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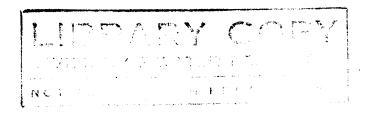
# Reports of the

# UNIVERSITY OF CALIFORNIA ARCHAEOLOGICAL SURVEY

No. 10

LOGY OF TWO KERN COUNTY SITES

Archaeology of Site Ker-74. F. A. Riddell ve Burial from Kern County. R. F. Heizer



# The University of California Archaeological Survey

Department of Anthropology University of California Berkeley 4, California

## THE ARCHAEOLOGY OF TWO KERN COUNTY SITES

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### EXPLANATION OF ILLUSTRATIONS

- PLATE 1. Specimens from Ker-74. a, Obverse side of diatomaceous rock slab; the stippled areas indicate areas of red paint created by scratching horizontal and vertical lines on the surface of the specimen which had previously been completely painted on the obverse side. b, Reverse side of above specimen. The dark stippled areas represent areas of red paint while the lightly stippled areas represent a dark discoloration --- possibly a black pigment. Both the red and the black are very faint. Incised lines at the top are partially obscured through weathering. c, Smaller diatomaceous rock slab completely stained with a red pigment. The bands at the top are of black pigment. An attempted repair of the break was made anciently with asphaltum. d-h, Incised coyote bone tubes. i, Green glass liquor.k-1, Obverse and reverse of a church medallion dated 1830. m, Steatite lip plug. n, Heavily rusted steel strike-a-light with shell beads adhering to its surface.
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THE ARCHAEOLOGY OF SITE Ker-74

By Francis A. Riddell

### INTRODUCTION

In January, 1949, an historic Yokuts cemetery located approximately twelve miles due west of Delano, Kern County, California in T25S/R23E, lying in territory claimed aboriginally by the Wowol, was destroyed by lance leveling. The present designation for this site is Ker-74; its aboriginal name is unknown. The author, as Assitant Archaeologist of the University of California Archaeological Survey made a study of this site both in the field and in the museum as part of his regular duties.

The cemetery is situated on a natural sandy knoll on the edge of a former slough, and only a few miles southeast of the former shoreline of Tulare Lake. Approximately 1.5 miles southwest of Ker-74 is an historic village that was occupied in October, 1854, this is designated by Gifford and Schenck as their Site 28.

It is not known that a habitation site existed on one of the other rises near Ker-74. If so, then Ker-74 can be assumed to be the cemetery for such a village; if not, Gifford and Schenck's Site 28 may possibly be the source for the burials in Ker-74. Since fragmentary freshwater mussel shell was evidenced in the earth spread out in the leveling operation it might be guessed that there was a habitation site in conjunction with, or in close proximity to Ker-74. The artifacts, however, strongly indicate burial association rather than an unassociated occurrence in a midden deposit. The matrix, as far as could be ascertained, was a fine sandy silt with little or no indication of charcoal or ash.

The site was on or near the 225 contour elevation which places it a few feet higher than the surrounding flat terrain. Recause of its elevation, yet nearness to a slough, Ker-74 was a natural location for a village and/or a cemetery.

Present at the destruction of the cemetery were several local people who were interested in preserving as much material as possible from destruction by the land leveling machines. It was from these persons that I was able to obtain information on burials and artifacts. Those people to whom I am most indebted for information and collections from this site are: Mr. and Mrs. Louis Vergano, Mr. E. Dorsey, Mrs. Melen C Kopp, Mr. and Mrs. Robert Cornelison, Mr. Edward Butts, all of Delano; and Mrs. and Mrs. Harry S. Riddell, Jr. of Lone Pine. I take this opportunity to thank them sincerely for their aid.

Though the information obtained concerning this site was meager it does seem to be of enough importance to warrant description. This is especially true since a considerable portion of the aboriginal artifacts recovered accompanied burials and were additionally associated with Caucasian trade material.

All specimens, unless otherwise specified, bear catalog numbers of the University of California Museum of Anthropology (UCMA), Berkeley, California. Catalog numbers for the artifacts from Ker-74 are as follows: 1-103111 to 1-103150 inclusive; 1-116052, 1-116053; 1-118990 to 1-118999 inclusive; 1-116055 to 1-116107 inclusive. The skeletal material bears the catalog numbers 12-7262, 12-7263, 12-7265. The University of California Archaeological Survey accession numbers for the material from this site are 15 and 51.

The typological designations for shell bead and ornament forms are taken from E.W. Gifford's Californian Shell Artifats, Univ. of Californian Anthrop. Records, Vol. 9, no. 1, 1947.

### BURIAIS

Information was obtained for only nine burials in sufficient detail to permit standard burial record sheets to be filled out. Several of the people present at the destruction of Ker-74 estimated the number of burials scraped out to be at least one hundred, the majority being removed by the scraper, and only a few being taken out by excavation with a shovel.

The information obtained concerning the nine burials is very meager and second-hand. It is difficult to reach any important conclusions on such data. Both flexed and extended burials occur with historic trade material, the orientation is variable and shows no pattern and the relative depth and horizontal locations were not obtained. The following table gives the position, orientation and the approximate depth of the recorded burials from the site.

• •	1	2	3	4	5	6	7	8	9
Flexed			X					X	X
Dorsally extended		X		X	X	X			
Orientation	.SE	E		S	N	W	W	SW	NW
Depth	.51	41	31	31	41	51	31	51	51

To gain some idea of the burials and the conditions concerning their removal the following extracts from interviews with some of the local people present at the destruction of Ker-74 are presented:

Mr. Robert Cornelison's statements: Believes the land was leveled six feet. He says he took out 2 or 3 burials from about four feet below leveled surface (i.e., originally these would have been 10 feet deep). Burials dorsally extended, no special orientation. Burial with religious medallions (see p.5) had a burial directly above and one directly below it. The one above had shell beads in association; that below had nothing with it. The bones were in poor condition. Does not recall whether the orientation for the three burials was the same or not. Burial with medallions originally about 7 or 8 feet deep (sic).

Everything-"wampum"-found under heads of burials.

The burial with the glass liquor bottle about 4 feet below disturbed surface, possibly a total depth of 10 feet (sic), bottle between legs of Burial.

With one burial was a cloth "bag" containing colored powder which was all that was left when it was disturbed, i.e., the powder. Cloth, some like silk but most like burlap, also was found, but disintegrated.

Mrs. Louis Vergano's statements: She located a skull of a flexed burial exposed by the scraper which she dug out only to find a second burial, extended with infant in arms, below. This she too excavated only to find another extended burial below this one. This latter burial is Burial 1, the one just above this burial is Burial 2 and the one above Burial 2 is Burial 3.

Burial 1 was dorsally extended, oriented to the SE, with a number of mammal and bird bone tube beads about the head and chest. With these bone tubes was a skull of a raptorial bird filled with asphaltum and with abalone ornaments adhering to it. Also with this burial were several raptorial bird claws, a large, long, tubular (though somewhat flat in cross-section) shell bead. Inside the skull was a steatite tube and near the face was a steatite labret. A painted slab of diatomaccous rock also was associated with this burial. Burial 1 was about 5 feet below the original surface.

Burial 2 was an adult with an infant in its arms and was located above and across the legs of Burial 1. Burial 2 was oriented east and was dorsally extended at a depth of about 4 1/2 feet below the original surface. This burial, too, had a diatomaceous rock slab with it.

Burial 3 was an adult and was flexed in a "sitting" position; the skull was exposed first. This burial was above and slightly north of Burial 2. The top of the skull was about 3 feet from the original surface.

Other burials were in very close association with these three burials.

Mr. E. R. Dorsey's statements: Mr. Dorsey uncovered Burial & at a depth of about 3 feet from the original surface. This burial was dorsally extended and oriented to the south. He said that all of the material came from under the back of the skull. The material included a great number of glass trade beads, tubular shell beads, a clay pipe, four pocket knives, buttons, and a small pestle (rectangular in cross-section). Also with this burial was a possible whetstone of a material similar to jadeite. This stone was about 6 inches long, 3 inches wide and about 2 inches thick. One side is flat and smooth while the other side is unworked; both ends are uneven from an original break. Two projectile point fragments, an obsidian flake knife, and several obsidian flakes. Some abalone ornaments came with this burial, also.

Mr. Dorsey stated that he saw another burial removed that was extended and oriented to the west. He also said that he saw some "shells" with red paint (ocher?) in them at this site.

Mrs. Helen Kopp's statements: She excavated Burial 5, that of a child, which was dorsally extended and oriented north. The burial was about 4 feet below the original surface. Numerous saucer-shaped Olivella beads were around the skull. The skull and mandible are in the UCMA. The arms were flexed on the chest of this burial.

Burial 6, an adult, was dorsally extended and oriented west. It was about 5 feet below the original surface. Twelve obsidian flake scrapers were found near the right ribs.

Burial 7 was that of an infant, oriented west, and about 3 feet below the original surface. Numerous glass trade beads and two rather elaborate abalone ornaments occurred with this burial.

All of the burials seemed to be in fairly close association with one another, according to Mrs. Kopp.

Mr. Edward Butt's statements: He removed Burial 8 and 9, both of which are now at the Delano High School Science Museum. Burial 8 was a tightly flexed burial about 5 feet below the surface. It is an adult, probably male, and had two rectangular Haliotis ornaments near the chest. The burial was oriented SW.

Burial 9 was a tightly flexed adult burial associated with an infant burial. This burial was about 6 feet NW of Burial 8 and at the same depth. Artifacts with this burial include glass trade beads, clam shell disc beads, spire-lopped Olivella beads, saucer-shaped Olivella beads and Haliotis ornaments.

## ARTICLES OF EUROPEAN MANUFACTURE

Bottle: A green glass liquor bottle found between the legs of a burial is now in the Cornelison Collection. The height of this bottle is  $30 \cdot l_i$  cm., the diameter at shoulder  $7 \cdot 9$  cm. and the depth of the concave base  $3 \cdot 6$  cm. (pl. li ).

The exterior of this bottle was oxidized to the extent that the glass was nearly opaque. The burial was reported to have been nearly 10 feet below the original surface; this scems, however, to be an excessive estimate for depth.

Medallions: Four or more religious medallions, now in the Cornelison Collection, were found in a leather pouch under the skull of a burial. Through the eyes (rings?) of the medallions was a fine copper (?) wire upon which were strung several colored glass beads. These beads, unfortunately, were not kept with the medallions when removed from the burial. The length of the medallions is 1.76 cm., the width 1.2 cm. and the thickness 0.7 mm.

The date on all of the medallions was 1330. The inscription on the obverse side of these medallions reads: "O Marié Concue Sans Peche Priez Pour Nous Qui Avons Recours A Vous" (pl.lk-1).

Clay pipe: A brown, glazed clay, figurine pipe (pl.lj) occurred in association with Burial 4 and is now in the Dorsey Collection. The outside diameter of the bowl is 2.6 cm., a height of 3.7 cm. with 1.6 cm. for the maximum diameter of the stem. There are rust stains on the right side of the face.

Several pipes of this same type were recovered from the historic site of Tsurai at Trinidad Bay, Humboldt County (site Hum-169). A date of 1850 was assigned to these specimens.

Pocket knives: Four folding pocket knives with wooden side plates on the handles also were associated with Burial 4. These knives appear to be quite similar to present day pocket knives. The specimens are in a rusted and decayed condition and the blades can not be opened. These, too, are in the Dorsey Collection.

Buttons: Brass military buttons from this site are of three types: 2) "D" shield eagle (one specimen in the Dorsey Collection); b) NYL or eagle on "rock" (five in the Dorsey Collection and one, 1-103136, in the UCMA); c) eagle on anchor (five in the Dorsey Collection and one, 1-103136, in UCMA).

A fourth type of brass button is probably not military since it has a flower design on its face (pl. ). This button which is in the Dorsey Collection may have been gold plated or gold washed.

The following is a fuller description of the military buttons: Small D shield eagle, non-gild with a height of 5.0 mm., and a height of 1.0 cm. with shank; diameter of 1.4 cm. The front is of copper or copper alloy, eagle head right, clive branch in right talons, chest shield with "D", plain background. The back is a separate piece of copper alloy with Scovills & Co. Extra" on it. The shank is of copper alloy, is circular and 1.7 mm. thick and has been soldered on button with lead (?) solder. Occurrence: Fre-27, UCMA 1-100223, 4 inches deep; Ker-74, Dorsey Collection, Burial 4.

Eagle on anchor button has a height of 4.0 mm., and a height of 9.0 mm. with shank; diameter of 1.4 cm. The front is of brass with eagle, head facing right, perched on anchor crossarm and surrounded by 13, five-pointed stars; this in turn is surrounded by a solid raised band. The background is of fine horizontal lines. The edge has fine slanted lines progressing counter clockwise from face. The back makes a single piece with the front and is of brass. Letters on the back read "Scovills and Co. Extra"; the back is flat in shape. The shank is of copper and is 1.7 mm. thick and soldered on with brass. Occurrence: Ker-74, Burial 4, UCMA 1-103136.

Eagle on "Fock" has a height of 4.0 mm. and a height with shank of 8.0 mm.; it has a diameter of 1.5 cm. The front of the button is brass, has eagle facing right, talons on fringed-bottom "rocks", wings round ended; the background is plain, "NYL" raised below "rock"; no border. The back is concave, being a single piece with the front which is convex. Letters on back read "Young Smith & Co. New York". The button appears to be of gilded iron. The shank is of copper and is soldered to the button with copper. The shank is tear-drop in shape rather than having a ring-shaped end, it is 1.5 mm. thick. Occurrence: Ker-74, Burial 4, UCMA 1-103136.

A small, four holed, white glass shirt (?) button, 1-103136, also occurred with Burial 4. This button has a diameter of 1.0 cm. and a thickness of 3.0 mm. One face has a concavity in which the four holes are set. This type of button has also been reported from Sac-1 occurring with many other white china buttons and with large shield "A" gild and small "A" gild military buttons. It has also been reported from Sha-6 with many other white china buttons.

Three copper trousers (?) buttons, 1-103136, found with Burial 4 are 1.54 cm. indiameter and 2.4 mm. thick. These buttons are made of two perforated circular pieces of copper. One of the pieces being larger in diameter is crimped around the edges of the smaller piece thus making a disc shaped button. Before being crimped together the two perforated circular pieces of copper are interspaced with unperforated discs of cloth. The larger circular piece of copper is perforated in such a manner, however, that a slender bar of the metal is left intact across the perforation. This bar and the center filling of cloth permit the button to be sewed on to the garment with thread.

Cloth: Cloth material from this site was observed by some of those present to be "some like silk but most like burlap". All of the choth material was in a disintegrated condition and no effort was made to save any of it. The fabric resembling burlap might well have been of aboriginal manufacture since material of this sort has been described from this area by Kroeber, Gifford and Schenck, Wedel, Walker and Latta.

Copper tacks: Also associated with Burial 4 were ten small round headed copper upholsterer's tacks, 1-103136. Adhering to several of these tacks were fragments of a rather fine woven red cloth material. The diameter of the round heads are \$.0 mm. while the total length of each tack is 10.0 mm.

Iron spikes: One complete iron spike, reminiscent of a modern railroad track spike, and fragments of two other spikes were recovered from this site but these are not accompanied by location or association data. All three specimens, 1-103132, are heavily rusted. These specimens had apparently been wrapped in a cloth or rag as traces of cloth occur on all three specimens. One of the spike fragments has Types F5b and X2b Olivella beads (see infra, p.18) achering to it. The whole spike has what may be the impression of a F5b type bead on its surface. The dimensions of the complete spike are as follows: Head -- 3.5 x 2.5 cm., and 1.0 cm. thick; Body -- maximum width 1.5 x 1.5 cm.; Total length -- 17.4.cm.

Steel strike-a-light: A strike-a-light, 1-103133, had no data concerning its recovery but since it is heavily rusted and has Type F5b and X2b Olivella beads adhering to its surface, it is possible that it was associated with the above described iron spike and spike fragments. There is no evidence, however, of cloth material on this specimen. The dimensions of the specimen are: Length, 8.6 cm.; width, 3.5 cm.; thickness, 8.0 mm. One of the "horns" had been broken off before loss or burial by the Indians (pl. ln).

Glass beads: The following is a list of bead types found occuring in Ker-74, the typology of Mr. Clement W. Leighan has been used throughout. In the approximate or actual number of beads of each type from this site is given after the catalog number or the owner; association is given after the approximate number of beads per type. CC stands for Cornelison Collection and NL for no location.

Турс	Cat. No.	No. of beads	Burial
17 34 35	00 1-103136 " 1-116052	1 3 123	ř† ř† N <b>T</b>
48 51	CC CC	12 6	n <b>l</b> n <b>l</b> n <b>l</b>
51 53 55 60 61	CC 1-103136	1 5	NL L
	ff ff	1	1 <u>.</u> 1
64	CC	3	NL

	•	0 1 V	-9-	
(cont.)	Type	Cat. No.	No. of beads	Burial
	68	CC 1 <b>-1</b> 03138	6 1	NL 7
	74	CC 1-103130	20	NL
	81	CC	3	NL
	90	CC 1 <b>-</b> 116099	3 3 1	NL
	99	1-103136	<u>1</u> 1,5	9 4 9 7
	,,	1-116092	8	9
	7	1-103138	1	
	100	00 1 <b>-</b> 103136	26	NL 4
	100	1-116104	1	9
	102	1-103136	2	4
		1 <b>-</b> 116102 1 <b>-</b> 116103	1	9 4 9 9
	111	CC	1 2 6	NL
	120	CC	2	NL
	200	1-116052	1	NL
	122	1-103138 CC	1 10	7 NL
	124	CC	1	NL
	126	CC	1	'nΓ
	127	1 <b>-1</b> 03 <b>13</b> 6 1-116052	1	4 NL
	141	1-103136	1 1 5 1 5 1 9 2	ĵ <sup>†</sup> 14Τ
	143	1-116052	į	NL
	146	cc 1 <b>-</b> 116106	<u>ц</u> .	NL
	140	1-116052	) 1	9 NL
		CC	9	NL
	147	00		ΝL
	151 153	1 <b>-</b> 103136 cc	25 -	L NT.
	154	1 <b>-</b> 1031 <b>3</b> 6	25	Й И <b>Г</b>
		1-116095	10	9
•	168	CC	2	NL NL
	184	CC	2 5 3 13	NL
	200	1-116100	3	
	187 188	1-103136 1-103138	13 131	9 4 7
	1.00	CC	10	NL
	204	1-103138	1	7
	215	1-116105	1 6	9
	218	CC 1-103136	105	NL lı
		1-116098		4 9 4
	235	1-103136	8	
	236 237	CC	С	NL NL
	238	CC	1 8 6 5 5 10	NL
	239	CC	10	NL
		1-116052	1	NL

(cont.)	Type	Cat. No.	No. of beads	Burial
	5710	cc	6	NL
	243	1-103136	4	4
	244	19	l'	4
	245	1 <b>-</b> 1031 <i>3</i> 8	2	7
	246	tt	1	7
	247	16	1	7
	248	11	1	7
	249	11	7	7
	250	1-116052	ì	ЙL

Additional beads from Ker-74 for which no type designation could be assigned since the only specimens known to Meighan and the author are those in the Cornelison Collection are as follows:

- a) Similar to no. 71 with a slightly lighter shade of blue.
- b) Similar to no. 55 with a navy blue instead of red color.
- c) Hexagonal bead with biconical outline, wire wound, opaque white background with inlaid spirals of pink and green-both transparent. Length 16.5 mm., maximum diameter 8.0 mm., minimum diameter 4.0 mm., perforation diameter 1.9 mm. Walker illustrates this bead type. 12
- d) Spherical bead with horizontal ribs; diameter 6.0 mm., perforation diameter 1.9 mm., cohor is pale pink, bead is opaque. This bead, too, is illustrated by Walker. 13
  - e) Similar to no. 141 but is red, not blue.
- f) This bead is green and transparent. Its dimensions are: length 8.4 mm., diameter 10.0 mm., diameter of perforation 1.9 mm.

## Shape:



- g) Similar to no. 120 but green, not red.
- h) Similar to no. 17 but blue, not red.

## WORK IN ASPHALTUM

Olivella beads: Shell beads of the following types were found with asphaltum adhering to them indicating the possibility that some of the beads had been set in this material as ornamentation on some unknown object.

C23c, one specimen, 1-103130.

F5b, two specimens, 1-118996.

X4, two specimens, 1-116053,

X4, about 20 specimens set in a rectangular asphalt tube with abalone ornaments and steatite beads. For a description of this rectangular asphalt tube see a following section under the above major topic heading.

Clam shell beads: Two clam shell disc beads with milled edges, 1-103118 and 1-103140, have asphaltum in their grooves. These are bead types VIf and VIg. \*\*

Several specimens of Type VlaI have a lacquer on their exterior that may be asphaltum or pitch. Determination is impossible due to the lack of any appreciable amount of this material on the beads.

Haliotis ornaments: Shell ornaments of Haliotis set in asphaltum or with asphaltum adhering to their surfaces include the following types:

K5bII, one specimen, 1-116059. K5bII (?), one specimen, 1-116063.

K6aIII, one specimen, 1-116061.

K8bIII, one specimen, 1-116056.

Sla, two specimens, set in the skull of a raptorial bird, 1-103142. SlaI, four specimens in the Cornelison Collection. Specimens set in rectangular tubes of asphalt with Type X4 shell beads and with steatite beads. These tubes are discussed in a closely following section.

S7aII, one specimen, set in the same skull as the preceding Type Sla.

S21, one specimen, 1-116067.

Fragmentary ornament, 1-116082.

Specimens 1-103137 and 1-103182 are pieces of asphaltum in which Haliotis ornaments had been set but were evidently broken out when unearthed.

Specimen 1-103135 (pl. 1c) had been broken in two pieces in aboriginal times and a repair had been attempted by the use of asphaltum on the broken edges.

Specimen 1-103142 is the skull of a raptorial bird, the interior of which has been filled with asphaltum and with the ornaments mentioned above adhering to the sides and the basal portion. Gayton gives ethnographic data on the use of raptorial bird heads as talismans by the Yokuts and the Monos. Gifford and Schenck describe and illustrate a similar specimen from their site 14.

Two unique specimens retained by Mr. Cornelison in his collection, though they are only partially complete, consist of tubes formed in asphaltum with Type SlaI ornaments on two sides of each tube. These specimens are roughly rectangular in cross-section and appear to have been formed by coating a stick (?) with asphaltum. Alternate Type X4 Olivella beads and small black steatite beads were embedded about the ends and above and below the ornaments along the sides. The dimensions of these two artifacts are as follows: 3.5 cm. long, 1.5 cm. high, 1.3 cm. wide; 2.8 cm. long, 1.4 cm. high, 1.3 cm. wide.

The source of this asphal tum might have been from seeps near McKittrick, Kern County  $^{17}$  or traded from the Chumash people to the west on the coast.  $^{18}$ 

## WORK IN BONE

Occurring in the neck and chest region of Burial 1 were a series of bone tubes. Six of the specimens were incised and four were plain (pl. ld-h). Eight other specimens were fragmentary but appear to have been undecorated. Eleven of these specimens are of mammal bone while the remaining seven are of bird bone. The mammal bones are of coyote

(Canis latrans), 19 four are of femur sections, five are sections of tibiae and two are sections of humeri,

The whole decorated specimens range from 10.3 cm. to 5.6 cm. in length and average about 1.5 cm. in diameter. The decorated bones are all of coyote, the bird bone tube was not decorated.

The undecorated specimens range in length from 11.0 cm. to 5.6 cm. and average 1.5 cm. to 1.1 cm. in diameter at maximum.

A quarter section of a bird bone tube 5.8 cm. long and 6.0 mm. wide, polished on all edges, also occurred with this burial. (no. 1).

All of the specimens bear the UCIA catalog number 1-103143.

## WORK IN CLAY

No fired clay or baked clay objects were recovered. Since the cemetery was at least partially historic it would not be surprising had Yokuts pottery or Caucasian china trade pieces been found with the burials. Considering the number of historic chinaware objects recovered by Walker at Tulamniu it is rather surprising that at least a few such pieces were not recovered at Ker-74.

## PIGMENT

Traces of red ocher were found adhering to specimen 1-118994, a Type X3bI Olivella bead. The two specimens, 1-103134 and 1-103135 (see following section on diatomaceous earth slabs), have been covered with red ocher. Specimen 1-103135 has six lines drawn in a black pigment as well as being covered with red ocher.

Recovered with no data are two very small fragments of red ocher, 1-115053. The red ocher from this site appears to have been first ground into a powder and then molded into solid pieces for future use; powdered form, however, may have been used too (see below).

A burial from this site described by one of the local collectors was reputed to have had a cloth "bag" containing colored powder. It is quite likely that the specimen was powdered red other tied up in a piece of cloth.

A fractured quartz crystal, 1-103119, with no location data has a slight trace of red other on portions of its surface,

Specimen 1-103147, a mortar, has a trace of red ocher in its cavity (see section on ground stone).

## WORK IN SHELL

The following is a list of shells occurring in Ker-74 as artifacts:21

Olivella biplicata
Marine clamshell (sp.?)
Mytilus californianus
Tivela stultorum
Hinnites multirugosus
Norrisia norrisii
Haliotis cracherodii
Haliotis (californiensis ?)

Shells occurring in the site but not as artifacts are given in the following list:22

Donax sp. Mytilus sp. Mytilus sp. Marine clamshell (sp. ?) Callistoma (costatum ?) Tegula funebralis Anodonta (freshwater mussel) Planorbidae (freshwater snail) Anadara trilineata (Conrad)<sup>23</sup>

Clamshell: The species of clam used for some of the bead specimens is not determinable. Some of the specimens, however, have been identified as Tivela stultorum and it can be assumed that the unidentified specimens are probably the same.

Clamshell beads fall roughly into four categories: a) large thick discs, b) small discs, c) slender tubes, d) long, rectangular (flat in cross-section) forms.

The clamshell beads fall into the following types as given by Gifford: AVLa, AV2b, Vla, VlaI, VlbI, Vlf and Vlg. The latter two types are an extension of Gifford's typology.

Type AVla: This is a solid rectangular bar that may be an incipient form of Type AV2b; this type is represented by one specimen, 1-103137.

Type AV2b: These are cylindrical tubes and rectangular or lateraly flattened tubes. This type is represented by the following specimens: 1-103150, two specimens; 1-116081, two specimens; 1-103120, three specimens; 1-103137, one specimen.

Type Vla: This type is an undecorated disc less than 25.0 mm in diameter and often as small as 3.0 mm in diameter. This type is represented by the following: 1-103137, one specimen; 1-103136, about one hundred specimens.

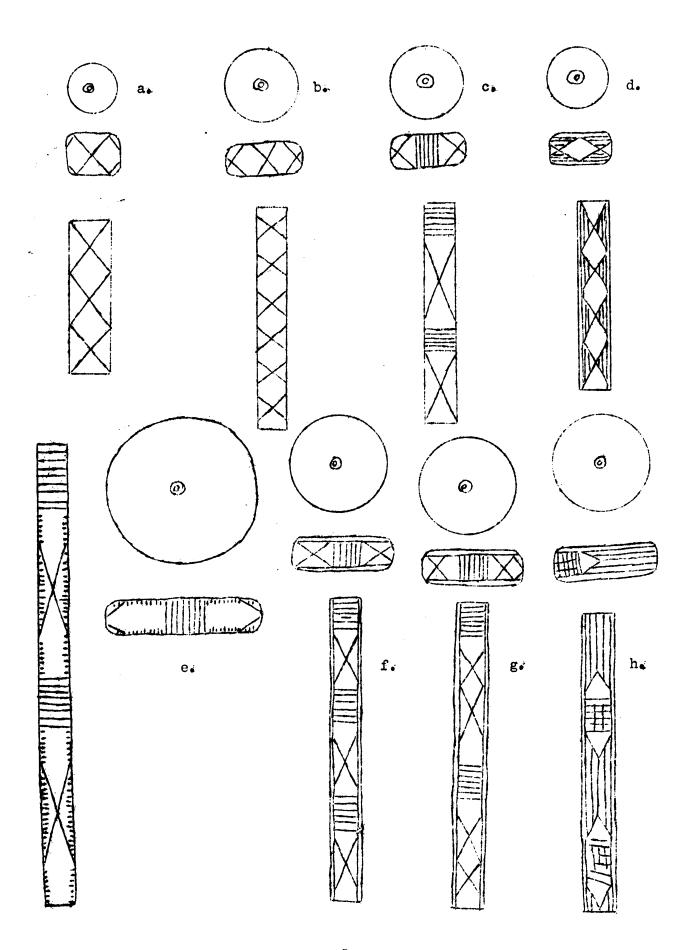


FIGURE 1
EDGE INCISED CLAMSHELL DISC BEADS (1/1).

Type VlaI: This, too, is an undecorated disc less than 25.0 mm. in diameter, the difference being that it is from an identifiable species. This type ranges in thickness from 7.0 mm. to 2.0 mm. and is of Tivela stultorum. The following specimens represent this type: 1-103122, six specimens; 1-116094, one specimen; 1-103129, one specimen; 1-116094, sixty-two specimens; 1-103140, one specimen.

Type VlbI: These are disc beads with a diameter over 25.0 mm. The following specimens are from 8.0 mm. to 12.0 mm. thick: 1-103118, four specimens, undecorated.

Type Vlf: Beads of this type are discs under 25.0 mm. in diameter with incised edges (Fig. la-d). Wedel<sup>25</sup> also shows this bead type, as do Gifford and Schenck.<sup>26</sup> This bead type is represented by these specimens: 1-103118, one specimen; 1-103140, three specimens. Traces of asphaltum in the incised lines indicate that the incisions were filled at one time with this material to make the design stand out.

Type Vlg: These disc beads are over 25.0 mm. in diameter and have incised edges. The specimens recovered from Ker-74 average about 10.0 mm. in thickness. Two of these specimens are in the UCMA, 1-103140; the others are in the Cornelison Collection (Fig. le-h). Traces of asphaltum occur in some of the incised lines.

Haliotis Shell: Abalone shell ornaments from this site, though numerically small are rather diverse typologically. Gifford's typology is used in describing the following ornament types. The majority of the ornaments are made from an unidentified species of Haliotis; it is unidentifiable simply because in the process of manufacture the ornament loses its distinguishing features. Haliotis cracherodii is one of the identified species, the other is probably Haliotis californiensis.

Type J2aIV is represented by one specimen, 1-103141, and has a diameter of 1.4 cm. The diameter of the perforation is 8.0 mm; the specimen is only 1.0 mm. thick (Fig. 2).

Type KlaIV, a specimen in the Dorsey Collection, occurred in Burial 4. The approximate diameter of the specimen is 2.7 cm. This specimen is a disc with one central perforation (Fig. 2). Another specimen of this type is 1-118992; though only one-malf of the specimen was recovered it was measurable and found to have a diameter of 1.9 cm. and is 1.5 mm. thick. There were no location data with this specimen.

Type K2aIII is a disc with one peripheral perforation and is from a species of red backed abalone (Fig. 2). The single specimen of this type, however, is broken slightly along one edge and may actually have had a second perforation, thus making it Type K6aIII. This specimen, which has no location, has a diameter of 3.5 cm. and is 3.0 mm. thick.

Type K5aII, a single specimen, 1-116060, is a disc with opposing peripheral perforations. The diameter is 2.0 cm. and is 1.5 mm. thick. The perforations appear to have been conically drilled (Fig. 2). There is no location information for this specimen.

Type K551I is represented by three specimens; 1-116057, 1-116059 and 1-116055. All these specimens have two opposed peripheral perforations and peripheral incising (Fig. 2). The diameter of the first specimen is approximately 2.5 cm. though it is not completely circular; it is 1.5 mm. thick. The second specimen is 2.3 cm. in diameter and 2.0 mm. thick. This specimen has asphaltum filling one perforation. The third specimen has a diameter of 2.3 cm. and a thickness of 2.5 mm. The perforations for the most part appear to be biconically drilled for all three specimens. There is no location for any of these specimens.

Type KóaI is represented by two specimens, 1-103126, that have been made from Haliotis cracherodii shells. (Fig. 2) These ornaments are discs with adjacent peripheral perforations. Since the perforations had been damaged or broken out during recovery it is not possible to determine definitely if the perforations were biconically or conically drilled. Due to their relative thickness it may be safely assumed that the former process was followed.

Both of these large ornaments are in good condition and quite well matched. One has a diameter of 9.3 cm. and a thickness of 5.0 mm. The second specimen is slightly larger with a diameter of 10.0 cm. and a thickness of 5.0 mm., also. These ornaments were in association with a burial that was estimated to have been about 4 or 5 feet below the surface, no other data were obtained for this burial.

Type K6aIII is a disc with two adjacent peripheral perforations, but differing from the preceding type in that the species of Haliotis is unidentified (Fig. 2) There are two specimens of this type.

Specimen 1-103137, which occurred with Burial 4, is 2.5 cm. in diameter and 2.5 mm. thick. This specimen has asphaltum adhering to its surface. Specimen 1-116061 is approximately 3.5 cm. in diameter and 2.0 mm. thick; this specimen has no known location from the site.

Type K8a is a disc with three peripheral perforations, two adjacent and one opposed (Fig. 3). This type is represented by specimen 1-116066 which has a diameter of 3.6 cm. and a thickness of 2.5 mm. All three perforations appear to be conically drilled. This specimen has no location recorded for it. A second specimen of this type, occurring in Burial 4, is in the Dorsey Collection and is about the same size as the previous described specimen.

Type K8bIII, like the previous type, is a disc with three peripheral perforations, two adjacent and one opposed. The difference, however, is that this type is incised on the edge of one face (Fig. 3). This type is represented by specimen 1-116056 which has a diameter of 2.6 cm. and a thickness of 3.0 mm. All three holes are conically drilled and two have traces of asphaltum in them. No location was obtained for this specimen.

Type K13aII is a disc with two opposed peripheral perforations and one medial perforation (Fig. 3). Specimen 1-103128, the sole representative of this type, is 2.0 cm. in diameter and 1.0 mm. thick. This particular specimen may actually have had edge incising when made. If this were true the specimen would rightly be classed as Type K13bII. Since the specimen has been worn considerably and has a patination or stain it is difficult to ascertain its original surface features.

Type K20a, an extension of Gifford's typology, is a disc with two adjacent peripheral and two adjacent medial perforations as well as edge incising on one face (Fig. 3 ). Specimen 1-103128, with no known location data, is the only specimen of this type. The diameter of this specimen is 2.9 cm. and it is  $1.5~\mathrm{mm}$ . thick.

Type Q2aIV is a more or less rectangular ornament with a single perforation at one end (Fig. 3). This type is represented by two specimens, 1-116089 and 1-118990. The first specimen is 1.1 cm. long, 6.0 mm. wide and 1.0 mm. thick; the second specimen is 2.2 cm. hong, 8.0 mm. wide and 2.5 mm. thick. These specimens have no location data recorded for them.

Type QhaII, a roughly rectangular ornament, is represented by a single specimen, 1-116062. This type has two peripheral perforations on one side (Fig. 3). The dimensions of this single ornament are 3.5 cm. x 3.7 cm. having a thickness of 2.5 mm. There is no location recorded for this artifact.

Type Q7aIII is a trapezoidal ornament with two opposed peripheral perforations; the corners are rounded (Fig. 3 ). A single specimen, 1-103121, is the representative for this type. No location was obtained for this specimen. The maximum dimensions for this artifact are 2.1 cm. x 1.9 cm. The surface of this specimen has exfoliated so that the present thickness is but 1.0 rm.

Type QllaII is a trapezoidal ornament with three peripheral holes, two at one end and one at the other (Fig. 3). This type, too, is represented by but one specimen; no 1-103121 and has no location given for it. This specimen has a maximum estimated length of 2.7 cm. (the single hole is broken out). Its maximum width is 1.2 cm, and it is 2.0 mm. thick.

Type Sla, a rectangular, unperforated <u>Haliotis</u> ornament, is represented by two specimens imbedded in asphaltum in specimen 1-103142, a raptorial bird skull (Fig. 3 ).

Type SlaI is represented by four specimens set in a rectangular asphalt tube. The ornaments are rectangular and unperforated and have edge incising. The specimens to which these ornaments adhere are in the Cornelison Collection.

Type S2aIII is represented by the recovery of two ornaments of this type from the chest region of Burial 8. These specimens, 1-116087 and 1-116088, are rectangular pieces with a single perforation at one end (Fig. 4).

Type S6aIII is a rectangular ornament with two central perforations and is represented by a single specimen from Burial 4. This specimen (Fig. 4) is in the Dorsey Collection. The approximate dimensions of this specimen are 3.5 cm. x 1.8 cm.

Type S7aII is represented by one specimen which, which specimens in Type Sla, is set in asphalt in the skull of a raptorial bird, The ornament is rectangular with a perforation at each end (Fig. 3).

Type Slla is a rectangular ornament with three peripheral holes, two at one end and the other hole at the opposite end (Fig. 3). The only specimen of this type is 1-103128 and has no location recorded for it. It is 4.0 cm. long, 1.4 cm. wide and 2.0 mm. thick.

Type S15b, a rectangular ornament with peripheral incising on one face and a perioration in each corner, is represented by one specimen which is in the Cornelison Collection (Fig. 4). The approximate dimensions for this specimen are 2.8 cm.  $\times$  3.5 cm.

Type S21, a rectangular ornament, has two perforations in the corners of one end as well as two medial perforations. The medial perforations tend to be separate rather than centrally located. One of the medial perforations of the single specimen 1-116067, has a Type X4 Olivella bead insert held in position by asphalt (Fig. 4). The other medial perforation has a trace of asphaltum in it so it may be assumed that it, too, had an insert. The length of this ornament is 5.0 cm. while its maximum width is 3.2 cm. It is 3.0 mm. thick; there is no location for this ornament.

Type U2aIII is a triangular type of ornament with a single perforation (Fig. 4). Two specimens, 1-118999 and 1-103137, are the only specimens of this type. The former has no location though the latter is if from Burial 4. The larger specimen, 1-118999, is 3.0 cm. long, has a maximum width of 1.4 cm. and is 1.5 mm. thick. The other specimen is 1.6 cm. long (an estimate since one corner is broken), 8.0 mm. wide (high) and 1.0 mm. thick.

Type AP2aII is represented by five whole specimens and numerous fragments (Fig. 4). The largest specimen is in the Cornelison Collection. All whole specimens have the single perforation at one end. These ornaments are made from the inner rim of the Haliotis shell. UCMA numbers for the specimens of this type are as follows: 1-116069, 1-116070, 1-116071 and 1-116087. The UCMA specimens have approximate dimensions as follows: 3.5 cm. long, 8-10 mm. wide and 2-4.0 mm. thick. The Cornelison specimen is ca. 10.0 cm. long, 1.5 cm. wide and 4.0 mm. thick. There is no location for this last specimen.

Type AQla is a trough shaped ornament somewhat like the previous type. Specimens 1-116088 and 1-116072 are the only two specimens of this type (Fig. 3). These specimens average 3.5 cm. in length, 1.2 cm. in width and about 2.0 mm. in thickness.

A Haliotis ornament type not given in Gifford's typology is represented by 1-103139. This specimen is an ovoid ornament 4.0 cm. long, 3.0 cm. wide and 2-3.0 mm. thick (Fig. 38). This specimen is an ovoid ring with a perforated lug on one side suitable for suspension. It was associated with Burial 7.

Another Haliotis ornament not given in Gifford's typology is represented by a single specimen from Burial 7. The specimen, 1-103139, is a disc with a large central perforation and with 8 projecting perforated peripheral lugs with a notch or semi-circle at their extremities (Fig. 3A). The maximum diameter is 3.1 cm. and the diameter of the central perforation is 1.3 cm. The specimen has a thickness somewhat greater than 1.0 mm.

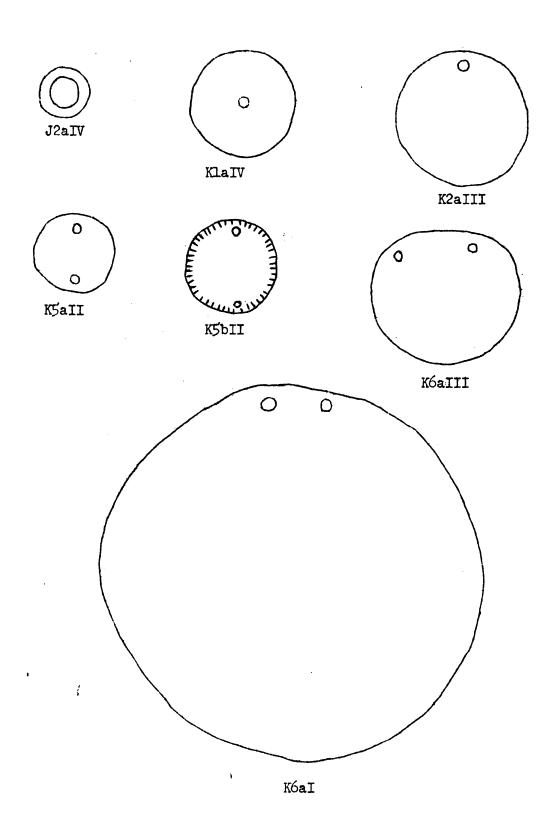


FIGURE 2

HALIOTIS SHELL ORNAMENTS (1/1).

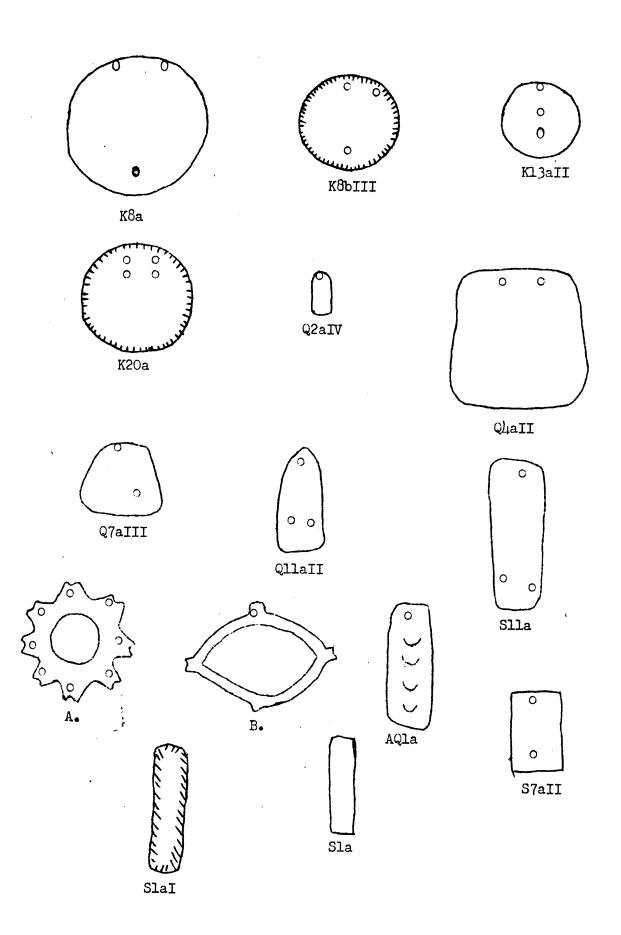


FIGURE 3

HALIOTIS SHELL ORNAMENTS (1/1).

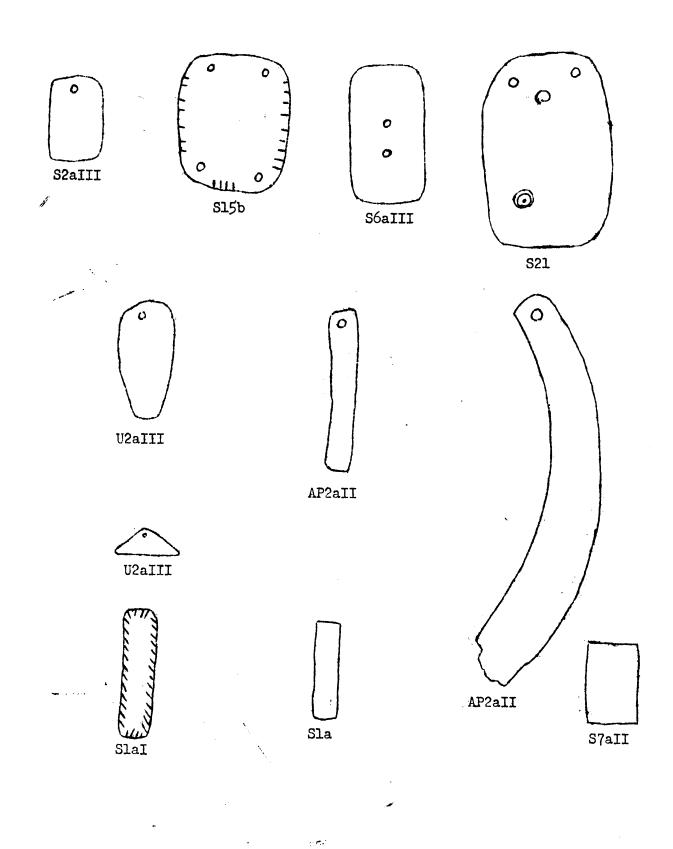


FIGURE 4

HALIOTIS SHELL ORNAMENTS (1/1).

Olivella shell: Six types of Olivella beads were recovered from Ker-74<sup>28</sup> One whole unmodified Olivella biplicata also was found. This specimen, 1-103137, was apparently picked up on the beach as it still has small grains of gravel stuck inside the shell. It also still retains its purple, brown and white coloring. This specimen occurred with Burial 4.

The Olivella specimens are given below by type with museum numbers, description, location and quantity.

Type C23c, an extension of Gifford's typology, is a whole Olivella biplicata shell with the spire ground off and the side in which the natural orifice is located abraded (excluding the orifice) to form a rather large perforation. When beads of this type are strung they form a braid rather than a linear string; the alternating of the beads form two rows on the one string rather than a single row.

Specimens of this type include the following: 1-103130, two specimens; 1-116053, one specimen; 1-11608h, two specimens; 1-118995, three specimens; none of these specimens had their locations recorded. The single specimen 1-116090 came from Burial 9. All beads of this type have two perforations, one at the spire and one laterally.

Type F5b is an Olivella biplicata shell with the spire ground off, thus having a single perforation. The following specimens are of this type: 1-103114, three specimens (small) from Burial 5; 1-103122, one specimen; 1-103124, 18 specimens (small, probably not adult shells); 1-103132, three specimens; 1-103133, 7 specimens; 1-116083, 6 specimens; 1-116091, five specimens from Burial 9; 1-118996, 13 specimens, two with asphaltum; 1-118997, 29 specimens (small), one with slight lateral abrasion about the orifice.

Type Glc is a cup-like bead made from the spire of an Olivella shell with a trace of the suture on the exterior of the bead. The tip of the spire is ground off giving it a single perforation. The single specimen, 1-116053, has no location.

Type X2b is a disc or oval bead from a section of the wall of an Olivella biplicata shell with a trace of the inner whorl at one end. Specimens of this type include 1-103113, 32 specimens from Burial 5; 1-103115, four specimens; 1-103125, 37 specimens; and 1-103131, two specimens. There was no location obtained for the latter three groups of beads. This bead type has a single central perforation.

Type X3bI is a circular or oval bead from Olivella biplicata shell with no shelf-like trace of inner whorl. The bead is cut from the body whorl and has an even thickness but a variable diameter. They have but a single central perforation. The following are specimens of this type: 1-103136, three specimens from Burial 4; 1-116093, 25 specimens from Burial 9; 1-118994, one specimen, and 1-118998, four specimens. The last two groups had no location data concerning their recovery.

Type Xh is a small, round, concave-convex bead cut from the thick enamel of the parietal callus of the Olivella biplicata. This type has a single central perforation. Specimens of this type are as follows:

1-116053, three specimens, two with asphaltum; 1-116080, six specimens; neither of these two groups of beads have any location. Occurring with Burial 9 are 1-116093, two specimens and 1-116096, 18 specimens. Fifteen specimens, 1-118998, have no location data.

## WORK IN STEATITE

Only a few specimens of steatite were recovered from this site. All of the specimens, however, appeared to have been made from the fine grained compact material having the grayish rather than a greenish tone. Wedel<sup>29</sup> suggests that this material may have come from near Lindsay, Tulare County. Walker<sup>30</sup> had previously reported on this quarry and Latta<sup>31</sup> states that the local Yokuts Indians in the Lindsay area traded steatite to other Yokuts groups. The coarsely crystalline steatite usually greenish in color that occurred at Buena Vista Lake<sup>32</sup> was not represented in the artifacts of steatite from Ker-74.

The specimens made of steatite found at this site are as follows: one arrowshaft straightener, one tubular bead, one small disc bead, one habret or lip plug and a rim sherd of a vessel.

Arrowshaft straightener: The single specimen, 1-103112 (Fig. 5b,c), was apparently found by the local collectors in several fragments, probably having been broken at interment. Unfortunately the location and association for this artifact were not obtained. The specimen is a large and an unusually well formed piece with incised decoration on the upper surfaces of both ends.

The maximum length of the specimen is 12.0 cm., the maximum width is 6.7 cm. and the maximum thickness is 6.1 cm. The maximum width of the groove is 2.0 cm. which is the same as the maximum depth of the groove. The groove is quite well polished from use. The outside, though not as highly polished, has been smoothed as evidenced by the striations from the abrading tool.

Beads: Specimen 1-103144 is a perforated steatite tube that might be classed as sub-rectangular rather than circular in cross-section. This artifact was found in the skull cavity of Burial 1. The dimensions are 3.3 cm. long by 1.6 cm. in diameter. The perforation is approximately 9.0 mm. in diameter.

This bead is well polished and has a groove at either end of the perforation indicating that through long continued suspension from a cord through the perforation a single groove or notch was worn on the inside rims at each end. The interior or "bore" of the perforation is quite polished though rings formed at the time of the drilling can still be discerned. From the diameter of the perforation and the occurrence of the rings on the interior it seems quite likely that this specimen was perforated with a stone drill.

A small disc bead, 1-116101, was recovered from Burial 9. The specimen is 6.0 mm. in diameter and 2.0 mm. thick. It has a single central perforation.

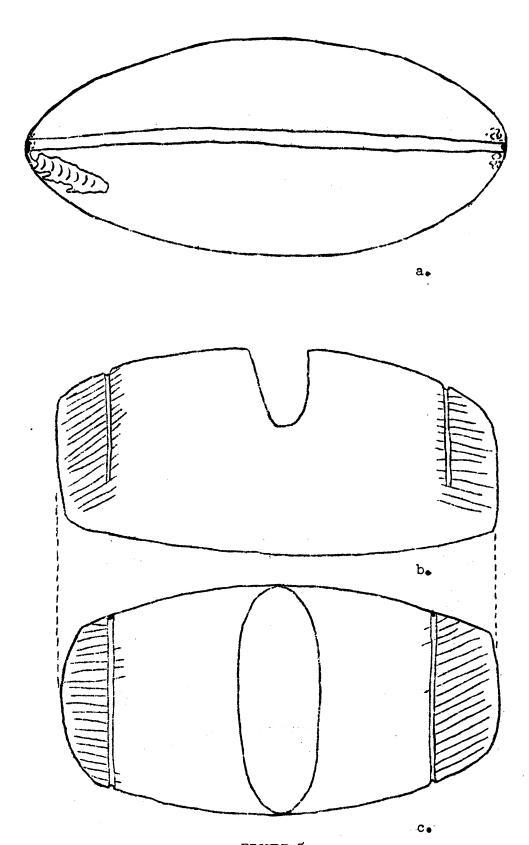


FIGURE 5
ALABASTER CHARMSTONE (upper); STEATITE ARROWSHAFT STRAIGHTENER (lower) (1/1).

Lip plug: A single lip plug or labret, 1-103145, was recovered from the face region of Burial 1. The diameter of that portion outside of the lip of the wearer is 1.7 cm. while the section that is "buttoned" into the lip is 1.4 cm. in diameter. The specimen is 8.0 mm. thick and is moderately well finished (pl. lm).

Vessel rim sherd: A rim fragment of a steatite vessel, 1-103116, occurred at Ker-74. No location was obtained for this specimen. This artifact evidently came from a vessel that had been cracked and an attempt had been made to mend the pot by drilling holes in the walls of the vessel. One of the holes is biconically drilled while the other is conically drilled. Along the edge near one hole are several notches that may have served to hold the binding that held the vessel together. Both the exterior and the interior are only moderately well finished. The fragment is too small to determine the shape of the entire vessel.

"Crack sewing", the method of repairing broken vessels of steatite by drilling holes on both sides of the crack or break and sewing the two pieces together, is noted in the Santa Barbara coast region by Rogers 33 and from the southern San Josquin Valley by Gifford and Schenck.

## WORK IN CHIPPED STONE

Chipped stone of any sort was exceedingly rare in Ker-74 if it can be assumed that the pieces recovered are a representative percentage.

Projectile points: In Burial 4 there were found the tips of two obsidian projectile points. Because of their fragmentary condition no type could be assigned them. The lack of any quantity of chipped stone artifacts may be due to the recency of the burials. With the advent of the white man's trade goods the chipping of stone tools, became unimportant. These artifacts are in the Dorsey Collection.

Flake scrapers: Two groups of artifacts that are nothing more than rather thin flakes of obsidian used as scrapers, and occasionally knives, were associated with burials. One group of twelve specimens, 1-103111, consists of thin obsidian flakes of various irregular shapes. These specimens came from Burial 6 on the right side near the ribs. Only one specimen showed any signs at all of secondary flaking; however, nearly all edges showed varying degrees of "use retouch", i.e., the edges were fractured through use.

The second group consists of two specimens of the same type as described above. These specimens, 1-103137, were associated with Burial 4, the burial from which the projectime point fragments were recovered. Several other pieces of obsidian occurred with this burial, also, but are not in the UCMA collections.

All of the above flake scraper specimens from the two burials average approximately 2.5 cm. in diameter and about 4.0 mm. thick. They all appear to have been made from a translucent grey obsidian.

The Yokuts from the Tulare Lake region were reported to have supplied other Yokuts groups with obsidian. If this were true it is possible that the lake people got their obsidian from the Coast Range region to the west. However, since the Yokuts supplied obsidian to the Chumash and other peoples on the coast it seems that most of the obsidian used by the Yokuts came from Inyo County.

Quartz crystal: No. 1-103119 is a portion of a quartz crystal that has been fractured by percussion. The measurements of this specimen are 2.1 cm. x 1.9 cm. x 1.3 cm. No secondary flaking appears on this artifact. Traces of red ocher appear on its surface on one end. Quartz crystals have also been noted by Gifford and Schenck as coming from the Tulare Lake region. Walker recovered a crystal from a burial at a depth of 40 inches; there is no location data for 1-103119 described above.

## WORK IN GROUND STONE

Charmstone: Only one artifact that might be termed a charmstone was recovered from Ker-74; it is now in the Cornelison Collection. This specimen was associated with the burial from which the church medallions were recovered. The charmstone is of alabaster and is 12.8 cm. long, 6.3 cm. wide and weighs 632 grams. The average width of the longitudinal groove is 6.0 mm., the average depth of the groove is 2.3 mm. There has been a slight battering at both ends but not enough to make it seem that the regular function of the specimen was as a hammer (Fig. 5a).

Mortars: One mortar, 1-103147, recovered from Ker-74 had apparently been broken by the land leveling machinery. Since all of the pieces had been saved, however, the mortar has been reconstructed.

Maximum diameter ... 23.0 cm. Maximum height .... 17.8 cm. Sides ..... Convex Cavity: Diameter ..... 18.0 cm. Lip ..... Rounded and thin. Rim ..... Ca. 10.0 mm. wide, is undulating due to wear and breakage. Bottom: Shape..... Flat or slightly convex. Thickness ..... Ca. 3.0 mm. Finished ...... Pecked all over-Material ,,,,,,, Sandstone Condition ..... Complete except for several fragments lost when specimen was broken by land leveling machinery.

This specimen had been much used though was not worn out. There were slight traces of red ocher on a portion of the walls of the cavity. There was no location for this piece.

A second mortar, 1-103146a, is also made of sandstone and had been slightly damaged when scraped out of the site.

Maximum diameter .... 31.0 cm. Maximum height .... 23.6 cm.

Sides .... Convex-vertical.

Cavity:

Diameter ........ Ca. 2545 cm. Depth .......... Ca. 1548 cm.

Lip ...... Rounded

Rim ..... Flat and ca. 1.5 cm. wide.

Bottom:

Finished decessors All over.
Material decessors Sandstones

Condition •••••••• Good except for about a quarter of the rim which was chipped off before burial and a portion of the remaining rim which was broken by the scraper during the leveling of the site.

The inside lip of this mortar is worn to form a facet at an angle to the walls of the cavity. There was no information concerning the location of this specimen when removed from the site.

Pestles: A pestle, 1-103146b, probably associated with mortar 1-103146a, is flattish or near ovoid in cross-section and tapers to the proximal end. The material is a granitic stone that has been rather well shaped and polished. Its length is 30.8 cm. and it has ca. 8.0 cm. for a maximum width. As with the above mortar, 1-103146a, there were no location data obtained for this specimen.

Another pestle recovered from this site is in the Dorsey Collection. It is ca. 20.0 cm. long, round in cross-section and has rounded ends. The proximal end has a smaller end diameter than the distal end, thus giving the pestle a taper. This specimen is well formed and in good condition. There were no location data obtained for this piece.

## DIATOMACEOUS ROCK SLABS

Two rather unique specimens occurred with Burials 1 and 2. These specimens were slabs of diatomaceous rock that had been modified by scraping, smoothing and painting.

The larger slab, 1-103134, was found lying on edge on the right side of Burial 1 near the lower arm. This piece is 35.4 cm. long, 13.0 cm. wide at one end and 10.6 cm. wide at the other; it is from 2.5 to 3.0 cm. thick. The surface on one side had been solidly painted with red other and then vertical and horizontal lines were scratched on the surface leaving the red paint on in irregular squares. On the reverse side there is at one end a pattern of incised lines (pl. la.b).

Another specimen similar to the one described above is 1-103135. This artifact was also laid on its edge but in the vicinity of the upper right log of Burial 2. This piece is 32.0 cm. long, 10.0 cm. wide at one end and 7.0 cm. wide at the other; it is approximately 10.0 mm. thick. This piece has been entirely stained with red other and has gir black lines extending from one end toward the middle (pl. lc).

The Yokuts obtained diatomaceous earth for white paint from the Coast mountains. 39 The material for the above described specimens may have come from this same area.

## FOSSIL MATERIAL

A fragment of a sea shell tentatively identified as Anadara trilineata (Conrad) came from Ker-74 though no location was obtained for it. This shellfish was rare and doubtful before the Miocene but abundant from the Pliocene to Recent. This form occurs in the Kettleman Hills oil field in the Pecten and Trachycardium Zones of the Etchegoin formation which is Pliocene in age.

Latta says that oddities or rare curios had a high trade value to the Yokuts. 41 If this specimen came from the Kettleman Hills it is possible that it was picked up by someone on a trading mission to the coast.

### DATING

Of major importance in establishing dates for Ker-74 are the brass military buttons and the glass trade beads. I would here like to express my appreciation for the invaluable assistance given me by Mr. Clement W. Meighan concerning trade beads and by Mr. Arnold R. Pilling concerning the military buttons.

On the basis of common bead types which occur in Ker-74 and other sites, the following sites are considered to show a historic connection with Ker-74. These sites were subject to some of the same trade influences and are presumably of the same age, at least in part.

- 1. North Shore Kern Lake, Kern County.
- 2. Shasta no. 20.
- 3. Yol-13 (Mustang Site).
- 4. Nilcs, Alameda County.
- 5. Winters Site no. 3, Sacramento County.
- 6. Santa Rosa Island Site no. 2.
- 7. Santa Cruz Island Site no. 138.
- 8. Goleta Site no la
- 9. Ft. Vancouver, Oregon (Hudson's Bay Co.).

Thus, Ker-74 has some of the same types of glass beads as do sites on the Channel Islands which were presumably subject to Spanish influences. On the other hand, there is an overdap of bead types with Sha-20 and Yol-13, both of which appear to postdate the 1849 gold rush to California. It is with the first three sites given above, however, that Ker-74 has the greatest number of types of glass trade beads in common.

From these apparent connections it would seem that the site was under Spanish trade influences dating back to circa 1810, and that in the later period, 1830 to circa 1860, the same site was receiving trade goods from American or Hudson's Bay Company sources. The apparent connection between Ft. Vancouver and Ker-74 is worthy of note as the former was a Hudson's Bay trading post.

Meighan's trade bead typology 41 indicates that Burial 7 dates from 1810-1830. Burial 4 is dated between 1830-1860 as indicated by the association with brass military buttons of known date. Burial 9 falls into the post 1830 period and is therefore contemporary with Burial 4. Nine types of glass beads occurred with Burial 9, of these nine types five were in common with Burial 4 and two were in common with Burial 7. Of these latter two types one form, Type 99, is common to all three burials. Meighan, however, has found that this bead type, the only one common to all three burials, is quite widespread and apparently not very diagnostic for use in dating.

The burial associated with the church medallions quite obviously post-dated the date of 1830 given on the medallions. Complete data concerning this burial would have been of prime importance in obtaining valuable information on glass trade beads. The glass beads accompanying the medallions were considered of slight importance by the finder and consequently were not saved.

No date has been assigned to the green glass liquor bottle that was removed from a burial; virtually no data were obtained for this burial. This bottle could have come equally well from Spanish sources or from the American period.

## CONCLUSIONS

Of the numerous burials scraped out of Ker-74 by heavy land leveling machinery only enough data were obtained from nine to allow burial record forms to be made out. Out of the nine burials there were three burials with Caucasian manufactured material associated with them. It was from these three burials that comparisons and cross-dating with other sites in California and Oregon was at all feasible. Despite the lack of proper information concerning these three burials they proved to be invaluable in aiding in the dating and general study of glass trade beads found in California.

Caucasian trade articles occurred with both flexed and with extended burials. Both flexed and extended burials, also, were associated with aboriginal material—without any trace of trade material. Depth information concerning the burials seems to be of little value since relative depths are unknown. Extended burials occurring at a greater depth than flexed burials might be interpreted as meaning that with the introduction of the white man's shovel the Indians were able to dig deeper graves. The extended burial itself probably is due to Christian influence; however, a conservative element continued to bury the dead in a flexed position even after contact.

Numerous questions present themselves concerning this Yokuts Indian cemetery that cannot be adequately answered due to the lack of sufficient detailed information. Additional information, very carefully collected, may at sometime in the future be obtained that will be of considerable scientific aid to those interested in the proto-historic and historic periods of the aboriginal groups living in the southern portion of the San Joaquin Valley. Until additional information is made available, however, Ker-74 may well be considered to be a recent Yokuts cemetery with the majority of the burials dating from about the end of the 18th Century to about Civil War times.

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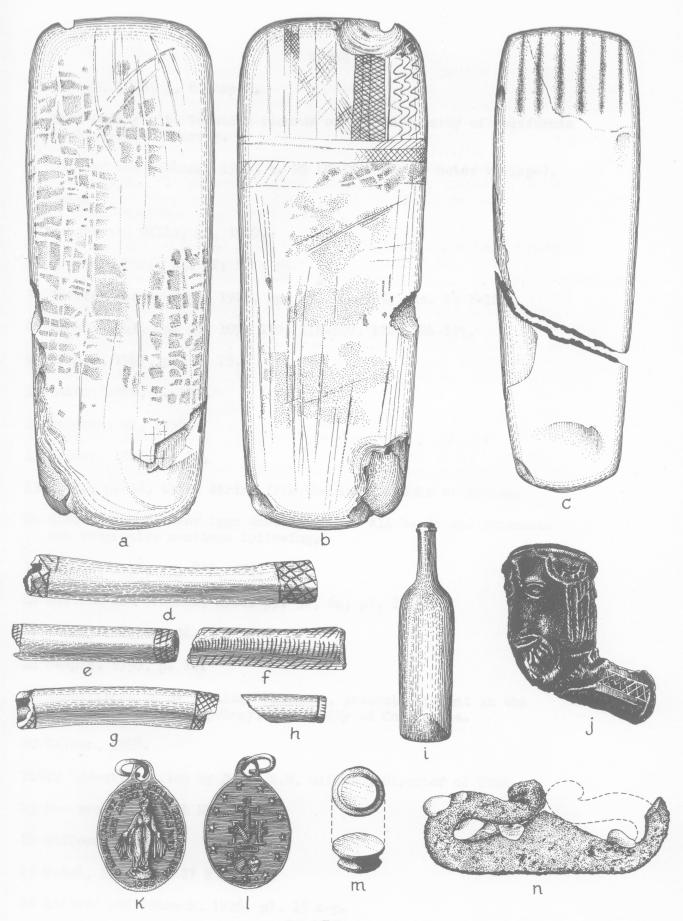


PLATE I Specimens from Ker-74

### NOTES

- 1 Gayton, 1948, p. 8, map 2.
- 2 Kern County site location records of the University of California Archaeological Survey.
- 3 Gifford and Schenck, 1926, p. 29 (Coffee survey notes village).
- 4 Ibid.
- 5 Heizer and Mills, MS, 1949.
- 6 Kroeber, 1925, pl. 72; 19 , p. ..
- 7 Gifford and Schenck, 1926, pp. 49, 101-105; pls. 2, 7-10.
- 8 Wedel, 1941, pp. 36, 109, 110, 116-120, 122, 124-127.
- 9 Walker, 1947, pp. 6, 28.
- 10 Latta, 1949, p. 173.
- 11 Meighan, MS, 1950.
- 12 Walker, 1947, p. 39.
- 13 Ibid., p. 36, third string from the left, middle of string.
- 14 Gifford, 1947. For type description of all beads and ornaments see respective sections following.
- 15 Gayton, 1948, pp. 232, 276.
- 16 Gifford and Schenck, 1926. pp. 50, 64; pl. 13.
- 17 Wedel, 1941. p. 38...
- 18 Sample, 1950, p. 20.
- 19 Identification by Sheilagh Thompson, graduate student in the Department of Anthropology, University of California.
- 20 Walker, 1947.
- 21-22 Identification by Prof. E.W. Gifford, Director of UCMA.
- 23 See section FOSSIL MATERIAL.
- 24 Gifford. 1947.
- 25 Wedel, 1941, pl. 27 k and n.
- 26 Gifford and Schenck, 1926, pl. 15 a-p.

- 27 Gifford, 1947.
- 28 Gifford, 1947.
- 29 Wedel, 1941, p. 53.
- 30 Walker, 1935.
- 31 Latta, 1949, pp. 65, 69.
- 32 Wedel, loc. cit.
- 33 Rogers, 1929, pl. 68.
- 34 Gifford and Schenck, 1926, pp. 74-75.
- 35 Sample, 1950, pp. 20-21.
- 36 Gifford and Schenck, 1926, p. 392.
- 37 Walker, 1947, Table 1, p. 10.
- 38 See section Medallions.
- 39 Sample, 1950, p. 20.
- 40 This identification was made by Henry T. Herlyn, graduate student in Paleontology at the University of California, Berkeley.
- 41 Latta, 1949, p. 65.
- 42 Meighan, MS, 1950.
- 43 Pilling, MS, 1950.

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# A CAVE BURIAL FROM KERN COUNTY ((KER-185)

Robert F. Heizer

## A CAVE BURIAL FROM KERN COUNTY (SITE KER-185)

From the files of the C. Hart Merriam Collection

In September, 1903, James W. Stockton who seems to have been at the time a schoolteacher in Bakersfield, wrote C. F. Lummis in Los Angeles saying he had "two Indian baskets, a tule mat and most of a mummified body. found by me some months ago in the remains of an old cave near Kern River Canyon." Stockton also mentioned "a net of milkweed fiber about the larger basket in which the mummy was casketed, a breech cloth made of cords of wild hemp wrapt with skin." Lummis forwarded the letter to Dr. Merriam who wrote Stockton and received an answer stating where the specimens might be seen. A typed extract of Dr. Merriam's observations under date of October 8, 1903 reads:

"At a store in the town [Bakersfield] I saw an interesting recent find from a cave on Kern River about 10 miles east of Bakersfield. It consists of a cornucopia shaped basket about 20 inches diameter at big end and apparently bluntly rounded at small end. The small end I could not see as it was packed in a box which it fits tightly. It contained and still contains the partly mummified remains of an Indian. The skull appears to be perfect and the teeth are so worn that the person must have been past middle life. From its size it must have been a small person probably a woman.

It was found by James W. Stockton of Bakersfield, who states that the basket in which the skeleton is doubled up (with still a good deal of skin, etc. attached) was wrapped in a net of milkweed fiber. With it were some other things, including a partly decomposed tule mat, a lot of fiber cord which he says was a breech cloth and a smaller basket. The latter is a bowl about 14 1/2 in. diameter by 5 inches in height, with nearly vertical sides.

Both baskets are still fairly well preserved though of course pretty rotten. They are of coiled weave of the 3-rod type, though more than 3 splints were used in places. They appear to be of tule, over willow rod foundations but I am by no means sure of the material. The big one is about 13 inches high by 20 in. diameter at the big end. I saw no design on either and believe them to be perfectly plain."

In June, 1904, Stockton again wrote Dr. Merriam some particulars on the location of the cave, and attached to his letter a sketch map. In July, 1905, Dr. Merriam was in Bakersfield, and in his Journal are the following additional observations on the cave:

"On the north side of the river (Kern) extending from near the bridge to opposite the mouth of Cottonwood Creek (say 1/2 mile) is a semi-circle of abrupt hills and vertical clayey cliffs rising from the river bottom to a height of perhaps 100 feet. On the face of the highest cliff, just above the steep-sloping talus and perhaps 30 feet (estimated) above and some little distance from the river, is the remains of what once must have been a most interesting cave. All that is left of it is two holes, one about 4 feet above the other, going back horizontally with the clayey cliff and each sub-dividing into other holes which are lost

to sight as they wind into the clay. Both are now occupied by dens of skunks of the genus Mephitis. They smell skunky and long tail-hairs and cylinders of excrement, made up almost wholly of beetle (Coleoptera) remains, abound.

The lower hole still has black walls from the smoke of the fires built in the cave by Indians a thousand or more years ago.

The cave has practically disappeared from the gradual falling away of the face of the cliff, This is the cave in which a young man named James W. Stockton (of Bakersfield) found, a couple of years ago, a small human 'mammy' buried in a basket. This I saw in the fall of 1903 and persuaded the Mational Museum at Washington to purchase. It is now in the National Museum and is the only case of basket-cave burial known to me on the Pacific coast.

I photographed the cliffs from the hills on south side of river, looking across the river bottom. The river flows in two channels enclosing an island between the bridge and mouth of Cottonwood creek.

An old irrigating ditch runs along the face of the cliffs, at the bottom or near it, and by following this ditch one comes to within say 20-30 feet of the remains of the cave."

Further information on the occurrence of the burial is contained in a letter to W. H. Holmes from J. W. Stockton of October 30, 1903. He says, "The smaller basket was unearthed first, bottom up and resting on the larger one which was on its side and facing north. The smaller one was full of and the larger one surrounded by a great deal of weeds, brown and sere with age. I judged them to be principally pennyroyal, dogbane and cycamore leaves. About the larger basket was a carrying net of milkweed fibre and entangled with it was some larger cordage of wild hemp. The mummy was casketed in the larger basket. Arms were placed across abdomen and head was crushed between knees. About the abdomen was a breech cloth of cordage in loops which had been covered with skin wrapped with fur outward.... The position of articles justified my thinking that the larger basket was placed upright, mummy in sitting posture, weeds packed about it, mat over its head, and second basket used as lid. After being placed thus a slide at mouth of cave forced debris inward overturning baskets. The body faced the setting sun."

## Description of burial and artifacts:

Skeleton. The remains are those of a child of about 12 years old. This determination was made by Dr. T. Dale Stewart, U.S.N.M. The corpse appears to have been placed originally in a sitting position in the basket. As may be seen from the photograph (Pl. 2,b) there still adheres to some of the bones dried flesh and skin. The burial and baskets were thus protected from disintegration in the dry deposit of the interior of the cave.

## Rabbitskin blanket.

This is the item referred to by Stockton as a "breech cloth," wrapped about the abdomen. Fragments of this are shown in the photograph in Plate 2,b, but the bulk of the blanket has been removed. The blanket is made by wrapping strips of rabbitskin 9 mm, wide in a clockwise spiral on foundation cords of 2-ply right twist grapevine bark 5 mm, in diameter, or on cords of some other fiber (probably milkweed, Asclepias) also 2.-ply right twist or two 2-ply right-twist cords twisted together in a clockwise direction. The wrapped warps are 1 cm; in diameter, and are bound side-by-side with twining elements of cordage (2-ply, right twist string 1 to 3 mm. in diameter), each course being spaced 8 cm; apart. The blanket now measures about 50 cm, wide, and was originally at least this long, or perhaps longer. Although in a fairly good state of preservation (some of the strips still bear hair and the cordage is firm and strong), the blanket is fragmentary due to separation of warp elements and breaking of weft twining elements. In its present condition nothing can be determined of the manner of finishing the edges of the blanket.

## Carrying net

None of the carrying net described by Stockton as of milkweed fibre found wrapped about the burial basket was collected, or at any rate, did not reach the U.S.N.M. as part of the collection.

# Small coiled basket

This basket (Pl. 2,d) is flat-bottomed with low, vertical sides. It measures 14 inches (35.5 cm.) in diameter, and stands 5 inches (12,5 cm.) high.

The foundation of the basket consists of a bundle of small grass (Epicampes?), split willow splints and an occasional small round willow rod. The basket is rather coarse, with 27 stitches per 10 cm, and 21 vertical coils per 10 cm. Occasional interior and exterior stitches are split, apparently by accident, and the basket cannot be said to bear intentionally split stitches. The coils are clockwise, and the stitches lean toward the left. The convex work surface was used in making the basket. Stockton's account states that the smaller basket was inverted over the larger one, serving as a cover.

## Basket containing burial

This basket (Pl. 2, a-b) is somewhat larger than the last, and measure 13,5 inches (34,5 cm.) high, 19 inches (48 cm.) in diameter at the top, 13 inches (33 cm.) in diameter at the base. The bottom is flat and the side walls are straight. No decoration is apparent. The foundation of the coils is again a bundle of fibrous hollow grass stems (Epicampes?); there are 21 coils per 10 cm., and 26 stitches per 10 cm. Except for size, the coils, stitches, direction of work and work surface of the larger basket is identical to the smaller one.

The larger basket contained the dessicated remains of the child with the rabbitskin robe (or breechclout) wrapped about it.

## Tule matting

This piece of tule matting (Pl. 2,c) lay over the head of the skeleton. One long edge with the tule (Scirpus) warp elements cut off square is the original border. It is bound with a simple twined technique .5 inch (1.5 cm.) from the edge, the weft consisting of a 2-ply right-twist cord, probably of Asclepias, 3 mm. in diameter. Three other twined weft courses are preserved, and are spaced from 5.5 inches (14 cm.) to 4.5 inches (11.5 cm.) apart. There are from 7 to 8 warps per 10 cm. The warp courses regularly consist of 4 tule stalks bound together by the cordage twined loops. The present measurements of the fragmentary mat are 15 inches (38 cm.) wide by 49 inches (124.5 cm.) long. One of the short edges bears an original segment of selvage. The warp element on the edge is a right-twist 2-ply tule rope caught by the weft cords. The second and third: course weft cords are joined along the edge to form a loop.

#### Discussion

A comparison of the cave burial artifacts with the culture inventory of the Yokuts tribe who held the territory of site Ker-185 in ethnographic times shows numerous points of correspondence. Because the Ker-185 burial was not accompanied by any Caucasian materials, we may regard it as dating from the prehistoric period, that is, earlier than 1850. The safest assumption would be that the burial dates from the last few centuries of the prehistoric period - say 1600 to 1850, though this is frankly a guess.

As Driver<sup>5</sup> shows, the site lies in the territory of the Yauelmani tribe of the Yokuts group, not far west of the Kawaiisu tribal boundary. Looking to the Yauelmani Culture Element Distribution list<sup>6</sup>, we note that this group possessed the following: hammock type carrying net (element 806); rabbitskin blanket or cape with cordage wefts (elements 650, 891, 896); twined tule matting (el. 913); coiled basketry with grass bundle (Epicampes) foundation (el. 820); and cordage of milkweed (Asclepias) fiber (el. 936). Basket interment (element 1966) was not inquired for among all Southern Sierra native groups, though incomplete interrogation yielded affirmative replies by the Entimbich (Western Mono) and Kocheyali (Yokuts) who are lower foothill groups near Kings River east of Fresno. Driver's monograph (notes to element 1962) mentions that most corpses were carried to the grave on the back of a person in a carrying net, carrying basket, or pack strap. The heavy carrying net mentioned by Stockton as enclosing the baskets, and the tightly flexed child's body stuffed into the large basket are features which suggest the packed remains were carried to the cave and there deposited. Although cave burial is apparently rare in this region, the Yokuts custom of burying the dead in a cemetery plot removed from the village offers the possibility that the single basket burial from Ker-185 is that of a child who died on the march or at a temporary camp in the vicinity and was left at this convenient spot. Because the cave was small, had not been used for other mortuary purposes, and the practice of cave burial was at best only rarely practiced locally, we must conclude that the burial is atypical for Southern Sierra foothill

Indians. Though such speculation can hardly be decisive, it is of interest to note that there are recorded at least two additional instances of individual basket cave burial in California. One of these is from a cave in Monterey County (site Mnt-85) excavated some years ago by W. W. Hill while a student at the University. The collection, now in UCMA includes the dessicated remains of an infant lying on a dressed skin and placed in a twined basket.

The second instance of child cave burial in baskets is that of the dessicated skeleton of an eight year old child wrapped in a cordage carrying net and sandwiched between two halves of an openwork twined burden basket. The location of this burial is Bamert cave just east of Clements, Amador County (site Ama-3).

These three examples, all of which probably date from the late prehistoric period and, to judge from the artifacts accompanying each skeleton, may logically be ascribed to the recent prehistoric ancestors of the ethnographic Yokuts (Ker-185), Niwok (Ama-3) and Costanoan (Mnt-85) tribes, and thus constitute evidence of a widespread late Central Californian custom of occasionally interring dead children in dry caves. 12 In Central California children's graves are often lavishly endowed with offerings. These are to be interpreted as evidence of affect-laden attitudes surrounding a much loved young son or daughter. The factor of youth may help to explain the rare, though widespread, special interment of children in caves.

#### Summary

The dessicated body of a child buried in a coiled basket in a small Kern County cave (site Ker-185) is probably to be interpreted as deriving from the later prehistoric Yokuts tribe who in recent times occupied the area. Host of the cultural objects accompanying the skeleton are of the recent Yokuts type. Although cave burial is rare in California, most graves being localized in cemetery plots within or near village sites, two additional dry cave burials of an infant and child are cited with the suggestion that occasional burial of sub-adults in dry caves is a Central Californian culture trait explainable in part to the care with which corpses of children were sometimes disposed.

#### Addendum

# Published references to basketry in Western North America.

In the far west the arts of basketry were brought to a very high development. This subject has been fairly adequately covered in publications describing ethnographic specimens. Among the more important contributions are those by Mason (1904), Barrett (1908), O'Neale (1932), Kroeber (1909), James (1904), Boas et al. (1923), Kissell (1916), Roberts (1929), Douglas (1937).

Of archaeological or prehistoric basketry we have the excellent major studies of Horris and Burgh (1941), Weltfish (1930, 1932a, 1932b), Tschopik (1939), Cressman (1942), Loud and Harrington (1929), and Cosgrove (1947) besides a large number of minor, though significant, contributions.

Robert F. Heiser Director, UCAS

#### NOTES

- 1 The C. Hart Merriam collection of data on California Indians was deposited at the University of California by Dr. Merriam's heirs. In the collection was found an envelope containing some letters, photographs and Dr. Merriam's observations on the "mummy" and its wrappings. Dr. Merriam was instrumental in seeing that the U.S.National Luseum secured the find. To the staff of the U.S. National Luseum, in particular Dr. Frank M. Setzler, Curator of the Department of Anthropology, Dr. Remington Kellogg, Director of the Museum, Dr. T. Dale Stewart, Curator of Division of Physical Anthropology, Dr. Herbert W. Krieger, Curator of the Division of Ethnology, we are indebted for the loan and photographs of the material from Ker-185. The Ker-135 specimens, accessioned in the U.S.N.M. under No. 41, 978, catalogue numbers 222, 142/222, 146. The burial is on permanent exhibit at that institution.
- 2 These photographs, 4 in number, are in the Merriam Collection.
- 3 Right-twist is the same as clockwise or S-twist; left-twist is counterclockwise, anticlockwise or Z-twist.
- The looping of two twined weft courses occurs elsewhere in Western North America. Cf. J. L. Nusbaum. A basket-Maker Cave in Kane County, Utah.: Mus.: Amer. Indian, Heye Fndn., Indian Notes and Monographs, 1922, Fig. 15.: In UCMA are 4 Yokuts tule cradle mats made by twining 2-ply right-twist cordage. Nos. 1-10730, 1-10732 show occasional weft courses carried along the edge to the next weft course as in the case of the Ker-185 mat. Other weft courses are tied at the mat edge. The selvage of these tule matting pads is, like the Ker-185 specimen, two tule stalks with a right twist. In brief, these ethnographic Yokuts specimens are practically identical with the cave matting.
- 5 1937, Map 1. See also Stewart, 1927, Pl. CXXIII; Gayton, 1948, Map 1.
- 6 Driver, 1937.
- 7 See also Gayton, 1948, p. 46 (Paleuyami)
- 8 Wedel, 1941, p. 121 ff.; Driver, 1937, element 1968. The Yokuts are not unique in this practice which is also attested for the Yurok and Chumash.
- 9 Northeastern California caves, the Sierran limestone caverns, and some caves south of Tehachapi yield burials.

- 10 Accession no. 100 SF; catalogue nos. 12-3930, 1-27084.
- 11 Accession no. CAS-84; collection in UCMA.
- 12 Alternatively one may prefer a less specific explanation, and, pointing to the wide occurrence of cave burial in North America, incline to the possibility that the three California instances cited here are specially selected examples of a fairly general mortuary practice.

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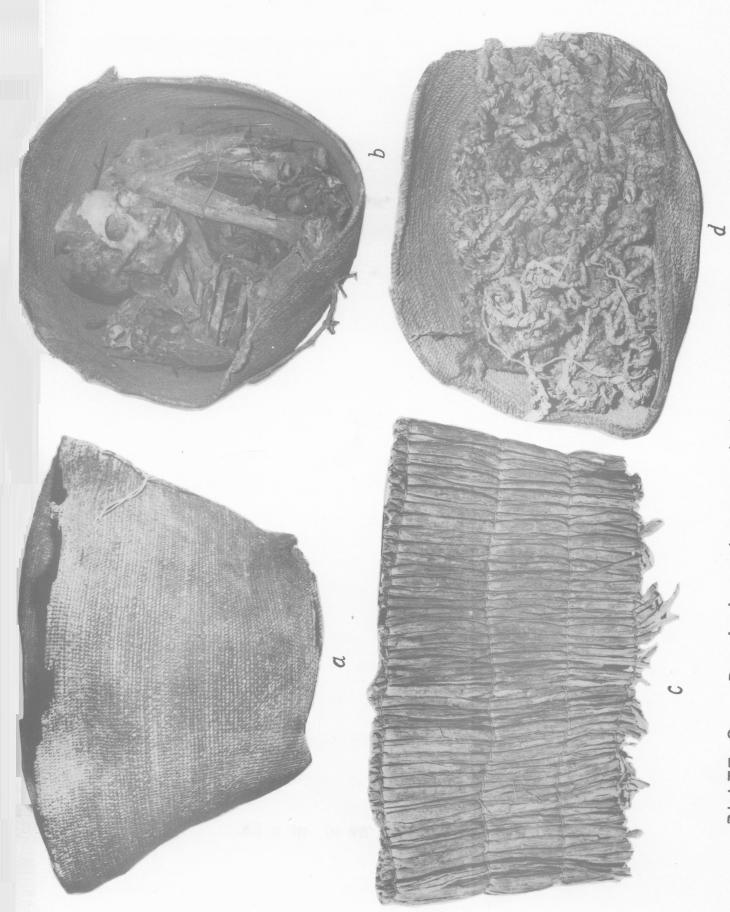
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specimens Burial and associated from Ker-185.