50. Catlow Twine from Central California

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A type of basketry technique which is of wide occurrence in western North America has recently been noted archaeologically in Central California, in areas where it is unknown ethnographically. This technique has been named Catlow Twine by Cressman (1942) who found it archaeologically in the caves of southeastern Oregon and who sees it as a variation of Basket Maker twined bags (Cressman, 1942, p. 42). The technique in question is a simple two-strand twine with its distinguishing feature being a warp of two-ply twisted cordage. In the Oregon area the pitch of the weft is down to the right and Cressman considers this also to be a diagnostic feature.

Ethnographically this basketry type is best known from the Klamath-Modoc area, where it was described by Barrett (1910, p. 254). It also occurs farther north in the Plateau (Ray, 1932, p. 36) and it may be related to a common twined bag on the Northwest Coast which in technique is a plain twine and may use as a warp either a bundle of fibers (Gunther, 1927, p. 223) or two-ply twisted cordage (Mason, 1904, p. 264). Mason also notes the occurrence of a similar type in Mammoth Cave, Kentucky (Ibid., p. 263). In California the technique occurs among the recent Achomawi and Atsugewi as well as the Modoc but apparently does not extend into the Shasta, Wintu, or Maidu (Voegelin, 1942). In other words it does not occur in the northwest California culture area nor does it extend into the area of the Penutian-speakers of Central California.

Although the technique does not occur ethnographically in Central California, there are a number of known instances from the archaeological data. In the following paragraphs will be described a piece of Catlow Twine found in Alameda County and other instances which have come to the writer's attention will be noted as well. (See Map 1.)

The present specimen was collected by Dr. Mark Emerson, now deceased, in a cave near Altamont, Alameda County, California. Attempts both before and after Dr. Emerson's death several years ago to learn the exact date and circumstances of the find have failed. The specimen was received by the University of California Museum of Anthropology in 1943 and is cataloged there under the number 1-62387.

The specimen is a rectangular fragment of tightly woven, flexible twine basketry measuring 19 cm. in length and 12 cm. in width (see fig. 1d). In technique it is plain two-strand twine, that is, each twist of the weft encloses a single warp, and the pitch of the weft is down to the right. The wefts are 2-3 mm. wide and there are about 44 of them per 10 cm. The warps are made of two-strand Z-twist cordage which has about a 20 degree twist (see Osborne and Osborne, 1954, for an explanation of cordage terminology). Each strand of the warp cordage has a diameter of about 2 mm. There are about 25 warps per 10 cm. Mr. Gordon Grosscup, in going through the archaeological collections of the University of California Museum of Anthropology, observed a number of specimens of Catlow Twine and took the time to record each occurrence. It is believed that few, if any, additional specimens in the U.C. collections were not noted by Mr. Grosscup, hence the list below should contain substantially all the information on the subject available at the moment.

<u>Glen Cove Site (Sol-236)</u> Several fragments of a Catlow Twine-like basketry come from this site on Carquinez Straits in Solano County. The specimens from this site are the most divergent of all those observed in Central California, being much finer, almost more resembling cloth than basketry. The specimen is covered with a layer of <u>Olivella</u> beads which are rectangular in outline and are perforated near one end. This type of bead is known to be diagnostic to the later part of Phase I of the Late Horizon.¹ The specimen was previously discussed by this writer (Baumhoff, 1953).

Thomas Site (Mrn-115) A single fragment of Catlow Twine was recovered from this site on the Marin shore of San Francisco Bay. It was the same as the Altamont specimen except that the pitch of the weft is up to the right instead of down to the right. This is undoubtedly a late occurrence; radio-carbon dates indicate that the site was probably occupied until 1800 and the basketry was found in the topmost level of the site (Meighan, 1953, p. 5).

Johnson Site (Sac-6) Three separate lots of Catlow Twine have been recovered from the Johnson Site near the delta region of Sacramento County. One lot contains seven fragments of the same basket, the second lot contains many small fragments of a single basket, and the third lot consists of a single fragment. The three lots no doubt come from three different burials but unfortunately we have no information on the provenience of the specimens. The basketry technique evidenced in these three lots is virtually identical with that of the piece from Alameda County. The degree of fineness is the same and the pitch of the weft is down to the right. The basketry specimens from the Johnson Site are part of the collection donated to the Museum of Anthropology by E. J. Dawson. Most of the artifacts in the Dawson collection are attributable to Phase II of the Late Horizon and the basketry is therefore probably from the same period. In any case they are from the Late Horizon because the whole site is representative of that period.

Mosher Site (Sac-56) Several fragments of Catlow Twine come from this site and appear to represent at least two baskets. The technique on these specimens is again the same as that of the Alameda County specimen in that there is exhibited the same degree of fineness and the pitch of the weft is down to the right. No data on the provenience of the specimens within the site are available but the entire site is either Phase II of Late Horizon or historic; the basketry must also come from one or the other of these periods.

^{1.} I am indebted to Mr. J. A. Bennyhoff for assistance in placing this and the following sites in the Central California archaeological sequence.

<u>Nicolaus Site 4 (Sac-86)</u> Sixteen fragments of Catlow Twine were recovered from this site, probably all pieces of the same basket. The technique is the same on these fragments as on the Alameda County piece, with the same degree of fineness and a down to the right pitch of weft. Again there are no data on intra-site provenience but the entire site deposit is known to date from the historic or protohistoric.

Allyn Mound 2 (Sac-95) Two separate lots of Catlow Twine were recovered from this site. One lot of several fragments was associated with an infant burial (Burial 4). Another offering in the same grave was a shell ornament which is characteristic of Phase II of the Late Horizon which means that the basketry was also from this period. The other lot consists of a single fragment which appears to have been associated with disarticulated human bones; even the site identification is doubtful, but if it is correct the fragment is probably Phase II of the Late Horizon. The basketry technique is of the same fineness and pitch of weft as the Alameda County piece.

Windmiller Site (Sac-107) One group of eight fragments of Catlow Twine is known from this site. The fragments may represent one or at most two baskets. They are all of the same fineness as the Altamont piece and all have a down to the right pitch of weft. No association data are present but since the specimens are carbonized we may assume they come from one of the burials from that site which exhibited pre-interment grave pit burning. All such burials in the Windmiller site are from Phase II of the Late Horizon.

<u>Booth Site (Sac-126)</u> One lot of Catlow Twine consisting of many small fragments of the same basket has been recovered from this site. It is of the same fineness as the Alameda County specimen and also has a down to the right pitch of weft. No location data are available for the specimen and since both Phase I and Phase II of the Late Horizon as well as the historic period are represented at this site the basketry could be from any of these periods.

The UCMA catalog numbers of the above specimens are given in the following table.

Site	Catalog Number
Altamont Cave	1-62387
Glen Cove (Sol-236)	1 - 22008
Thomas Site (Mrn-115)	1-127796
Johnson Site (Sac-6)	1-57290, 1-57923, 1-59201
Mosher Site (Sac-56)	1-165974, 1-165980
Nicolaus Site 4 (Sac-86)	L-16822
Allyn Mound 2 (Sac-95)	1-86769, 1-86791
Windmiller Site (Sac-107)	L-13806
Booth Site (Sac-126)	L-17673

Aside from two variations it will be noted that all the above specimens are virtually identical in technique. They are all plain twining on a two-ply twisted warp with a down to the right pitch of weft. They are all of the same degree of fineness running 40 to 50 wefts and 25 to 35 warps per 10 cm. The two variant specimens come from the San Francisco Bay region. The single specimen from the Thomas Site is of the same degree of fineness as the general type but has an up to the right pitch of weft. The fragment is very small and therefore may represent a few rows of decoration from a basket which mainly had a down to the right pitch of weft. The other variant is the piece from the Glen Cove Site. It conforms to the general pattern in having a down to the right pitch of weft but differs in being much finer than the other pieces; it runs about 40 warps and 70 wefts per 10 cm. It also differs in having diagonal rather than plain twining.

All the specimens but two may be placed in Phase II of Late Horizon, that is they may be dated as not earlier than 1400 A.D. The single specimen from the Booth Site may be either Phase I or Phase II and may therefore be left aside for present purposes. The piece from the Glen Cove Site seems to be definitely Phase I but it is the most divergent piece of the group. It is therefore proposed that in Central California the coarser variety be considered a Phase II trait without any earlier known occurrence and that the Glen Cove type be excluded on this basis. The Glen Cove type cannot be said to have disappeared, however, because similar techniques are recorded in the ethnographic literature (for instance, Gifford and Kroeber, 1937, p. 131, note twined bags on card warps among one group of the Pomo. Barrett (1908), however, does not mention this in his classic description of Pomo basketry).

What we have, then, so far as the Altamont or coarse variety is concerned, is a general trait occurrence in Central California in Late Horizon Phase II and early historic times. Ethnographically this type occurs in the Modoc-Klamath and Achomawi areas and therefore no doubt also occurred in the northern Sacramento Valley in the protohistoric period. Why then did it disappear in the historic period from the Central California region while it continued in full force in the northern regions? A possible answer is that it was replaced by European goods. The primary usefulness of the technique would have been in the manufacture of objects with great flexibility. This function is of course better served by cloth and perhaps cloth was the material that replaced it. But if this is the case why did the Modoc not abandon the technique-cloth was available to them as well as to the Penutians of Central California. The answer to this would be simply that the Modoc used this technique for all their twined basketry, not just for baskets which required flexibility. They could not easily abandon the technique any more than the Pomo could abandon fine coiling.

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