their apparent self-sufficiency is accompanied by a genuine technological inferiority. This is one striking condition and another is their relative poverty, when compared with the Arapeshspeaking people of the Beach and the Plains. They have poorer and smaller gardens, more meager supplies of sago, fewer coconut trees, fewer and thinner pigs, than the peoples with whom they come most in In their attitude towards all foreign manufactures is found a genuine sense of humility, of inadequacy, which makes them peculiarly receptive to outside influences and uncritical in their importing methods.

The main lines of travel, trade, and importation are north and south through the Arapesh country. A glance at the map will show that the regions to the northwest and southeast of the Arapesh are very sparsely inhabited. They have slight contacts with the peoples on the northwest; the Alitoa people believe that there is a large section of virgin bush between the most northerly outposts of their language and the next linguistic group. The region to the southeast is inhabited by a people of whom the Plains group is called the Nugum and the Beach group the Abelesihim. The Arapesh trade with these people and the most easterly Arapesh villages are slightly influenced by them. Diffusion from the east is further limited by the fact that the Abelesihim are themselves very isolated from contacts on their eastern borders, the mountains presenting great tracts of land which are said never to have

been cultivated. The Abelesihim and Nugum peoples speak a language, which according to native testimony is also spoken on "Wallis" and is related to the Iatmül language of the Middle Sepik. The sea people maintain contacts with "Wallis" and so provide a group through which "Wallis" traits can reach the Arapesh.

But the most important influences reach the Mountain Arapesh through their own linguistic group on the Beach. The Beach villages form links in the chain of land diffusion and trade which traverses the coast from Aitape to the Sepik and also receive continual influences from the neighboring islands. From traders, like the Murik peoples who make annual trading voyages along the coast, they receive culture traits straight from the Lower Sepik.

Equally important, but less formalized, are the influences which reach the Mountain people from the Plains, for the Plains Arapesh draw directly upon the line of diffusion along the south side of the Torricellis, and also through the Abelam and Nugum people, upon the culture of the Sepik River.

The entire Mountain region through which the Plains man must travel to the sea is threaded with hereditary trade relationships along which individual Plains families walk, generation after generation. The Arapesh apply the word for *road* both to these individual routes and to the aggregations of these routes which bind hamlets instead of individuals together. I shall reserve the term, road, for this larger system and use the term, path, for the individual routes.

The path is hereditary in the patrilineal line, although sometimes a daughter may inherit the path of her father and her husband may actually exercise the right to it, and also, occasionally, a sister's son may follow his mother's brother's path. It consists of a series of points defined by the present residence of a series of hereditary trade friends and extends northeast to the Beach and southwest into the Plains. ceptionally, some individuals have trade friends among the Nugum, but these paths are regarded as slightly irregular and are not conceptualized as a part of an individual's real path; they are felt rather to be a temporary accident which may not outlast his lifetime. Each Arapesh Mountain boy is taken immediately after his initiation along at least part of the path of his father, or of one of his father's classificatory brothers. He is dressed in his initiatory finery and introduced in turn to his father's hereditary friends, all of whom give him gifts and thus institute the gift-giving relationship which he will tend to assume more and more as his father relinquishes it. Men call their gift friends "brother," using one of the elder or younger brother terms, or else merely e'in arapen, my human being. The wife of a gift friend is called "brother's wife" and the children of gift friends call their father's friends "father." However, this relationship does not carry with it an incest prohibition. There is a vague feeling that all such relationships were originally set up by marriage of women into distant places and that a continuance of the marriage tie from time to time is not inappropriate, although it is not necessary. This association of the gift friend with a relative is also demonstrated in the custom of taking the novice to see his sisters and father's sisters who are married at a distance, as well as to his father's gift friends.

Although brothers may, as youths, share the same path, as a result of rearrangements after the death of their father, the hereditary path of each adult man is different. Very often, however, two brothers will share a friend in one hamlet, after which their paths will diverge and follow separate lines. There is, nevertheless, a strong tendency for men of the same locality to follow very similar routes, so that it is possible to say that members of a given locality are the habitual gift friends of another locality, although this statement is actually a generalization from the series of individually inherited, slightly diverse paths.

The path is covered with a pledge of safety, food, and shelter. a man is going to and from the house of his gift friend, an injury to him will be resented by his friend as he would resent one to a close relative. This path, then, represents the maximum freedom of movement which an Arapesh man possessed before the introduction of the Pax Britannica and the freedom of the King's Highway. He thought of it in several ways: it was the path along which he could go to visit far places and see dances and ceremonies and new articles of material culture he had never seen before; it was the path along which foreign goods passed freely, his friends giving him of their surplus or of articles which they had specially obtained at his request, and along which he had the pleasure of giving, also, objects which would be highly valued and thankfully received; finally, it was the path along which sorcery traffic in exuviae was conducted. It was this aspect of their attitude towards the path which put the iron in a Plainsman's voice when he remarked in a Mountain or Beach village, "This is my path. Along this path I always travel."

Because one end of the path gives access to the sea, to salt water, to shells, and to a sense of freedom and expansiveness, and its other end is lost among the fierce and war-like Plains people who have all the important sorcery powers, the two ends of the path have very different affective tones, and the habits and traditions regarding the two directions The tradition is that all new paths are formed by Plainsmen who wish to reach the sea, and who, armed or carrying the far subtler weapon of a knowledge of sorcery which the Mountain and Beach people lack, visit the more seaward villages and make friends there. visits are subsequently returned by their hosts who would never have dared to initiate such a relationship. This tradition is also continued by the tendency of fathers to take their novice sons beachward and to neglect their inland gift friends. In the teaching which a boy receives from his father in regard to the entertainment of visitors, the emphasis is always upon haste in entertaining the visitor from the Plains, who comes with the threat of sorcery, and upon a more cavalier attitude towards the visitor from the Beach whose interest in sorcery is merely limited to the accusation of having passed on some piece of exuviae to one's Plains friend. This attitude is accentuated by the fact that the Beach visitors are more often mere friends or relatives of gift friends who take this path because they believe that it is close to the one along which the exuviae of the sick person, whose recovery they seek to encompass, probably traveled. But the Plainsman who travels, visits only his own line of gift friends.

These paths are used for sorcery in several ways. If an Arapesh man of Beach or Mountains has purloined a bit of exuviae from some person who has temporarily angered him he will take it inland, traveling from one gift friend to another; or, he may entrust the little packet to some inland trade friend who will see that it finally reaches the Plains sor-Although each man's gift friend in the Plains is not a sorcerer. yet each path ends in the vicinity of one or two well-known sorcerers. so that if a sick man knows who has stolen his exuviae he also knows along what path it has probably traveled and in whose hands it now Sometimes, but not usually, a gift, such as a piece of meat or a shell ring, is sent with the packet to retain the sorcerer. proceeding inland on sorcery errands are likely to take the less-frequented tracks. It must be remembered also that a man's "path" is not defined by the actual geographical route which he follows, but merely by the chain of individuals at whose houses he stays.

The second sorcery use of the paths is in the search undertaken for exuviae when someone falls ill. The relatives first conduct as searching an inquiry as possible into the identity of the guilty person, sometimes, but not usually, assisted by divination, and then they seek some con-

nection of theirs whose path is close to that of the guilty person. connection is persuaded to escort them into the Plains to look for the exuviae and persuade the sorcerer, with gifts, to desist from his charms. We may speak of this escort as the Host of the Path, while the search party are his guests. A request of this sort is embarrassing; the man who is asked to be host cannot refuse under penalty of being regarded as involved in the plot to kill the sick man, nor is he able to resist the importunities of his close relatives and affines who now implore him to accompany them. So he must strain the hospitality of his gift friends along perhaps the entire path into the Plains, by imposing upon them a search party, whose known intent is to discover the path taken by the exuviae. The gift friends of the host of the path regard such visits as impositions: the search party is large, angry, and hungry. Its members are no friends of theirs, and are, moreover, definitely hostile to some members of their community who are believed to have formed links in the sorcery chain. If there were no such suspicion, the search party would not be This strained relationship is greatly accentuated when the search party reaches the village of the suspected sorcerer. times may be a Mountain village if the sick person is merely afflicted with a sore, and is a Beach dweller; or a Beach village, in case of the slight sickness of a Mountain man. For all serious sorcery, however, the suspected village is in the Plains, and in most cases, one of the hamlets of the Dunigi and Bonaheitum localities, the two border Plains villages which form the entrance to the Plains and are the chief strongholds of the sorcerers.

A third sorcery use to which the paths are put is that of blackmail. The Plains sorcerer keeps the exuviae of the Beach victim and, if no retaining fee is sent him, he merely files the packet away in the thatched wall of his hut. The Arapesh tell tales of such huts falling down in a storm and some passerby picking up the exuviae packet—its identity now lost—and smoking it until the victim dies. Such an accident is a constant nightmare to them, because they believe that safety and possible recovery of health depend upon knowing where the exuviae are hidden so that the sorcerer may be reached and bribed into innocuousness. The sorcerer may keep the exuviae for several months and still receive no retaining fee. The absence of a fee is the more usual circumstance, although the range of variations is between no fee at all to small gifts of meat or a ring of low value which are not, however, sufficient to make the sorcerer actually attempt to cause the victim's death.

<sup>&</sup>lt;sup>1</sup> Based upon my observation of such parties in Alitoa.

After several months of inactivity the sorcerer may then try to realize on his investment. To do this, he must get in touch with the victim. So at the Plains end of the network of paths a situation arises which is the reverse of that set up at the other end, when the victim falls ill. The sorcerer, through friends and connections, finally sends a message by a man who is traveling to the Beach, or he passes it from one person to another, along a path which lies close to the victim's path. By the time this message reaches the victim, it is couched in terms of anxious solicitude. His gift friends have been advised that such-and-such a sorcerer has a bit of his exuviae and is likely to put it on the fire and release the forces of black magic. He will, however, be persuaded not to do this if he receives a knife, an ax, or a ring; usually the exact blackmail fee is named. The victim believes he has no choice except to pay it.

Only under the most exceptional circumstances, when the man who stole the exuviae is caught red-handed or confesses his sin immediately after its commission, is the packet of exuviae actually sought along the path along which it originally traveled, by the man who sent it in, who now repentant and, under great pressure, goes to redeem it. If he is able to regain it he will bring it back to the victim whose relatives will pour hot water on it to make it "cold."

The fact that a man's individual path ends in the southeast, in the hamlet of a particularly well-known sorcerer, or one famous for sorcery, may also act as a sanction for high-handed activities of men in the Mountains and on the Beach, who, strong in the knowledge that they have powerful Plains friends, will sometimes mention their existence in a threatening fashion, or in answer to any threat from others. A man who is afraid that he has been or will be sorcerized will somewhat over-vehemently stress the fact that his Plains friends will certainly avenge his death.

Finally, vengeance for deaths is also planned along these paths. The Plainsmen traveling through after a death will sympathize with their bereft gift friends and offer to have a reprisal performed for them on some distant village, by killing an individual of the same age, sex, and marital status. The traveling Plainsmen then collect the fees and in due time inform their Beachward friends that the avenging death has been accomplished. There is, of course, no way to check up on the honesty of these transactions; the traveling Plainsmen traffic in an imponderable and are paid well for it.

<sup>&</sup>lt;sup>1</sup> The Abelesihim forces the sorcerer to remain in the Beach village while this type of revenge sorcery is procured.

Because relatives tend to follow paths which thread some, if not all, of the same hamlets, and because a great proportion of the sorcery thefts are between relatives, a classification which usually includes all the people of a locality, a kind of reciprocal relationship develops between certain hamlets in the Plains and certain localities in the Mountains—the paths converge sharply on the edge of the Plains—due to the fact that the exuviae of most of the adult males of a Mountain community are filed in a particular Plains hamlet. This relationship is strengthened by a special form of an extension of sorcery practice called wishan by which the sorcerer who wishes to produce, not death, but merely misfortune, such as a burnt house, or an accident while hunting, can do so by acting upon the exuviae of any member of the intended victim's The more distant the victim is, the wider the circle of those whose exuviae may be used, so that the power of wishan spreads steadily as the Beach is approached. In the Mountains near the Plains, it might be necessary to have exuviae of a member of the same hamlet: for exercising wishan on a man from the Beach, any exuviae from any Beach locality will suffice. So the sorcery power of the Plains acts as the narrow end of a funnel, drawing the attention and the fear of the Beach people towards the Plains. Out through this funnel-shaped area the Plainsmen walk safely to the sea, to get sea water and shells from which they manufacture rings.

At the other end of the network of paths, however, lies the Beach, with its far wider circulation of foreign goods and its freedom from sorcery and fear, drawing the attention, the hope, the enthusiasm of the inland people towards the sea. Although the Plains villages send exuviae merely from one village to another, so that the southwest direction is lost, nevertheless the whole population of Arapesh speech is drawn into the net of sorcery fear. But only the Mountain villages share the excitement and enthusiasm about the products from the Beach. The Plains people import all of their most desirable and highly decorated objects from the Abelam people to their southwest.

I have discussed the sorcery aspect of the paths first because it is the most highly charged emotionally and because the presence of the constant threat and fear of sorcery may be the reason why quarreling over the size or value of gifts is completely absent. To introduce complaints about a return for a net bag into a context within which one's own life or the life of a relative may any day have to be decided, may have seemed inadvisable. However that may be, there is today no habit of quarreling or questioning the import and export value of foreign trade objects; under the guise of free giving¹ trade goes on perpetually along these lines of gift friends. Nor is sorcery used as a sanction for gift-giving returns. The manner of making these gifts is not very highly formalized, although along these paths must pass not only ornaments and luxuries, but weapons, tools, and utensils without which the Arapesh would not be able to live. There is no question of concealing a vital economic exchange with an overlay of ceremonial such as is characteristic of the *Kula* Ring of the Massim Area of Papua.² The necessities of life, pots and spears, and the delights of life, paint, feathers, and delicately plaited armbands, are all exchanged with the same gesture of casual giving.

These gift paths control the distribution of the few objects manufactured within the Arapesh-speaking group and the fate of such of these as they export, the import of manufactured objects from beyond their borders, and the export of raw materials in return for them.

Occasionally, both within and without the area, explicit trade conducted in regular barter fashion may take the place of gift exchange. This happens, for example, when a trading canoe brings a load of pandanus baskets or new grass aprons to one of the Beach villages. though these articles may be brought in connection with the sale of some ceremonial complex which is being acquired by a group, they are bartered, under cover of the ceremonial event, between individuals who are comparative strangers. This type of importation may quite reasonably be likened to the Kula. Traveling parties of Plainsmen, also, may journey towards the Beach, carrying great bundles of tobacco or loaded with pots, and may hold short informal markets in the villages where they sleep the night. The pattern of gift giving rather than direct barter is, however, so strong that the Mountain Arapesh usually resent any direct haggling over price and accuse the bartering Plainsmen of having asked an exorbitant price, although it proves to be, upon examination, no greater and sometimes not as great as would actually be paid in the course of a gift exchange in which there is no explicit question The people are much happier when the direct bartering is over and the objects so acquired can again be diffused from hamlet to hamlet as spontaneous or solicited gifts.

Because of the localization of manufacturing and the directions of trade routes along the coast and in the Plains, certain articles almost

<sup>&</sup>lt;sup>1</sup> This excepts, of course, the blackmail of the Plains sorcerer which is most usually conducted along the lines of his friend's gift friends, not his own.

<sup>2</sup> For a discussion of the basic economic function of the Kula see especially Fortune, R. F., Sorcerers of Dobu, 207-208.

always move in the same direction along these gift paths. Ornamented net bags with a wide mesh are always expected to come from the Plains, where they are manufactured by Plains Arapesh and Abelam peoples; the small tight-meshed net bags made by the Suwein people come in from the Beach. The heavy decorated serving pottery and certain types of large pots for boiling, come from the Plains; while other types come from the Beach. Bows and arrows always come from the Beach and are only imported as far as Alitoa-Wihun. Rings with an extra point called by the natives a "nose" come from the Nugum and from "Wallis"; decorated rings also come from the Beach, while plain ones are manufactured by the Plains Arapesh. Wooden pillows come from the Beach, being imported from the east, and are only used as far inland as the Mountains. Beyond this limit pillows are not found again until the most southeasterly Plains Arapesh villages where are found pillows of quite different type which are related to the Sepik form. tends to move steadily towards the coast. Bird of paradise and eagle feathers go Beachward, while hornbill and yellow and white parrot feathers go towards the Plains.

Circumstances of scarcity or plenty, and of demand outside the Arapesh borders—like the Island demand for feathers,—set the general pattern of one-way gift exchange. However, certain objects travel in both directions, notably pigs, dogs, sago, magic, and less often, articles of European manufacture which, however, have a definite inland trend. The valuables used as currency, rings, dog's teeth, and strings of a very coarse shell money, also move both ways. Value of other objects may be expressed in them, but two tendencies, to personalize them and to regard each one as unique and not comparable with the other, interfere with their regular use as currency. Puppies and little pigs are "marked" in the same way as are prospective brides and the payments follow the same pattern. So a little animal is marked by a gift friend who usually makes some inconsiderable gift at the time, another when the animal is delivered to him, another if it lives to grow up, and finally, further gifts in appreciation, if the dog is a good hunter or when the pig is finally contributed to a feast. This same procedure is followed in the purchase of magic; a first gift is given when the magic is imported; if it works, as to catch a pig or prawns, or to grow yams, further gifts are given. the other hand, the charm fails, the man from whom it was obtained will give some gift to assuage the disappointment of his friend. transactions are all conducted in terms of affection, gratitude, or possible disappointment, not in terms of dunning, although more caution is exercised and more stages of gifts are given at a great distance to friends who are less well known than are given to close friends with whom one is in constant touch.

In these exchanges, which balance themselves only after many months and sometimes after years, the groups with definite manufactures such as the pot-making, ring-making Plains villages, or the plate-carving localities of Kobelen and Aotogi, have a definite contribution to make in return for the products from a distance. Of the whole Arapesh region, the Mountain localities are the poorest, as they have no surplus manufactures whatsoever, and having the poorest land they have the fewest vegetable products to export. With the exception of a few birds' feathers and a little tobacco, they have nothing of their own with which to return the gifts of their gift friends on the Beach and on the Plains. For this lack of material contribution they substitute the labor of transporting Beach products to the Plains and Plains products to the Beach. They do not phrase the matter as articulately as this, but speak of visits to their gift friends as "walking about to find rings." So a Mountain man will walk into the Plains and receive a gift of a net bag which he will then carry to the Beach, where it has a high scarcity At this time, or some time later, he will receive from his Beach friend perhaps two Beach-manufactured wooden plates; one of these or perhaps both, he will carry in to his Plains friend. If he takes both in, the next gift which he receives, for he will now be one plate to the good, will be his profit on from three to five days' walking about in the rain and mud, on bad roads, often hungry, and always anxious. because there is no chaffering over return and no set procedure prescribing the repayment for a gift on the spot, or that a solicitory gift go in a given direction, or that a certain kind of object be returned for another kind of object, there is no good mechanism for checking up on profit and loss. The confusion resulting from lack of fixed exchange procedure is very marked. It is possible for a man to visit his gift friend and receive a gift appropriate to that direction, e.g., to visit a Beach friend and receive a bow, or to receive a visit from a Beach friend who brings him a gift which he has not earned by walking or even to send a message to the Beach friend that he needs a certain kind of obiect which the Beach friend will then make every effort to send to him as soon as possible. Because of this confusion, many individuals actually walk in the wrong direction for profit. Probably only the very meager scale of all of the transactions prevents the recognition of this muddle or at least some resentment of uneven returns for goods and labor.

In addition to walking about, one other factor inclines both Beachward and Plainsward friends to deal generously with the Mountain Arapesh, that is, their midway position, and the shelter they are able to offer to travelers in a cold and inhospitable bush. Both Beach and Plains people have better land and therefore no wish to drive the Mountain people out. But it is very necessary for the Plainsmen to have an outlet to the sea, a route on which they can be assured of food and safety. These New Guinea people are not real bushmen, are appalled by the prospect of a night in unknown bush, and do not know how to improvise a meal in the bush. Furthermore, they have no form of highly portable food and their sago is too precious to consume when traveling. Yet, if they had to carry a three days' supply of yams, they could carry very little of their trade products. Hospitality en route is therefore valuable and worth cultivating. And once the Plainsmen have used this hospitality under the sanction of sorcery threats, it is equally necessary to all the people nearer the sea to have reliable paths inland on which to search for hidden exuviae. This may very well be an additional reason why even the harder-headed Beach and Plains people do not reckon the profit and loss in the gift giving too accurately.

The individual hereditary path, then, is the basic pattern of the more complicated mechanisms of trade and diffusion among the Arapesh. As these individual paths also include an implicit assumption of a onetime tie of blood or marriage, it may be said that the most basic Arapesh concept of contact is founded upon intermarriage between localized gentes and the subsequent scattering of blood relatives among their bilat-The value of such ties is articulately stated when the Arapesh discuss marriage plans; against the comfort and ease of marrying near home, they place the advantage of marrying at a distance and forming new contacts. It is also of interest to note that the direction of marriage among the Arapesh is for inland women to marry more seaward-dwelling men. The opposite type of marriage only occurs in very rare instances. This places the inland village in the special position of maternal kindred, who become in subsequent generations as titular grandparents to the village of the man's kin. After a few generations such a tie is assumed to have been extended to every member of the locality; thus all of the people of Alitoa call those of Dunigi locality "grandparent," a tie which is traced to a marriage between a Dunigi woman and a man of Totoalaibis gens some seven generations ago. Other marriages between such localities are likely to follow. These conditions add another affective note in the Mountain attitude towards them, for maternal kin are a specially privileged group who are chiefly distinguished from the paternal kin by their more institutionalized right to exercise familial curses, and their ability to initiate economic exchanges which ultimately balance, but it is always the maternal kin who initiate them. The direction of marriage also signifies in practice that daughters are sent towards the safer country, towards the Beach, not into the interior to face the danger of sorcery.

Upon the basis of these hereditary individual paths, the Arapesh have a more formulated system which they call by the same word, "road," and which I shall call a road to distinguish it from the paths. Roughly, these roads may be described as summations of paths. individuals of one locality, especially those of one hamlet, generally follow similar paths and their summation is spoken of as the road of the But the units forming these roads are hamlets or even localities, instead of individuals. A road is thought of as a series of linked hamlets along which exchanges take place between communities. are four such roads among the Arapesh, only three of which are regarded as important by Alitoa. These are: one, Shemaun, or the road of the Dugong; two, Lahowhin, or the road of the Viper; three, the road of the Place where the Fire Dies and the Sun Goes Down; and four, the road to Sawom. When the Alitoa people discuss them, they refer to the Shemaun Road as going through Suapali, Hamisuk, Mugia, Kotai, Aotogi, Waginara, and Dakuar, and they call it the road taken by the Nugum people, who are today being increasingly spoken of as "those of the Boikin speech," taking this name from the mission at Boikin. The Nugum people are hemmed in by a great uninhabited area of mountains with only three exits to the sea, the road through Sauri, which comes out through Wewak, the unpopulated road down the Hawain River, or the Shemaun Road which leads out through the Arapesh country. connection it is interesting to note that the Arapesh have two general symbolic uses for the term shemaun, as it is used to denote the east and rising sun on the one hand, and the sea and the plains on the other. the Plains villages which lie south of Alitoa are again spoken of as shemaun, but this connection is vague, based apparently on a tendency to regard the plains and the sea as interchangeable and the fact that the dugong is the great marsalai of the sea, for it is his sun-reflecting breath which makes the rainbow over the sea, as that of the Lahowhin snake marsalai makes the rainbow over the land. This cluster of associations

<sup>&</sup>lt;sup>1</sup> Cf. The Marsalai Cult among the Arapesh, with Special Reference to the Rainbow Serpent Beliefs of the Australian Aboriginals (*Oceania*, Vol. 4, pp. 36-53, 1933).

tends to emphasize the position of Alitoa on the Road of the Lahowhin (which I have translated as "viper"), as the position of an islanded people, surrounded by a symbol of the sea on the north, south, and east, and by the setting sun on the west.

The Road of Lahowhin, the central road for the Arapesh people, begins at Wihun, and runs through Alitoa, Liwo, Umanep, Kobelen, through the more northwest section of Waginara, to Sublamon (Magahine). This is the road taken by the more eastern villages of the Plains Arapesh.

The Road of the Setting Sun runs from Nimonihi, through Kumininum to But, and is taken by the western Plains villages and by the north Abelam villages.

The fourth road, for which the Alitoa people have no name, runs through Nanpoam and Monihi to Sawom. This road is unnamed, although the Sawom people are referred to as pigs, because of their method of fighting. This fourth road is said to be taken by people speaking another language who live to the northwest.

Regarded from the Plains end, these roads, like the paths, are mainly a way of egress to the sea, a route by which large traveling parties carrying tobacco can pass through the associated Mountain villages. But from the standpoint of the Mountain and Beach village, these roads loom largest, not as the trade routes, which are conceived more in terms of the individual paths, but as importation routes. The terminal villages on the beach, Dakuar, Sublamon, and But, are spoken of as "mother villages"; the line of Mountain villages which stretches behind each are called "daughter villages." These terminal villages purchase complexes of material culture and export them through a definite inter-hamlet feast-exchanging mechanism.

In order to understand fully what happens here, it is necessary to refer to the point previously discussed (p. 163), the articulate recognition of culture traits as something which may be purchased. Dance complexes are brought to the Beach Arapesh by the trading canoes of the people at the mouth of the Sepik, whose villages are located in salt lagoons, with very meager land resources. Their principal natural resources are said to be pandanus trees, a plentiful supply of Nassa shells, and sago. They have specialized these products, making women's aprons from the sago shoots, a strong carrying basket from the pandanus leaves, and ornaments of all sorts from the Nassa shells.<sup>1</sup> But in order

<sup>&</sup>lt;sup>1</sup> This account is entirely based on Arapesh information.

to sell these staple products, year after year, they have taken advantage of the characteristic attitude of the area which regards culture traits as objects of exchange and sale. They vary the form of their ornaments, stringing the Nassa shells in new designs, constructing new forms of headband and combine these new ornaments and new styles of women's aprons into a dance complex. They are said to purchase the dances themselves, from other Island and Beach people, and with these as a nucleus, construct complexes consisting of a large number of other traits, songs, ways of hairdressing, styles of face painting, charms, exorcisms, and small and peculiar usages, and sell these to Beach villages northeast of them, who sell them in turn to the inland people.

Such a transaction is never a simple economic one, even on the Beach. It is not known whether the peculiar form taken by these purchases is a reflex of the Arapesh humility and eagerness in the face of innovation, or part of a more widespread pattern. The purchasing village, through a leader who is called the base or Trunk, forms an advance contracting relationship with the locality, village, or canoe-load of representatives of the selling village. The Trunk then organizes the collection of a large amount of property, pigs, feathers, rings, and tobacco, and when the time comes for the dance to be exchanged, these collected gifts are presented to the donors. If they are satisfied, they transfer the whole dance; if they consider the offering meager, they may remove some item from the complex, an ornament, or a piece of dance paraphernalia. Arapesh response to such treatment is characteristic. They do not phrase it as injustice, because the whole transaction is not couched in terms of justice or fair exchange, but rather, they say that the selling village is granting a tremendous favor to the buying village, and alas, the buyers, have not come up to the expectations, the so reasonable expectations, of the sellers. The most extreme response to such a situation is one of bereavement and hurt. The hamlet of Ahalesimihi in the Mountains is still sad and hurt because the people of Sublamon took back two of the dance masks of the Tangeba complex because they felt the gifts were inadequate. This fear that the gifts will not be acceptable, as between buyer and seller of a dance complex, has one more formalized correlate, in that each richer, more Beachward village, usually removes a few elements from the complex before selling it to the inland village. As the prestige of a sold dance is practically nil, the elements which are retained are of no use to the sellers and their retention is merely a way of recognizing the inadequacy of the Mountains. It might perhaps be interpreted as a precautionary measure against any disappointment with the price. The few elements are taken out in advance, "because the Mountain people are poorer than we," say the Beach people.

The mechanism for collecting the necessary amount of property for the purchase of these dance complexes is the same as that used for the internal organization of the intra-locality feasts which validate *rites de passage*. The dual organization, the *ginyau-iwhul* pair of moieties, which is primarily a feasting mechanism, functions here exactly as it does in intra-locality feasts. I will postpone a detailed discussion until I describe the social structure. It is only necessary to say here that while the dance complex belongs to the hamlet of the Trunk, all those who worked with him, and are called his Dogs, share the purchase. They have the right to sing the songs, dance the dances, wear the new fashions, adorn themselves casually with the face-paint designs, etc. As the whole locality is usually involved in such a purchase, either as Trunk or Dogs, it is virtually purchased by a locality. Actually, it is the models and the right to copy them that are purchased.

Furthermore, because the solicitory gifts sometimes extend over several years, there is an interplay between several complexes. So Alitoa may be making advance payments to Kobelen for the Midep complex, while Kobelen is trying to collect enough to buy the Shené complex from Dakuar. The pigs paid for the Midep become part of the purchase price for the Shené. Theoretically, each of these dance complexes should pass up the road, from one locality to another, inland, without skipping any one of them. In practice, now one Mountain locality, now another, will display the initiative necessary to inaugurate the payments.

The fate of these importations differs accordingly as they are absorbed into the secular dance pattern or into the esoteric tamberan cult. The Arapesh do not regard this as a matter which is determined by the nature of the import, but rather as a matter of choice on their part, as to whether or not they decide to "show them to the women." The most conspicuous instance of secularization is the series of buben flutes which the Mountain people now say should properly have belonged in the tamberan context, but which were secularized instead. The new elements in the tamberan cult are diffused from locality to locality exactly like the secular dance complexes, except that more elaborate interlocality feasts are held which involve a preliminary taboo of coconuts followed by large exchanges of coconuts. The coconut exchange is an integral part of the family initiatory system, according to which the initiated boy pays a great number of coconuts to his mother's brother. It may

be that this association with the *rite de passage* aspect of initiation has been carried over to the interlocality diffusion of elements which, belonging now to the *tamberan* cult, will later be used for initiation. Or, the coconut feast may be an older pattern of importation which has now been replaced in the case of the secular dances by the pig-ring-tobacco-and-feather gifts.

The importation breaks down at the last mountain ridge, because the Plains Arapesh receive all their ceremonial importations from the Abelam peoples, and therefore each more inland village has fewer possible buyers for even the simpler elements of the complex. In contrast, the Beach villages can depend upon the sale of one complex to provide them, at least in part, with funds for the purchase of a new complex, while the Mountain village, far inland, is almost entirely dependent upon its own efforts for the purchase of each new dance. There is perhaps only one more possible purchaser and the value of the dance also steadily deteriorates with use and increasing familiarity. This element of gradual devaluation of originally highly coveted and expensive dance complexes is very important. There is definite premium upon the newest dance, and there is no mechanism by which one complex after another can be preserved by becoming the property of one particular gens, moiety, or age grade. Therefore, importation of each new complex means that the old, even if it is not sold, will be less and less used. This emphasis upon newness seems to be consciously and artificially stimulated by the coastal traders who depend upon it for making their sales. It is, however, extraordinarily interesting that the need for a market for surplus manufactured clothing should be found in association with this emphasis upon fashion. The parts of the new dance which the Mountain people can afford to buy are perhaps used only a few times, since occasions of large group life are few, and then remain as scattered and half-forgotten remnants, a snatch of a song, an ornament, or a style of face painting. The economic emphasis also becomes slighter; pieces of the dance complex may even be given away from Alitoa inland because there is so little chance of Wihun and Boinip being able to buy a whole complex. One organized wave of diffusion dwindles away and meeting another is dispersed in casual ripples.

A third kind of importation is made on a smaller scale and contains fewer elements than do the dance complexes, but nevertheless may be said to derive from that pattern rather than from the simple path pattern of gift giving. This is the importation of small traits like a new method of fishing, of pig hunting, or a new harvest ceremonial. These importations are organized like the dance importation, except that individuals and not the hamlets play rôles in the preliminary assembling of property. Like the dances, these smaller complexes are always believed to have an extra-Arapesh origin. In this respect they differ from the gifts sent along the path where the emphasis is only upon availability in a given locality and scarcity and demand in another and not upon the additional prestige of foreign origin. These smaller complexes may be given away without the request that their use be relinquished by the seller, i.e., they can be indefinitely diffused. So one man assumes the responsibility of purchasing a new form of pig magic from a man in Sublamon who has purchased it from outside. He persuades several of his friends to invest with him and these minor investors will be repaid with small gifts of meat. Perhaps there will be one other larger investor, who will, in this case of pig-hunting magic, very probably be the purchaser's most regular hunting partner and a close relative. two will take the assembled property to the seller, buy the pig magic, and come back and try it out. If it works well, the small investors will receive pieces of the pig, the use of the magic will spread among them, and they will make further contributions which will be sent to the former owners. If it fails, then the gift-path pattern will reinstate itself and the purchasers will profess themselves dissatisfied and the sellers will give them presents in local products to assuage their feelings. large complexes of magic, such as hunting or yam magic, spread under the sanction of these gift-giving paths. Small pieces of magic are sometimes attached to a dance complex, but tend in time to become dissociated from it. Very small magical usages which involve the behavior of only one person, such as methods of divining, or a special new magical plant, are passed from one man to another, either along the paths or through a relationship chain.

In addition, certain small traits are diffused even less formally by being observed in one village by visiting spectators who carry them back to their own village. The emphasis upon purchase and village ownership of culture traits tends to discourage this kind of diffusion, but, on the other hand, the desire to possess other peoples' customs encourages such acts of imitation and borrowing.

An analysis of the abullu yam harvest ceremony will perhaps clarify this type of diffusion.

The abullu ceremony as it exists today<sup>1</sup> in the Mountains has the following elements:—

<sup>&</sup>lt;sup>1</sup> The present tense indicates the year of field-work, 1931.

- 1. A large yam harvest.
- 2. The choice of a sponsor for the ceremony from among the men who have previously made an *abullu*, and who have experienced the ordeal the harvester is about to undergo.
- 3. The segregation of a reasonable supply of yams from the harvester's crop and their housing.
  - 4. The collection of meat to feast those who come to the ceremony.
  - 5. Painting the yams in designs to designate lots of ninety-six each.
- 6. A taboo period for the harvester and his wife who are not permitted to smoke, chew betel, or touch food with their hands.
- 7. A long piece of vine, called a wiya is charmed by calling upon blow flies (or ghosts) and pronouncing a rhyming-couplet charm. It is spread upon the ground and the yams are arranged on it in a special pattern. The rope is then pulled out and the yams piled up around a stick called lowat. At this time there is a ritual gesture performed called "killing the rat."
  - 8. A small roofed house is built over the yams.
- 9. The people going to the *abullu* sing special songs on the way, some of the words of which are new. All the *abullu* words in present use are of local origin; there is a single melodic pattern.
- 10. The visitors at the feast dance with a long pole, a group of older men and small boys holding on to each end. The harvester and his sponsor do not dance.
  - 11. The top game, peshuga, is played.
- 12. The visitors take home yams, leaving presents of meat in their place.
- 13. The harvester and his wife are purified through a series of rituals, extending over several days, to release them from their taboos. For this the sponsor is paid in rings.
- 14. The *wiya* measuring vine is kept and fastened up on the outside of the house and may be referred to in ceremonial boasting between hereditary exchange partners (*buanyins*).

The right to make an abullu was imported by Pailit of Alitoa in the last generation. He imported the institution of the measuring vine, the pattern of specially arranging the yams, the building of a house over the yams, the use of the pole, and the song pattern. The custom that a man with a good harvest taboo a section of his yams for others' use is old and extends into the Plains today. The ritual gesture of "killing the rat" is a part of Arapesh children's games as a way of declaring the "It" to be dead. The little house structure over the yams was built in

the same way as a similar small house used in yam planting magic and in purification ceremonies. The decoration of this house with crinkled sago leaves (buwhik) was not imported, but the decorative herbs commonly employed in Arapesh yam magic were used instead. The purification ceremony is identical with that used for a father of a new child, a novice, or a man who has killed another in a fight. In all these cases sponsors are required. The top game is an element which has been imported from the interior and is part of the long-yam complex in the interior, not of the short-yam complex which comes from the coast. The buwhik decoration element never reached Kobelen, but has remained characteristic of Sublamon; but another element, that of men and women swinging on rattan swings, was imported by Kobelen and Umanep and had been part of their abullu pattern for ten years or so. also imported a pattern of direct exchange of a net bag full of abullu yams for an object such as a plate or a pot. This usage, together with a method of marking with a banana leaf the vams to be distributed, penetrated as far as Liwo, but never took firm root in Alitoa, where, as in the old pattern of exchange for yams, meat continued to be used. years ago, Pailit of Alitoa paid one pig and four large rings for the right to give the ceremony. He sold the right to give it to his wife's brother in the more inland village of Wihun, for four rings and a small piece of (This is an illustration of the decreasing value of imports as one The abullu ceremony has never penetrated beyond goes inland. Wihun.) Since that time many Alitoa men have made abullus, each one sponsoring some new aspirant. In 1931, Wupali, the eldest son of Pailit, who had run away from Alitoa and gone to live with his mother's brothers in Wihun, acting with Ombomb of Alitoa, gave an abullu at which was used for the first time the swing feature, which had been in use for years in the more beachward villages. No extra payment was made for the right to do it; the Alitoa and Wihun people had seen the swings many times and now used them. Whether the swings were an original part of the abullu ceremony at the time when Pailit purchased it, there is now no way of telling.

Perhaps the most revealing point in this whole development is the way in which this particular ceremony was fitted into the Arapesh sponsoring pattern. There is a basic ritual pattern in which one who faces a crisis in his or her life for the first time, calls upon the ritual service of someone else who has experienced the same ordeal. It is peculiarly adapted to the importation of *rite de passage* ritual. Perhaps because yams are themselves so intimately connected with the ritual pattern of

sex dichotomy among the Arapesh, this ceremony, in spite of its many secular elements, was fitted into the sacred pattern.

Any one of these minor ceremonial complexes tends to be subject to this kind of reorganization, to be absorbed into one or another local pattern, to lose some of its elements, to be combined with elements which came from another direction, and to assume more or less distinct forms in each locality. The way in which the complex is integrated has a profound influence on whether it is kept and becomes a permanent part of The abullu is only some twenty years old in Alitoa, but it is reasonable to predict that it will probably survive for just one reason. the encorporation of the length and number of wive measuring vines into the pattern of boasting compulsory upon buanuins (hereditary feast-The continuing references to these wiya between buaning partners). yins of different ages will tend to stimulate the continued performance of the ceremony, which otherwise might very easily fall into disuse and With this hold upon the social structure, the abullu is now becoming a nucleus about which new elements of culture crystallize. Later imports, like swinging, and new compositions like the abullu songs, can now be added to the complex.

Not yet integrated, as is the abullu, is a fishing magic ceremony which Whoiban of one Liwo gens obtained from his cross-cousin in the Shemaun seaward village of Kotai. Whoiban gave it to his brother-in-law, Polip, 1 of the gens of Suabibis, as an affinal gift, and Polip trained his youngest brother to the ceremonial rôle of being "keeper of the fish souls." magic contains an herb for poisoning fish, a long prescription for the use of other herbs, and a type of taboo on the male participants which is not entirely congruent with the Mountain Arapesh menstrual taboo, for it is a taboo against the participation of any man whose wife menstruates regularly or is pregnant, whereas the Arapesh pattern is only against the husband of a woman who is menstruating at the moment of some cere-The members of the fishing party hunt for the stupefied fish with torches and give the first fish to the "keeper of the fish souls" who cooks it ritually and then lies absolutely still until dawn while the others In the morning, the fishing party must not hasten to eat and the women bring them food.

There are several points of interest about this ceremony. It came in as a personal gift from a village with whom the Lahowhim villages of Liwo and Alitoa have very little contact. The localities directly beachward do not have it, so that there will not be continued interchange of

<sup>&</sup>lt;sup>1</sup> Based upon an account given me by Polip's brother, Unabelen.

observance later. The training of the younger brother for the special ritual rôle introduces a new possibility for the survival of the ceremony in the mountains. It may become hereditary in family lines, as other hunting and fish magic tend to be, or it may pass from one virgin boy to another, and the "keeper of the fish souls" may become the key person rather than the owner of the ceremony. The accident that it is the gens of Suabibis who have been taught it, while Whoiban himself and his gens have never used it, may also play a rôle, because Suabibis is a very unsocial, essentially agricultural gens, little given to trade, and with few outside connections. Whereas other hamlets would delight in passing their new acquisition on as a gift to an individual affinal relative, or for pigs to another hamlet, Suabibis are already remarking that they catch bigger fish than other gentes and will continue to do so. marily due to the dominating and retentive character of Madjeke, the leader of Suabibis.

The details of one occasion when this fish-magic ceremony was performed are also revealing. Fishing among the Mountain Arapesh is usually a two-sex activity, groups of men and women, often containing men and their brothers' wives, without these women's husbands, will go fishing all night in the mountain streams. The newly imported ceremony makes a rigid dichotomy of the sexes. In their former fishing methods, when a mixed party went fishing, small bits of fish could be given by the men of the party to their sisters-in-law. After the catch, on one occasion, when the new magic was used, the men ate one of the fish. This violated a very rigid taboo against eating meat which one has caught one-self—one of the most basic Arapesh taboos. The men were worried because they had eaten the fish and confessed to the women who were very angry. The men kept repeating that they ate one, only one.

In this new fishing complex the exclusion of the women from an activity in which they have hitherto participated, makes for instability. It is highly probable that unless the ceremony is somewhat revised and better integrated with the local culture, in a generation all that will remain will be a few odd bits of magic, owned perhaps in one, perhaps several, family lines and that they will be very likely to disappear altogether.

Another type of conflict occurs when the same element is imported by more than one individual in a community. This has happened with the imported magic of *sagumeh*, a form of magic which has swept the entire coast from Madang to beyond Wewak in recent years. It is popu-

<sup>&</sup>lt;sup>1</sup> Fish traditionally play a larger ritual part as objects which may not be eaten, than as objects which need to be pursued ritually.

larly supposed to come from Madang, but there is not enough evidence to state this with certainty. Sagumeh proper contains two elements: one, death-dealing magic with several formulas, including a taboo which can be placed upon palms and a method of burying exuviae in the ashes of a fire (for this a Capstan tobacco tin must be used), in some places it is associated with sorcery by pointing (form of black magic found on the Sepik River), and two, divination through possession induced by eating the bone of a ghostly control who then speaks through one's mouth.

Sagumeh has come into the Arapesh country from several directions. In Alitoa, in 1932, there were two practitioners: Gerud and Bunitai. Gerud had obtained it from his paternal parallel cousin, Alis, who had obtained it from a distant "father," Wabil, who had obtained it from a Nu-(Note that at the same time that the Mountain Arapesh from Alitoa and Numidipiheim were importing this magic beachward from the Nugum, the Plains Arapesh were purchasing it from the Arapesh Beach village of Sublamon.) Wabil, who had imported it first, was a widower, and therefore belonged in the wider classification of those eligible for black magic practice, i.e., those who have no active sex life. the same time, he had rejected the death-dealing elements in the complex and only accepted the divinatory aspects, which the Arapesh classify as good magic as it reveals where exuviae are hidden and how recovery can be attained. The sagumeh pattern required possession; chewed bone dust and ginger, ran about as if possessed, and finally sank on the ground in an imitation stupor, out of which he was able to answer questions in a strained voice, using many tricks to make the occasion seem eerie, such as referring to usually unmentionable subjects. was not at all successful in his diagnosis, but after marrying again he taught the divination to Alis, a young man whose wife had not yet menstruated, in the hope that a virgin would succeed where a man who merely lived without sex had not. Alis, however, had no better luck, his wife became mature enough to consummate the marriage. Then he taught it to Gerud, a younger boy cousin, whose betrothed wife was still a child. Alis asked for no payment from Gerud as by this time no one believed that the magic was worth very much. But then an accidental turn of events occurred. The more usual need for divining among the Arapesh is to locate distant exuviae or to diagnose illness as due to exuviae sorcery or to the malice of ghosts or marsalai. But, just as Gerud began to practise, occurred two very pressing cases of illness from sores, which are believed to be due to exuviae buried in wild taro patches or in marsalai places, or hidden in tamberan houses. Gerud showed astonishing resourcefulness in finding buried in old tins and pieces of bamboo odd bits of fastened up objects which looked as if they were possible bits of exuviae. His fame grew. He held a series of divinations. Meanwhile, Alis had compromised with the original dogma, which demanded that the bone dust chewed and the control used must be the same. Now Alis had a recently dead brother, Bauwan, whose bones had not yet been exhumed, but whose memory was very green. Alis chose to use Bauwan as a control, and temporarily chewed the bone of his father's brother, expecting to substitute Bauwan's bone presently. Gerud took over the divination formula and the bone of the dead uncle and also continued to call upon Then Baimal, the eldest living brother of Bauwan, announced that he would not dig up the bones of Bauwan, he had had too hot a temper and he could just remain in the ground. By this time, Gerud was thoroughly used to Bauwan as a control, so he said "never mind, why should the bone and the ghost be the same anyway?"—a reasonable question among a people who had no pattern of ghostly communication,—and went on with the dissociated pattern.

Meanwhile, Bunitai, another young man, who had no betrothed wife, decided to learn this divination from Manusa, one of his cross-cousins in Numidipiheim, a man who had made very little of its divinatory aspects, but who had tried to specialize in putting black magic on palm trees. He had incurred such opprobrium for this that he was glad to give up the magic. When he took it over, Bunitai introduced another innovation, but one which conformed to the local pattern. He observed for his magic the series of *rite de passage* taboos, the duration of which is measured by the time that it takes the yams to sprout in the yam house. These taboos are ordinarily observed by young boys when their pubic hair begins to grow, and by novices. They were not currently associated with divination. Bunitai adapted his divination to local ritual practices, therefore, as the *abullu* had been adapted. He practised a few times in the very isolated group where he lived, but Gerud's fame was still far greater than his.

Meanwhile, Gerud's practice was becoming involved. His powers of divination enabled him to find hidden exuviae, but exposed him to the charge of appropriating these exuviae and handing them over to an enemy of the sick man on whose behalf he was supposed to be divining. In the most important case in which he was periodically officiating his own relatives were at odds with the sick man. The sick man's family began hinting that Gerud had re-secreted some of their relative's exuviae in some sore-producing spot. At the next important divination in this case,

Bunitai, who was a relative of the other side of the quarrel, was called in. He introduced a new type of circling movement as he ran and claimed to find some hidden exuviae in the sacred flutes of the tamberan house of Gerud's own father's brother, Balidu, the big man of Alitoa hamlet. dealt a fatal blow to Gerud's prestige. It was doubtful whether he would ever be consulted again. It was very probable that the same fate would befall Bunitai within a few months. Meanwhile, the practice of sagumeh may be reintroduced many times and from many directions, especially if, instead of becoming strongly institutionalized in some neighboring region, it continues to be a migrating element. It is also probable that as often as it is introduced and whatever innovations are made, it will always be too weak to counteract the deeply rooted Arapesh belief that detective work on the human plane is more reliable than any reliance upon the supernatural. This Arapesh conviction that personal motives are stronger than any form of supernatural inspiration has already relegated to disuse many forms of divining, divining with a bone of the dead in a net bag, with a bone of the dead set up on a lime gourd, etc.

These three instances comprise, therefore, a case in which a small ceremonial complex has become stronger and more widely integrated (the *abullu*); one in which a new importation has not yet been pruned of its contradictory elements and which as yet shows no signs of obtaining any permanent hold upon the structure (the fish magic ceremony); and a third in which the successive attempts to reinterpret and use the divining method of *sagumeh* seem to have failed to establish themselves permanently.

This extreme diversity is such that every small group is always differentiated in some slight measure from the others which have either not yet received or have already rejected some one of its special usages, has its reverberations in the creation of the idea that each place, each hamlet, has its own individuality. I think that it is fairer to say that the actual differences are responsible for this attitude than to say that there is any underlying pattern of group emulation and comparison which makes each group anxious to differentiate itself from others. But because one village has swings at the *abullu* and another has not, one locality has two men who can divine, the next, two men who have imported rain-making magic, the tendency is to use these accidental internal variations to build a picture of village idiosyncracy. Thus, there were two cases in the hamlet of Ahalesimihi of men who married mother and daugh-

<sup>&</sup>lt;sup>1</sup> This latter condition obtains in Samoa, where the enormously similar mass of ceremonial etiquette is continually being slightly rearranged so that each village can count itself unique in some infinitesimal respect.

ter; in each case the man married the daughter first and a young widowed mother "followed the daughter" and became a kind of subsidiary second wife. This was a new way of doing things; the first case was undoubtedly due to accident, the second was conditioned somewhat by the acceptance of the first, and now the men of surrounding hamlets spoke, three years after the second aberrant marriage, of this as a "fashion of Ahalesimihi," which might be expected to continue. Once focussed in the public eye as the trait of a hamlet, it may also spread, as outside elements commonly spread, although this is not as likely because of the low prestige of any indigenous traits as opposed to the trait known to be of outside origin.

#### GLOSSARY AND GAZETTEER

### GLOSSARY

I have included here only such native or pidgin English (P. E.) terms as occur more than once and independently of the given definition.

abullu, Yam harvest ceremony of the Beach and Mountain Arapesh

abus (P. E.), Garnish, more particularly meat

agehu, The plaza of an Arapesh gens, where ceremonies of that gens are performed buanyin, Hereditary exchange partner, Arapesh

buen flutes, A series of triple flutes which have been secularized among the Arapesh Dog, Those who assist the Trunk in organizing a feast by receiving small gifts which they later "disgorge"; literal translation; Arapesh

elephant grass, (P. E.) pitpit; a species of cane allied to saccharum robustum

exuviae, Emanations of the body used for sorcery practices

fasten a pig, This is a literal rendering of the P. E. phrase in which anyone who uses a pig for a feast is said to "fasten it," referring to the custom of tying it up to show that it is dedicated to be slaughtered

garamut, A wooden slit gong, which usually lies horizontal

kunda (P. E.), Rattan

iwhul-ginyau, Arapesh, the one of two sets of moieties, which is devoted to the regulation of feasting

limbum (P. E.), A palm of which the hard outer wood of the trunk is used for flooring, the spathe as a container, and the flower for brooms

mal (P. E.), The bark cloth G string, especially characteristic of the non-Papuan island peoples

mark, Literal translation from P. E., to be peak, as of a woman in marriage, or a young dog or pig or tree to be cut

marsalai (P. E.), For supernaturals which inhabit various unsavory sections of the bush, especially water holes, and are embodied in snakes, lizards, crocodiles, etc. Frequently associated with descent lines

midep, A dance complex which Alitoa was preparing to purchase from Kobelen, said to come from Mushu Island

path, The route between hereditary trade friends, along which articles of trade pass from individual to individual, among the Arapesh

ponkol (P. E.), Sago palm petioles

road, The traditional route from hamlet to hamlet along which inter-group diffusion of complex forms of ceremonial behavior takes place, Arapesh

rope, The Mundugumor descent line with alternate sex membership in each generation, e.g., Ego, male; Ego's daughter, Ego's daughter's son; Ego's daughter's son's daughter, etc; literal translation of the Mundugumor word

sagumeh (P. E.), A form of combined sorcery and divination, associated with pointing bones, burial of exuviae, and possession by a spirit of the dead; contains many work-boy elements and is rapidly diffusing through the work-boy population of the Madang Aitape coast

shené, A dance complex sold by Dakuar to Kobelen, in 1932; said to have come from "Murik"

talibum (P. E.), Turbo shell, used as currency on the Sepik River

tamberan (P. E.), The supernatural guardian of the adult male group, usually impersonated by a musical instrument or sound-making device, such as the bull-roarer, flutes, water drums, etc.; not used in the other pidgin English sense of "soul of a dead man"

tamberan house, House which is especially devoted to storing the men's sacra, the secret paraphernalia associated with the tamberan cult; distinguished from "men's ceremonial houses" which are partly tamberan houses and partly club houses

tambu (P. E.), Shell money; may be applied either to the strings of small discs similar to wampum, or to a Nassa shell

tangeba, A dance complex which had been imported by the hamlet of Alitoa called Ahalesimihi, from Sublamon (Magahine) just previous to 1931

tangget, Mnemonic devices used to convey messages or make records

trait, Used in this paper to mean an identifiable unit of cultural behavior, considered from the standpoint of diffusion, without reference to its cultural integration trunk, The organizer of a feast or ceremonial; literal translation, Arapesh tumbuan (P. E.), A masked dancer

vada, A special widespread type of sorcery, described by Seligman, Fortune, and others, distinguished by an encounter between sorcerer and victim in which the sorcerer magically disembowels the victim who subsequently dies; the word comes from the Koita, British New Guinea

#### GAZETTEER

My usage of place names and tribal and linguistic names is purely pragmatic. The following list contains the names by which I have referred to a given place or group, because my informants did so. Mapping conditions in the Aitape-Sepik District were still chaotic at the time this paper was written. I had access to a map bearing the legend: "Map of District of Sepik, compiled in the Survey Office, Rabaul, October 1931, Revised." Wherever possible, I have included (if I have not preferred) the spelling followed on this map. Where the map spelling is merely included it is enclosed in parentheses. For Fig. 2, I adhered to the map spelling when it existed. Beyond wishing to specialize the three terms, Arapesh, Mundagumor, and Tchambuli to the peoples intensively studied by Doctor Fortune and myself, I have no desire to make any of this terminology final or binding. It is included merely to locate, if possible, the people whom I am discussing. Where the origin of the term used was known, as a pidgin English term, or one used by the people themselves, etc., I have included it. When no special informant is listed for a given locality, it may be assumed that my information came from the nearest neighbors of the three tribes intensively studied.

Abelesihim, Arapesh name for the Beach people, directly east of them, who speak a language often called the Boikin language, after the Mission station on the coast; informant, Kama of Alakombur

Ahalesimihi, A hamlet of the Mountain Arapesh village of Alitoa

Aibom, A group of people living on the southwest bank of the Aibom Lake, with a culture similar to, but not identical with that of the Middle Sepik

Aibom Lake, A lake south of the Sepik River and east of the 143rd meridian

Aitape District, This District, with Aitape as the head station, and Wewak and Vanimo as sub-stations, is bounded on the south by the 4th parallel and the east by the 141st meridian, and on the west by the 144th meridian, the Dutch border. It has since been combined with the Sepik District, with Wewak as the head station

Albast, Mountain Arapesh village (Fig. 2)

Alipinagle, A hamlet of the Mountain Arapesh, Alitoa village

Alitoa, Mountain Arapesh village (Fig. 2)

Ambunti, A government post on the Upper Sepik River, a little west of the 143rd meridian

Andoar, A village on the east bank of the Lower Yuat River, with a culture distinct from that of the Lower Sepik

Aotogi, Mountain Arapesh village (Fig. 2)

Arapesh, A simplified spelling of the plural form of the word for human being, further qualified by the adjectives Beach, Mountain, and Plains, with localities as shown in Fig. 2

Balam, Beach Arapesh village (Fig. 2)

Banak, Beach Arapesh, Abelesihim village (Fig. 2)

Banaro, A people on the Keram (Potter) River studied by Doctor Thurnwald; this name is also applied to them by the Mundugumor who have slight contacts with them

Biligil, Plains Arapesh village (Fig. 2)

Boinam, Mountain Arapesh village (Fig. 2)

Boinip, Plains Arapesh village (Fig. 2)

Bonaheitum, Plains Arapesh village (Fig. 2)

Bugabihiem, Mountain Arapesh village (Fig. 2)

But, Beach Arapesh village (Fig. 2)

Dakuar, Beach Arapesh village (Fig. 2)

Dimili (Dimiri) (P. E.), "Grass-men" people living southeast of the Mundugumor, inland from the Yuat River

Dobuans, A linguistic group in the D'Entrecasteaux Islands, studied by Doctor Fortune in 1927-28

Gualip, Border village between Plains Arapesh and Abelam

Hamisuk, Mountain'Arapesh village (Fig. 2)

Hawain River, A principal river of the Arapesh country (Fig. 2)

Iatmül, The shortened form of Iatmül-Iambonai, which Mr. Bateson has specialized for the people of the Middle Sepik villages between Tambunum and Japandei (Bateson, Gregory, Social Structure of the Iatmül People, Oceania, vol. 2, pp. 245–291, 401–451, 1932)

Ilapweim, Plains Arapesh village (Fig. 2)

Kaboibis, Plains Arapesh village (Fig. 2)

Kairiru, Island off the Aitape coast (Fig. 2)

Kairiru, Plains Arapesh village (Fig. 2)

Kalawali, A term used loosely to refer rither to the Southeast River, or the people who live along its banks

Kambaramba, A village south of the Sepik River, just east of the 144th meridian, with a culture shared by the villages at the mouth of the Keram

Kauk, Beach Arapesh village (Fig. 2)

Keram River (Potter), Local P. E. Ramu (not to be confused with the Ramu); a tributary on the south side of the Sepik, east of the 144th meridian

Kobelen, Mountain Arapesh village (Fig. 2)

Kofi, Beach Arapesh, Abelesihim village (Fig. 2)

Kotai, Mountain Arapesh village (Fig. 2)

Kuminum, Beach Arapesh village (Fig. 2)

Liwo, Mountain Arapesh village (Fig. 2)

Loanum, Beach Arapesh village (Fig. 2)

Madang, Port on the north coast of New Guinea, seat of the District office. A term often applied to the whole coast from the mouth of the Sepik, south to Madang

Maguer, Mountain Arapesh village (Fig. 2)

Manus, Sea-dwelling people of the south coast of the Great Admiralty Island, studied by Doctor Fortune and myself in 1928–29

Maramba, A Lower Sepik village, off the River, due south of Kanduanum; trade friends of the Mundugumor

Matapau, Current term for the people around the village of this name, west of the Beach Arapesh on the Aitape coast

Mentchuat, Tchambuli name for a bush people to the southwest of them, with whom they trade

Monihi, A village on the west border of the Arapesh country, linguistic affiliations uncertain; on the road from the western Plains to Sowam on the Beach

Mt. Turu, A prominent little peak in the Nugum Country which is also visible from the Sepik River (Fig. 2)

Mowia, Mountain Arapesh village (Fig. 2)

Mundugumor, Name applied to themselves by a tribe located on both banks of the Middle Yuat (Dörfer) River; information collected primarily in the village of Kenakatem

Murik, The term applied by the Arapesh to the peoples of the village of Murik and the adjacent villages, on the coast just west of the mouth of the Sepik River

Mushu, Island off the Aitape coast (Fig. 2)

Nanpoam, A village on the west border of the Arapesh country, linguistic affiliations uncertain; on the road from the western Plains to Sawom on the Beach

Nugum, Arapesh term for the Plains section of the people whose Beach section they call Abelesihim, and who inhabit the country directly east of them; often called the Boikin speech, taking their name from the Mission station on the coast; from the Sepik point of view called "man-o-bush belong Timbungki" (Tumbungu); informants, traveling parties through Alitoa and Manuniki, Luluai of Kumun

Numidipiheim, Mountain Arapesh village (Fig. 2)

Numonihi (Numinahi), Mountain Arapesh village (Fig. 2)

Sauri, A village back of Wewak (Fig. 2)

Sawom, Beach Arapesh village (Fig. 2)

Sepik District, Formerly the district which was bordered on the east by the Ramu River, on the south by the border line between Papua and the Mandated Territory, on the west by the Dutch border, and on the north by the Aitape District; now includes the Aitape District; see above

Simain, Beach Arapesh village (Fig. 2)

Southeast River, A tributary on the south bank of the Sepik River, west of the Yuat River; forms a junction with the Southwest River before emptying into the Sepik; sometimes called Kolowali

Southwest River, A tributary on the south bank of the Sepik, west of Yuat River,

which forms a junction with the Southeast River before emptying into the Sepik

Suabibis, A gens of the Mountain Arapesh village of Liwo

Suapali, Mountain Arapesh village (Fig. 2)

Sublamon or Magahine, Beach Arapesh village (Fig. 2)

Suwein, The current name for a small group of people, with affiliations more with the adjacent islands than with the mainland, who inhabit a few villages on the Aitape coast, west of Matapau

Tapeno, Plains Arapesh village (Fig. 2)

Tchambuli (or Chambri), A linguistic group occupying a single continuous area on the Aibom Lake, east of the 143rd meridian, and south of the Sepik River; name used by themselves and by their neighbors

Ulup, Border village between Plains Arapesh and Abelam

Umanep, Mountain Arapesh village (Fig. 2)

Urat, A current term for a people on the Mountain-Plains border west of the Arapesh and south of Suwein; information obtained from an inhabitant of the village of Sumsai

Waginara, Mountain Arapesh village (Fig. 2)

"Wallis" Island (P. E.), Used by Arapesh to refer to the islands of Tendanye and Valif, directly north of the Beach Arapesh

Wanimo (or Vanimo), A small group designated by the name of a village which now contains a government station, on the northeast coast of the Aitape District, near the Dutch border; these people are in contact with the natives of Dutch New Guinea; information obtained from Wana, a native of Wudu

Wanip-on-top, A P. E. term used by the Wanimo people to refer to an inland people with whom they have trade relations

Wapi, Current term applied to the inhabitants of the Plains behind Aitape, on the south side of the Torricelli Mountain Range

Warimo, or Wariman, A bush people north of the Upper Middle Sepik village of Japanaut; trade connections of the Tchambuli; information obtained from a police boy

Washkuk, A small group of mountain-dwelling people, northwest of Ambunti, north of the Sepik River

Wewak District, Used to refer to that section of the old Aitape District which was under the sub-station of Wewak before the Aitape and Sepik districts were consolidated

Wihun, Mountain Arapesh village (Fig. 2)

Yambon, An Upper Sepik village, on the Sepik River, above Ambunti

Yaulu (Yaul) (P. E.), "Grass-man," people living east of the Mundugumor between the Yuat and the Little Ramu (Potter's River)

Ybonimu, Plains Arapesh village (Fig. 2)

Yiminip, Mountain Arapesh village (Fig. 2)

Yuat River, A tributary on the south side of the Sepik, a little west of the 144th parallel; also called the Dörfer River, and the Villages River. It is possible to distinguish at present three main cultural divisions: Lower Yuat, typical village, Andoa; Middle Yuat or Mundugumor; and Upper Yuat

