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# ANIMAL CEREMONIALISM IN CENTRAL CALIFORNIA IN THE LIGHT OF ARCHAEOLOGY

By ROBERT F. HEIZER and GORDON W. HEWES1

CALIFORNIAN ethnological literature is replete with descriptions of ceremonial observances and treatments accorded various animals, living and dead. Notwithstanding the fact that special attitudes have apparently been developed by all peoples toward their local faunas, it appears that in California this phenomenon has been emphasized and specialized into what certain ethnographers have called "cults." This general aspect of Californian ethnography has been recognized by numerous investigators. Certain recently excavated archaeological sites in Central California have revealed evidence of ritual post-mortem treatment of animals. It is the purpose of this paper to determine whether and to what extent these may be interpreted through the application of ethnographic data.

Californian culture has long been pointed out as a unique example of cultural conservatism. Historical reconstructions, using ethnographic data as a point of departure, have heretofore been limited to the extent that they had little archaeological evidence of physical and cultural types with which they might effect a correlation. This simple, uniform culture, assumed to have persisted in essentially the same form from earliest times to the present day, was the background against which the ethnographic culture was projected. The archaeology of the last few years, however, has been able to establish definitely a succession of physical and cultural types in Central California.<sup>3</sup> Early Sacramento, so far the oldest culture discernible in the central valley, occurs in highly compacted calcareous midden sites now almost submerged in the alluvium of this overflow region. Most striking in this horizon are burials fully extended, face down, heads oriented invariably to the west; the skulls are dolichocephalic, and the bones are permineralized. Cremation is absent. Certain types of shell beads, bone and stone objects, are distinctive; the slab metate seems to be the characteristic grinding implement. In less calcareous and less compacted middens, and more widely distributed, the Transitional culture presents features linking it with the

<sup>&</sup>lt;sup>1</sup> The authors are indebed to the following for information: J. B. Lillard, Franklin Fenenga and E. B. Niehaus of Sacramento, and to Dr Ann Gayton for unpublished Yokuts notes.

<sup>&</sup>lt;sup>2</sup> See especially: Merriam, 1908; Gifford, 1916, 1926; Barrett, 1917; Kroeber, 1925; Gayton, 1930.

<sup>&</sup>lt;sup>3</sup> Heizer and Fenenga, 1939. In this paper will be found a full description of the three cultural horizons. See also, Lillard and Purves, 1937; Heizer, 1939; Kroeber, 1936, 1938; Lilliard, Heizer, and Fenenga, 1939.

Early as well as with the Late; its individuality is apparent, nevertheless, in a number of unique elements. Late culture sites are loose, black, ashy middens with definite village remains. Cremation and burial were practiced, the latter in the tightly flexed position; the bones are not mineralized; physically, the skulls are strongly brachycephalic, the same as those of the living Indians from the area. The artifacts in general are those which were in use among the Indians at the time of first white contact and include stone mortars and pestles as the chief grinding tools. The uppermost layers of many Late sites contain trade beads, iron nails, chinaware, and other articles of white manufacture. Many Late sites, moreover, were known as villages within the memory of living native informants.

#### ARCHAEOLOGICAL EVIDENCE

In this section, cases of what seem to have been special post-mortem treatments accorded certain animals are described. Although habitation site deposits generally contain the bones of animals, only instances in which articulated skeletons occur, buried commonly in cemetery areas, or in which particular parts of animal skeletons are associated with human burials, seem to merit consideration.

BEAR; Ursus americanus californiensis,<sup>5</sup> three occurrences. Particular information on two bear skeletons from sites S.16 and S.100 is lacking. Mr E. B. Niehaus of Sacramento has advised us of these, and states that they were complete and not associated with artifacts. They were found in deposits classifiable as belonging to the Late culture horizon.

The third occurrence, at site C.138 (two miles east of Oakley, Contra Costa Co.) was found at a depth of 37 inches in Late culture deposits. It lay at the west edge of a cemetery area. The skeleton was fully articulated, complete except for the absence of most of the claws and the caudal vertebrae. The only broken bones were those of the right side of the face, which had been crushed, presumably by an intentional blow rather than by the weight of the earth above the skeleton, which would have, in all probability, fractured such bones as the scapulae as well. The skeleton (see Pl. 1a) lay on its right side, legs flexed, skull to northeast, tail to southwest. Placed

<sup>&</sup>lt;sup>4</sup> Site numbers refer to those on survey maps on file in the University of California Museum of Anthropology. A prefix letter "C" refers to the Delta Survey of Schenck and Dawson and subsequent U. C. workers, "S" to the Sacramento Junior College Survey.

<sup>&</sup>lt;sup>5</sup> Identified as the skeleton of an adult female California Black Bear, *Ursus americanus californiensis*, by Dr E. R. Hall, Curator of Mammals, University of California Museum of Vertebrate Zoology. See Grinnell, Dixon and Linsdale, 1937, for a description and distribution of this species.

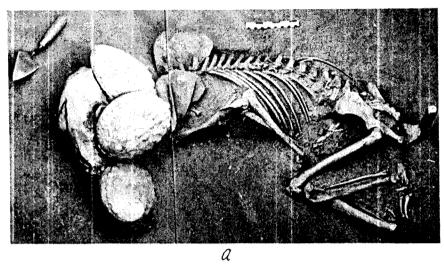


PLATE I.

- a. Bear burial, site C.138.b. Badger burial, site S.60.

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directly above the skull and neck were five whole abalone shells (Haliotis rufescens), all lying convex side uppermost except the smallest one which lay beneath one of the larger shells. Rectangular shell beads of Olivella biplicata, shingled in pairs, and numbering about 100, lay in five strips at two-inch intervals on the thorax and abdomen, parallel to the ribs. These appeared to have been attached to the exterior surface of a fabric, rather than strung as beads. There were no other associations with this interment, either with artifacts or human burials. The skeleton was removed, and later reconstructed in the position in which it had been uncovered, with the abalone shells, beads, etc., in place, the whole being set in a wooden case now in the University of California Museum of Anthropology.

Schenck and Dawson<sup>6</sup> mention the finding of 24 bear claws with burials in sites C.6 and C.19, Late horizon. The Stockton and Lodi areas have yielded large numbers of obsidian curves,<sup>7</sup> practically all occurring as burial objects, in sites C.6, C.80, C.82, C.83, C.86, C.91, C.120 and S.29. As will be brought out later, these were probably imitation bear claws worn in the Central Miwok grizzly bear dance.

COYOTE; Canis latrans, thirteen occurrences from five sites. From site S.16 (7 miles northwest of Sacramento on the east bank of the Sacramento River) in the Late horizon have been reported five interments, of which one was complete, two with the hindquarters missing. Two are reported by amateurs and are described as having been "covered with banjo-shaped abalone pendants." The complete skeleton occurred at a depth of 54 inches from the surface and was interred with an older animal which lacked the hindquarters; both lay on the left side, backs to the east, skulls to the south. The pair were completely surrounded by a layer of sand and gravel. apparently purposely introduced into the grave at the time of burial. This practice is not recorded for any other Lower Sacramento Valley interments, either human or animal. At a depth of 24 inches from the surface in the same site (S.16) there occurred an articulated skeleton lacking the pelvis and hind legs. In this grave were fifty clam shell (Saxidomus nuttalli) disc beads and some unworked fragments of clam shell. From the Transitional phase at site S.99 (7 miles east of Sacramento on the north bank of the American River) a pit at a depth of 50 inches from the surface contained the complete articulated skeleton of one coyote, the dissociated mandibles

<sup>6 1929:</sup> p. 352, pl. 79d.

<sup>&</sup>lt;sup>7</sup> Ibid., p. 372, pl. 95.

<sup>8</sup> Specimens discovered by Sacramento Junior College, and identified by S. B. Benson, Assistant Curator of Mammals, University of California Museum of Vertebrate Zoölogy.

Type shown by Holmes, 1902: pl. 25.

of three others, an elk bone, and a quartz crystal. Inserted transversally between the maxillae of the complete skeleton were two bone pencil-like shafts worked at both ends, 20 cm in length. A fifth coyote burial is reported as having been found in site S.99, although we lack specific information concerning it. Site C.66 (4 miles due south of Franklin on the north bank of the Mokelumne River) also of Transitional period, yielded a coyote skeleton with hindquarters missing, and no associated artifacts, at a depth of 8 inches from the surface. From site S.32 (on the north bank of the American at its confluence with the Sacramento River) is recorded a complete skeleton of a covote associated with clam shell disc beads and in Late period deposits. From site S.13 (on the south bank of the Sacramento River opposite the confluence of the Feather River in Fremont Bend) was found another complete coyote skeleton associated with a large, diagonallynotched spearpoint and a "charmstone." The culture level was Late. Site S.66 yielded three coyote skeletons, completely articulated. The first, a large adult, lay on an area of charcoal particles, in the proximity of human burials. A fragmentary obsidian spear point lay in association with the second skeleton, which had no burned area beneath. With the third was found a bone awl. These burials lay at depths of six, twelve and twentyfour inches, respectively. The cultural affiliation was Late.

BADGER; Taxidea taxus neglecta. Two occurrences have been noted in site S.60 (one mile northeast of Hood on the east bank of the Sacramento River). The cultural affiliation is Transitional. The first, found at a depth of 26 inches, was complete except for the skull. The second (Pl. 1b) was found at a depth of 55 inches, and lay within a few inches of a flexed human burial of the Transitional period. The animal skeleton was complete and lay in a crouching position on the belly with the fore and hind legs flexed underneath. The body was oriented north. There were no artifacts associated with either of the badgers. There was no evidence of a burrow, nor were the bones of the nearby human burials disturbed. This was specifically noted, for it occurred to us that the animal might have accidentally died in its burrow.

From site C.141, Transitional period, were recovered three incomplete badger skeletons. They were buried separately, each at a depth of 18 inches, and consisted of only the forequarters (skull and thorax) of the animal.

Beaver; Castor canadensis. No complete skeletons of this animal have been found in archaeological sites. Unworked halves of beaver mandibles are fairly common associations with Early and Transitional period human interments. Site C.107, Early horizon, yielded two dissociated specimens lying within the cemetery area. Around the mandibles were a large number

of rectangular Olivella biplicata shell beads, and small spire-lopped Olivella baetica beads. The burial of an adolescent in site C.68, Early period, contained two dissimilar halves of beaver mandibles, both unworked. Another Early period burial from site C.56 was associated with half of a beaver mandible. From Transitional culture sites S.60, C.66, and C.141, have been noted numerous instances of the presence of unworked mandibles in graves. Site C.138, Late horizon, revealed one occurrence in a burial.

ANTELOPE; Antiloca pra americana. From site S.100 (north of Woodland in Yolo County) came a complete skeleton associated with two bone basketry awls and clam shell disc beads. The burial occurred in a cemetery area of the Late horizon.

CERVIDAE; (Deer or tule elk). Site C.138 revealed, at a depth of 18 inches in Late period deposits, the complete skeletons of seven foetal deer or elk. The heads of all lay together, oriented south. There was no association with a cemetery group, nor were there any artifacts found with the immature skeletons. A complete deer skeleton from Site S.16, Late period, associated with three plummet-shaped "charmstones" with two grooves around the proximal end, has been described to us by Mr E. B. Niehaus of Sacramento.

BIRDS; (Eagles, hawks, condor). The bones of raptorial birds have been found in associations suggesting ceremonial interment in sites C.142, C.107, C.56, C.68 (Early period); S.60, C.66, C.142, C.141 (Transitional period); C.138 (Late period); and further afield, from a site in the Elk Hills, northwest of Buena Vista Lake in Kern County, at the southern end of the Central Valley. While none of the finds in the valley area are of complete skeletons, legs, claws, skulls and/or mandibles occur together frequently as burial objects, suggesting that the whole skins of birds had been interred. Ethnographically, local emphasis was upon the raptors (eagles, hawks,

<sup>10</sup> Gifford and Schenck, 1926: p. 64, pl. 13.

<sup>&</sup>lt;sup>11</sup> Mr George Carter, Dept. of Geography of the University of California, while conducting excavations in a coastal shellmound at Point Sal, Santa Barbara County, found in a grave of the Late Mainland Santa Barbara period, the complete, articulated skeleton of a golden eagle. Since this paper was submitted there have been found associated with an adult human burial of the Transitional Period in site C.10 (on the lower Cosumnes River south of site C.107) the bones of two raptorial birds. The first, Cathartes aura (turkey vulture), was represented only by the bones of the wings; the second, Haliaeëtus leucocephalus (bald eagle), was complete except for the skull. The turkey vulture bones may possibly be the remains of birdskin regalia which had the wings attached; the eagle skeleton represents the actual interment of a decapitated bird, and is thus the only instance of this sort on record for the lower Sacramento Valley region. We are indebted to Mr Howard Kermickel of the Museum of Vertebrate Zoology, University of California, for identification of the bones.

condors), 12 although the region was the habitat of other large birds, such as the heron, In the Sacramento area, unworked birdbones as burial objects were recovered from sites belonging to the three cultural horizons, Early, Transitional and Late. J. B. Lillard and F. Fenenga report from the recently excavated Early Culture site (C.56) that one burial had, under the chin, two bird skulls. The mandibles, however, were lacking. Both these specimens have been identified as Falco peregrinus. There was no evidence of preparation of the bird skulls. The position of the skulls near the head of the human skeleton, the lack of preparation (e.g., asphaltum adhering as in the Buena Vista Lake specimen described below) of the bird skulls, the mandibles missing, etc., agrees with the site C.107 occurrence. The Buena Vista Lake occurrence was a skull of a bald eagle, Haliaeëtus leucocephalus, "with a circular abalone pendant fixed over one orbit by means of asphaltum." From the same site a human skull was found with rectangular pendants similarly placed over each orbit.<sup>13</sup> Numerous small effigies or figurines of birds made of baked clay are found chiefly in site C.6, Late horizon.14 Their use is unknown.

TURTLE. At a depth of 56 inches from the surface in site S.60, Transitional level, was found the complete skeleton and shell of a turtle lying on its plastron. It did not lie in a cemetery area, nor were there artifacts associated with it.

In summary of the preceding, we have described the following animal interments in the Central California area: bears—3; coyotes—10; badgers—5; antelope—1; cervidae—8 (of which 7 were foetal and in one group); birds—numerous parts of skeletons; turtle—1.

#### THE RELEVANT ETHNOGRAPHICAL DATA

The ethnographical information on the ceremonial treatment, particularly on the post-mortem disposition, of animals will be discussed here in reference to our archaeological data. The order of presentation follows that of the foregoing section.

BEAR. Grinnell, Dixon and Linsdale<sup>15</sup> have mapped the California distribution of the two subspecies of *Ursus americanus*. Neither of these sub-

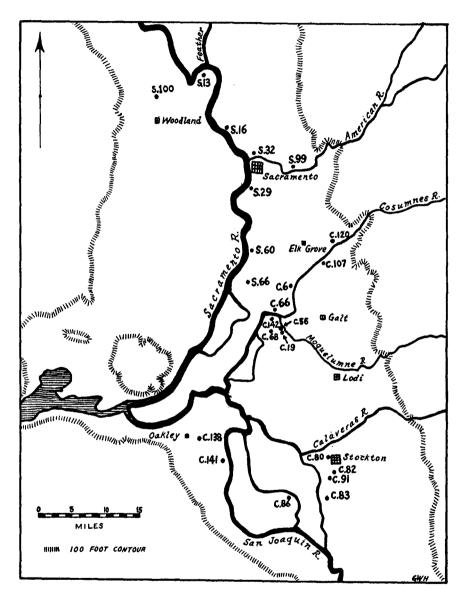
<sup>&</sup>lt;sup>12</sup> Identified as *Halieëtus leucocephalus*, *Falco peregrinus*, *Gymnogyps californianus*, by Hildegarde Howard, Los Angeles Museum. Letter dated Nov. 2, 1937. See Gifford, 1926: p. 394.

<sup>&</sup>lt;sup>13</sup> Gifford and Schenck, 1926: p. 64, pl. 13. Cf. Kroeber, 1925: p. 395, pl. 81 for a picture of the human skull.

<sup>&</sup>lt;sup>14</sup> Schenck and Dawson, 1929: pp. 359, 365, pl. 86. Heizer, 1937: pp. 39, 42, fig. 3.

<sup>&</sup>lt;sup>15</sup> 1937: p. 95, fig. 24, vol. 1.

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MAP. 1. Location of sites in the Sacramento-San Joaquin delta region.

species was found on the valley floor, nor in the foothills of the Coast range immediately to the west of the sites where their remains have been recovered archaeologically. Ursus americanus altifrontalis has a distribution in the Coast ranges north of San Francisco Bay, Ursus americanus californiensis being restricted to the Sierra Nevada range and its western foothills. Of the three bear burials reported, only one has been zoologically identified, this belonging to the subspecies californiensis and from site C.138 located in the Delta region (see map 1). We have called attention to these zoögeographical facts in order to demonstrate that the bear interred in site C.138 must have been brought purposely from the Sierra foothills in the east, across the valley floor and the numerous rivers or sloughs intervening. It is hardly likely that a full grown bear which had been killed in the foothills of the Sierras would have been carried this not inconsiderable distance merely for the purpose of burial in a cemetery. Judging from the articulation of the bones, this specimen could hardly have been brought there for the purpose of being eaten, 16 or at most could have been butchered only superficially. We are dealing presumably with an instance in which a live animal, captured as a cub in the foothills, was transported across the valley floor to the site C.138 village, kept there in captivity, and upon reaching maturity and becoming dangerous, was killed by a heavy blow on the side of the head. Since site C.138 is located within the ethnographic boundary of the Yokuts, it is to them that we have looked for, and have found, information which seems to explain the interment. As a result of a discussion with Dr Ann Gayton, she has kindly abstracted from her unpublished notes on the Yokuts the data which we reproduce here:17

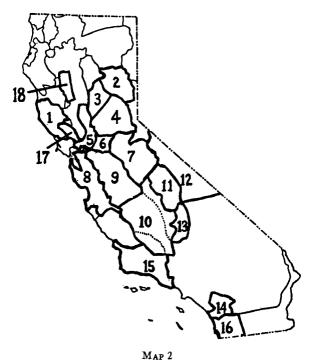
Bear cubs were kept as pets and released, i.e., taken into the mountains, when they became too rough. The only actual instance of which I know was of a Bear man (a member of a lineage group having the bear as its "totem" animal) who had one, but informants said anyone could keep one that wanted to. This held for any kind of pet and totem affiliation. Cubs were occasionally taken westward by mountain people, the animal being sold from tribe to tribe. Perhaps such cubs, as they grew up too far from their home to be easily taken back and released, were dispatched with a club, as was the carcass . . . found. The usual method of hunting and killing bears was with bow and arrow, this done by an ambushed group of men. Clubbing of any sort was not known to my informants.

<sup>&</sup>lt;sup>16</sup> Indeed, bear meat, along with the flesh of certain other animals, was generally avoided as food in Central California. See Kroeber, 1925; Gayton, 1930: p. 367; Beals, 1933: p. 346, (referring to totemic animals associated with lineages).

<sup>&</sup>lt;sup>17</sup> We take this opportunity to express our appreciation for Dr Gayton's interest and permission to quote from her letter of October 11, 1938. See also Gayton, 1930: p. 367.

While it is probable that this particular animal was not slain by hunters, it may be that it was accorded the same treatment as that described by Dr Gayton for the disposition of carcasses of bears which had been encountered and killed in the foothills:

... when one had been killed, it might be brought to some village where there were Bear (lineage) people. Under the leadership of the most important Bear elder, ... the Bear people assembled. The bear carcass was laid on skins. The Bear people



Location of tribes

- 1. Pomo
- 2. Northeast Maidu
- 3. Northwest Maidu
- 4. Nisenan
- 5. River Patwin
- 6. Plains Miwok
- 7. North, Central, South Miwok
- 8. Costanoan
- 9. Northern Valley Yokuts

- 10. Southern Valley Yokuts
- 11. Western Mono
- 12. Eastern Mono
- 13. Tübatulabal
- 14. Luiseno
- 15. Chumash
- 16. Diegueno
- 17. Wappo
- 18. Hill Wintun

wept copiously and cast strands of money over the carcass. <sup>18</sup> The money went to the hunter . . . . The meat was not eaten by members of the lineage, of course, and the majority of informants say that *no* one ate bear meat, whatever his lineage affiliations. The disposal of the carcass would presumably have been ceremonial, but on this I have no information save that it was "just buried." What I suspect is, that burial with the accompanying beads and shells as was found does constitute "just buried" to Yokuts, since such things were the ordinary accompaniments of burial. The distinction lies in its being buried at all.

Aginsky's findings,<sup>19</sup> which indicate that personal totem animals were kept and reared in captivity, are supported by Driver's information;<sup>20</sup> the latter lists the keeping of bear cubs as pets among three Western Mono and two Yokuts groups. Aginsky lists bear cubs as pets for Northern Yokuts, Southern, Northern and Plains Miwok. For the Wappo, Driver says:<sup>21</sup>

Bear cubs and fawns best pets; would follow owners around like dogs. Fish's (name of an informant) grandfather had bear cub which followed him everywhere, ate and slept with him; but it finally got too big, had to be killed.

Gayton<sup>22</sup> deals specifically with the avoidance of totemic animals among the Yokuts. Among the Nisenan, according to Beals,<sup>23</sup> bears were believed to have once been people. Captured bear cubs had to be fed clean food and when they died were buried with shells and beads "like persons."

Among the Central Californians, especially the Pomo, there was a belief in the existence of were-bears or "bear-doctors" (malevolent shamans who dressed in bear hides and impersonated that animal). Perhaps in some manner associated with these bear-doctors<sup>24</sup> who were reputed to have terrible claws, are the obsidian curves recovered archaeologically in our area. Indeed, the Central Miwok state that these were imitation bear claws worn on the left hand of the bear dancers. Four of these curves were lashed to sticks and these in turn lashed to the four fingers.<sup>25</sup> Hallowell's classic work on bear ceremonialism contains references to this phenomenon.<sup>26</sup> Our find-

<sup>&</sup>lt;sup>18</sup> Cf. Gifford, 1916: pp. 144-145 for a similar practice among the Miwok for bear, eagle and falcon. See Dixon, 1905: p. 194 for the Maidu practice.

<sup>&</sup>lt;sup>19</sup> Aginsky, n.d. (N. Yokuts, W. Mono, S. and N. Miwok); see also Kroeber, 1925: pp. 49, 588; Gifford, 1932: p. 38.

<sup>20 1937:</sup> p. 65, trait 278.

<sup>&</sup>lt;sup>21</sup> 1936: p. 186.

<sup>22 1930:</sup> p. 367.

<sup>23 1933:</sup> p. 382.

<sup>&</sup>lt;sup>24</sup> Barrett, 1917: passim; Kroeber, 1932: pp. 286-287; Driver 1937: p. 105.

<sup>25</sup> Barrett and Gifford, 1933: p. 211. See also Driver, 1937: p. 105, element 2270.

<sup>3</sup> Hallowell, 1926: pp. 76-79, 145, 154-155, 161-162.

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ings would seem, however, to be explicable in terms of general observances toward certain large animals in Central California as reported by Barrett, Kroeber, Gayton, Driver, et al., rather than in terms of a specific complex of bear ceremonialism as proposed by Hallowell.

COYOTE. In general, the peoples of the Central Valley area seem to have regarded the coyote as a special animal. The flesh was generally avoided as food;27 the coyote seems to have been an important lineage totem and accorded special treatment much as outlined above for the bear;28 they may have been kept as pets,29 though for the valley area specific mention is lacking. There has been no specific reference in the literature to the postmortem disposition (i.e., burial) of the coyote, although the archaeological findings are numerous. The obvious inference is that certain coyotes at least were treated in a manner somewhat like that accorded the bear. 30 Four of the thirteen coyote burials were lacking hindquarters. This would seem to indicate a deliberate halving of the carcass.31 Thus, in view of the fact that the coyote was commonly a totem animal whose flesh was specifically avoided by members of the Coyote lineages and whose body would have therefore been accorded special post-mortem treatment, and that in general coyote flesh was not eaten and presumably not hunted regularly, it would seem to follow that the aforementioned covote burials might be explained in the same terms as was that of the bear.

BADGER. There is no specific mention of the badger in the ethnographic literature of the Central Valley. However, several intentional burials of this animal have been found. In site S.60, Transitional horizon, were found two skeletons, one of which (Pl. 1b) lay in the midst of a cemetery. From site C.141, Transitional horizon, came three partial skeletons from a depth of 18 inches in the cemetery area. It will be remembered that in another Transitional site (C.66) was found the "halved" skeleton of a coyote, also with the hindquarters missing.

It is of interest to note that the badger is in evidence only in Transitional period deposits. We infer that this animal may have at one time been more important than the ethnographic record now indicates.

<sup>&</sup>lt;sup>27</sup> Driver, 1937: p. 62 (Yokuts, Mono); Beals, 1933: p. 346 (Nisenan); Kroeber, 1932: p. 277 (Patwin).

<sup>28</sup> Gayton, 1930: p. 367.

<sup>&</sup>lt;sup>29</sup> Kroeber, 1925: p. 608 (Tübatulabal); Gifford, 1918: pp. 211-212 (Luiseno); Gifford and Kroeber, 1937: p. 176 (Pomo).

<sup>&</sup>lt;sup>30</sup> Gayton (letter dated October 11, 1938) mentions that among the Yokuts, redemption ceremonies were held for the coyote and eagle, comparable to those held for the bear.

<sup>&</sup>lt;sup>at</sup> It is possible that if the coyote had been hunted (ordinarily it was avoided as food), the hunter might receive as his share the hindquarters of the animal.

Beaver. This animal was hunted for its fur and flesh by the Central Valley groups. It will be remembered that the remains of beavers recovered archaeologically have been, not of complete or partial skeletons, but only of halves of mandibles. These show no signs of wear, hence it is improbable that they were used as tools. That they were endowed with some special significance is shown by the two specimens associated with beads from site C.107, Early period. Whatever the import of these may be (ethnographic accounts tell us nothing), it seems that some belief was associated with the mandibles of beavers, and that this is an extremely old trait in our area.

ANTELOPE. There is, as in the case of the beaver, no ethnographic information which would indicate special post-mortem disposition of the antelope. Ordinarily this animal was hunted for food. The mere fact that a whole animal would be buried without being eaten seems significant. Furthermore, the presence of two awls and clam shell disc beads indicates a special attitude.

DEER. The seven foetal deer (or elk) buried in the near-surface layers of site C.138 are not, we think, to be interpreted in the same light as, for example, the bear from the same site. In all probability these reflect the taboo or prohibition against the eating of foetuses.<sup>32</sup> Almost the only way that these could have been collected in such numbers would have been during a communal deer drive in the late spring or early summer months at the time the does were ready to drop their fawns. If a number of pregnant does were caught, the foetuses might have been gathered at the butchering and buried separately.

The Late period deer skeleton associated with three "charmstones" is not reported elsewhere in our area, although the coyote skeleton from site S.13 was buried with one of these problematical objects. The practical difficulty and labor of burying such a large animal, the occurrence with it of three "charmstones," and the fact that the deer was commonly hunted as a food animal all indicate that this particular interment is highly unusual. All we can say is that here is an animal which for some reason was accorded special and ceremonial burial. It is possible that this was a tame fawn, similar to that mentioned by Driver for the Wappo, and by Aginsky for the Central and Northern Miwok.

<sup>&</sup>lt;sup>32</sup> Driver, 1937: p. 62, elements 99, 100, notes several scattered occurrences of the taboo against eating foetuses. The belief was at least present among the S. Yokuts; whether for the Delta groups of N. W. Yokuts, we do not know. Againsky n.d. lists this taboo for the W. Mono and S. Miwok.

<sup>&</sup>lt;sup>33</sup> Charmstones, endowed with supernatural power and highly dangerous to those not versed in their control, indicate by their mere presence the exceptional nature of this burial. See Kroeber 1932: p. 391. Charmstones were often used as aids to success in hunting or fishing.

BIRDS. Gifford, in a preliminary study of Miwok cults, has placed much emphasis upon what he calls the "Bird Cult," characterized by the ceremonial capture, killing, and disposition of eagles, hawks, and condors, or the rearing of their young, and the pota ceremony.34 Despite the wealth of ethnographic information on bird ceremonies, there is little available on burial or disposal of the body. Driver35 notes that among the Wukchamni and Paleuyamni (S. Yokuts) the bird killed at a ceremony was "buried like a human," and among the former at least, the head was saved and stuffed. The eagle skull with the abalone ornament applied over the eye, as mentioned before, was found in an archaeological site in the Buena Vista Lake region. The complete eagle skeleton reported by Carter from the northern Chumash territory perhaps may be interpreted as a ceremonial burial—the Chumash, like the Interior Valley peoples and most of the Southern Californian groups, also held ceremonies involving birds.36 The Lower Sacramento area has not yielded, to our knowledge, complete skeletons or prepared skulls of raptorial birds. Instead, the association of the skull, leg- and foot-bones of condors, eagles and falcons with human burials suggests that these are evidences of regalia consisting of the skins of birds. If the lower legs, feet and claws, and skull were left attached to the skin of the bird, these would therefore be the remnants found archaeologically, since the skin and feathers would have completely disappeared. Gifford mentions that the condor was skinned and the entire skin worn by the chief in the condor dance.<sup>87</sup> The skinned body was not left to rot, but was cremated. Eagles, condors and falcons were kept captive,38 and might be traded from tribe to tribe. 39 Kroeber 40 has re-analyzed Gifford's historical reconstruction of Miwok cults wherein the Bird Cult is claimed to be of distinct origin and earlier than the Kuksu (God-impersonating) ceremony.41

<sup>&</sup>lt;sup>34</sup> Gifford 1926: pp. 394-398; Gifford 1916: pp. 144-145; Kroeber 1932: pp. 416-417; Gifford 1932: pp. 38-39.

<sup>35</sup> Op. cit. p. 134. See also Gayton 1930: p. 374 (Yokuts); Beals 1933 (Nisenan); Waterman 1910: p. 319 (Diegueno).

<sup>&</sup>lt;sup>36</sup> Kroeber 1908: pp. 4, 7.

<sup>&</sup>lt;sup>87</sup> 1926: pp. 395-396.

<sup>&</sup>lt;sup>38</sup> Gifford 1926: pp. 394, 397 (Miwok); Beals 1933: p. 394 (Nisenan); Kroeber 1925: p. 608 (Tübatulabal); Fages 1937: p. 77 (Coastanoan); Driver 1937: p. 144 (Yokuts); Aginsky n.d. (N. Yokuts; W. Mono; S., N., and Central Miwok. Goldschmidt n.d. describes the burial with beads of captive eagles among the Hill Wintun (Nomlaki).

<sup>&</sup>lt;sup>39</sup> Beals 1933: p. 394 (Nisenan); Powers 1877: p. 398 (Mono); Aginsky n.d. (W. Mono, S. Miwok, Central Miwok, N. Miwok).

<sup>40 1932:</sup> pp. 416-417.

<sup>41</sup> Gifford 1926a; Gifford 1926b: p. 390.

	fakon, condor, eagle)		BEAVER	COYOTE			TURTLE	BADGER		BEAR				CERVIDAE			ANTE- LOPE	DOG
	Skins for regalia	Pet eagles buried		Cap- tive pets						Cap- tive pets	Pets buried	Ob- sidian curves in dance			Deer as pets			Pets buried
ETHNOGRAPH- ICAL (Tribes)*	6 7	2 3 6 7 10 15 16 18		1 13 14						4 6 7 9 10 11	4 6 7 10	7			6 7 17			7 9 10 11
ARCHAEO- LOGICAL (Sites)**	Bird bones- leg, foot, skull, etc.	Eagle skele- ton	Mandi- bles in burials		Com- plete skele- tons	Halved skele- tons	Com- plete skele- ton	Com- plete skele- ton	Partial skele- ton		Com- plete skele- ton	With burials	Be ar claws	Foetal skele- tons		Adult skele- ton	Com- plete skele- ton	
LATE CULTURE	C.138	(Pt. Sal)	C.138		S. 13 S. 16 S. 32 S. 66	S.16		S. 16 S. 100 C. 138			2.16 S.100 C.138	C.6 S.29 C.80 C.82 C.83 C.86 C.91 C.120	C.6 C.19	C.138		S.16	S. 100	
TRANSITIONAL CULTURE	S.60 C.66 C.141 C.142		S.60 C.66 C.141		S.99	C.66	S.60	S.60 C.141	S.60 C.141									
EARLY CULTURE	C.56 C.58 C.107 C.142		C.56 C.68 C.107															

<sup>\*</sup> Numbers refer to tribes on map 2.
\*\* Numbers refer to sites on map 1.

Kroeber pointed out that the two main elements of the Bird Cult, the first (bird-rearing) is "too limited and specific to be the basis of a cult in the sense of a system," and that it is widely distributed, while the second element (the *pota* ceremony) is likely to be a recent and not an ancient institution. The archaeological evidence, particularly that which derives from the Early Sacramento culture horizon, indicated that, in itself, the use of skins of certain species as regalia is old.<sup>42</sup> Whether this can be identified with the similar wearing of bird-skins among the ethnographic Miwok is a moot question.

TURTLE. Ethnographic information on the disposition of this animal is lacking. It, like most animals, was a totem animal.

Dog. Ethnographically (i.e., in recent times), the dog was important and, among some groups was buried, as we might expect. However, the dog, the only domesticated animal of the Californian Indians, is apparently very recent in our area, since according to zoölogical determinations, no bones of this animal have been found in any archaeological site. Schenck and Dawson suggest the archaeological absence of the dog in our area. This late appearance is one of some interest, for the dog is supposed to have entered America in remote antiquity. North Central Californian dogs were presumably introduced from the north—those of Southern and South Central California possibly derive from the southwest. Ethnographic accounts attest the absence, in aboriginal times, of the dog in the whole area north of San Francisco Bay (Coast Miwok) to about the Eel River (area of the Northwest California Athabascans).

It is possible that the burial of dogs where it has been recorded is explicable as a transference from the interment of pet coyotes, yet if dogs were rare and highly prized they might be especially significant in the natives' eyes, and thus lead to their special burial.

#### SUMMARY AND CONCLUSIONS

Table 1 summarizes the known archaeological and ethnographical occurrence of ceremonial or special interment of animals in our area. There are many gaps in our ethnographic record, and it is to be hoped that future investigation may fill some of them.

<sup>&</sup>lt;sup>42</sup> Although we hesitate to suggest a direct identification of our archaeological avian remains with a modern ethnographic ceremony, it is of interest to note that Gifford (1926: pp. 392, 395) has suggested that the Miwok Bird Cult is ancient.

<sup>&</sup>lt;sup>48</sup> Kroeber (1925: p. 216) notes the Coast Yuki burial of dogs with property. Aginsky (n.d.) notes that dogs were "treated like totem animals" and were buried among the N. Yokuts, W. Mono, Central and Northern Miwok.

<sup>4 1929:</sup> p. 334.

The general conclusion of the authors is that these archaeological evidences of post-mortem disposal of animals reflect, not the existence of special "cults," but a generic ceremonial attitude toward many different animals. Viewed thus, the "Bird Cult" loses much of its distinctiveness, becoming instead only one phase of this broader complex or pattern. To illustrate by analogy, in Los Angeles county in California there are today "pet cemeteries" where dogs or cats are elaborately entombed, and yet it is to be doubted that one should call this evidence of a dog or cat "cult." This would seem to be most easily explicable as an extension of the pattern for the disposal of human remains to the disposal of the remains of animals which have acquired special status as pets. Likewise, the Central Californian animal burials which we have been discussing are, in all probability, reflections of special status of one sort or another. An emphasis on certain animals in the moiety system and as eponyms of the lineages46 easily might have led to their requiring, under particular conditions or circumstances, mortuary treatment resembling that accorded humans.

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<sup>&</sup>lt;sup>45</sup> See the magazine Life for November 21, 1938, p. 55.

<sup>46</sup> Lists of these lineage names may be found in Gifford (1916) and Kroeber (1925) p. 455.

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