

# Cultural History of the Fraser - Delta Region: An Outline

CHARLES E. BORDEN

Until recently, the known prehistory of the Fraser delta region did not extend back beyond the last millennium B.C. Important new investigations carried out by Miss Calvert at the St. Mungo Cannery site in the eastern part of the delta have now pushed the story back another 2,000 years to the middle of the third millennium B.C. (cf. this volume). Very likely, however, even this does not mark the beginning of human occupancy of the delta. Excavations by the University of British Columbia at several other sites have uncovered wave-worn pebble tools in the sand of raised beaches which may date to the terminal Pleistocene or early Holocene when isostatic rebound from the depression caused by the Cordilleran ice load was still continuing. It is possible, therefore, that the prehistory of the Fraser delta was comparable in duration to that of the Fraser Canyon region (Borden 1965; 1968 b). Unfortunately, the details of this prehistory will probably never be completely known because urban expansion, industrial development, farming and other human activities during the past century will have destroyed much of the evidence.

The present summary of prehistoric events in the delta region will be confined in the main to the last 3,000 years. Archaeological data about this time span were gathered during excavations at seven major sites (cf. Fig. 13): (1) Point Grey, (2) Locarno Beach, and (3) Marpole, all three within the city limits of Vancouver; (4) Old Musqueam and (5) Stselax Village, both on the Musqueam Indian Reserve at the mouth of the North Arm of the Fraser; (6) Whalen Farm, a site straddling the Canada-U.S.A. border on the Boundary Bay shore of Point Roberts Peninsula; and (7) Beach Grove at the base of the Point Roberts upland in the southwestern corner of the delta. All of these sites are located in the western part of the delta region, the first five on high ground along the northern margin of the delta and the last two on the southern fringe of the delta alluvium. Only minor archaeological manifes-

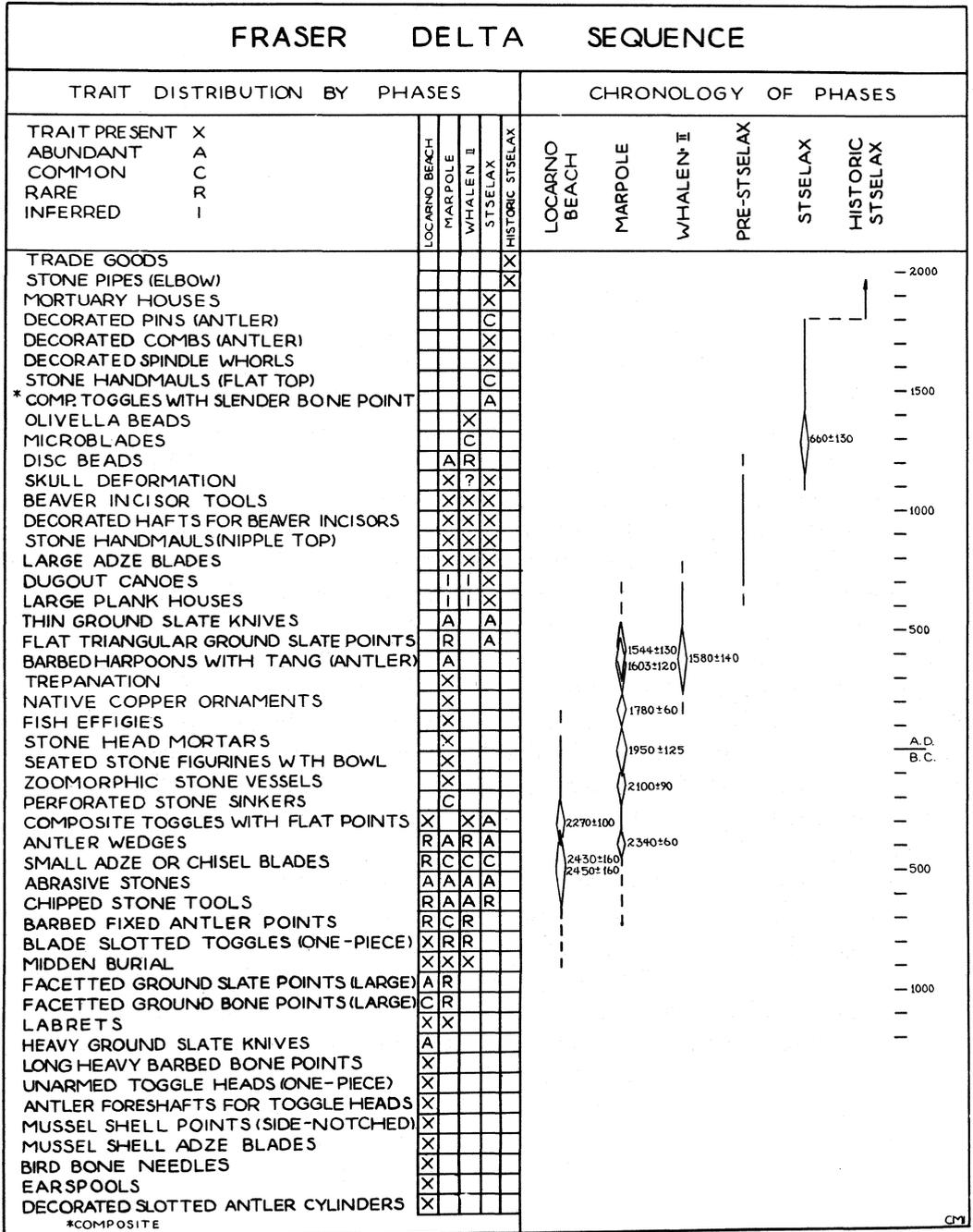


FIG. 29. Fraser Delta Sequence.

tations have been recorded on the flood plain of the delta proper. The Fraser is constantly building its delta westward at a rate of roughly 1,000 feet in one century. As a result, a site like Marpole, which 2,000 years ago faced saltwater, now is more than 3.5 miles from the river's mouth. Similarly, the upland area at the southern end of the Point Roberts Peninsula was an island until approximately 1,500 years ago.

The recovered data, supplemented by 15 radiocarbon dates, make it possible to divide the prehistory of the western part of the delta region into five phases whose names are derived from their respective type sites: Locarno Beach, Marpole, Whalen II, Pre-Stselax, and Stselax. Figure 29 shows the distribution of selected diagnostic traits in four fairly well defined phases and the accompanying chronological chart their approximate duration in time. The relative frequency of some elements is indicated where this differentiation seemed of significance and sufficient data were on hand to do so. A number of the artifacts listed in the table are illustrated in Figures 30 - 33. An examination of the trait distribution reveals that although a few elements are present in all phases, each phase has its distinctive features which sets it apart from the others.

#### LOCARNO BEACH PHASE *ca.* 800-200 B.C.

The Locarno Beach phase is known from two components, one being the type site on the north shore of Burrard Peninsula in the extreme northwest part of the delta region, and the other Whalen I, that is the lower or earlier horizon of the deposits at the Whalen Farm site in the southwestern part of the delta. Three radiocarbon dates show that this culture was in full operation around 500 B.C. Since the charcoal samples did not originate from the bottom of their respective deposits the beginnings of the phase must date back somewhat earlier.

Among the salient features of this culture is the reliance on toggling harpoons for fishing and sea mammal hunting, and a highly developed slate grinding industry for the manufacture of piercing and cutting implements. Three types of toggling harpoon heads were used. Since these particular types are not well known it is advisable to describe them in some detail:

Type A. *Small one-piece toggle heads.* Made from distal end of antler tine. Outline acute isosceles triangle, cross section oval, closed socket, opposed bilateral symmetric spurs, gouged line hole at right angles to spurs. *Not* armed with cutting blade.

- Type B. *One-piece toggle heads, slotted for cutting blade.* Made from distal end of antler tine. Larger and sturdier than Type A. Closed socket, short unilateral spur, deep open blade slot in same plane as spur. Cutting blade of bone, bevelled bifacially to sharp edge. No hole or groove for retrieving line. Line must have been fastened beneath the lashing which held cutting blade in place, coming away on side opposite spur to permit toggling action.
- Type C. *Composite (two-piece) toggle heads slotted for blade.* Made from two sections of antler cortex. These devices consist of two similar halves or "valves" which, when lashed together, form in effect a toggling harpoon head with basal socket, opposite lateral spurs and blade slot. Well defined lashing groove. Retrieving line fastened to head by same lashing that holds the two valves together, coming away on one side midway between the spreading spurs of the valves.

Toggle heads were used with fixed foreshafts of antler or sea mammal bone. Only fragmentary specimens are on hand from the type site, but a number of entire foreshafts were found at Whalen Farm. Foreshafts vary considerably in size. Some evidently were intended for substantially larger toggle heads than have been recovered.

By far the most important industry of the Locarno Beach phase is slate grinding. Most projectile heads are ground slate types in a great variety of small and large forms, usually hexagonal in cross section. The larger specimens may have been lance heads or dagger blades. Ground slate knives are very numerous. Semilunar or rectangular in outline, the majority are heavy implements with a thick back (sometimes 10 mm. or more), tapering from here to a straight or curving cutting edge.

Compared with the importance of slate grinding, the chipped stone industry was of minor significance. A few well made leaf-shaped and stemmed points are present as well as some rather heavy percussion flaked scrapers of basalt.

Projectile heads of bone were sometimes ground like slate points with well defined facets. Very long heavy bone points with serrated edge or small barbs were also employed. The atlatl was used to propel darts and harpoons. An atlatl hook made of the distal end of an antler tine is carved realistically in the form of a human figure wearing a cone-shaped (basketry?) hat. The jutting chin of the figure served as the hook that engaged the depression at the butt of the projectile shaft (Borden 1969 b).

The tough shell of the giant mussel (*Mytilus californianus*) was ground into a variety of artifacts, even into blades for chisels and adzes. Adze blades were also ground of bone, cherty slate and nephrite. Adzes, however are few in number and rather small with narrow bit, suitable for fashioning bone, antler and wooden artifacts. Antler wedges are rare and of small to medium size. Cobbles and pebbles were used as hammerstones.

Eyed needles ranging considerably in size were made of mammal and bird bone. Ornaments include perforated graphite and tooth pendants, earspools, and labrets. The human figure on the atlatl hook mentioned above is shown wearing a medial labret.

Although the people of the Locarno Beach phase did not neglect land game, toggling harpoons and faunal remains indicate that sea mammals, including seal, sea lion, and porpoise were frequently hunted. Fish remains are also abundant. The main midden fill, however, like that of nearly all delta sites investigated, consists of the discarded shells of mussels, cockles, and clams, indicating the importance of marine molluscs in the diet of these coast dwellers.

We know, as yet, nothing about the habitations of the Locarno Beach phase nor of the watercraft that must have been in use. However, it is difficult to envisage large-scale woodworking, such as produced the large plank houses and dugouts of later periods, with the type of tools that have been recovered to date. Perhaps these groups used habitations and boats different from those of later times. Burial practices, on the other hand, resemble those of later phases. The dead were buried, sometimes with a few grave additions, on the inland slope of the midden mound.

Elements diagnostic of the Locarno Beach phase have not been found in sites east of the Fraser delta. Moreover, the two known sites of the phase are relatively small and located at the northern and southern extremes of the delta region. Perhaps the people of this phase had their main centres on various islands in the Strait of Georgia and visited the delta sites only seasonally. Other contemporary centres as well as antecedent stages of this early maritime culture may yet be discovered farther north on the coast.

#### MARPOLE PHASE *ca.* 400 B.C. - A.D. 450

On the surface and in the top layer of the Locarno Beach site were found artifacts that differ from types characteristic of the Locarno Beach phase. They are elements typical of another stage in the cultural develop-

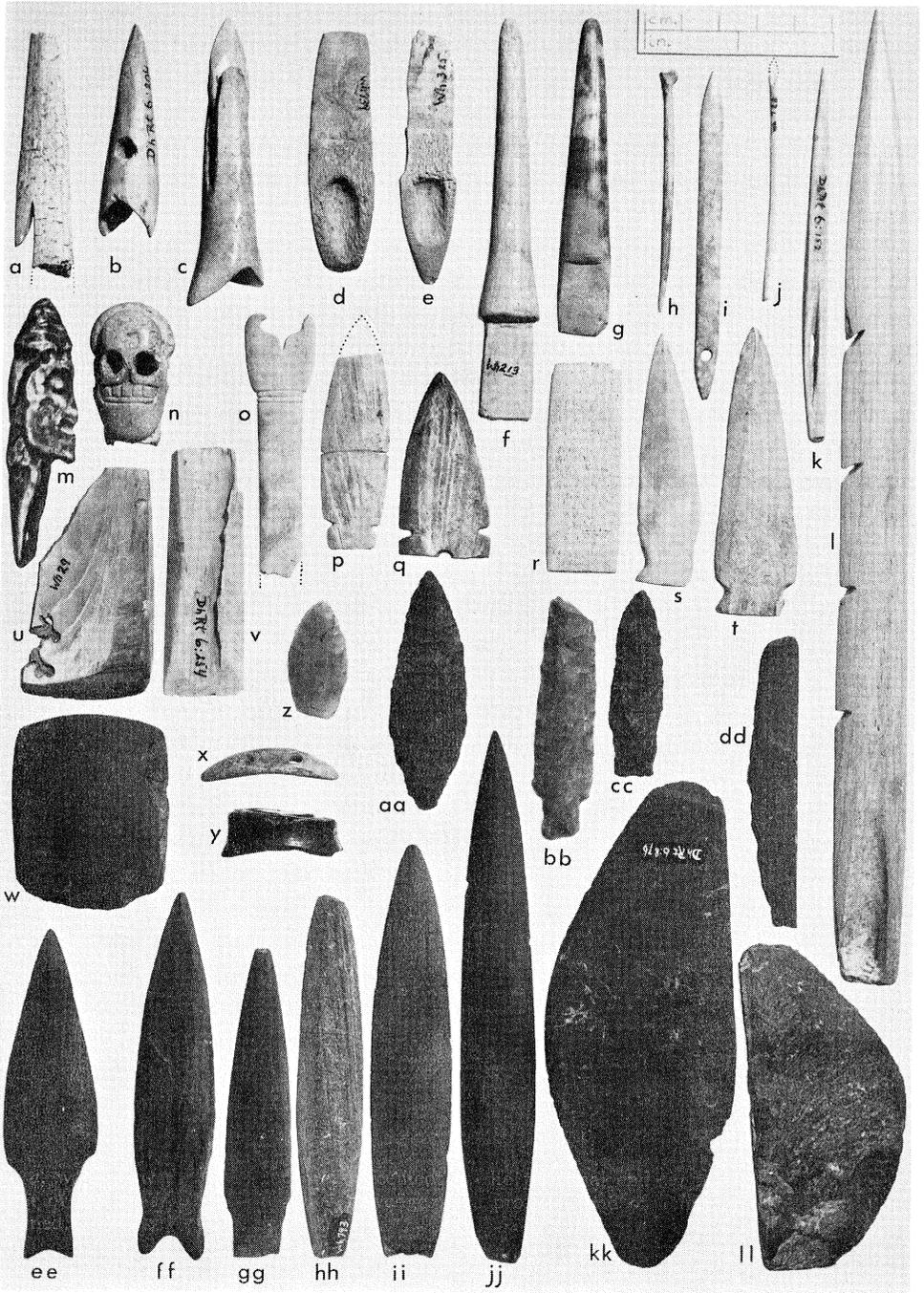


FIGURE 30

ment of the Fraser delta region: the Marpole phase. This phase is known from excavations at Marpole, Old Musqueam, Point Grey and Beach Grove (cf. Fig. 13). Surface finds from at least three other sites in the delta suggest that they too represent components of the same phase. As may be seen from the chronological chart, the initial manifestations of the Marpole phase date to a time when the Locarno Beach culture was still in operation in the delta. Evidently the two coexisted for a period in close proximity and contacts between the two groups must have been common. However, even before the Marpole culture came into full flower toward the end of the last millennium B.C., Locarno Beach groups had vanished from the delta region.

While certain important aspects of later coastal culture are anticipated in the Locarno Beach phase, in the Marpole phase the typical Northwest Coast culture patterns of more recent times are already well blocked out:

Maritime orientation.

Highly developed woodworking.

Large villages with commodious houses along the shore.

Impressive achievements in the plastic arts.

Evidence hinting at wealth emphasis and stratified society.

To a considerable extent the economy of the Locarno Beach and Marpole phases is similar: the primary orientation of both is toward the

#### FIGURE 30

##### Fraser Delta Sequence

##### Diagnostic Artifacts of Locarno Beach Phase

*a*, Barbed fixed projectile point; mammal bone. *b*, Toggling harpoon head, self armed, transverse line hole, basal socket, symmetric opposite spurs; antler tine tip; *c*, Toggling harpoon head, slotted for cutting point of bone, basal socket, asymmetric opposite spurs; antler tine tip. *d, e*, Ventral views of valves for composite toggling harpoon heads. Valves are scarfed anteriorly so as to form slot for cutting point when lashed to opposite valve; depression on posterior portion of valves form basal socket when paired; antler. *f, g*, Foreshafts for toggling harpoon heads; antler. *h*, Bird bone pin or awl. *i*, Flat needle with drilled eye; mammal bone. *j*, Tubular needle with eye cut laterally into tube; bird bone. *k*, Needle with incised eye; mammal bone. *l*, Barbed fixed projectile point; mammal bone. *m*, Anthropomorphic atlatl hook; note conical (basketry?) hat, depression for medial labret, and chin of figure carved so as to form hook; antler tine tip. *n*, Effigy of human skull; distal end of deer metapodial bone. *o*, Bone knife, butt end carved in form of stylized whale tail; mammal bone. *p, q*, Projectile points or harpoon cutting blades; *Mytilus californianus* shell. *r*, Net gauge; sea mammal bone. *s, t*, Faceted bone projectile points; mammal bone. *u-w*, Adze blades; *u, Mytilus californianus* shell, *v*, mammal bone, *w*, cherty slate. *x*, Bone flange of composite labret. *y*, Elliptical labret, lateral view; cannel coal. *z, aa-cc*, Chipped projectile points; *z*, chalcedony; *aa, cc*, basalt; *bb*, chert. *dd*, Ground slate knife, end blade. *ee-jj*, Ground slate projectile heads. *kk, ll*, Semilunar ground slate knives.



sea. To be sure, several sites of the Marpole phase are now completely landlocked, but this is so only because of the gradual westward accretion of the delta since their abandonment. At the time of their occupation, they all fronted the salt water of the Strait of Georgia. Although food resources of the land were extensively utilized (deer and wapiti remains are common), the main quest was directed toward exploiting the bounties of the sea. Salmon, the basic staple, and other species of fish are supplemented by molluscs, water fowl, and sea mammals.

Important differences from the Locarno Beach phase, however, are apparent in the gear employed. Whereas in the Locarno Beach phase sole reliance for taking sea mammals and large fish was on toggling harpoons, in the Marpole phase almost exclusive use was made of barbed harpoon heads. Fashioned of wapiti antler, they occur in a considerable variety of types and in a wide range of size, suggesting specialized use for different species of marine game. The dominant form of harpoon point is the unilaterally barbed head with conical tang and laterally projecting line guards. Very numerous in the Marpole phase, moreover, and represented by many different types, are fixed barbed points of antler. These may have tipped fish spears, darts and possibly arrows.

In the brief space available it is impossible to convey an adequate notion of the diversity of hunting and fishing gear and auxiliary equipment employed in this phase. The chipped stone industry was relatively more important than in the Locarno Beach phase, especially for projectile points and broad leaf-shaped knives of basalt. However, large numbers of knives for butchering fish were ground of slate. Interestingly, these slate knives are very similar to those already present by 3,000 B.C. in the Eayem phase of the Fraser Canyon sequence (Borden 1968*a*). By contrast with the thick and heavy knives of the Locarno Beach phase, the Eayem and Marpole knives are thin (2-3 mm.), of even thickness

---

FIGURE 31  
Fraser Delta Sequence  
Diagnostic Artifacts of Marpole Phase

*a*, Antler wedge. *b, c*, Needles; *b*, drilled eye; *c*, incised eye; mammal bone. *d, e*, Bird bone pins or awls. *f*, Dentalium shell. *g*, Fish effigy; siltstone. *h*, Anthropomorphic pendant; antler. *i*, Miniature pestle (?) carved in shape of bird preening breast feathers; antler. *j, k*, Barbed harpoons with conical tang and lateral line guards; antler. *l, m*, Barbed fixed projectile points; antler. *n*, Steatite bead. *o*, Crescent of native copper (nose ornament?). *p*, T-shaped labret, silicified serpentine (?). *q*, Disc beads, clay shale. *r*, Beaver incisor tool. *s-x, z*, Chipped projectile points, basalt. *y*, Ground slate knife. *aa*, Stone hand maul with nipple top. *bb*, Seated figurine embracing bowl-like container; steatite. *cc*, Perforated sinker; vesicular lava. *dd-ff*, Adze blades; nephrite. *gg*, Carving tool with narrow chisel edge; nephrite.

throughout, and polished over the entire face. Outlines range from semilunar to rectangular. Early explorers on the Northwest Coast were impressed by the large, seaworthy dugout canoes and the huge plank houses of the coast Indians. The full complement of heavy-duty tools which made possible the large-scale woodworking industry of recent times is present on the southern coast for the first time in the Marpole phase. This basic tool kit includes:

Large splitting wedges of antler and wood. (Wooden wedges were recovered from the water-logged basal levels of the Beach Grove site).

Pestle shaped hand-mauls of tough fine-grained rock.

Adzes armed with finely ground and polished blades of nephrite. (Only on the *northern* Northwest Coast was this basic triad of tools augmented by large grooved adzes and grooved mauls.)

From the presence of such tools and the remains of porpoise and other sea mammals in Marpole phase deposits we may reasonably infer the use of dugouts in fishing and sea mammal hunting as well as for transport and travel. The former existence of large rectangular houses at the Beach Grove site was suggested by a series of oblong depressions. Unfortunately, it was not possible to explore these adequately. However, excavations at the type site revealed a series of large widely spaced post-holes capable of accommodating massive house posts. These postholes as well as extensive spreads of ash and other features associated with habitation floors indicate that Marpole phase groups lived in spacious houses, very likely comparable to the large plank houses of more recent times.

Among the most impressive remains of the Marpole phase are sculptures in antler and stone. If wood were nonperishable we would no doubt also find carvings in this medium. Pertinent in this connection is the fact that wapiti antler was chopped, hacked, grooved, split, carved and finished with essentially the same tools and techniques that had to be used on wood. The nature of antler put a limit on the size of the objects that could be fashioned from this material, but the mastery of dealing with this medium, acquired in the manufacture of wedges, harpoons, barbed points and other devices, was also put to skilful and imaginative use in the creation of exquisite realistic and semiabstract carvings and engravings of birds, frogs, fish, sea-monsters and human figures. Soft stones, such as steatite and siltstone, were treated in much the same way. Of special interest here are fish effigies and small seated human figurines holding a bowl-like container. Beaver incisors, very small chisels of

nephrite and splinters of crystalline quartz served to carve and incise fine detail. Characteristic of the Marpole phase, moreover, are numerous stone vessels, some perhaps mortars, of lava, granite and other rock. Many are plain, some are embellished with simple geometric designs, and again others are zoomorphic or anthropomorphic. Pecking, abrading and incising were the main techniques employed in the creation of such utensils.

An abundance and great diversity of beads and pendants of many different materials add luster to the Marpole phase. Gorgets and labrets are occasionally encountered and even ornaments of native copper. Many of the materials used in ornaments and other manufactures are obviously imports. Indications are that the people of the Marpole phase were active traders. A cache of over 20,000 disc beads was discovered near the western limits of the Marpole settlement. Since each individual bead represents a considerable investment of effort, skill and time, such a cache must be regarded as a significant concentration of wealth. In what manner was such surplus wealth accumulated? Were the beads a medium of exchange in trading, or were they intended to be displayed and distributed during potlatch-like festivals?

The dead were buried on the inland slope of the village midden. While most burials are rather simple affairs, a few are lavishly furnished with ornaments and other grave goods. Artificial deformation of the skull is fairly common, but it is of interest that not all skulls have been treated in this manner. It is uncertain, however, whether such differences in the treatment of the dead and in skull deformation should be taken as indicating differences in social status. Perhaps future work will produce firm evidence indicating that wealth emphasis and ranked society have considerable time depth on the Northwest Coast.

The Marpole phase of the Fraser delta region appears to represent a climax of long cultural development. Basic affinities of the Marpole culture with both the Eayem phase (*ca.* 3,500 - 1,100 B.C.) in the Fraser Canyon and with the early component at the St. Mungo Cannery site (which is contemporary with the Eayem phase) in the eastern part of the delta suggest that this was essentially a local cultural development. However, many of the cultural features that lend diversity and glamour to the Marpole culture are not yet present in either the Eayem phase or in the early assemblage at St. Mungo. Obviously, strong external cultural stimuli from diverse directions played an important role in generating the cultural efflorescence of the Marpole phase with its many features that are generally regarded as characteristic of classic Northwest Coast

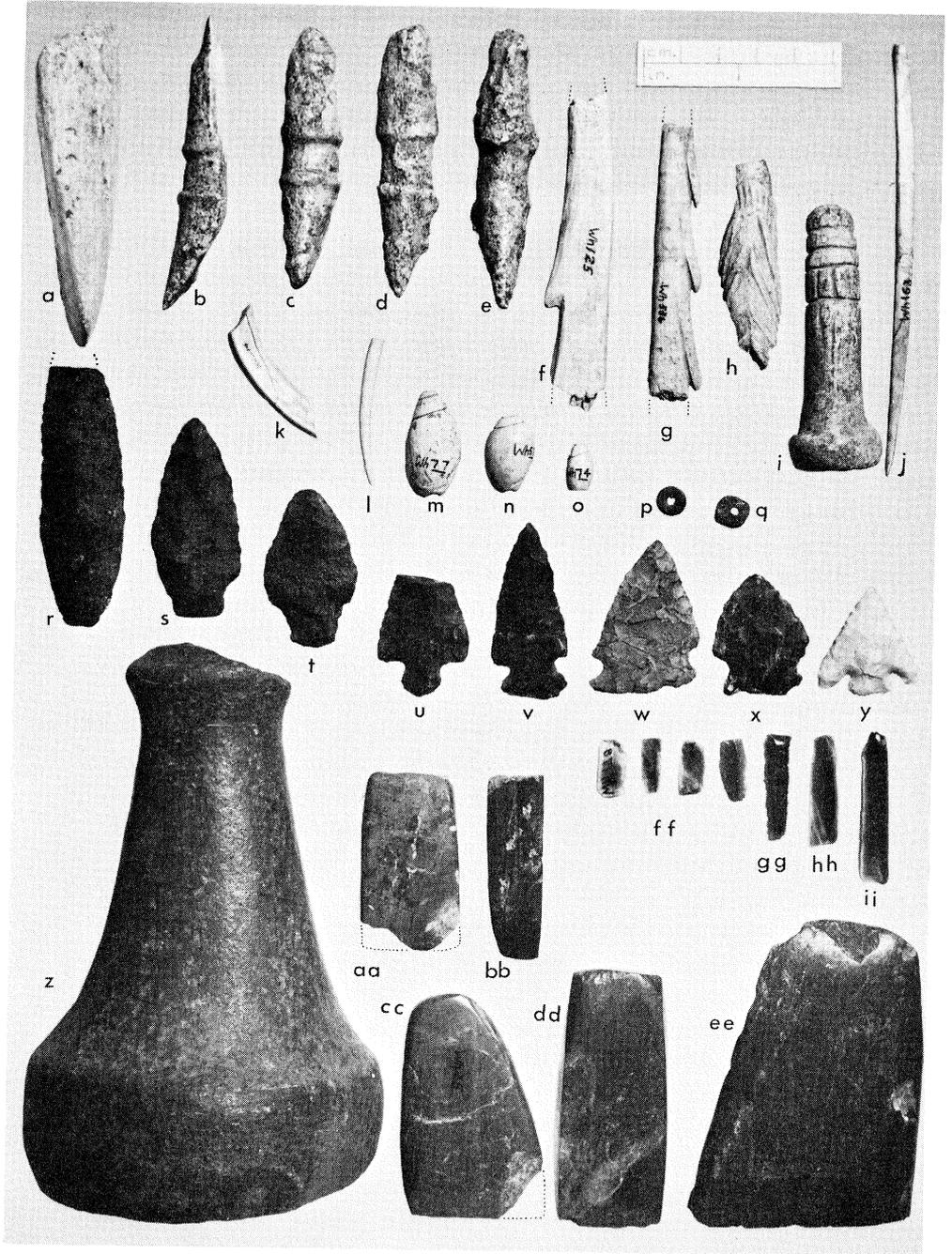


FIGURE 32

culture of more northerly coastal peoples in recent times. A cultural intensity and complexity was attained in the Marpole phase which on the southern part of the coast was neither maintained nor reached again in later periods.

#### WHALEN II PHASE *ca.* A.D. 350 - 800

Towards the end of the Marpole phase, there are hints of historic events which were to be of great consequence for the future development of the delta and probably of other parts of the lower mainland. Among such indications is the appearance in late deposits at Beach Grove and Marpole of traits which are new to the Fraser delta. Our main source of information concerning these new developments is the upper cultural horizon at the Whalen Farm site.

C-14 analysis of charcoal from well above the bottom of the Whalen II deposit gave a date of A.D. 396. The beginnings of the phase are therefore probably somewhat earlier. As shown on the chronological chart, (Fig. 29) two C-14 dates on samples from late Marpole phase deposits at Beach Grove fall well within the time of the new phase, suggesting the persistence of the Marpole culture in some parts of the delta even after the appearance of Whalen II groups in the region.

Among the most prominent aspects of the Whalen II assemblage are first of all negative traits, that is, the absence of certain complexes and traditions, such as ground slate artifacts, stone bowls and stone carving which were well established earlier at the mouth of the Fraser. On the other hand, a series of elements hitherto unknown in the delta suddenly appear. Among these are microblades, *Olivella* beads, and new types of chipped projectile points, particularly side-notched and corner-notched arrow heads with expanding stem. The appearance of somewhat similar points and other new traits in the Fraser Canyon several centuries earlier,

---

#### FIGURE 32

##### Fraser Delta Sequence

##### Diagnostic Artifacts of Whalen II Phase

*a*, Antler wedge. *b-e*, Valves of slotted composite toggling harpoon heads with well-defined lashing grooves; *b*, lateral; *c-e*, dorsal views; antler. *f, g*, Barbed fixed projectile points; antler. *h*, Bone object fragment, carved in low relief. *i*, Miniature pestle-like artifact; siltstone. *j*, Bird bone awl. *k*, Beaver incisor tool. *l*, Dentalium shell. *m-o*, *Olivella* beads; *Olivella biplicata*. *p, q*, Disc beads; *p*, clay shale; *q*, cannel coal. *r-y*, Chipped projectile points. *z*, Stone hand maul with nipple (?) top. *aa-ee*, Adze blades; nephrite. *ff-ii*, Microblades; obsidian; *ff*, bladelets truncated by snapping off proximal and distal ends; *gg*, retouched along both edges; *ii*, unmodified bladelets.

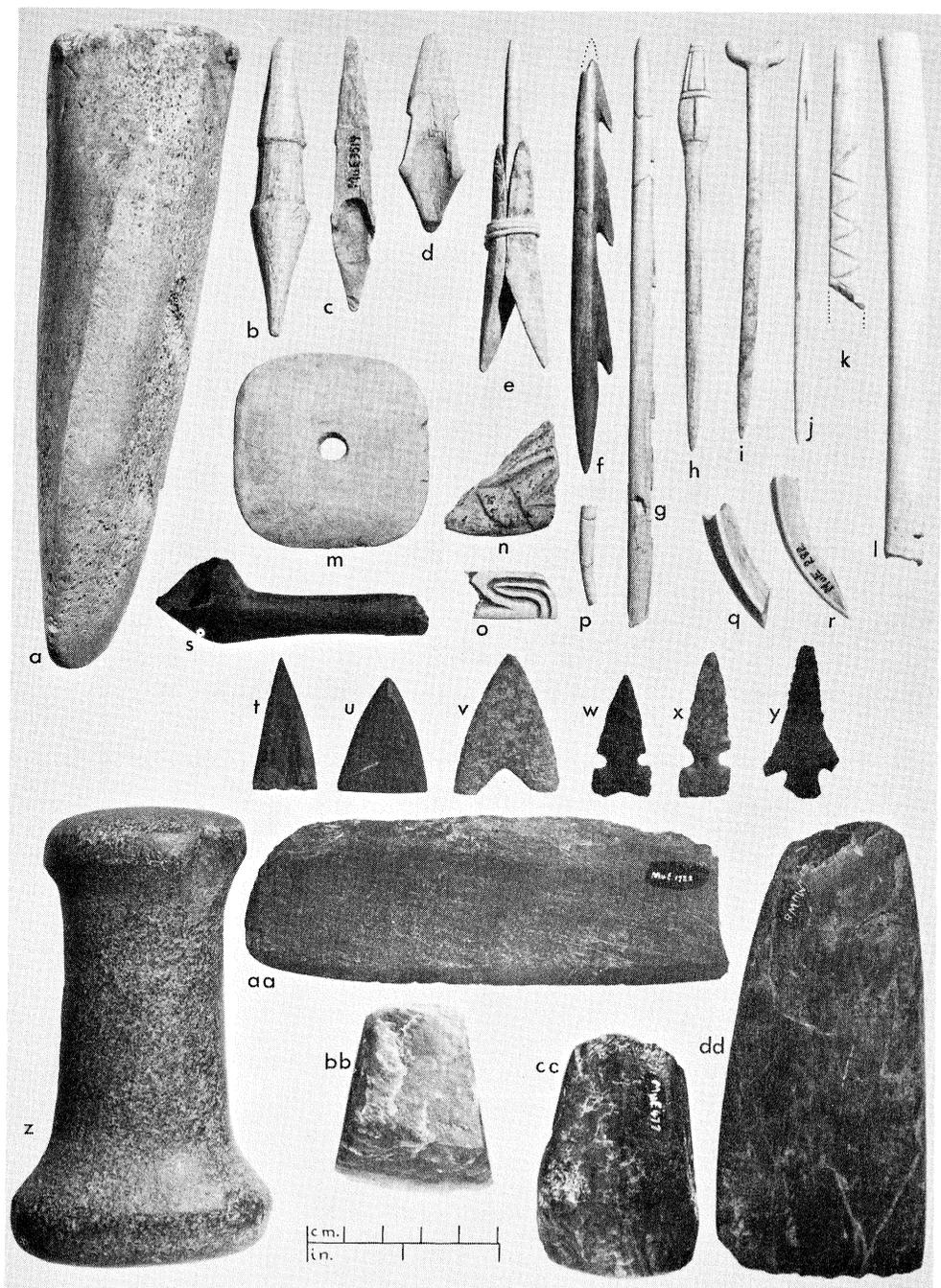


FIGURE 33

terminated the Baldwin phase in that part of the valley. Perhaps these sudden breaks in cultural development are somehow linked with the movement of new ethnic groups into the lower Fraser region.

Interestingly, the break with the past was not complete. In the Whalen II assemblage one may discern the beginning of a fusion of elements and complexes that were present in either the Locarno Beach phase or the Marpole phase, but which these two earlier cultures did not share. We recall that large-scale woodworking, so characteristic of the Marpole phase, seems not to have been practised yet during the Locarno Beach phase. On the other hand, sea-mammal hunting with *composite* toggling harpoons, a feature of the Locarno Beach phase, is not found in the Marpole culture. It is significant that these two disparate complexes are integrated in the culture of the Whalen II phase. This synthesis was to persist into later periods. Heavy duty woodworking tools and the presence of large postholes suggest that the Whalen II people lived in spacious plankhouses, and we may reasonably assume that they had dugout canoes capable of navigating the waters of Georgia Strait.

Evidence that Whalen II groups had master carvers among them is provided by the fragment of a bone object, skilfully carved in low relief, and by a handsomely sculptured human figure on the haft of a beaver tooth carving tool (Duff 1956 b). Ornaments are rare. The *Olivella* beads from Whalen II are the only examples of this type of ornament from the Fraser delta region. It is worthy of mention that the glass-clear obsidian used in the manufacture of some of the Whalen II microblades is an import from a locality in Oregon some 400 miles away.

Among the most striking contrasts between Whalen II and the Marpole and Locarno Beach phases is the complete absence of ground slate

FIGURE 33

## Fraser Delta Sequence

## Diagnostic Artifacts of Stselax Phase

*a*, Antler wedge. *b-d*, Valves of slotted composite toggling harpoon heads; *b*, dorsal view; *c, d*, ventral views; antler. *e*, Composite toggling harpoon head; antler. Paired valves form socket at anterior end for slender bone point. *f*, Barbed fixed projectile point; mammal bone. *g*, Slender fixed projectile point with "microblade-like insets" carved along one side; mammal bone. *h, i*, Blanket pins; antler. *j*, Needle with incised eye; mammal bone. *k*, Bone object fragment with geometric ornamentation. *l*, Drinking tube, unilaterally perforated for suspension; bird bone. *m*, Small spindle whorl; antler. *n*, Rim fragment of large decorated spindle whorl; epiphysis of whale vertebra. *o*, Bone object fragment with curvilinear decoration. *p*, Dentalium shell. *q, r*, Beaver incisor tools. *s*, Elbow pipe; steatite; proto-historic. *t-v*, Ground slate cutting points for slotted composite toggling harpoon heads. *w-y*, Chipped projectile points; basalt. *z*, Stone hand maul with flat top. *aa*, Ground slate knife. *bb-dd*, Adze blades; nephrite.

artifacts in the Whalen II assemblage. Though these people expertly employed abrasive techniques on adze blades and in other manufactures they persisted in using chipped projectiles and knives. But the ground slate industry must have been firmly entrenched among other groups of this region for among the later Coast Salish of the Strait of Georgia the grinding of slate for knives, projectiles, harpoon cutting blades, etc. had gained nearly complete ascendancy over chipping.

#### PRE-STSELAX PHASE

Unfortunately, we have as yet no reliable data for the centuries immediately following the Whalen II phase, that is the time from about A.D. 800-1,250. But surface finds from a site, probably dating to this period, and the cultural assemblage of the last major stage in the culture history of the Fraser delta suggest that this intervening period was one of continuing synthesis. The amalgamation of old and new elements eventually led to the final prehistoric culture phase of the delta region: the Stselax phase. For the time being, I am proposing the provisional term "Pre-Stselax" to denote the postulated developmental stage which intervened between Whalen II and the final phase.

#### STSELAX PHASE *ca.* A.D. 1,250 - 1,808

Virtually all our information concerning this last phase comes from excavations at Stselax Village, a Coast Salish settlement on the Musqueam Indian Reserve, just west and north of the mouth of the Fraser River's North Arm. The site is still inhabited today. Analysis of charcoal from near the bottom of the village deposits gave a C-14 date of  $660 \pm 130$  B.P., suggesting that the settlement had its beginning about A.D. 1,250. Although no systematic excavations have been made yet at other recent village sites in the delta it is evident from surface collections that they would yield assemblages similar to that recovered at Stselax.

Persisting in the Stselax phase are the two old Fraser delta traditions which had first merged in Whalen II: (a) sea mammal hunting and fishing with composite toggling harpoons and (b) large scale wood-working. Added to these two complexes is now that other ancient delta tradition: the slate grinding industry.

The slotted composite toggling harpoon heads with well defined lashing groove, which were first encountered in the Locarno Beach phase are now armed with triangular ground slate cutting blades. Valves of this

type of harpoon head and triangular slate points are numerous at Stselax. In addition, a new variant of composite toggle head occurs, which may have been introduced during the Pre-Stselax phase. Generally smaller than the preceding, this new type consists of two valves without lashing grooves. The anterior portion of each valve is channeled on the ventral side so that when the two valves are fitted together a deep socket of small diameter results, into which a slender bone point is inserted. According to ethnographic evidence, this new type was used primarily for taking salmon, whereas the other usually larger and sturdier composite toggle head served to harpoon sea mammals and very large fish, such as sturgeon.

Rectangular ground slate knives, used in butchering fish, resemble Marpole phase specimens of similar shape. They are thin, of even thickness and usually ground over the entire surface. The practice of stone flaking has declined to minor significance. Only a few side-notched and corner-notched points are present. Completely gone are microblades. The only hint of their former presence may be seen in vestigial blade-forms *carved* along the side of slender bone points.

Large-scale woodworking continued to flourish in the Stselax phase, and it was still practised with that same complement of basic tools already attested for the Marpole phase. These relatively simple implements enabled the Salish to ready the materials for the construction of large rectangular houses, often several hundred feet in length by sixty feet deep (front to back) and from twelve to fifteen feet high. The Coast Salish houses were of the shed type, that is, they had a single-pitch roof, the front, which faced the water, being somewhat higher than the rear. Another important product of the woodworking industry were dugout canoes. These seaworthy craft provided efficient transport which enabled the inhabitants of the village to maintain contacts with distant groups in the Strait of Georgia and farther up the river.

No examples of stone carving turned up in the excavations. Striking, moreover is the paucity of personal ornaments in the Stselax assemblage. Lacking are not only *Olivella* beads, that had made a brief appearance in the delta during the Whalen II period, but virtually all the other types of beads, pendants and decorations which had added lustre to previous phases. There are, however, certain traits which have not been attested for earlier periods. Thus, ethnographic data on spinning and weaving of mountain goat and dog wool are supplemented by archaeological evidence from Stselax. Horn cores of mountain goats, microscopic spores of a rare alpine moss in house floor deposits (the spores probably carried

in on the fleeces of mountain goats), and decoratively carved spindle whorls of whale-bone testify that these textile arts were practised centuries ago. Fairly common, moreover, are gracefully formed and embellished pins of wapiti antler which probably served for pinning together woven woollen blankets worn over the shoulders.

Finally, we may note a marked change in burial practices. While in all the preceding periods inhumation was the rule, the inhabitants of Stselax and of other Coast Salish settlements commonly disposed of their dead by wrapping them in mats or blankets and placing them in mortuary houses a short distance from the village. The general absence of burials in the Stselax deposits suggests that mortuary houses were in use throughout most of the occupancy of this site.

Coast Salish culture during the Stselax phase appears to have been remarkably stable. No obvious changes are discernible archaeologically until the advent of historic times. The first white explorer to visit Stselax was Simon Fraser, who inspected the settlement on July 2, 1808, at the end of his perilous journey down the river which now bears his name. It was not until some decades later that white impact began to effect profound changes in aboriginal culture. Archaeologically, the historic period is confined to barely more than the topmost one foot of the occupational deposit, which in places attains a depth of more than eleven feet. The full historic period is ushered in by the appearance of faceted and spherical trade beads of blue glass, copper foil, clay pipes, gun flints, iron files, and later by a host of other articles of Caucasian origin which increasingly replaced the artifacts of traditional Indian manufacture.

#### ACKNOWLEDGEMENTS

The projects were carried out with financial support from the Provincial Government of British Columbia; the University of British Columbia Committee on Research; the Agnes Anderson Fund (University of Washington); Dr. H. R. MacMillan (Vancouver Foundation); and the Leon and Thea Koerner Foundation. Members of the Archaeological Society of British Columbia co-operated as volunteers in the excavation of the Old Musqueam site. Age determination of radiocarbon samples were made possible through the generous co-operation of Dr. K. J. McCallum, University of Saskatchewan; the Archaeology Division of the National Museum of Man, Ottawa; and the Archaeological Sites Advisory Board, Province of British Columbia.