California Archaeological Survey and the University of California Museum of Anthropology have yielded the data contained in table 2.


5. RECENT DEVELOPMENTS IN THE STUDY OF NORTHWESTERN CALIFORNIA ARCHAEOLOGY

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Recent excavations in shell mounds on the coast of Northwestern California have produced abundant material remains of the distinctive type which we are already familiar with as characterizing the recent cultures of the area. The differences in stratigraphic position and geographical distribution of certain implement forms, together with observed vertical site stratigraphy, promises to yield in Northwestern California a local culture sequence which can be generally correlated with the later prehistoric culture horizon of Central California.

In the summer of 1949, a University of California field party excavated a large shell mound (Hum-118) at Patrick's Point State Park, 30 miles north of Eureka. Another University party in 1949 dug in the historic Yurok village site of Tsurai1 at Trinidad Bay (site Hum-169). The results of these excavations, taken with those of Loud2 and Stuart3 at site Hum-67 on Gunther Island in Humboldt Bay in 1913 and 1928 respectively, exhibited certain features of material culture similarity and other traits which we take to evidence local specializations.

Loud trenches the north portion of the Gunther Island shell mound and recovered 22 burials from this operation. On the basis of this sampling he proposed a sequence of early cremation and later primary inhumation.4 His cremations, 16 of the 22 remains, consisted of partially-burned skeletal material in each grave accompanied by burned and unburned artifacts. The remainder of the skeletal material had been buried without burning and there were few artifacts present. H. H. Stuart, an amateur archaeologist in Eureka, excavated, in 1928, the area adjacent to Loud's trench and recovered 390 burials. His notes on the first 100 burials show 94 to be "burns" (this is synonymous with Loud's term cremation) and 6 unburned. The average depth for "burns" is 29" and they range in depth from 10" to 58". Loud's cremations average 33" and range from 8" to 68" in depth. The unburned skeletal material from both excavations averaged 23" and 27" in depth and ranged from 12" to 36". Loud's and Stuart's figures do show that the burned skeletal material averaged a slightly lower depth than that of the unburned, but the horizontal distribution of both types of interment and range of depths of each prove that primary inhumation was contemporaneous with the burning pattern. Obviously, the burial complex of Gunther Island was centered about this latter pattern and, for reasons as yet undetermined, a few burials did not receive this treatment. Stuart's and Loud's observations show the burning pattern to consist of charcoal deposits 4' to 5' in diameter, and 5" to 10" in thickness.
When skeletal materials is present, it is usually resting on the charcoal, with part of the bone material consumed by the fire or at least scorched on the underside. The artifacts with these "burns" are, in many instances, fire-cracked, and obsidian blades have been found twisted and melted, evidencing the intense heat of the fire at the time of their deposit. In a few cases, unburned skeletal material is found lying on the charcoal. In this burning complex there is a strong suggestion of a trait found in the annual mourning ceremony of Central and Southern California. Kroeber's ethnographic account of the hill Maidu hints at a practice quite like that shown archaeologically at Gunther Island where, during the mourning ceremony observance, material offerings are burned on the cemetery site or near it in memory of the dead. The Wiyot burial pattern, then, may have received its stimulus, prehistorically, from this southern ceremony. This pre-interment grave pit burning was also a prominent burial trait in the Late Horizon of Central California.

A further suggestion of the validity of this hypothesis of diffusion from the south is to be seen in other elements which may have accompanied this mortuary trait northward. These consist of small biconical baked clay balls and tubular pottery pipes which are typical culture traits of the Late Central California horizon. Kroeber has also shown that certain elements of Wiyot mythology may be traced to a Central California source. The fired clay human figurines of Gunther Island are generally similar to those of the Middle Horizon of Central California, but also evidence a strong similarity to certain figurines from Shasta County.

The zoomorphic ground slate clubs, called "slave killers" by Loud, found at Gunther Island are represented at Patrick's Point site in the middle and lower levels, where two specimens (one fragment and one miniature) were recovered in 1948. The functional use of these objects is still unknown. Large and miniature obsidian ceremonial blades were abundant on Gunther Island. These blades are still used in the wealth display ceremonies of the northwestern Indians and their function and description was first detailed by Rust and Kroeber in 1905.

Before describing the harpoon types of Gunther Island, it will be necessary to discuss the Patrick's Point site (Hum-118), for it is in this site that the temporal sequence of harpoon types for the northern coast has been established.

The remainder of the material culture at Hum-67 on Gunther Island is typical of the north coast pattern evidenced in other sites excavated, i.e., in similarity of types and lack of change in the overall time period of occupation. These artifacts common to all sites include antler wedges, chipped points, blades, drills and scrapers, notched and grooved pebble net sinkers, curved stone adze handles, bell-shaped mauls, steatite vessels, grooved sandstone arrowsmoothers, olivella shell beads, bone headscratchers, needles, awls, flint flakers, and single piece curved bone fishhooks.

The Patrick's Point site is a pre-contact shell mound that is stratigraphically marked by layers of clam and mussel shell, rock and sand, resting upon a clay and rock base. About 80 per cent of the mound was excavated by a University field party in 1948. There were no house pits on the surface but house floors, marked by packed beach sand and fireplaces, were evident in the shell layers.
Six burials were located of which three were complete. These were fully extended, two lying prone and one supine, oriented respectively to the west and northeast. The remaining three were disturbed with only a few bones present. Burial offerings were lacking with the exception of a few olivella shell disc beads and two bone artifacts with two of the remains. Though an extensive search was conducted, the burial ground at Patrick's Point was not located. In regard to Yurok cemeteries, Kroeber has noted that they adjoin towns or often lay in their heart; large settlements sometimes had two or three graveyards.\textsuperscript{12}

Five miniature obsidian ceremonial blades were recovered ranging from 17" to 38" in depth. At the base of the mound, lying in the sandy subsoil 12 feet below the surface, were found two fragments of a large crudely worked diorite zoomorphic club. A miniature object of this type was found at a depth of 54", and a fragment of a large slate animal form club at a depth of 74".

The harpoon typology of Patrick's Point is classified into three general categories dependent on base form. In the lower levels of the site a spade-base form with a simple or slotted tip for a projectile point is the earliest type recognized. This ranges from 11 feet in depth to its final appearance at 6 feet. A second form, with truncated base and bilateral line guards, indicates a transitional type that was introduced at about the 6 foot level, was the principal harpoon type at 3 and 4 feet, and became of minimal importance in the uppermost levels. Contemporaneous with this middle or transitional type was one with a rounded-base and unilateral line guard. Stratigraphically, its first appearance is slightly later than the middle type and it continues on to the latest period of occupation.

The harpoon types of Gunther Island are, with minor aberrations, similar to those of Patrick's Point. Though minimal in quantity, each of the three types is represented at site Hum-67. Loud's excavation produced the early type,\textsuperscript{13} and Stuart found both transitional and late forms.\textsuperscript{14} Unfortunately, stratigraphic depth was not recorded so the temporal relationship of these types to each other is unknown.

The historic Yurok village at Trinidad named Tsurai (Hum-169) was first noted by the Hezeta expedition in 1775 and was continuously occupied to 1916.\textsuperscript{15} The southern, central, and western portions of the village were excavated by a University field party in 1949.

The vertical stratification of Tsurai exhibited metal objects, glass, and crockery in the uppermost levels. This period of occupation can be dated as beginning in 1850 for in that year great quantities of European and American made objects became accessible to the natives. After carefully studying the diagrams of stratigraphic profiles, the ratio of depths of the historic level to the prehistoric level was calculated. Using a large number of such ratios and assuming that the refuse layers accumulated at the same rate after 1850 as before that date, the site of Tsurai was calculated to have been first occupied about 1620 A.D. This date is tentatively offered, for there are many factors beyond the control of the researcher that may affect the rate of mound deposition over a period of time.
The artifact types extracted from the site deposit are similar to those from Patrick's Point, with the exception of the zoomorphic club which is missing at Trinidad. Though no ceremonial blades were located, Indian informants stated that these were to be found in the historic graves on the site. No excavations were conducted in the two cemetery areas located within the site's boundaries in conformity to the wishes of the Yurok natives still residing in the town of Trinidad. The historic burial pattern, known from local informants, was to place the body full extended, on the back, in a redwood-lined pit. No specific pattern of orientation was followed. The personal goods of the deceased were placed in or upon the grave.

The harpoon types of Tsurai are similar to those of the middle and late Patrick's Point forms, and their temporal sequence follows this order in the vertical stratification. Three different composite types (used for salmon spearing) found at Trinidad can be possibly assigned to early, middle, and late stages of development. I hesitate to place these in a time sequence for only 5 specimens of the three types were recovered. If the assignation is correct, they would correlate with Patrick's Point (Hum-118) and Gunther Island (Hum-67), where only the early Trinidad type is found.

In an attempt to establish a relative chronology for the prehistoric cultures that have been excavated to date on the northwestern coast of California, the writer has considered the following elements to be most essential. For Gunther Island (Hum-67) the presence of zoomorphic clubs ("slave killers") provides an important tie-in with the lower and middle levels of Patrick's Point. The three harpoon types of Hum-67, though evidencing minor aberrations, are also typical of Patrick's Point. The mortuary custom and clay artifacts, along with certain ethnographic evidence, suggest that the culture of this site had been marginal to the Central California climax though predominately evidencing the distinctive character of the Northwest Coast culture. Winship who entered Humboldt Bay in 1806, located on his chart the Indian villages seen at that time. No notation either in his journal or on his map was made of any occupation on Gunther Island. One end of the site was occupied in 1850 and then abandoned following the massacre of the Indians by Whites in 1860. This, then, suggests two occupation periods for Gunther Island, one of indefinite pre-1806, and re-occupation shortly before 1850. On the basis of harpoon types and the presence of zoomorphic clubs in the two sites, and in view of the pre-1850 non-occupation of Gunther Island (the post-1850 village site was not excavated), Hum-67 was probably occupied contemporaneously with the early and middle periods of Patrick's Point site.

Again using the harpoon typology for cross-cultural dating, the middle and late types of Trinidad would suggest the Tsurai culture to have been contemporaneous with the late middle and late Patrick's Point periods, but continuing on into the historic. If this were so, and assuming that the date offered for the beginning of the Trinidad site of 1620 is acceptable, by projection and based on relative deposit depths, it is calculated that the earliest period of cultural occupation of Patrick's Point may have begun at a maximal date of 1000 A.D. and a minimal date of 1400 A.D.

On the present evidence of material culture continuation without fundamental change through the centuries of occupation, it is almost undeniable that these prehistoric peoples of the Northwestern coast of California were the ancestors of the modern day Yurok and Wiyot Indians.
NOTES


