HISTORIC CULTURES OF THE PACIFIC

When the Europeans arrived in the Pacific in the sixteenth century they found representative cultures of the Palaeolithic, Neolithic, Bronze and Iron Ages. With the exception of Tasmanian culture, all are still functioning today in local areas. The use of iron, as we have noted, had spread within the Christian Era through the East Indies as far as Central Indonesia and some of the more distant islands to overlie most of the Bronze Age influences of slightly earlier times. Cultures of Neolithic character had preceded the use of metals to become the historic cultures of Melanesia, Polynesia, Micronesia and marginal Indonesia. In Australia, Palaeolithic traditions are basic but influenced. The lithic industry of the Tasmanians is at best Palaeolithic. Correlated with the stone industries are hunting and wild food collecting economies. Associated with the Neolithic and metal-using cultures are cultivated plants and domesticated animals.

Eight distinctive cultures can be recognized in the Pacific area: the Tasmanian, Pygmian and Australian cultures represent the hunters and collectors; the Melanesian, Polynesian, Micronesian, Indonesian and Malaysian cultures are based on Neolithic gardening economy. Malaysian culture qualifies for separate classification as the result of its associations with metals, intensive agriculture with cereal crops, and other traits derived from continental cultures during the last 2000 years. The question of classification, however, is relative, for these same traits in different combinations and in varying intensity are present in much of Indonesia. The archaeological correlation of industries and basic economies and the distributions of the historic cultures are indicated in the chart on page 55.

These eight culture areas have no inherent relationship with the particular geographical distributions they now occupy. They do not conform to natural regions as defined by geographical, botanical or zoological considerations, except incidentally and temporarily, for all the cultures occupied different distributions in the past.

Archaeological Correlation	Basic Economy	Culture	Distribution in Historic Times
Palaeolithic Age	HUNTERS AND COLLECTORS	TASMANIAN	Island of Tasmania
		PYGMIAN	New Guinea, Philippine Islands, Malay Peninsula, Andaman Islands
		AUSTRALIAN	Continent of Australia
Neolithic Age	FISHERMEN AND GARDENERS (Root Crops)	MELANESIAN	New Guinea to New Caledonia and Fiji
		POLYNESIAN	Triangle enclosed by Hawaii, Easter Island and New Zealand
		MICRONESIAN	Pelew and Mariana Islands to Ellice Islands
Neolithic, Bronze and Iron Ages		INDONESIAN	Interior of some of the large islands of the East Indies and the Philippines, the islands between them and New Guinea, the island of Formosa and mountain areas in the Malay Peninsula
	AGRICULTURALISTS (Cereal Crops)	MALAYSIAN	Coastal districts of large islands of the East Indies and interior of some, most of the Philippines, coastal districts of the Malay Peninsula

HUNTING CULTURES

The hunting cultures are confined to the area of closely spaced islands, the only region within reach of simple hunters with Palaeolithic type tools and rafts or swimming logs. The Tasmanians and Australians are the best representatives of the early types of culture, for the Pygmies in refuge localities in the area of Neolithic cultures have been influenced from time to time by their neighbors. The Australians have received influences from Neolithic New Guinea, but their general ways of life have not been altered.

The hunting cultures are characterized by certain basic resemblances in other than simple lithic industries. In all cases there is a weak po-

litical system of small autonomous units without responsible leadership. Material possessions are few as the result of frequent shifting of camps and the difficulty of transport. Activities of a strictly sedentary nature are precluded for the same reason, as are also those which depend on the presence of a large and concentrated population. It is principally in the fields of abstract culture, such as social structure, religion, mythology and folklore, and aesthetic expressions, that marked differences are found among the hunters. In these respects they are unrestrained by environmental and technical limitations and free to pursue the particular trends of their own determination, with or without inspiration from other cultures.

TASMANIAN CULTURE

At the time Tasmania was settled by Europeans Tasmanian culture was the simplest of any in the world of which we have ethnological knowledge. We have already noted the primitive character of their stone tools. A comparable simplicity is typical of the other aspects of their culture. Little is known of their social structure and kinship system, religious concepts, mythology and folklore, but bits of information indicate so much similarity with, and so few differences from, the underlying culture in Australia, that general inferences are permissible.

The material culture of the Tasmanians is well known. In addition to the stone flakes, they possessed long pointed spears thrown by hand, short throwing-sticks, twined baskets, short skin cloaks, worn principally by the women, and a few personal ornaments. Crude, low windbreaks of bark provided the only shelter, except along the west coast where domed huts were erected. Simple rafts were poled on the rivers or used as swimming aids to reach some of the islands off-shore. Fire was generated with the fire-drill.

Politically, the largest unit was the horde, which consisted of a few families related patrilineally. Each horde occupied its own land and trespass was prohibited. Leadership was nominal, for there seem to have been few political issues before the arrival of the whites.

Little is known of the details of social organization. There seem to have been no totems. Marriage was polygamous and apparently based on some rule of preferential mating, probably that of cross-cousins. Divorce was easily arranged. Initiation ceremonies were characterized by scarification of the body.

The few data on folklore indicate a general similarity in type and motif to those in Australia. Rolled skin drums and the tapping together of two sticks provided accompaniment for the songs and dances of the ceremonies held every full moon. Decorative art seems to have been confined to a few simple designs on the body and on pieces of bark, although a few rock carvings of outline type have been discovered in the northwestern corner of the island.

The Tasmanians apparently lived a very peaceful existence. Head-hunting and cannibalism were lacking. Their standards required inter-horde "battles" on proper provocation, but it is probable that such fights seldom resulted in any deaths. After the coming of the Europeans these fights assumed a serious character, for the coastal peoples, deprived of their properties, had no alternative but to move into the territories of the inland hordes, thus upsetting the entire structure of their society.

Personal disputes were settled in terms of a rather ultra-modern sense of justice. The two parties were sometimes required to stand face to face closely together and yell their tirades until their anger had abated, or were given one throwing-stick with which they took turns in whacking each other over the head. Petty law-breakers were sentenced to the pillory, in the form of a tree branch, where they received the jeers and ridicule of the public. More serious crimes were punished by the "jury" hurling their spears at the offender who stood on a spot but was allowed to avoid the barrage by ducking and twisting his body and limbs. The verdict of the "jury" may have influenced the accuracy of their aim.

The language of the Tasmanians is imperfectly known. It was complex in structure and the nature of the few lists of words collected indicate that the vocabulary was extensive.

It is difficult to imagine a more simple culture than that of the Tasmanians. The Upper Palaeolithic cultures of Europe were characterized by a much greater wealth of material possessions, more advanced techniques and outstanding achievements in art. The passing of the Tasmanians deprived Anthropology of the opportunity of studying a people who, isolated from the rest of the world for thousands of years, had not had the benefits of contacts with neighbors. It is of course unwarranted to assume that Tasmanian culture has not changed in the course of thousands of years. The fundamentals of their culture, however, can be accepted as a likely pattern for human societies in early Palaeolithic times.

PYGMIAN CULTURE

The Negritos are usually considered a hunting people, yet, with the exception of the Andamanese, all have acquired cultivated plants and practice gardening with varying degrees of success. Rice, millet and corn are planted in the Philippines and the Malay Peninsula, and bananas, taro, sugar-cane and some tobacco are grown in New Guinea. In the latter area the Pygmies seem to be fairly well adjusted to the sedentary life which gardening entails. In the other areas there still is so much dependence on hunting that the gardens are neglected and their yield is variable and unreliable. Although some of the mountain districts would be difficult to farm successfully by experienced farmers, it would appear that many of the difficulties are the results of historical factors, the basic hunting tradition and the frequent changing of camps which it requires, and the lack of detailed knowledge of planting and caring for plants.

All the Negritos have been influenced by other cultures to such an extent that it is difficult to reconstruct their original culture by seeking traits common to all groups at the present time. Some may have retained a Palaeolithic hunting culture until long after their neighbors had become Neolithic farmers. It is quite possible that gardening did not spread to some mountain areas until very late proto-historic times. The Andamanese are the only Pygmies who lack cultivated plants and who therefore still lead a hunting and collecting existence. They have acquired advanced watercraft, nets and the harpoon, and now devote considerable time to the sea. They also are the only Pygmies who make pottery, although most of the other groups possess pots secured from their neighbors.

Little is known of the stone-working techniques of the Pygmies. In New Guinea, stone axes, knives and chisels are reported. The Andamanese make knives and scrapers from shell. Elsewhere, most tools and weapons seem to be made of wood and bamboo.

Bows and arrows are typical everywhere, but in the Malay Peninsula the borrowed blow-gun has become the most important weapon. In the same area are many other introduced hunting devices—nets, deadfalls, trapline spears and slip nooses. Elsewhere, hunting methods are still quite primitive and require much of the men's time for rather meager results.

Many foreign goods come to the Pygmies by trade. They are so shy that sometimes they leave their products at a traditional trading spot and return later to pick up what has been left them in exchange. Since both sides appreciate the advantages of acquiring goods unavailable in their own areas they are careful to give fair value. That contacts have frequently been more than casual is indicated by the great number of foreign ideas and beliefs in the various Pygmy districts.

Foreign ideas are much in evidence in the religious concepts of the Pygmies, although in many cases it is difficult to separate those which are fundamental but modified from those which have been introduced and adjusted to Pygmy interests. Shamans are the religious leaders but seem to have little importance except in time of crisis. Their relationship with the supernatural world varies considerably from area to area, as well as in terms of the particular problems they face. Many Pygmies have beliefs in supreme beings who control the world and punish wrongdoing by sending storms, thunder and lightning. There also are beliefs in spirits and ghosts. It is not yet clear whether all these concepts fit into an orderly theological arrangement with shamanistic practices and whether such knowledge is possessed by, or of importance to, the general public.

The political system of all Pygmies is very loose. The largest units are small bands, but they are not characterized by much cohesion and lack leaders in authority. Individual families frequently live by themselves for a time, separating from and rejoining others at will. Such a lack of solidarity is not conducive to war and all the Pygmies lead a peaceful existence, although occasional conflicts are reported in New Guinea. Headhunting and cannibalism are not practiced.

The social structure also is exceedingly simple, except in New Guinea, where moieties have been adopted by some groups. Elsewhere the kinship system seems to be bilateral. Athough not universal, monogamy tends to prevail, but divorce is so easily arranged that most individuals have been married more than once. Little emphasis seems to be placed on initiation ceremonies, except among the Andamanese, who scarify the body of the initiate.

Apparently none of the Pygmies devote much attention to aesthetics. Dancing accompanied by the clapping of thighs is typical of all. In the Malay Peninsula, nose and mouth flutes, jews'-harps and a simple guitar have been acquired from neighboring peoples. The decoration

of bamboo combs seems to be an old custom, at least in the west, for it is found in the Philippines and in the Malay Peninsula. For the other areas very little information is available.

AUSTRALIAN CULTURE

The aborigines of Australia are much better known than the Tasmanians and Pygmies. Although they are now extinct in much of the continent, their culture is still intact in the central desert and northern coastal regions, where they still carry on their stone industries, forage for food, and live in temporary open camps or rock shelters, just as they always have done in the past.

Although the Australians lead a primitive existence on the economic level, their culture is by no means simple, for not only have they received over the course of time many material, social and aesthetic traits from New Guinea, and possibly in fairly recent times from the Sunda Islands, but they have elaborated certain aspects of culture far beyond the attainments of any other people.

Fundamentally, Australian culture seems to be like that of the Tasmanians. In many peripheral areas not yet reached by the newer developments, resemblances to Tasmanian traits are numerous. Elsewhere and in varying combinations are more efficient types of spears, spearthrowers, hafted axes, shields, coiled baskets, containers of wood, bark and other materials, digging sticks, throwing and striking clubs, the fire-saw, the fire-plow, and numerous types of elaborate ceremonial paraphernalia. Most of these objects spread to the continent from New Guinea, but the Australians proceeded to modify or elaborate them into numerous varieties to suit their own standards and interests. It is difficult to realize that the nicely made weapons and ceremonial objects from the western areas, on display in the museum exhibits, have been hacked out with a crude chunk of stone and nicely finished with the simplest of scrapers.

The major problem faced by the Australians in accepting a new object is how to transport it. Except in those coastal areas where watercraft now are present, everything must be carried on the person. It is clear that people who travel many miles over arid and desert country in their daily search for food will not attach undue sentiment to burdensome wealth. Furthermore, success in the chase requires that the hunter be free of all unnecessary impedimenta. Some of the problems

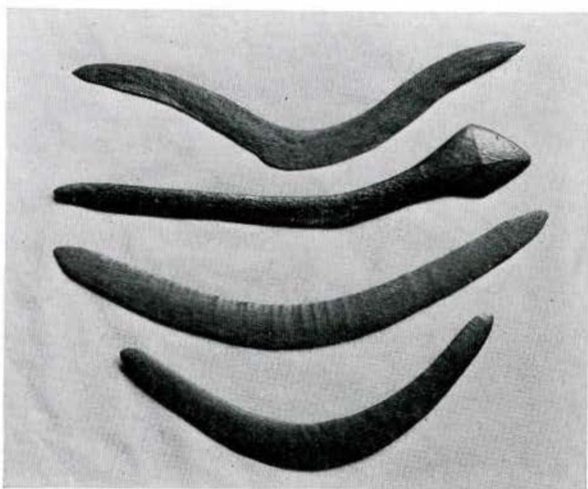


Fig. 10. Australian Boomerangs.

of transport have been solved by ingenious inventions, whereby the principles of several tools have been incorporated in one object. For example, the spearthrower in Central Australia is equipped with a stone scraper in its handle for use as an adze. Its sides are curved to provide an open tray. The sharp edges serve as a slashing weapon or, when drawn across the face of a shield, as a fire-making device. Notches cut along the back, when rubbed with a stick, convert the weapon into a musical rasp.

The boomerang is the most widely known invention of the Australians, but there are many misunderstandings about its use and qualities. Only a very small percentage of boomerangs are of the returning type. Most "boomerangs" are no more than elaborations of simple throwing-sticks with oval or elliptical rather than round cross-sections, used for striking or for throwing. The "returning" boomerang is not a weapon, except in emergency, but a toy. When properly thrown high in the air it performs a series of diminishing figure-of-eight gyrations finally to fall near its point of release. Its exact course cannot be controlled, for it varies in terms of the strength and inclination of the

throw and the air conditions encountered. If any object, such as a bird or branch, is struck, the course of flight is broken and the boomerang falls to the ground. It is interesting to note that European curiosity in the physics of flight of the returner contributed directly to the invention of the screw-propeller which made possible the developments of modern ships and airplanes.

The political system of the Australians is simple, but there are some interesting features. The largest units are the hordes, which throughout the continent seem, strangely enough, to have quite uniform populations of about thirty-five closely related individuals. The horde territories range from fifty square miles or less in certain coastal areas to as much as 6,000 square miles in the desert. Apparently for thousands of years the Australians have regulated their population to the food resources in each horde territory and have not permitted population to increase, as have certain modern nations, in order to claim the need for more land. The Australian attitude toward land is partially governed by religious concepts, for they feel such spiritual ties to their own territory that they have no interest in acquiring the land of others. Through the proper conduct of ceremonies a food supply is assured, evil magic is averted, and benefits obtained. It is in the power of each local group to control its own destiny in its own area. In other territories, however, the problems are different, and only the residents there have learned the secret of coping with them. For these reasons, it is unthinkable to an Australian to covet the lands of neighboring hordes. Trespass regulations, it would seem, serve more to protect the group against those who might come with evil designs than those who might seek food. Messengers who must cross a horde territory always ask permission and apparently always receive it.

War, as we understand the term, is unknown, but there are traditional provocations which require a battle between hordes. A death attributed to evil magic emanating from a neighboring horde usually requires settlement on the field of honor. A "war" challenge therefore will be dispatched and the day and place of the battle indicated. Such battles are preceded by great excitement, but they seldom end in any deaths, and peace and goodwill are restored on the field. It would seem that more aborigines are killed and wounded in local brawls than in the formal inter-horde encounters. The Australians do not attempt battle tactics nor ambush. There are no victors, no vanquished, no prisoners.

There is no slaughter, no tribute. They are not headhunters. Cannibalism sometimes is indulged in for practical purposes and, in so far as the kidney fat is concerned, for religious reasons, but it is not directly associated with "war", although on occasion it may follow a battle if a corpse is available. Cannibalism may not be an ancient practice, for it is lacking in the Southwest and in Tasmania.

It is in social structure that the Australians have attained a prominence which ensures them a perpetual place in anthropological literature. Space does not permit a detailed discussion of the intracacies of their social institutions, but a few comments can be made.

The foundation of the Australian social structure is contained in a classificatory kinship system, cross-cousin marriage and patrilocal residence which affects the distribution of relatives in the various hordes. This structure provided a perfect context for the imposition of moieties, the formal concept of which seems to have come from New Guinea. It has not yet spread to all areas.

The amazing complexities in the Australian structure are the results of their own ingenuity. Somehow, it was noted that the group of female cross-cousins, designated by one kinship term, included not only mother's brother's daughters and father's sister's daughters, but also mother's mother's brother's daughter's daughters, mother's father's sister's son's daughters, father's mother's brother's daughter's daughters, and father's father's sister's son's daughters. The group thereupon was divided so that the last four "cousins" were separated from the actual cross-cousins and given a kinship term of their own. Marriage was limited to this type of relationship. This necessitated a similar division among the grooms, as well as fathers, mothers, aunts, uncles and other near relatives on both sides of the family. But instead of adding more kinship terms, sixteen types of relatives were retained, as in the previous system, by merging certain distant relatives. The result obtained is perfect in kinship symmetry and in all reciprocal relationships.

The moieties, in which membership is determined by a unilateral rule of descent, were divided into two sections each, and membership in a section was arranged by a new rule of indirect descent. Thus a child is born into the complementary section in the moiety of the mother or the father, depending on whether descent of the moiety is matrilineal or patrilineal. This arrangement gave each of the four quadrants the

same internal structure in the types of relatives therein. Furthermore, the types of relatives in the two sections of a moiety reciprocally complement each other, and those in one moiety reciprocally complement those in the opposite moiety.

The sections were subsequently divided into two sub-sections each. This had the effect of formally and exclusively grouping together a man, his brothers, his father's fathers and his sons' sons and their respective sisters, all of whom by the kinship system had always called each other brother and sister. Each of the eight sub-sections is characterized by the same internal arrangement. Finally, in North Australia, each of the eight sub-sections was divided into two groups on a sex basis. As a result, there are eight named sub-sections for males in each of which are only terminological brothers, and eight sub-sections for females in each of which are only terminological sisters. The kinship system has not yet been completely adjusted to this arrangement in so far as distant inter-divisional relatives are concerned, but in a perfected form each of the sixteen sub-sectional terms will designate one type of relative, and each kinship term will indicate exclusively the members of a specific sub-section. The two sets of terms already are used interchangeably in direct address. Should a stranger arrive and announce his sub-section, each person would know immediately his kinship to the visitor, in which ceremonies he would be a participant or a spectator, what role if any he would play in initiation rites, whether there is a taboo relationship, whether his assistance could be expected in brawls, whether his possessions could be borrowed, and so on through all the potential problems of social relationships. The proper conduct of every person toward the members of all sixteen sub-sections thus is determined for every occasion. Such an arrangement apparently has long been the goal of Australian society, although presumably not a conscious one, for the latest developments seem to reflect a striving which in retrospect can be detected in the simpler social structures, all of which are still found in other parts of the continent. The complex social system of the Australians is confusing to us, for we attempt to understand it in terms of charts and diagrams, rather than in terms of personalities and the rôles they play in living institutions. To Australian children, the arrangements are obviously simple and readily comprehensible.

The Australians are also characterized by an elaborate totemic organization. There are personal totems in some areas. In the Southeast,

all the males belong to one totem, the females to another. Usually, however, membership in a totemic group is determined by a rule of unilateral descent which may be the same as that which prevails locally in respect to moieties, sections or sub-sections. In such cases, a totemic group may coincide with a division in the social structure. By the ordinary rule of unilateral descent, potential mates never belong to the same totem.

Associated with totemic concepts in the central regions is the belief that spirit children, who inhabit the sacred totem centers in each horde, bring with them a specific totemic affiliation when they enter passing women to be born. As long as pregnancies occurred at home such a belief did not appear to interfere with the the unilateral descent of the totem in the traditional fashion. However, the Australians realized that to be consistent it would follow that if a woman first noticed pregnancy while visiting in another area, the totemic affiliation of her child would be that of the local totem center. Thus the children in a family might have different totems from their parents and from each other. In the area of conceptual totemism, the totems may lose the solidarity of local unity of membership which formerly had prevailed, although the same totems are represented in many horde territories, but gain in the development of an extended unity through a more widely distributed membership, subject to a more centralized authority. Conceptual totemism therefore could have interesting ramifications in the course of time in respect to the development of greater political unity.

The Australians have a complex mythology. The experiences of innumerable ancestors are retold in stories and re-enacted in dramatic performances. These ancestors are not worshipped. Naturally, they belong to the various totems and are considered to have been the founders of the ceremonies in use today. They are integrated in the kinship terminology and social structure, and these considerations determine which individuals may represent them in ceremonial activities and dramatic portrayals. Of unusual importance over a wide area are two culture heroes who wandered over the continent. Almost every strange feature of the terrain is attributed to their experiences; hence each waterhole, prominent hill, gully or other feature of the landscape may have a long tale associated with it. To these culture heroes are attributed laws, social arrangements, weapons, tools, initiation ceremonies and all sorts of other desirable traits. The pattern of this culture

hero complex is similar to that in other parts of the world. Its significance is entirely a matter of mythology and it must be understood in such a context rather than in a historical one.

Religious interests are centered in totemic ceremonies and magical practices. Supreme deities are important in the Southeast, but elsewhere, if present, are of little significance in daily events or personal problems. Such matters are the responsibilities of humans and can be controlled by the proper performance of totemic ceremonies which ensure an adequate supply of the totemic animals and wild plants, and the succession of the seasons. Injuries and death are averted by the proper magic. Occasionally, evil influences penetrate the defense, but the fact that most people survive calamity from day to day is adequate proof of the efficacy of their methods of protection.

The arts of the Australians cover a wide range. Their dramatic presentations are spectacular. They have an extensive repertoire of songs, but the melodies are simple and stereotyped. Their musical instruments belong entirely to the percussion class, except for a drone trumpet. In decorative art the techniques are numerous but simple in application. The plastic arts are generally lacking, but there is an abundance of graphic expressions. In spite of the necessity of devoting most of their efforts to the search for food, they have found time to apply rock carvings and rock paintings throughout the continent. Rock paintings are still being executed today, usually in association with religious ceremonies. In most cases, the portrayals are devoted to the totemic animals and mythical beings. In judging such art it should be realized that the circumstances at the time of the paintings are far more important than the painting itself. Perfection, therefore, is not the goal of the Australian artist.

The Australians are primitive hunters restricted by cultural limitations to economic poverty. But in those spheres of human interest unfettered by physical considerations, such as social relations and structure, totemic organization, mythology and ceremonial activities, they have shown a remarkable inventiveness and a capacity for logical organization of diverse elements. Their developments have contributed to our knowledge of the range of social expression. Such variance between simplicity and complexity in a single culture indicates the fallacy of judging prehistoric peoples solely on the basis of their artefacts.

THE GARDENING CULTURES

The Neolithic cultures which came into the East Indies almost 5,000 years ago gave rise to the historic cultures of Melanesia, Polynesia, Micronesia and Indonesia. Little is known from archaeological evidence of the original composition of the parent cultures, or of the changes by losses and additions which may have occurred in the long interim between ancient and modern times; but the general basic unity of the modern exponents can be considered an indication of the essential character of the earlier appearances.

In all the Neolithic cultures, grinding is the characteristic stone-working technique, although flaked tools and weapons are found in some areas where suitable types of stone are available. The typical implement of these cultures is the polished hewing tool which is called an ax or an adze, depending on the manner of its use. The oldest specimens were presumably used as axes, although their general and non-specialized form permitted use as either. They serve both purposes in Melanesia, but are employed only as axes in Australia. A swivel socket in New Guinea permits the blade to be turned for either use. It would seem that there was a trend toward the adze in early Neolithic times, for several specialized types which can be used only as adzes were developed. These prevailed in the East Indies at the time he Polynesians migrated and are typical of Polynesia and Micronesia.

The cultivated plants of Melanesia, Polynesia, Micronesia and marginal Indonesia are essentially the same, the most important being taro, yams and breadfruit. In some coral islands some or all are lacking, or grown only with great effort in small fertile plots prepared with decayed vegetable matter. The coconut palm, since early days, has been planted in every island settled or visited. In some coral islands it is the staff of life. All these plants are indigenous to the East Indies or southeastern Asia.

Of puzzling appearance is the sweet potato, which seems to be of American origin. It, too, is found almost everywhere and undoubtedly occupied a widespread distribution before the appearance of European explorers. Its antiquity has been the cause of many controversies, for if the plant is American, the Polynesians must have not only secured it in the New World but returned with it to Oceania. Recently, attempts have been made to associate the sweet potato with Asiatic rather than

American relatives, but regardless of the botanical derivation, the use of the name *kumara* in South America and Oceania raises the same basic question of trans-Pacific contacts.

Of the non-edible plants, the paper mulberry is the most important, for it provides the bark from which tapa cloth is beaten. Since it is lacking in Micronesia, the question has arisen whether the Polynesians succeeded in carrying it through that area or subsequently reacquired it from the Melanesians. It cannot be doubted that it was introduced into Micronesia at an early time, but it is not known whether it soon died or was nurtured for generations until the high islands of Polynesia were discovered, and subsequently became extinct in Micronesia. It is possible that it was carefully grown in Micronesia until disappointment in the results caused it to be abandoned. It is interesting to note that in Yap the bark of the lemon hibiscus tree is beaten into a coarse "tapa" cloth.

In the East Indies, root crops are grown today only in marginal areas such as the small islands off the west coast of Sumatra. Sago is the most important food in eastern Indonesia and its use extends eastward into Melanesia. In western Indonesia, intensive agriculture is now typical of all areas. The cultivation of "dry" rice apparently preceded the growing of "wet" rice, and is found in central Indonesia and in areas where terraces or irrigation are impractical or not yet developed. The East Indies provide a great number of local vegetables and fruits which have not yet been introduced to other parts of the Pacific, nor, for that matter, to other parts of the world.

Domesticated animals are few in the cultures of the Pacific, except in the larger islands of the East Indies, but even there many were introduced only within relatively recent times. The association of man and dog goes back to Palaeolithic times, for the semi-wild dingo was taken to Australia subsequent to the isolation of Tasmania. Some marginal islands of Polynesia, such as Easter Island, lack the dog, probably as the result of accident or hunger during migration. Dogs are few in Micronesia. The pig seems to be the oldest domesticated animal in the East Indies. It has been taken to most of Oceania, but is lacking in Easter Island, New Zealand, barren coral islands, and in most of Micronesia. In recent centuries, pigs have all but disappeared in the Mohammedan portions of the East Indies.

Chickens are common in Polynesia, the East Indies and parts of

Melanesia and Micronesia. In the latter area they are feral in islands where they could not be indigenous. This indicates that they were brought to Micronesia, but abandoned. It is possible that they were introduced as part of the heritage of the early Polynesians, but became extinct. In the western East Indies, water buffalo are found in a wild state, but the domesticated varieties probably came from the mainland after the introduction of cereal crops. The horse apparently was brought from India by the Hindus. Cattle, sheep and goats seem to have arrived in quite recent times.

Another trait common to the Neolithic cultures is ocean-going watercraft in the form of the outrigger canoe. Without this development, Micronesia, Polynesia and eastern Melanesia could not have been discovered. The antiquity of advanced types of outriggers has not been determined. The simple varieties could have been used in Indonesia and western Melanesia for an exceedingly long time before the larger types evolved. The most seaworthy varieties and the most expert seamanship are found in Micronesia and Polynesia. The Melanesians are traditionally coastwise sailors, except in the eastern islands where Polynesian influences have been felt.

A consideration of other traits in the Pacific areas brings out many other basic resemblances, but the differences in details are numerous and the distribution of these differences significant. In some cases, Polynesia and Micronesia are set off from Melanesia; in others, Polynesia and Melanesia are closely allied. These differences apparently reflect the particular developments in Indonesia at the various times early migrations and late diffusions followed the southern route to Melanesia or the northern route to Micronesia and Polynesia. There also are interesting differences in distributions which separate eastern areas from the western islands, thus indicating that in more recent times eastward diffusions have followed one route or the other, or both. For instance, betel chewing has spread from Indonesia to western Micronesia on the north, and as far as the Solomon Islands on the south, to replace kava drinking, now confined to eastern Micronesia, eastern Melanesia and Polynesia. The manufacture of tapa cloth is obsolete in Indonesia, where loom-made textiles prevail. The simple loom has spread into western Micronesia.

There are many other important traits and innumerable minor ones shared in whole or in part by Indonesia, Melanesia, Micronesia and

Polynesia. Superimposed on this basic unity are the distinctly different cultural features which give each area its individuality. Polynesia and Micronesia, for historical reasons, resemble each other sufficiently to be treated as a unit, although they can readily be distinguished by many differences.

MELANESIAN CULTURE

The culture of the Melanesians is the most diversified in content of those with a horticultural tradition. This is particularly true in the New Guinea area, where the earlier hunting cultures were present when the Neolithic cultures arrived. Although the latter have come to predominate everywhere, they have been influenced locally in a variety of ways. In the oceanic portion of Melanesia, where the horticulturalists and fishermen were not preceded by earlier peoples, there is much greater uniformity, except where Polynesian influences have been important.

The political structure of the Melanesians is extremely simple for a sedentary people. In some cases a single village with possibly less than one hundred inhabitants is an autonomous unit. Usually several villages, with their garden plots and surrounding jungle, form a compact district along the coast or in a mountain valley and constitute a loosely coördinated political entity. Since several contiguous districts are characterized by the same dialect and culture, they form a tribe in all respects except political cohesion. There are some large tribes in New Guinea and in some of the other islands, but they are not typical of Melanesia as a whole.

Although the necessity of frequently shifting villages to new garden sites is not in itself conducive to stability in the smaller political units, the weakness in Melanesian political organization cannot be explained in environmental terms. Villages are shifted frequently for similar reasons in other regions where strong governments are found. It would seem that the Melanesians have never experienced a political awakening. They lack such institutions as nobility and stratified social classes, divine kingship, and an organized priesthood, any of which by its nature can lead to centralized political authority. The Melanesians are not lacking in political interests and ability in those areas, such as Fiji, where Polynesian institutions have been adopted.

The weakness of Melanesian political institutions is compensated to

Fig. 11. Carved head, Sepik River, New Guinea. (height 12¾″)

some extent by the strong bonds of affiliation in social groupings. The Melanesians are essentially a matrilineal people and the clan plays a controlling role in the life of the individual and the affairs of the community. It protects its members from injustice, but in return requires conformity to its policies. It is a land-owning body and regulates the inheritance of certain kinds of property. It offers opportunities for leadership in a variety of activities, many of a political nature. Hence it is in the clans that the ambitious find power and prestige and the personal satisfaction they provide. Clan solidarity in most areas is considered to be far more important than unison of the various clans in joint enterprises. Such attitudes do not promote general good will.

All Melanesians are quick to resort to arms to settle disputes. In all areas there is intense suspicion of everyone outside the local village, clan, district or tribe. Petty ambushes are common, and in some islands a person who wanders far from the village does not return. Raiding parties strike quick blows, kill all in a village who do not have weapons handy, and make off as soon as a defense is organized. Such activities in most cases are not official and represent feuding rather than warfare, for the attackers today may be the defenders tomorrow against other raiders. Elsewhere, war may be declared formally between autonomous political units, and organized battles conducted. As in Australia, these battles, after an impressive show of force and much excitement, may be no more than short skirmishes with a few casualties, or perhaps even none. Peace is then declared and a gay time and feast may follow.

More serious wars, however, do occur. Some tribes have been so weakened that they have had to abandon their lands and take to the swamps. Coastal peoples have been expatriated and have saved themselves from extermination by building artificial islands of coral chunks inside the reefs, sometimes miles from shore.

The general lack of intensive warfare among the Melanesians is probably the result of their loose political organization. The constant feuding is more difficult to understand. Headhunting is practiced in many of the islands but, as elsewhere in the world, it is seldom associated with war but is resorted to by individuals or small unofficial raiding parties for social or religious reasons. In some areas a young man cannot become an adult until he has taken a head; hence marriage and various privileges may depend on a gory trophy. Cannibalism is widespread in these islands, or was until recent times, and many murders

Fig. 12 Suspension hook, Sepik River, New Guinea. (height 31″)

Fig. 13 Suspension hook, Sepik River, New Guinea. (height 41¾″)

had a practical motive. Sometimes a dispute in which a person is killed may turn into a fight to determine who can make off with the body. Under such circumstances the apprehension toward strangers can be appreciated.

The economic developments in Melanesia are worthy of special note. A general interest in trading prevails throughout the islands, although in many districts it is expressed only in simple bartering. The topography of all the larger islands, and of many of the smaller ones, contributes a partial basis for the exchange of raw materials as a result of the differences in the natural resources of mountain and coastal areas; but the most important avenues of commerce follow the coastlines and the sea lanes between islands. Outrigger canoes with platforms, double canoes, or several dugouts supporting a platform, engage in extensive trading expeditions and sometimes are away weeks at a time. In some areas, these vessels are leased by business men who have goods to sell, or the captain and crew may act as merchants. The articles of commerce vary considerably from island to island, but all sorts of manufactured goods, such as pottery vessels, mats, tools, weapons and personal ornaments, foods of which sago is the most important, and raw materials, such as shell, animal teeth, fine quality stones and the like, are regularly transported from one locality to another. Values are determined by local media of exchange in the form of money of shell or other materials.

Although the economic advantages of commerce are obvious, social motives seem to predominate in many areas. Accompanying the exchange of goods are elaborate feasts and ceremonies and the custom of interchanging gifts. One of the most interesting institutions is found in the Trobriand Islands off the east coast of New Guinea. These islands form a rough circle and this accident of nature provides the background for the peculiar development known as the *kula* ring. Each business man has a partner in each adjacent island. From one partner he receives each year a collection of shell armbands, which he retains for the ensuing twelve months and then passes on to his other partner. The latter keeps them in his possession for a year and then delivers them to his partner in the next island beyond his own. These armbands continue to circulate in the one direction around the islands, each man replenishing his supply each year from one partner and passing on his old collection to the other partner. At the same time, strings of shell circulate in the same manner in the opposite direction. The primary

Fig. 14. Mask of braided fibre, Sepik River, New Guinea. (height 28½″)

importance of these objects is not in their intrinsic or economic value but in the great social prestige associated with their formal acquisition at the public feasts and ceremonies provided for the visiting partners, the pride of ownership during the year and the prominence attained when they are presented publicly to the new owner.

The exchange of ordinary goods at these meetings may be considerable, although often a man may go home with the same kind of objects he brought, satisfied that he has had the better of the bargain. To the natives, however, such economic matters are secondary to the social values associated with the *kula* exchange. The traders are hardly home from one *kula* meeting when preparations start for the next one. Like our own "Christmas trade", plans must be made months in advance. New canoes must be built and old ones restored to respectable appearance. Locally manufactured goods are "ordered", gardens are planted so that the necessary quantities of food will be available for the expedition and for the lavish entertainment of the visitors who come to the home island. New articles of clothing and personal ornaments are prepared. As in our own society there is feverish activity throughout the year in anticipation of the great events of the season.

In the Banks Islands social prestige is also the dominating motive in a complex series of economic activities which underlie the functioning of the Sukwe society. Great feasts are given by individuals to celebrate certain events, such as a birth, a death, the building of a house, or to honor some person; but these entertainments, whatever their pretext, along with the payment of substantial sums to the members of the society, are required as an initiation fee and as a fee for rising through each of the successive degrees in the organization. Prestige is measured not only by the rank attained in the society but also by the quantity and quality of the food distributed at each feast. Few individuals can afford these lavish occasions without the help of family and friends, but since the latter by association share to some extent in the glory they help create, they are usually willing to assist.

Plans for the great feasts are made months in advance. To acquire the food and other means of entertainment the host and his sponsors must go into debt. Money is borrowed at 100% interest regardless of the duration of the loan. Usually the debtor expects his creditor to contract a smaller loan than his, also at 100% interest, thus making each a creditor and debtor. The original creditor is not required to

comply, but his prestige declines if he refuses. Both parties to the transaction at least receive interest, a result somewhat at variance with the customary procedure in some of our banks, for an individual who borrows $1,000.00 at a fixed rate of interest is often required to lend the bank $200.00, in the form of a minimum balance in his account, from which he receives no return.

These islanders have also developed a novel and effective system of property insurance. The insurance "companies" are the Ghost Societies organized by entrepreneurs with a profit motive. Any two men may "incorporate" and select as a "seal" some insignia which each "stockholder" places over his garden, like a detective agency marker, to warn prospective miscreants that the plot is protected by all the members of the organization. However, the society does not protect one member from another; hence it is expedient to be a stockholder in several companies, for only a person who holds duplicate membership can legally violate the property. Each owner is constantly alert to such a danger and therefore is anxious to join other societies. To this end he and an associate may form a new organization and sell memberships, or he may buy an interest in a small society. The initiation fees are greater in the small companies but constitute good investments, for each member receives dividends from the initiation fees of those who subsequently join. Once a society has a large membership, its insurance feature becomes worthless. In the meantime, new companies have been organized and aggressive agents use their persuasive powers to induce property owners to become members.

Those who interfere with protected properties are subject to fine by each society to which the owner belongs. The aggregate sum would be so large that it would bankrupt the wealthiest person. If someone uses an insignia without authority, he is usually given his choice of being fined an exhorbitant amount or paying the initiation fee and joining the society.

The artistic talent of the Melanesians is particularly worthy of note. They are skilled craftsmen and their control of a variety of techniques, particularly woodcarving, has permitted impressive attainments. Virtually everything made of wood is carved in the round or on the surface. Such attention is to be expected in objects which serve community or group interests, such as drums, canoes, ceremonial and fighting weapons and paraphernalia for rituals and dramatic spectacles, but the

Melanesians give equal care to the manufacture of many household articles, particularly those which provide personal comfort and pleasure, such as headrests and equipment for preparing betel nuts and lime for chewing (*Figs. 15, 16*). Not all carvers are equally gifted; hence quality of product varies more than is apparent in the selected objects on museum display. Nevertheless all Melanesian craftsmen seem to take an unusually deep pride in their workmanship, and relative quality is appreciated as much by the Melanesian public as it is for other types of objects elsewhere in the world. Virtuosity is greatly admired. Certain districts are famous for the excellence of their products. Such objects, eagerly sought in the neighboring communities, form an important basis for trade.

Religion has given the Melanesians their greatest aesthetic inspiration. Their religious beliefs recall in part those of the Australians, with the great emphasis placed on human and mythological ancestors, totemic associations and the highly important initiation ceremonies. Interwoven with these are a great respect for a multitude of spirits, secret societies with special esoteric clubhouses for men, and the concepts associated with headhunting, all of which are important in the religious beliefs of the Indonesians. In so far as Melanesian and Australian concepts are comparable, it would seem that the former have succeeded in accomplishing what must be the thwarted ambition of the Australians. The Melanesians have no better techniques, but lead sedentary lives, have more leisure time, and are able therefore, to make permanent ceremonial objects which can be stored out of sight in the clubhouses. In addition, there is the incentive provided by a larger population to stage impressive rituals with massed performers. The Australians do not have time to prepare permanent properties even if they could preserve them. They must bundle their spears to form a sacred pole, make other ritual objects on the spot with bundled grass wound with string and decorated with bird down and paint. Sacred designs on most articles are painted, for they must be removed at the conclusion of the ceremony so they will not be seen by the uninitiated. The ritual objects revert to normal status as shields and spears. The other articles are destroyed.

The Melanesians can afford a great wealth of ritual objects, and they have taken full advantage of their opportunity. Endless numbers of statues of legendary and totemic ancestors, and of their spiritual re-

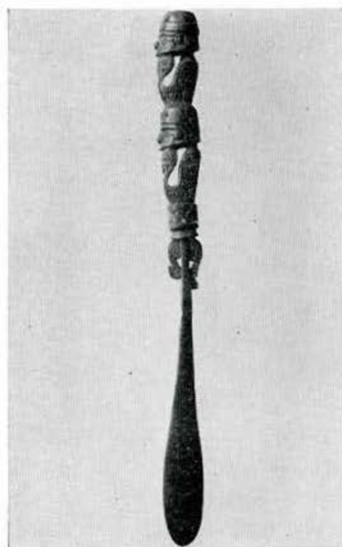


Fig. 15. Lime spatula, Massim area, New Guinea or Trobriand Island. (height 18½")

Fig 16. Bamboo lime containers with carved and painted tops, Sepik River, New Guinea. (height 30")

Fig. 17. Small wooden figure, Sepik River, New Guinea. (height 18½")

Fig. 18. Carved stool, Sepik River, New Guinea. (height 36½")

presentations, are possessed. Usually they are carved in anthropomorphic forms or as humans wearing masks. The human face by itself or as an element in a composition is a frequent motif. Masks are particularly prominent and comprise a major class of object. They may be carved of wood or other substances, woven of fibrous materials, built up on a framework decorated with feathers, shells, tapa cloth, grass and other goods. They may vary from sizes sufficient to cover the head to huge structures. They may be equipped with long skirts of grass or with headdresses more than twice the height of the wearer (*Figs. 1, 6, 14*).

New Guinea is the home of the bird of Paradise and other birds with brilliant plumage, and feathers are employed extensively in headdresses.

As in ancient Greece and most other parts of the world, painting and sculpturing are intimately associated. The Melanesians use pigments profusely and with remarkable effect on carved statues, masks, weapons, canoes, ceremonial planks and placques, and ornamental household articles. Color may be employed to accentuate the carving or may be superimposed in minor design arrangements of its own. The pigments

Fig. 19. Ivory figure, Fiji Islands. (height 8")

Fig. 20. Mortuary figure, Dutch New Guinea. (height 12")

Fig. 21. Clayed skull, Sepik River, New Guinea.

of the Melanesians are limited to a few brilliant colors; hence reality in sculptures is distorted by their use. The peculiar utilizations of color in Melanesian art comprise one of its most outstanding features.

In areas where skulls are venerated and preserved an interesting development in clay modeling is found. The fleshy features are restored in clay, shells substituted for eyes, various materials attached for hair, and facial designs applied in paint. The simulation of living expressions is often quite striking (*Fig. 21*).

Melanesian art is vibrant, dynamic, emotional, unrestrained. To the Melanesians their art reflects the profundity and variety of religious beliefs and principles so important in daily life. To them the aesthetic qualities are incidental to the significance of their associations. The Melanesians have not been conscious of any striving to be artists or creators of art traditions. That is why their attainments are so extraordinarily impressive.

POLYNESIAN AND MICRONESIAN CULTURES

The economic background of the Polynesians is almost the same as that of the Melanesians. Both fish in the sea, grow the same root crops in small gardens, and live in small villages. Like the Melanesians, the Polynesians are highly skilled experts in the simple industrial techniques they employ. The limitations imposed by the meager natural resources of their habitat have not permitted prominent attainments in material culture nor encouraged attempts to devise more efficient means of exploitation. In what manner such improvements could be made is not at all apparent.

The social structure of the Polynesians is relatively simple. There are no moieties, clans, gentes, totemic groups, nor, for most individuals, restrictive marriage regulations. Aside from the larger family groups which coöperate in many activities, the only social groupings are the villages, the districts and the tribes, in each of which a strong bond of affinity exists as the result of the inter-relationship of all families through marriage, and the tracing of descent to common ancestors.

According to Polynesian tradition, the original settlers of the islands were quite democratically organized. Subsequent to about 1000 A.D. other Polynesians began to arrive with concepts of divine nobility and social stratification. They came as conquerors, sometimes in small but well organized parties, each under the leadership of a noble, and proceeded to impose their political control and social system upon the inhabitants. This second wave of migrants is known as the Arii or Ariki, and the tradition of their arrival is general throughout the islands.

In most parts of the world traditions of this type cannot be substantiated by supporting evidence, but the Polynesians, as the result of earlier ancestor worship, had long been interested in remembering individual genealogies by which they traced relationship to some great ancestor or deity. Originally these genealogies seem to have served no other purpose, although frequently associated with them was much interesting information about the accomplishments of individual ancestors, such as who had settled the local island, the name of his canoe, where he came from, what plants and animals he transported, or, in later generations, the arrival of visitors, the introduction of cultural innovations, and the like. In later times genealogical records assumed added significance for they served as official records for determining rank and hereditary rights to land.

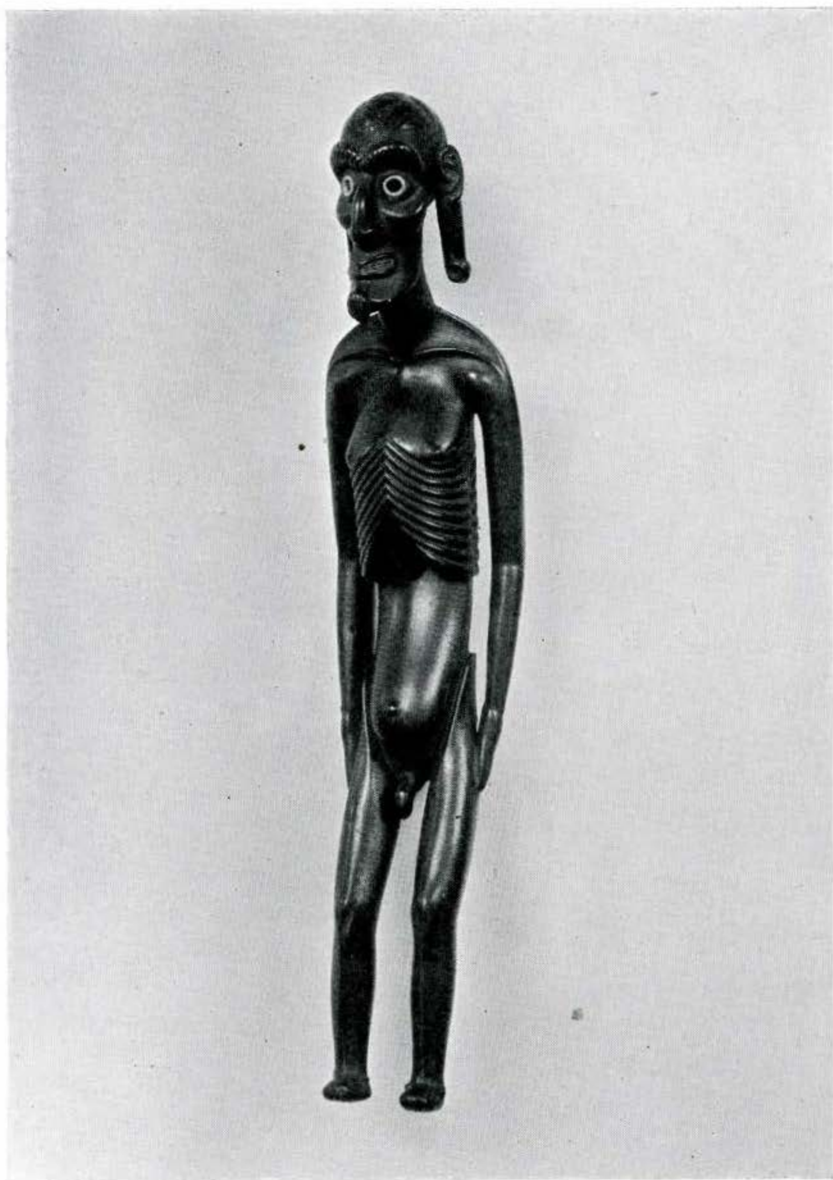


Fig. 22. Ancestral figure, Easter Island. (height 17″)

Fig. 23. Stone tiki, Marquesas Islands. (height 8″)

The genealogies have provided anthropologists with a unique and invaluable source of historical information. Assuming twenty-five years to a generation, it is possible to fix the dates of original settlement of the various islands and of subsequent arrivals of other lineages. Furthermore, when the genealogies of a distant island collectively show no changes in the ancestral lines, the cultural isolation of that island can be inferred. Individual genealogies of course are not always reliable. Some generations may have been forgotten, or political or social expediency may have induced plagiarism in the records of nobility. The comparison of genealogies, however, provides adequate check on such deficiencies and falsifications. The Polynesians recognized these problems and guarded against them by giving certain priests or public officials the responsibility of memorizing all genealogies.

Ever since the arrival of the Arii, Polynesian society has been divided horizontally into nobility and commoners. In some islands, depending on political developments, the concept of stratification has been further elaborated. In Tonga, for instance, royalty, the direct descendants of the gods, are at the peak of the social pyramid. Next come the nobility, the younger sons and daughters of royalty and their senior descendants. They are followed by the senior honorables, the younger sons and daughters of nobility and their senior descendants. The younger descendants of the senior honorables comprise a junior honorable class. Most persons are just commoners, but since the populations usually are not large, and all lineages closely inter-related, even the lowliest has a "William the Conqueror" in his family tree and takes great pride in such reflected glory. The prerogatives of rank are even more important to the Polynesians than to ambassadors at a White House dinner, and there are intricate rules for determining the relative position of everyone. The Hawaiian royalty came to place such value on rank that brother-sister marriage was necessary, for even the nobility were considered too inferior to be permitted to contribute to the royal strain.

Polynesian social structure is abetted and fortified by two important concepts, *mana* and *tapu*. Mana is exhibited in a person by character, personality, skill, ability, dexterity, bravery, success, good luck. Weapons or tools which give good service have mana. Royalty and nobility are born with mana which they can increase or lose. Commoners are not born with mana, but it is possible for them to acquire it. The system

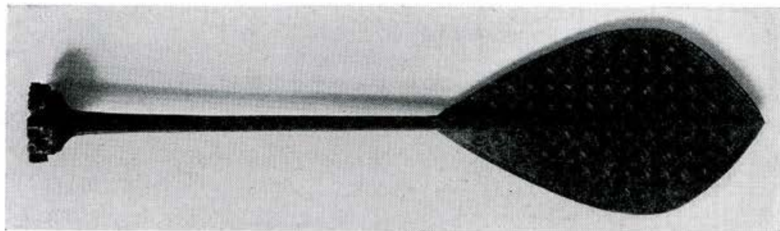
thus is flexible. It gives authority to those in high places and perpetuates their power. It gives an explanation for the black sheep in royal families. It justifies the inferiority of the commoner in his own eyes but holds open the door through which the ambitious and skilled may pass.

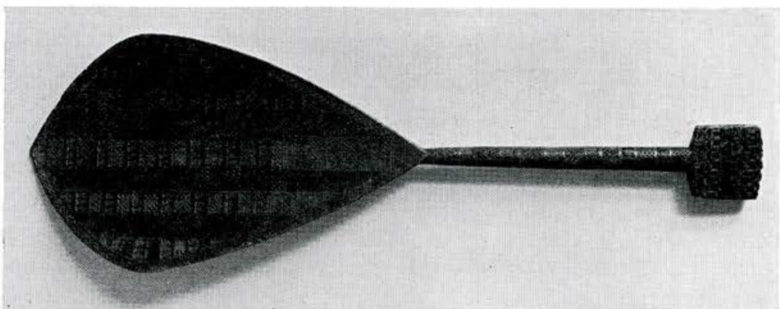
Tapu is a system of prohibitions imposed by divine authority. Royal personages, for instance, are tapu by virtue of their sanctity, for they would be defiled by contact with the profane. Similarly, possessions or prerogatives associated with royalty are tapu and cannot be touched or interfered with in any way without upsetting the whole supernatural scheme. In some cases a king's shadow was considered tapu. If he should walk in the sunlight the path would become tapu and therefore, could not be used by his attendants and servants. The tapu system also contributed directly to the perpetuation of the social structure. Its authority, by proclamation, can be extended to any acts or attitudes deemed contrary to the royal good by the ruler or priests, who may act as a committee on un-Polynesian activities. No policemen are required for enforcement of the rules of tapu, for violation brings direct retribution from the supernatural, as in the European concept of sin.

Genealogies, mana and tapu are present in Micronesia, but the context for their prominence is lacking.

The great respect for graduated rank and hereditary authority among the Polynesians has been an important factor in the development of their political institutions. Since one noble always outranks another, just the opposite to the principle of equivalence among European royalty, the extension of the political authority of the one over that of the other is consistent with their relative social positions. Empire building is a logical outgrowth of the concept of rank. In early times political struggles were confined to neighboring districts, but as these became consolidated into larger units the magnitude of conflict grew. Kingdoms developed out of principalities and empires evolved from kingdoms. Such a growth in political authority required the elaboration of nobility into royalty. The development of royalty invited further expansion of political control.

The struggle for political power in Polynesia seems to be the direct outgrowth of the social system and the virtues associated with warfare. Warriors were confident of their mana and anxious to demonstrate its potency to themselves and their associates. It appears that the growth





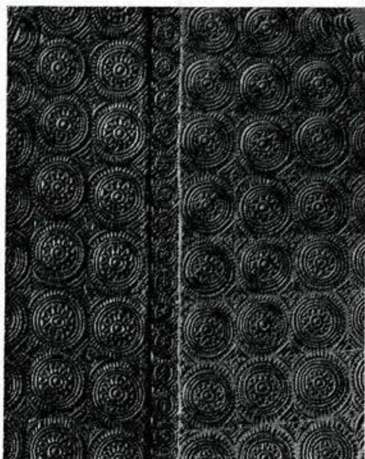


Fig. 24. Above: Paddles, Austral Islands.
Below: Same, showing details of carving.

in the size of political units had been progressing in the proto-historic period and was just reaching a culmination in a few of the great groups of islands at the time the Europeans arrived. The greatest consolidation was achieved in the eighteenth century Hawaiian Empire of Kamehameha I, who succeeded in unifying all the islands of that group. The only native "empire" remaining is the "kingdom" of Tonga which represents the unification of three small "kingdoms" or "principalities." The Maori of New Zealand seem to have no interest in the extension of political control. In Samoa none of the individual islands had been completely unified when European domination began. The Fijians, under King Cakabu (Thakambau), were well started along the path of empire when European cultural influences interrupted native institutions.

Polynesian kingdoms and empires are different from their European, Asiatic or Malayan counterparts. They existed more in theory than in actuality. They were not garrisoned by the military. They required no policemen. The system was consistent with theological principles and was accepted as such by all members of society. There were, however, always discordant elements. Nobles who were encouraged by their priests to believe that their superiors had falsified their genealogies sought opportunities to overthrow their rivals and install themselves. There also must have been considerable skepticism smouldering in the minds of the populace, for when the Hawaiians observed that Europeans were immune to tapu, and that mana was impotent against vile fellows with firearms, they rose and destroyed their entire system with one stroke.

In the early days the Polynesians seem to have been headhunters. This interest abated in most areas in later times, but cannibalism flourished until recent years. Polynesian cannibalism differed from that in Australia and Melanesia, for its practice apparently was confined to the consumption of enemies slain in battle, although in some areas enemy women and children were eaten. The use of human flesh for food under other circumstances would have been repulsive. The ceremonial aspect of cannibalism is indicated by the fact that enemies were sometimes cooked but not consumed. Occasionally parts of the body were not cooked, but eaten raw. The Maori, it is said, took keen delight in crunching eyeballs like cocktail cherries. The Fijians continued the Melanesian custom of eating humans for food and were the most notor-

ious of all Pacific peoples in this respect. Captives or slaves were fattened and accorded the honor of providing the chief's breakfast. The author once met a charming elderly Fijian gentleman who claimed to have eaten Fijians, Samoans, Tongans, Chinese, Europeans and one American Negro.

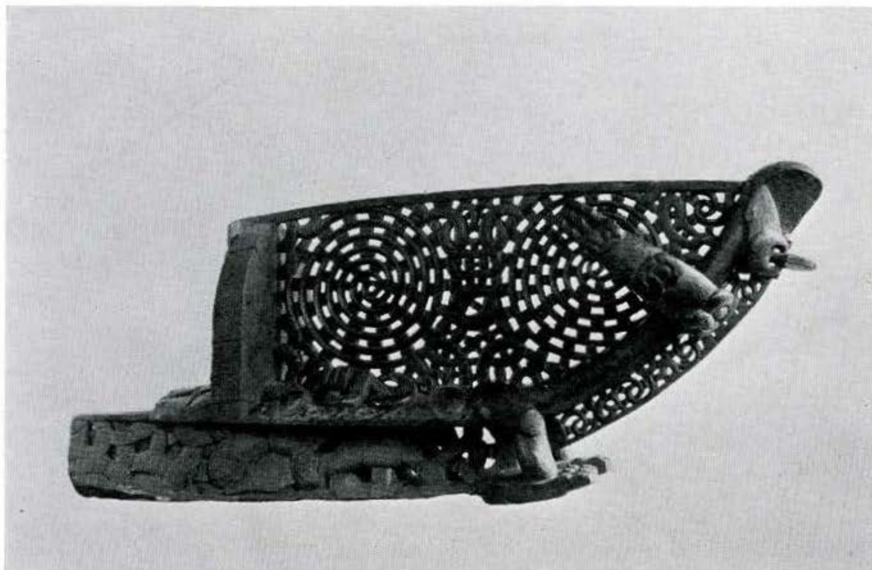


Fig. 25 Carved canoe prow, New Zealand Maori. (height 36")

Polynesian religion is varied in beliefs and practices. Reverence of ancestors is important in families, but the larger communities and tribes have their individual gods. Other gods, of greater stature, are of universal importance, but generally their interests are confined to some single human activity or natural phenomenon such as war, procreation or agriculture and rain. Each god has his own priests who are concerned only with the special interests of their deity. In some islands the high priests are members of the royal family and outrank the king during religious ceremonies. The Polynesians have a complex evolutionary cosmogony which, for a non-literate people who must rely on memory for all details, is remarkable in its profound philosophical structure. Learned Polynesians command what seems to be an almost endless quantity of orderly knowledge.

Fig. 26. Large wooden figure (tiki), Marquesas Islands.
(height 53″)

Polynesian decorative art reveals the hand of the craftsman rather than that of the inspired artist. The regularity of tattooing designs, the delicate patterns on wooden bowls and gourds, the spacing of geometrical figures on the ceremonial paddles (*Fig. 24*), the stamping of tapa cloth, owe their effectiveness more to technical perfection than to the designs employed. Yet masterful execution is in itself an art, as is so

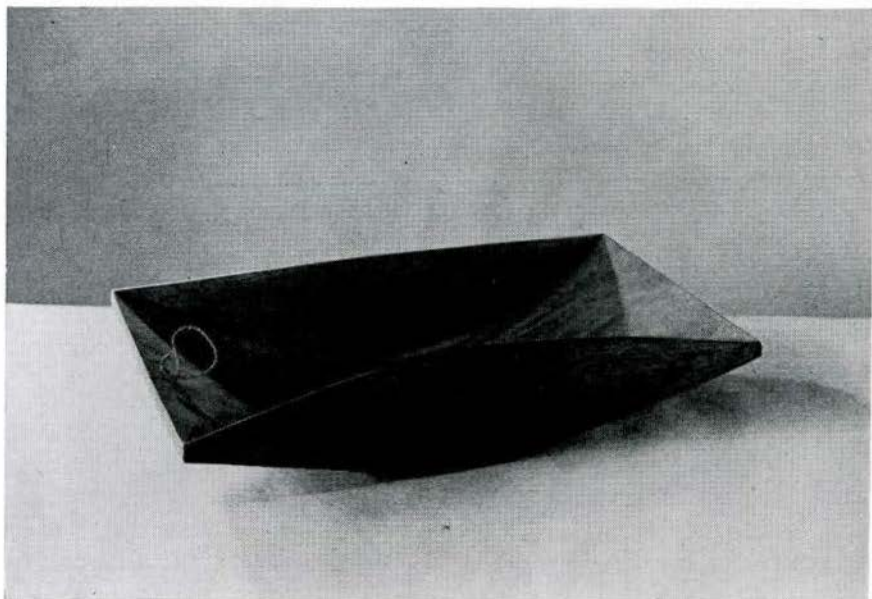


Fig. 27. Wooden dish, Matty Island, Micronesia. (length 18½")

well demonstrated in the superb quality of carving in Maori house posts and rafters and the bow and stern pieces of canoes (*Fig. 25*).

Highly conventional art motifs derived from distortions of human facial and body features are typical of sculptured stone and wooden images and statues in central and marginal areas (*Figs. 23, 26*). Local peculiarities are found in each group of islands, although all show basic similarities. An area of most striking local elaborations is Easter Island, the far distant easternmost outpost of Polynesia. The huge stone statues are distinctive in their conventions but nevertheless reflect a basic Polynesian character. Great mystery has become attached to Easter

Island in the popular mind, and theories of sunken continents and lost civilizations have been invoked to explain what seems to be an incongruous appearance of giant stone statues on an isolated tiny treeless island in the eastern Pacific Ocean. But their carvers were Polynesians who settled the island in the fourteenth century A.D. and, with ideas of their own, proceeded to elaborate the art tradition they brought with them. Also of local development on Easter Island are the very original cadaverous images (*Fig. 22*). Peculiar to New Zealand is the carving of jade. The *hei tiki* type of breast ornament carved from this material has peculiar charm (see title page).

The use of feathers for decoration is unimportant in Polynesia, except in Hawaii and New Zealand. The feather cloaks, mantles and helmets of the Hawaiians are particularly noted for their beauty. Their aesthetic appeal lies in the mass brilliance of the thousands of tiny feathers skillfully attached to a netted base (*Fig. 28*).

An effective method of decorating the interior of houses and other buildings is the use of ornamental lashings. Since the buildings are constructed by tying together the ends of beams, posts and rafters, the extension of the binding and the ornamental effect attained are the direct outgrowth of the house-builder's skill and motor habits.

The decorative art of Micronesia is not well developed, although there are some localized exceptions. The Marshall Islanders make an exceptionally fine quality of mat. In the Pelew Islands, in extreme western Micronesia, the gables of the men's house are profusely carved and painted inside and out. Ornamental lashings also are typical. None of these decorative features seem to be found in Eastern Micronesia, but it nevertheless seems likely that they are historically related to similar appearances in Polynesia. Generally speaking, the Micronesians in the coral islands seem to restrict their aesthetic interests to tattooing and the wearing of personal ornaments.

INDONESIAN CULTURE

Indonesian culture is difficult to define in terms of time, space or content. Each of the cultures of the Pacific, as originally constituted, occupied the East Indies at one time or another and seems to have continued there in refuge areas, or in modified form in larger distributions, long after later cultures became well established. An apparently Australoid people called the Toala, about whom little is known, still followed a

Fig. 28. Feather mantle and cape, Hawaii. (mantle 8′ 10″ x 5′ 1½″; cape 29½″ x 19″)

Fig. 29. Sumatra house model. (height 40″; length 48″)

simple hunting life in Celebes until the beginning of this century. The Negritos although they now attempt the growing of rice, millet and corn, seem to have such an inadequate knowledge of the rudiments of agriculture that one suspects that cultivation is not an old tradition among them. Root crops have been grown in the East Indies since early Neolithic times by digging stick and hoe methods. Cereals came later and have tended to replace root crops, yet the latter are still typical of some marginal localities and prevailed in Central Indonesia at least until some time after the Polynesians had departed. Dry rice, which preceded wet rice, usually is treated like a root crop and cultivated by the hoe method. It has spread into many central islands. The fact that it does not occupy a wider distribution would seem to be due in part to insufficient time for the development of varieties suitable to the different conditions of soil and climate in adjacent localities. Wet rice, which requires abundant water, is still confined to western areas and is associated with irrigation and terraces. It would seem that it, too, can develop varieties which in the course of time will permit an extension of its area of cultivation.

The use of metals, in the course of 2000 years, has spread to most of the inhabitants of the Indies. Excellent iron products are manufactured, not only by the advanced rice growers, but by those who cultivate by hoe and who in various other aspects of their culture are comparable to the Melanesians. The manufacture of fine textiles and the use of the loom are now found throughout the area, yet barkcloth is still made in a few localities and traditions of its manufacture were widespread until quite recent times. The religions of India and Mohammedanism spread through the western islands to be adopted by primitive and advanced cultures alike. The Kubu, who lead a simple existence in the swamps of Sumatra, accepted the tenets of Islam with the same devotion as their sophisticated neighbors.

Builders of complex irrigation systems and terraces are headhunters who carry on incessant petty feuds like the Melanesians, but lop off heads with a single deft stroke of their expertly made, specially designed iron head-axes. Cannibalism used to be widespread, but in recent times it apparently has been confined to the eating of the heart or other organs which have religious significance. As in Melanesia, the taking of a head was necessary for marriage and adult status, or required for religious purposes.

General weapons include spears, bows and arrows and shields, as in Melanesia, but the sling of the Polynesians, which must be more recent, is present in few places. The blow gun and poisoned darts have been added in western areas. Metal swords are widespread.

House types vary from the simple lean-to and tiny dwellings built on land or over the water on piles, to huge structures and community buildings constructed with massive posts and beams. The range in size and manner of use are comparable to the dwellings in Melanesia, but the details of construction of the larger homes are dissimilar. Some of the buildings in Sumatra, Nias and Celebes are most impressive in their architecture. In some areas the dwellings are ornately decorated as in parts of Micronesia and Polynesia (*Fig. 29*).

Art takes a variety of forms in Indonesia. Small wood carvings are widely distributed (*Figs. 30, 31*). Masks, designs and art styles reminiscent of Melanesia are important in some localities, unknown in others. Until recent years elaborate tattooing was typical of most areas, as in Micronesia and Polynesia. Posture dancing has been developed to its greatest sophistication in the west, but less elaborate appearances are present elsewhere, as in Micronesia and Polynesia. In addition, group dancing, as in Melanesia, is typical of many areas.

The political structure in areas unaffected by Hindus and Moslems is simple, like that of Melanesia. The villages are small and autonomous or loosely grouped into districts. Political authority is nominal. It is only in the regions which became dominated by Asiatic invaders that nobility, stratified society and concepts of integrated political structure are found. This complex in Polynesia is generally similar to the appearances in the East Indies.

In religion, ancestor worship, magic, medicine-men and similar traits are widespread. An organized priesthood is generally lacking, but cult priests, such as are found in Polynesia, were extremely important in the Hindu period. Human sacrifice is comparable with the Polynesian custom.

In social organization, unilateral groupings such as are typical of Melanesia are present only in Sumatra and in the islands near New Guinea. In all the remainder of the East Indies the bilateral family is typical, as in Polynesia.

The checkerboard type of distributions of culture traits in Indonesia indicates the great complexity of culture history in that area. General

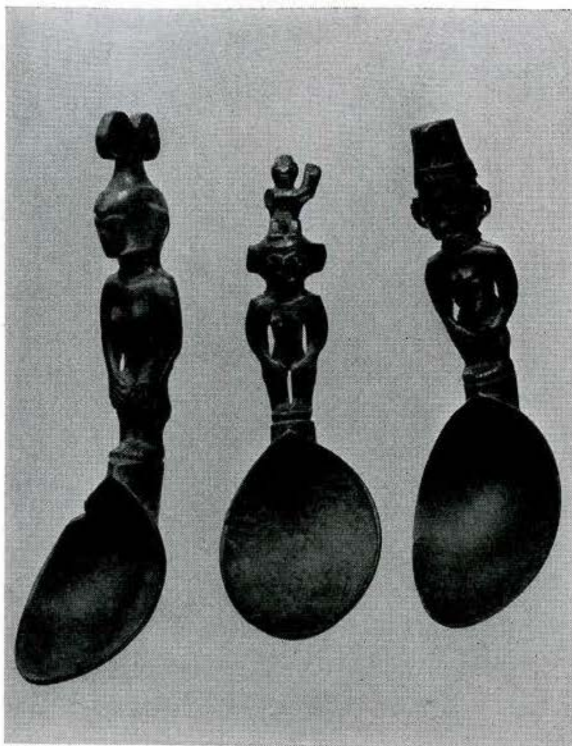


Fig. 30. Wooden spoons, Philippine Islands. (lengths 8⅛", 6⅞", 7⅛")

Fig. 31. Wooden figure, Philippine Islands (height 13¾")

culture unity, such as is found in Australia, Melanesia, Polynesia and Micronesia, probably has been lacking since Palaeolithic times, and even then there may have been many scattered distributions as the result of the topography and the long succession of prehistoric peoples and cultures.

To define a basic Indonesian culture at the present time would require the selection of criteria in a most arbitrary manner. Archaeologically the problem is simple, for material culture lends itself very nicely to distinctions based on stone and metal techniques. Ethnology, however, presents a bewildering variety of trait associations. In the living culture of Indonesia, the individual cultures we recognize as Polynesian and Melanesian seem to be completely interwoven with other elements. In the past presumably they were less closely associated.

The more recent developments in Indonesian culture are more clearly discernible. The influences from the continent which have given a new character to the culture of the western islands can be defined. Underlying modern Malaysian culture are the particular trait combinations which prevailed locally before the continental influences arrived. Historically, however, this culture represents the combination of elements from the many diverse prehistoric cultures of the islands.

MALAYSIAN CULTURE

Until about the beginning of the Christian Era, Indonesian culture prevailed throughout the East Indies and the Malay Peninsula. Scattered appearances of kindred cultures remained in many parts of southeastern Asia where in earlier times they had been more prominent. Indonesian culture, strictly speaking, did not give rise to Malaysian culture, but it provided the foundation on which the latter was erected. Its character is now submerged by the more spectacular institutions of foreign derivation, but nevertheless it still remains as a strong undercurrent in modern ways of the Malayans, particularly in country districts.

Early Malaysian culture, from an archaeological point of view, can be classified as Bronze Age. Material objects and technology from Chinese and Indo-Chinese sources were added to Indonesian culture, but the general character of the latter was presumably not altered. Early in the Christian Era Hindu traders from southern India began to arrive in Sumatra and the Malay Peninsula. Their influences for a time

were confined to these southwestern areas. The reports of the great wealth of the islands and of the political impotence of the inhabitants which they took home to their rulers apparently impressed the latter with the opportunities afforded for economic and political exploitation. Petty princes with small but well disciplined retinues followed the traders and established themselves in the coastal districts and, within a few centuries, developed powerful kingdoms which dominated the region.

The period of Hindu infiltration is correlated archaeologically with the Iron Age. The most important effects on native life, however, cannot be found in material remains, for they pertained to political, social and religious institutions. In addition to the intensive use of iron and iron-working techniques, the Hindus brought a vast store of general and technical knowledge. Undoubtedly their most important gift was writing. Universities were established and the study of Sanskrit and Indian religious and philosophical concepts promoted. We do not know how much the native peoples participated directly in this learning, but since the Hindus themselves were never numerous, their political system required a large number of native subordinates. It was undoubtedly through the latter that the spirit of Indian culture was injected into native life. The lack of archaeological traces of abstract elements of culture does not permit an appraisal of the geographical extent of their influences. It may well be that native East Indians, imbued with the system of their conquerors, proceeded to extend it eastward by moving into Central Indonesia as petty princes, carrying with them the principles of nobility, social stratification and the Hindu religions. At least it is possible that such concepts, whatever the means of their introduction, had reached some of the central islands before the end of the first half of the first millennium A.D., or shortly thereafter, and were accepted in outline but not in specific detail by the ancestors of the later Polynesians. By the middle of the last half of the millennium the central Indonesian area was sufficiently well organized to be subject to the distant economic control of the great Empire of Srivijaya in Sumatra.

The Hindus brought both Brahmanism and Buddhism to the Indies. The former came first, but by 500 A.D. both were well established. Subsequently, the bitter rivalries led to the same bloody strife which characterized their histories on the Asiatic continent. The various kingdoms espoused one or the other and the fortunes of the faiths waxed and waned

in terms of political and military successes and defeats. But during this period of intense religious fervor and military conflict Java experienced its classic development in art and architecture. Many thousands of skilled native artisans erected and covered with the most delicate carvings, depicting religious scenes and personalities, the great Brahmanistic and Buddhistic temples of the eighth and ninth centuries. Probably at this same time Javanese dramatic art, posture dancing, religious and state processions and ceremonials reached their greatest development. Modern aesthetic expressions in Java continue the traditions of the past, but it is doubtful whether there has been further evolution of the trends which produced the high achievements of so long ago. In most fields of art the Javanese have retained the high qualities of the past. In their wood carvings and silver work modern influences can be detected, but in the decoration of batiks (*Fig. 32*), the manufacture of puppets for their famous shadow shows (*Fig. 33*), the costuming of dramatic dancers and other traditional activities, their interests as well as their skills have remained unchanged.

The Late Hindu period was characterized by a succession of great kingdoms and powerful empires with courts of unsurpassed splendor. Diplomatic representatives were exchanged with all the kings and emperors of the Orient. Famous centers for the arts and learning were maintained. Huge standing armies and navies were held in readiness for conquest or defense. Untold wealth in gold and precious stones was possessed. Throughout this long period the East Indies maintained a civilization which, point by point, compares favorably with all but the very greatest of the continental empires. The spirit of Malaysia was Indian, but the Malayans themselves, as the result of long intermarriage with the small numbers of their conquerors, had become the rulers, the generals, the priests, the architects, the artists, the skilled craftsmen and the soldiers who gave substance to the inspirations derived from other lands.

Nevertheless, the great Malayan Empire, so powerful internally and externally for centuries, lost its dynamic qualities and cohesion. It retained its form until the thirteenth century, but with the arrival of the Mohammedans it disintegrated almost overnight. With it disappeared 1200 years of Hindu political and religious thoughts and concepts. Only in Bali had the old beliefs sufficient vitality to resist the frenzied rush to Islam which swept the islands from Sumatra to the Philippines.

Fig. 32. Batik with design of shadow puppets, Java. (44⅞"x 42")

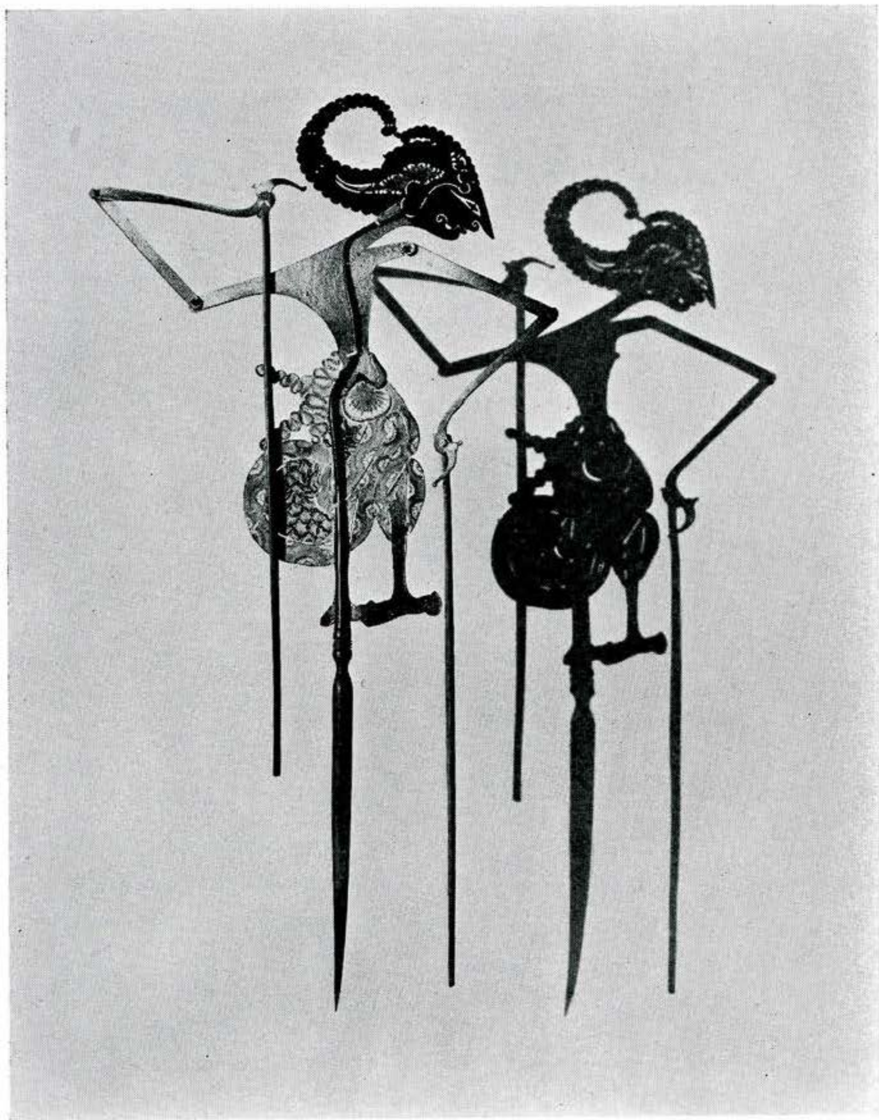


Fig. 33. Wayang shadow puppet, Java. (figure height $9\frac{7}{8}''$)

Only in Bali are Siva and Indra and Brahma and Vishnu, who inspired the great accomplishments of so many generations of Malayans, still remembered and worshipped with the devotion of early days. Only there does the erection of their temples still continue today. Only there is the art of delicate stone carving preserved.

The Malaysians had long been accustomed to theocratic rulers and seem to have accepted the political institutions of the Mohammedans with as much ease as they forgot those of the Hindus. The localized governments of the sultans at least freed them from fighting the battles and paying the costs of great empires. The expense of maintaining their new rulers was mitigated by their sanctity. The Mohammedans brought to the Indies an inspiring religion which readily gained adherents. They introduced new concepts of the state and political procedure, and new weapons. In what direction the new system might have evolved in the course of time is not indicated by three centuries of history, for the initial period of cultural adjustment had hardly ended when the Europeans put in their appearance in the sixteenth century. Except in the Philippines, where Mohammedanism had not gained a firm foothold north of the Sulu Islands, the latest foreigners accepted the institutions they found, and after a period of political intrigues, conquests by force when necessary, and alliances with the local sultans, came to dominate the entire region. Like their predecessors, the new rulers came in small numbers but with great resources, modern weapons and well disciplined forces. They guaranteed the sovereignty of the sultans, thus relieving the latter of much responsibility, and in return received the privileges of economic exploitation. European penetration thus enjoyed the advantages of approval by both political and religious authorities. Only in the Philippines was there any attempt to influence the religious beliefs of the Malaysians. In this area the Spanish, with their usual zeal in such matters, and with the help of the military, persuaded the Filipinos of the benefits of Christianity, except in those districts where the natives had been well exposed to Mohammedanism. The several hundred thousand Mohammedans in the Sulu Islands were never conquered by the Spaniards, nor by the Americans, nor by the Philippine Constabulary.

The Europeans have taken untold wealth from the East Indies and the Philippines but they have also given in return. In all areas a great knowledge of mechanical devices and technical principles has been

introduced, mostly in the last half century. The economic resources of the islands have been exposed and organized. New horticultural products, such as rubber and quinine, have been brought from South America and developed into leading commercial crops. Railroads and docks and highways have been built. Motor cars and airplanes have changed old methods of transport. Petty wars have been eliminated. Political stability was attained, at least until recent years. But the new system by its very nature imposed a rigidity in Malaysian culture just as had the systems of earlier foreign rulers. Internal changes in political organizations, social institutions and religious concepts, could be initiated by popular movement only with great difficulty and in local areas. Reform from the top threatened the delicate balance between Europeans and local political and religious leaders on the one hand, and between both of them and the people on the other. The problems are great for all concerned. Only in the differently constituted Philippines, and then only after Spanish domination had come to an end, was there an introduction of such modern institutions as universal education, an electoral system, parliamentary government and national freedom.

Malaysian culture is unique in that it contains elements from the great civilizations in Asia, the Near East and the West. Modern European contributions so far have been confined in most areas to technology. The Malaysians have been the spectators, but now they are beginning to grasp these tools with their own hands. Their interest in the outer world has been aroused, an unusual attitude in Mohammedan countries. They have shown repeatedly their ability to acquire and use the techniques and skills of other peoples and with them to attain great prominence. Their interest in what else the West has to offer is growing. Just what they will consider desirable to acquire, and what effects such acquisitions may have on their own culture, remains for the future to determine. But it seems safe to predict that in the new cultural developments in their region the Malaysian culture will do the absorbing rather than be the absorbed.

Fig. 34. Wooden mask, Mendalam River, Dutch West Borneo. (height 12¼″)