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CENTRAL CALIFORNIA ARCHAEOLOGY

PART TWO

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Baked clay objects, though common in later horizons in the Valley, are both extremely rare in the Early Horizon and extremely interesting. A unique form is a small pecan-shaped piece, longitudinally grooved, of which nine examples are known from Windmillier and Blossom Components. From the latter comes a ball, while perforated baked clay "discoidals" are known from both. Most interesting is a squared fragment and a whole piece with basketry impressions indicating the existence of close twined basketry.

From the material thus summarily discussed, it is apparent that aspects of life in the Windmillier Facies of Early Horizon other than ornamental and ceremonial are but weakly attested despite the fact that occupational sites have been excavated. The evidence of abundant and large projectile points leads to inference of hunting as a means of subsistence; although scarcity of animal bone cautions against unqualified reliance on this, the variety of identified species is fairly large. Fishing certainly supplemented the economy, as also, presumably, did seed gathering. A number of features, direct and inferential, argue against utilization of seeds and acorns in a manner comparable to later times:¹¹¹ scarcity of grinding implements; scarcity of fire-cracked stones in deposit; and virtual absence of the greasy organic charcoal in deposit such as characterizes later sites with good evidence of reliance on grease-rich acorns as a staple. Although many projectile points occur in grave association, none is embedded in the bone of the skeleton (a feature common in Middle Horizon), nor is there much alternative evidence that warfare played any significant role in the Windmillier Facies community relations with each other or with outsiders, except for the burials found without skulls, which may evidence head taking (by another people?). Utilization of human bone artifacts can equally well be assumed to be one aspect of the ceremonialism which, to judge from burials and their contents, dominated the culture with a rigor never quite equalled in later times. The quantities of quartz crystals, the variety of laboriously polished charmstones, the high percentage of burials favored with grave goods, and finally, the extreme adherence to a most uncommon burial posture requiring extra labor in pit digging, all combine to argue a fervor of attention focussed on supernatural aspects of death which must have permeated most of the aspects of community life. In this, the distinctive flavor of the culture appears to lie.

The interest of the community in certain materials for ornamental or ceremonial objects stimulated them to look afield. By expedition or by trade, they got seashell beads and ornaments from the coast, obsidian and amphibolite schist from the Coast Ranges, and quartz hornfels, limestone, and other materials probably from the Sierras. Their utilization of perforated beads and shell ornaments for applique, for which perforation was not only useless but apparently objectionable enough to disguise with asphaltum, strongly suggests trade with contemporaries living nearer the sea. To quote Heizer, "We can postulate a coastal population coeval with the Early period valley dwellers, since it is improbable that people would migrate to the seacoast, manufacture a few sea shell beads and return with no raw shell materials, sea-mammal bones, etc." ¹¹² This point will assume importance in discussion from the viewpoint of evidence for Early Horizon communities in coastal sites.

correspondence with the Early Horizon burial trait of smooth unworked pebbles is the occasional inclusion of differentially weathered stone "curios," chunks of fossil bone or a lump of tufa, which were perhaps preserved as mementos. Whistles with a single aperture placed toward one end, while not common, are found made sometimes of bird bones and several times of mammal bone.

It is clear that economic orientation of the Interior Province people approached the specific patterns known in Late archeological times and in the ethnographic present. Mortars are scarce and specialized for different environments. The characteristic pestle form (D1, from four sites) shows a chisel-like point and striated polish believed to be derived from use in a wooden mortar; it occurs in the overflow area of the Valley where suitable stone is rare. At the Sierra foothills side of the area is found a conical-tipped pestle (A1) and conoid bowl form of mortar (C1). Southward, but still near the hills, is another stone mortar, round bottomed and of stream-boulder origin like the others. Grinding stones, or metates, which were known in Early Horizon, occur in components of all parts of the Province. Bone basketry awls, rare or absent in Early Components, are definitely present in the Middle Horizon, distinguished from later styles by their frequently worked down bases. Here, too, are flakers of antler, a bone knife, and perforated bone needle. Bipointed bones occur which may be gorge hooks or compound hook barbs for fishing. Rectangular bone spatulae of several types, and ground sturgeon plates or tortoise plastron of identical shape, are regarded as mesh-gauges or (from their polish) as strigils or sweatscrapers. The spatulae occur fairly frequently, being noted in three of the sites here reviewed. Fishing is attested again by several forms of a unilaterally barbed implement with curved shank; these may serve as pieces of a compound hook or as half of a two piece fishspear.¹¹⁹ They are both fairly frequent and widespread; they occur for example at Miller B Component in the north and at Orwood Component beyond the southern edge of the province. Only in the northernmost component, however, have grooved stones interpretable as net sinkers appeared. The large size sinker (15 cm. maximum diameter) suggests a possible use as anchor for a raft or the like rather than attachment to a net. In general, bonework is well finished with a minimum of natural projections and surfaces retained. Partly worked specimens of the favored deer cannon bone are scattered throughout the deposit and not infrequently in burial association. River shells which would serve naturally as spoons are worked into better shape by grinding or removing the hinge; still different types occur in Late context. Steatite pebbles are used as polishing stones.

Projectile points and knives of the Middle Horizon show much closer affiliation with those of the Early Horizon than with the Late. Various materials, including chert and slate, are used in addition to obsidian which predominates. The specimens are large and heavy, weighing more than five grams for complete pieces. Non-stemmed forms are at least twice as numerous as stemmed forms and may be considered typical; bases are sometimes tapered or are occasionally indented in a crescent notch. Corner notching without tang is the typical mode of producing a stem. The face of large blades, which are not uncommon, shows a noteworthy technique in the extraordinarily skillful removal of long diagonal flakes, which produces a wavy "ribbon flaking" pattern unique to the Middle

Living sites throughout the area are mounds of midden accumulation comparable to those of Middle Horizon in content of bird and animal bone, fragmented stones, and river shells, ash or charcoal residues and greasy texture of the soil; but they differ notably in degree of compaction and mineralization. Extremely loose, soft dirt is the rule; destructible features such as charcoal flecks, ash lenses, pit lines, and housefloor traces are more distinctly defined in the soil. Depth of deposit has the surprising range of from about one foot (especially topping stratified sites) to more than twelve feet. Baked clay lumps and shaped balls are abundant in a variety of recurrent forms in components of Cosumnes Province, which lies mainly in the overflow area. Shaped objects of baked clay fade out after entering Colusa Province in the north along the Sacramento River; they are scarce beyond Windmiller Component on the Cosumnes River; and they are not found as far southwest as the Hotchkiss Component.

Linked traits give the entire area a certain degree of cultural unity which is rooted in the antecedent Middle Horizon culture. The following traits traceable to the Middle Horizon are especially well noted in the Hollister Facies. Burial and cremation exist side by side; burial is most often tightly flexed (though dorsally extended and semi-extended examples occur) and is on side, back, or face, favoring westerly orientation in somewhat more than half the cases. Artifacts are placed with both types of interment. Simpler shell or ornament shapes (A1, B1, C1a) are retained and radial incision still decorates their edges, as incising techniques decorate bone ornaments. Grave offerings are purposely broken and red ocher is found in interments. Paired bird bone whistles and quartz crystals are known; ceremonial interments of coyotes and inclusion of beaver teeth and unworked mandibles occur. Utilitarian objects of economic significance include basketry awls, baked clay objects (used in place of boiling stones), bipointed pins used as gorge hooks, chisel pointed pestles (type D1, D2) for use in wooden mortars, certain types of shell spoons, and large projectile points which may be knife blades or spear points. At Hollister Component and at Maltby Component beyond the southwestern border, earplugs of steatite link the horizons; the shallow stone pipe bowl insert is found at Hotchkiss Component in the southwest Delta; at Sandhill and Miller Components, in the north, dorsally extended and semi-extended burials carry over.

Many of the foregoing traits, however, are distinguished by new interpretation or are set in novel context. Cremation is more frequent than before, and in Hollister Facies (later, in Miller Facies also) burials are found with charring beneath the skeleton in which are preserved charred basketry, fibers, acorns, etc. This circumstance indicates sacrificial burning of offerings in the grave pit before interment of the body. Artifacts are found in virtually every cremation as well as with a high percentage of burials. Decoration of bone is focussed on tubular hair or ear ornaments of bird bone covered from end to end with repetitive geometric patterns in fine line incision. Utilitarian implements such as mortars and pestles are commonly "killed" instead of ornamental or ceremonial objects. Small ocher lumps occur much more frequently than beds of powdered ocher in the graves. The aperture in bird bone whistles is moved to the center from its earlier off-center position. Such variations as these to which carry-over traits are subjected serve to emphasize that the genetic continuity which binds the Late to the Middle

Horizon was molded in its course by new ideas from sources that introduced completely new traits.

There is no known intervening link for a few traits which occur both in Hollister Facies of Late and in Windmiller Facies of the Early Horizon. These include edge-perforated biotite ornaments, burned obsidian prisms used as tinklers and the technique of setting beads in asphaltum as applique on ornaments.

Certain traits appear for the first time as markers of the Phase 1 of Late Horizon and link Hollister and Sandhill Facies as approximately contemporaneous. They are spread through several aspects of community life, although as usual a shell bead type is particularly well defined. Olivella bead type 2a (small to medium rectangle, sharp edged, with a single central or edge perforation) is customarily linked in burials with type 1b (whole large Olivella with ground off spire), the latter being recurrent since Early Horizon times. For the first time appear tubular schist or steatite pipes sometimes flanged near the mouth or ending in an expanded mouthpiece. Small, side-notched, serrated obsidian projectile points of the type used with the historic bow and arrow are suddenly much more numerous than the heretofore typical large, non-stemmed points and blades.

Areal differentiation is brought to attention, however, by the appearance of traits in an earlier facies of one province than of another. Most of the flow of traits was northward from Cosummes Province. Traits of Hollister Facies, for example, which are absent from Sandhill Facies components but appear well marked in Miller Facies of Phase 2 include: fully flexed burial in dug grave pits; pre-interment burning in the grave pit; deep, angular serrations of obsidian points; incised bird bone tubes; single-piece, bilaterally barbed fish spears; banjo-shaped ornaments of Haliotis shell (type G, Gla, etc.); general elaboration in forms and decorative styles of abalone ornaments (notably use of precise triangular and trapezoid shapes); and Olivella bead type 3e (small, thick, cupped bead). In the reverse direction come relatively few traits: tubular and disc magnesite beads are found in Sandhill Facies (Miller B Component) as well as Miller Facies, but do not arrive in the Cosummes Province until Mosher Facies develops. The regularity with which the southern traits occur in Phase 2 Howells Point Component in the north, in contrast to their spasmodic appearance in associated sites of the Miller Facies, has led Heizer to suggest northward migration of a Delta group as a cause rather than simple spread of elements.¹²²

Although more extensive excavation in the Cosummes Province may be a factor in skewing the evidence, it seems evident that the Delta area which largely comprises that province was a focus of innovation in immediately prehistoric times. Artistic, or at least non-utilitarian, upwelling is apparent in the variety of Haliotis ornaments and the involutive growth of baked clay artifact types, which achieved many forms including effigies and tubular pipes by latest times, but without ever quite developing pottery forms.¹²³ Involution of a single theme is also shown by the manifold but sterile patterns incised on bird bone tubes.¹²⁴ Examples of a finely worked mortar with flat bottom, flaring sides, and a sharply bevelled rim appear in Hollister Facies. This and related shapes

with the same artistic touch continue in the subsequent Mosher Facies.

A list of traits present in both Hollister and Mosher Facies in the Cosumnes Province which failed to reach the north includes: large bone beads with constricted center; steatite ring; steatite pendant; "spindle whorl"; complete cremation; beds of red paint beneath burials; whole Haliotis shells in burials or used as covers over infant burials; use of shingled rows of rectangular (2a) Olivella beads on caps; tapering flat bottomed pestles; the flat bottomed mortars mentioned above, and "killing" of the two last named implements. Charred twined basketry, coiled basketry, string, netting, acorns, etc., are of course preserved by the pre-interment burning practice.

The subsequent phase of the Late Horizon is marked by the sudden introduction in both provinces of disc beads made of clam shell, accompanied by thick steatite disc beads of the same shape which are frequently found alternately spaced in strings with clam disc beads. Simultaneously, there appear tubular beads of steatite, Olivella bead type 3al (deeply curved perforated saucer with the shell lip incompletely removed), and decoration of Haliotis ornaments by punctations around the edge and by incised lines on the surface (decoration types c and d). Miller Facies is marked by use of a lozenge-shaped Haliotis ornament (type L). The following traits are restricted to Mosher Facies in the Cosumnes Province: curved obsidian blades with frequent angular dentation ("Stockton curves"), bird effigies of baked clay; a special type of wooden fish hook;¹²⁵ flat ovoid and tubular beads of Tivela shell and turquoise disc beads, both probably acquired in trade with the south; net sinkers of baked clay, and net sinkers of flat, notched pebbles. Certain traits uniquely noted from Hotchkiss A Component, situated near the southwest edge of the province near the coast range side of the Delta area, recur in a coastal context and may indicate special contacts between inhabitants of this component and the coast, since similar traits are not noted for inland sites equally near the coast (Orwood #2 A, Maltby, Simone). These Hotchkiss A Component traits are: unilaterally multi-barbed fish spears; flat-bottomed, cylindrical pestles; pestles with flanged, expanded, and cupped ends; large mortars inverted over burials; frequent incidence of flat bottomed, straight sided (type A) mortars; well-made charmstones expanded near one end and frequently displaying a small nodule at the large end; especially variable orientation of burials.

The archeological picture of these people, bow-users and basket-makers, prospering under an economy based on acorn and seed grinding and valley hunting, is practically identical with the picture of native life derived from ethnographic information. The physical type, brachycephalic, mesorrhine, medium short and light boned, is essentially that of the historic Central California type.¹²⁶ The historic period shows Late Horizon features side by side with European traits. Abundant quantities of clam disc beads (functioning as money according to ethnographic information), abundant bone and feather ornament, small notched arrow points, cremations, and carbonized textiles from funeral offerings occur together with such European intrusions as glass trade beads, steel-drilled magnesite beads, steel-incised Haliotis ornaments, arrow points of bottle glass, and deep shovel-dug graves. Ethnographic information and archeological findings do not always exactly correspond for this period, but it is nonetheless