WHENCE THE POLYNESIANS? THEIR LANGUAGE, ANIMALS AND plants bespeak an ancient origin in Southeast Asia, where a native people may have been displaced by more powerful neighbors and forced to take to the sea, developing a maritime culture as they moved eastward through the many islands of what is now Indonesia. Archaeologists have found distinctive “Lapita” pottery 4,000 years old, and fragments of obsidian possibly 6,000 years old, marking a 2,300 mile “voyaging corridor” from Borneo eastward along the northern shore of New Guinea to the Admiralty Islands and New Britain in Melanesia—evidence of a people with seafaring skills superior to those of the present inhabitants.

Melanesia had been inhabited by dark-skinned peoples long before their arrival, New Guinea for more than 30,000 years. We may call the newcomers Proto-Polynesians, a people changing culturally and physically, becoming but not yet Polynesian. Although they shared a culture, they may have lived in many groups, some exploring northward into the area of small islands now known as Micronesia and contributing to the ancestry of Micronesians, others acquiring Melanesian genes during periods of settlement along the northern coast of New Guinea or in the many islands of Melanesia. The trail of Lapita pottery leads eastward to Fiji, apparently settled by a people of mixed Proto-Polynesian and Melanesian ancestry.

Searching farther to the east, others found uninhabited islands in Sāmoa—where finds of pottery are 3,000 years old—and Tonga. Here in this “Cradle of Polynesia,” perhaps no more than a few canoe loads of Proto-Polynesians arrived. Over centuries they evolved the distinctive
1. The ancient route from Asia by way of Indonesia and Melanesia of ancestors of Polynesians. Some may have turned northward into Micronesia (small islands). Melanesia (black islands) was settled many thousands of years earlier by dark-skinned peoples.

2. Micronesia received voyagers from Asia by way of the Philippines.

3. Discovered more than 3,000 years ago, Sāmoa, Tonga, and the eastern islands of Fiji became the "Cradle of Polynesia," where distinctive Polynesian physical and cultural traits evolved within an originally small group.

4. Polynesians reached the Marquesas, and possibly the Tahitian Islands.

5. Archaeological findings suggest that "Eastern," or "Marginal" Polynesia was explored from the Marquesas and possibly Tahiti, by canoes sailing north to Hawai‘i (about 2,000 years ago), east to Easter Island, and southwest to the Cook Islands and New Zealand.
physical and cultural traits now regarded as Polynesian.

Later explorations continued the habit of moving eastward. Unable to sail against the prevailing easterly winds, they would have waited for periods of unsettled weather when wind shifts, brought about by the passage of low pressure troughs, enabled them to make their easting on winds varying from the north, west, or south. The Tahitian Islands and the Marquesas Islands were discovered, and became new homelands which spawned explorations to the outer limits of Polynesia. Hawai‘i was discovered to the north at some time before 1,900 years ago, Easter Island (Rapa Nui) to the southeast, and New Zealand (Aotearoa) to the southwest—the three corners of a triangle equal in size to the combined surfaces of North and South America.

The discovery of Hawai‘i could not have resulted from an accidental drift voyage of helpless storm-wrecked fishermen; the way north demanded close-reaching against the wind through three different regions of prevailing winds and ocean currents. A coconut cannot drift from the South Pacific to Hawai‘i through these zones. Those who sailed were on a purposeful voyage of exploration. They knew the dangers; they knew of canoes which had sailed and never returned; but their ancestors had always found new islands in their ocean world, and the spirits of their most powerful ancestors would guide them now.

They may have been driven by population pressures, a famine caused by a period of drought, or a lost battle. They may have been led by an ambitious chief, perhaps one whose older brothers had left him with few expectations at home. Not all voyages were driven by necessity. South Pacific legends also tell of explorations made purely for adventure or to satisfy curiosity about the girls of another island.

No less than twenty four species of plants upon which their culture depended were brought by canoe. Their domestic animals were the pig, a chicken of iridescent red and black plumage, and a small dog. A species of small black rat probably arrived as a stowaway.

These plants and animals were of a Southeast Asian origin with the exception of the sweet potato. Believed to be of South American origin, its wide distribution in Polynesia suggests that it arrived at a very early time. The Polynesian term for sweet potato, *kumara*, is also a Peruvian Indian term (in Hawaiian *kumara* has become ‘ula‘a). Whether it was brought by Indians on a raft, or as a prize taken home by early Polynesian explorers, we will never know. The raft theory, launched by Thor Heyerdahl’s *Kon Tiki* voyage, involves a one-way trip and may seem the most economical. But Indians were accustomed to sailing
within the comforting presence of a continent. Those on a raft blown out to sea would have struggled to get back to land, no doubt consuming any vegetable on board. Polynesians were open-ocean sailors, knowing only islands, and accustomed to conserving rations and protecting plants from seawater over long voyages.

South of Easter Island an exploring canoe might find winds upon which to reach eastward. Beyond Easter Island, winds and current begin a long curve toward the northeast that would carry a canoe to Peru. Off Peru, the current wheels to the northwest under the Southeast Tradewinds. With such prevailing winds, a swift canoe might sail to Peru and return to Polynesia in less time than a raft could sail one way.

Wherever Polynesians explored and established new settlements, they carried an ancient memory of an original homeland in the west. The name, Havaiki, may refer to Savai‘i in Sāmoa, or some place farther west. It was given to Havai‘i (later Ra‘iatea), and Hawai‘i. After death, many believed their spirits would leap from the westernmost point of their island and fly back to the ancient homeland of their ancestors.
TAHITIAN CONQUEST

Of the first Hawaiians, we know only that they were Polynesians, possibly from the Marquesas Islands two thousand miles away, and we know them only through archaeology. Their names and traditions are lost, obliterated by high status chiefs who arrived perhaps a thousand years later from the leeward Tahitian islands of Ra'iatea, Bora Bora and Huahine. With these new rulers the Hawaiian traditions begin. Histories are composed by conquerors.

Ra'iatea had become a powerful center of cultural change, and its major temple, Taputapuatea, a "Vatican" from which chiefs derived great mana and status. They adventured and conquered in all directions. On the Island of Tahiti they fought and subjugated people they called Manahune. In Hawaiian tradition, Menehune probably derives from the same term given to the original inhabitants of the Hawaiian Islands.

The term is disparaging, belittling, meaning a people of small status. But when Western writers heard stories of Menehune, they thought their informants were speaking of a people of small size. European tales of leprechauns and gnomes leaped to mind, imaginations took wing, and a new genre of "Hawaiian" folk-lore was born—no doubt abetted by Hawaiian informants as soon as they perceived the joke and revised their stories accordingly. Writers received tales of a magically strong little folk working in great numbers, building great voyaging canoes, huge temple platforms, long aqueducts and large fishponds—each project completed in a single night or left undone. There is, however, no authentic Hawaiian tradition of the Menehune as a race of physically small people.

On Kaua'i you may see solid evidence of an earlier people: the rockwork lining the "Menehune ditch"—an ancient aqueduct that once brought water from the Waimea river to irrigate dry lands for growing taro. The rocks were shaped and fitted together—a method of stonework requiring immense labor, and not typical of Hawaiian rockwork. At Nawiliwili the large Alekoko fishpond is said to have been built by Menehune.

A retreat by Menehune groups along the island chain would explain why the island of Kaua'i, as their last holdout, has the most stories about them. Tales of the Menehune as a people living in the mountains but with a taste for seafood suggest they had been driven inland from the shore. It is also said that the Menehune king at last gave it up and sailed off to the west with most of his people. They would have passed
1. Voyagers sailing from Western Polynesia, exploring to the west on the prevailing easterly winds, settled on islands in Southern Micronesia and Eastern Melanesia, now known as the Polynesian outliers. Samoan voyagers were ancestors of some Cook Island clans. From the 17th century into the 19th century, Tongans regularly visited Samoa, raided north through Tuvalu and into Micronesian Kiribati, and fought as mercenaries in Fiji.

2. About 1,000 years ago the leeward Tahitian islands (Ra’iatea, Bora Bora, and Huahine) became a center of cultural change and great mana from which adventurous high-status chiefs sailed to establish their rule in Tahiti and in the Hawaiian, Cook, Austral, and Tuamotu Islands. Some clans emigrated to New Zealand, which may have been re-discovered during this era. Hawaiian traditions begin with this era of conquest; those of earlier Polynesian inhabitants were not preserved.
Necker Island stone images may have been made by early settlers. Not Hawaiian in style, they resemble Marquesan stone carvings.


Collection of the Kauai Coconut Beach Hotel, Kauai

Necker and Nihoa islands, where carved stone images have been found which are Polynesian but not typically Hawaiian. But some apparently remained on Kaua‘i, where a census ordered by King Kaumuali‘i in the early 19th century recorded 65 persons as being of Menehune ancestry.

After voyaging was opened from the Tahitian leeward islands there arrived in Hawai‘i the high priest Pā‘ao. Here he determined that the chiefs, by intermarriage with lower classes, had lost the purity of lineage necessary to receive chiefly mana from the patron spirits. By his standards, none were qualified to rule. Back he sailed to his homeland, where he recruited Pili, a prince of the purest lineage. Returning to Hawai‘i, no doubt with a strong force, Pā‘ao installed Pili as king, and Pili founded the dynasty from which Kamehameha descended 28 generations later. Pā‘ao instituted new rites and built temples. At about the time William the Conqueror crossed the English Channel, Pā‘ao logged not less than 9,000 miles on his three voyages.

Breadfruit may not have reached Hawai‘i until this era. In Polynesia the tree has been under cultivation so long that it will not seed itself, but must be transplanted as a sprout from the root of a parent tree, and is often difficult to move successfully from one yard to the next. That it could be brought three thousand miles in an open canoe is evidence of the horticultural skills of ancient planters. A legend of this time credits Kaha‘i, a grandson of Mo‘ikeha, for bringing breadfruit from Taha‘a (then Upolu), a small island at the northern end of the Ra‘iatea lagoon in the leeward Tahitian islands.

Voyaging between Hawai‘i and the South Pacific appears to have ceased several centuries before European arrival. No explanation is found in the traditions, but several may be imagined. The appropriation and development of lands much larger than any they had known in the South Pacific demanded much attention, leaving little time for voyaging. Those who visited their southern homelands may have found that shifting alliances had made them less welcome; and, in the murky world of chiefly politics, there was always the danger that a chief who went on a long voyage might return to find his place usurped by another.
COMMONERS

The maka'ainana were planters, artisans, fishermen, hunters and gatherers, performers, healers, sailors—the working people. Their status and rewards varied according to their skill and productivity. All able bodied men would follow their chiefs to war.

Commoners provided their chiefs with foods, craftwork, and labor. Chiefs were obligated to reciprocate with good governance and security. Unlike European serfs, maka'ainana afflicted by a cruel chief could move to another district, and there are a few accounts of rebellion. In general, there was a mutual respect between chiefs and commoners without which neither could succeed. Both classes accepted their differences of station as natural rather than culturally invented, and there seems to have been little yearning among commoners for social
status higher than merited by their seniority within their extended families or earned by their own accomplishments.

The most frequent contacts between chiefs and commoners were the work planning conferences held daily by a lower chief, the konohiki (supervisor) of a particular land division, and the haku, leaders of guilds and spokesmen for extended families.

The 19th century historian S. M. Kamakau alluded to another point of contact when concluding biographies of ruling chiefs with the conventional remark, “he became an ancestor of chiefs and commoners.” An affair between a generous chief and a maka'ainana woman was usually welcomed, for it could bring chiefly patronage to her entire family, especially if a child was produced.

Men did all heavy work, as well as the cooking. Women did light domestic tasks, cared for infants and young children, and devoted much time to making kapa, plaiting matting and twisting light cordage for fishlines and nets. Women helped with the making of gourd containers, and the evaporation of salt from seawater. They harvested some wild plants and seaweed, caught shellfish in the shallows along the beaches and reefs and fished for shrimp and small fish in freshwater streams. Their agricultural work was limited to tending beds of sweet potatoes. Upon the death of a husband, his nearest male relative would undertake the care of his widow, cooking her food and keeping her home in repair.

Boys remained with their mothers until their sixth year, when, with ceremony, they were permitted to eat with men and have their first taste of meat.

Wherever possible, work was done by sociable groups. Children learned by observing and working with their elders. The more arduous the task, the greater the number who would assemble for it. Projects involving great labor were often turned into festive occasions.
The Painting: 

ADZE MAKER

The upper background of the painting depicts a man working the ancient quarry on the mountain Mauna Kea. The worker swings a large hammer stone between his legs against the edge of a basalt boulder core. If struck correctly, large flakes are produced of which some may be selected as adze blanks.

At upper left an adze (ko'i) is being shaped by a craftsman using a small hammer stone to remove flakes from both faces of a blank. This work was usually done at the quarry, after which the roughly shaped blanks were carried down the mountainside to the workplace of a master.

In the foreground, a master craftsman does the final flaking to produce the distinctively "shouldered" shape of the Eastern Polynesian adze. Each flake sets up further flaking by leaving what may be called a striking platform against which the next blow of the hammer stone may fall. As the size of the flakes becomes smaller, the overall shape of the adze becomes more refined.

After the final flaking, a craftsman (at left) grinds the adze against a wetted slab of fine-grained stone, using as grinding mediums pastes of various abrasives mixed with water, with more water added at intervals. An hour or two of grinding was required to produce flat faces that tapered to a sharp blade. Tools dulled by use were sharpened by further grinding.

The figure at right is lashing an adze to a haft carved from a section of a tree branch from which a thinner branch, the handle, has grown at an angle of approximately 70 degrees. The stone is set against a shock-absorbing cushion of bark cloth, and lashed up with braided sennit.
TOOLS

In a world without metal, all woodworking was done with tools of stone, shell, bone or the teeth of animals. The adze (ko’i) was the supreme implement, valued above all others.

The “shouldered” shape of the Eastern Polynesian adze is like no other in the world. No doubt it evolved because the shapes of adzes that proved most efficient to work with would be copied and refined. Efficient adzes expressed the mana of skilled adze makers, and were believed to accumulate mana through their use by expert craftsmen. While their owners slept, such tools might be “put to sleep” within shrines where it was believed they would be charged with spiritual mana. The deep respect for the adze was expressed in some Polynesian islands by fashioning special adzes as art objects for ceremonial rather than utilitarian purpose, with long blades superbly polished and mounted to ornate handles with decoratively intricate lashings.

Polynesian adzes were flaked from hard, dense basalt, and produced in many sizes to answer special needs. Chisels, knives, and drill bits were also fashioned from basalt flakes.

The adze is like an axe with the blade set at a right angle to the handle instead of parallel. The metal axe is so prevalent today that few
people know what an adze is; but the adze is the best tool for shaping wood, and adzes are used by Pacific Islanders today. metal blades having replaced those of stone. The axe cuts quicker, but it’s worthless for carving or canoe work; he who tries trimming a canoe log with it may find that one glancing blow can also trim off a leg.

The cutting edge of a stone tool necessarily has a bevel more obtuse than that of a metal blade, one that cuts less by slicing than by breaking the wood fibers under the force of a blow, leaving a subtly scalloped surface. Large adzes were used for rough work, the handles gripped in both hands with the thumbs lying along the handle. Smaller, lighter adzes were used for sculpting, held in one hand, often with the index finger extended along the handle to guide the stroke. Where sculptors use a large chisel or gouge today, requiring one hand to hold it and the other to swing a mallet, the workpiece must be secured by clamping to keep it from moving, and the carver must move around it or move the piece and re-clamp it. Such work can be done with a light adze using only one hand to make the stroke, leaving the other hand free to manipulate the workpiece. The carver does not change his position; his stroke remains constant and precise while the workpiece can be turned with the other hand. Only when woodwork became too fine for the smallest adze did Polynesians turn to chisels and scrapers.

Because stone edges dulled quickly, expert adzemen were assisted by helpers who removed dulled adze heads from their handles, sharpened their cutting edges on grinding stones, and re-lashed them.

Pounders, mortars, sling stones, stories used in bowling, and canoe anchors were shaped not by flaking but by “pecking,” a method in which a workpiece of softer stone is struck repeatedly with a hammer stone to break up and remove the surface.

Very fine cutting, such as required to fashion a fishhook from a piece of shell, might be done by repeatedly engraving and deepening the cut with a tool pointed with a sharpened flake of the hardest basalt, a shark tooth or a rat incisor tooth.
SPORTS AND GAMES

IT HAS BEEN SAID BY ROMANTICS WHO VIEW THE PEOPLE OF OLD as caring and sharing, motivated entirely by a spirit of aloha for each other, that competition was unknown—a notion far removed from the truth. By all accounts, competition was intense in politics, work, and in their arts and entertainments. Sports and games were fun, but spiced wherever possible with competitive interest. Their demise may be partly attributed to the influence of Christian missionaries, appalled at the fervor with which men gambled away their possessions on the outcomes. Nocturnal games of the kind played by groups of consenting adults also gave scandalized missionaries something to write home about.

But let’s begin with the innocent games of childhood. There was heti, complicated patterns contrived by looping string around the fingers. Spinning tops were made from nut shells—the winner’s top spun the longest. Balls of plaited lauhala were juggled to the timing of a song. Pala’ie was a ball and ring game; a ball, fixed with a cord to a stick with a loop at one end, was swung so it would strike the loop both from above and below in time to a song.

Foot racing (kūkini) involved sprinters and distance runners trained from childhood. Kites of various shapes were flown by all ages. Their fireworks was the spectacle of firebrands thrown from cliffs at night, thrilling audiences with the beauty of sparkling embers drifting in the
wind. Divers leaped from high cliffs into the sea.

Most sedentary was kōnane; similar to draughts or checkers, it was played on a flat stone or wooden board with pebbles of white coral and black lava, the places marked not by squares but by shallow pits in the board's surface. The objective was not to take all opposing pieces, but to be the one who could make the last move.

Bows and arrows were used to shoot rats. Cockfighting (hākā-moa) drew heavy betting; if the roosters were evenly matched it was a drawn battle, but if one ran off, its owner was the loser.

Ke'a pua was a Makahiki contest enjoyed by great numbers of men, women and children. Long darts, made from the dried flower stems and tassels of sugar cane, with tips weighted with dried earth, were hurled from a low mound to glance and ricochet along a smoothed course. Players wagered their darts on whose dart could slide the farthest.

'Ulu maika was a bowling game; stone disks, thrown to roll on edge, were aimed to pass between two stakes set at the end of a course. In pahe'e, spears or hardwood darts were thrown to slide for distance along a level course.

Surfing (he'e nalu) on surfboards or canoes was enjoyed by chiefs and commoners of both sexes. The wooden surfboards were shaped of koa or the much lighter wiliwili, or breadfruit, carefully smoothed and oiled. In competitions a buoy anchored in the shallows was the finish line. A Hawaiian invention, surfing is now universally popular.
The strongest paddlers were recruited for racing in kialoa, sharp and narrow canoes designed for speed. Both surfing and canoe races drew heavy betting among those on shore.

The element of gambling apparently led to canoe racing being shut down in the 19th century. Since its revival, however, it has flourished. Conducted and funded entirely by volunteer effort, it promotes values of teamwork and sportsmanship. During the racing season, young paddlers expend so much energy in their practice sessions that there is little left over for mischief. An international association includes clubs throughout the Pacific and Pacific Rim nations and is seeking acceptance as an Olympic event.

Boxing (mokomoko), wrestling (hākōkō), tug of war (hukihuki), spear throwing (ʻōʻō ʻihe), and fencing with staves (kākā lāʻau) were sports valued as training for war. There was also a martial art, lua, less a sport than a manner of hand-to-hand fighting that included sudden thrusting and leaping, bone-breaking, sparring with a spear—all with emphasis on self control and mental alertness.

Hōlua, a chiefly sport, involved launching a narrow sled with long wooden runners down a runway constructed of rockwork and paved with pebbles, over which a layer of some slippery thatching was laid. The longest known slide is Kaneaka in Keauhou, North Kona, Hawaiʻi. The lower half, which ended with the sledder flying into the sea, has been removed, but the slide was formerly a mile long. The remaining
upper half is fifty feet wide, in some places as much as eleven feet above the natural terrain, with only a few patches of pebble paving that have not been destroyed by cattle or shaken down among larger rocks by earthquakes.

There is no certain information on how the slide was thatched. An experiment by the writer proved that grass or leaves alone will not cushion sled runners from the lava pebbles underneath. The sled grinds to a sudden stop, while the rider continues forward, gathering cuts and bruises. However, it was found that a shingling of coarse *lauhala* mats covered with a scattering of grass will allow something close to terminal velocity. Old mats were abundant in Hawaiian houses as flooring underlayments and could be brought out and laid up quickly.

In the game of *noʻa*, two groups would sit facing each other, with several bundles of *kapa* between them. A contestant passed his hand under the entire length of the bundles, and the opposing side would guess under which bundle he had dropped a small stone. The first side to accumulate ten points won.

ʻUme might be termed a courtship game of the *makaʻainana*. Chanting a song, an umpire would walk among a nocturnal assembly of men and women. At a certain break in the song he would touch the nearest man with a wooden wand decorated with feathers. At the next break he would touch the nearest woman. The man and woman would go out into the night.