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The Creation and Flute Lure Myths:
Regional Patterns in Southern California Traditions

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Among the ways in which traditional narratives shed light on prehistory, regional variations in shared myths provide insights concerning cultural conservatism or fluidity and the patterns of social interaction among groups. A comparative analysis of two myths recorded in numerous versions from southern California, western Arizona, and northern Baja California suggests that the region's traditional cultures were shaped by ongoing borrowing and innovation to a greater extent than has sometimes been supposed, and that individual narrative motifs typically had relatively short lifespans of a few centuries at most. Cultural interaction among the region's different peoples was evidently little constrained by disparate linguistic heritages, competing military alliances, or social and economic dissimilarities.

Native Californian traditional narratives shed light on regional prehistory and ethnohistory in several different ways. In some cases, they directly preserved information about past events (e.g., Laylander). More generally, they reflect past lifeways, including material culture and social organization, but in particular they mirror ideas about human nature, morality, and aesthetics which were otherwise often not well documented (e.g., Blackburn 1975).

The present study considers two additional ways in which traditional narratives are revealing, based on interethnic sharing of common narrative themes and story elements. Diachronically considered, the extent to which patterns of narrative sharing crosscut the primary lines of cultural descent, as those were marked by linguistic affiliations, is a measure of the extent to which the groups' traditions were open to borrowing and innovation, rather than static and conservative. Synchronically, the closeness of different groups' narratives is one indication of more general social and cultural closeness prevailing among the groups.

There are formidable obstacles to making objective comparisons between such information-rich and complexly structured entities as traditional narratives. The narratives were recorded with markedly different degrees of completeness. The absence of a given feature in one recorded version may indicate that the feature was absent from the cultural tradition involved, or it may merely reflect a limitation in the particular performance or in the record that was made of the performance. Such factors as this make it difficult to apply a dichotomy between "same" and "different" narratives, or to use any simple statistical comparison of the frequency of shared narrative motifs. Nonetheless, when shared themes and elements are found, and when they are too numerous or too much alike in detail to be merely the products of similar social or psychological needs, they offer convincing evidence of a cultural connection, whether that connection lies in a longstanding common inheritance

or in more recent borrowing.

Two sets of cognate traditional narratives are considered below. One is the Creation myth, recognizably similar versions of which were shared throughout most of southern California, western Arizona, and northern Baja California (Figure 1). The second is an elaborate epic known as the Flute Lure myth, with a geographical distribution a little wider but more scattered than the Creation myth. Together, the distribution patterns of the two myths provide some insights into the late prehistoric and early historic cultural worlds of the region's peoples.

THE SOUTHERN CALIFORNIAN CREATION MYTH

More than 50 cognate variants of the Creation myth have been recorded (Table 1). These include Luiseño, Cupeño, Cahuilla, Serrano, Ipai, Kumeyaay, Tipai, Paipai, Cocopa, Quechan, Mohave, Maricopa, Upland Yuman, and Upper Piman versions. The distribution is strikingly compact, including all of the ethnolinguistic groups within a continuous area, and only those groups. Cognate creation myths were not found in the adjacent cultures, although individual motifs were occasionally more widely shared. The myth was not documented for the Takic-speaking Gabrielino, but this may be due merely to the relatively scant ethnographic record preserved for that group. In the case of the Kiliwa, the linguistically most divergent among the Yumans, the absence of this myth is made significant by the presence of an alternative, non-cognate creation myth (Meigs 1939:64-67).

Following a brief discussion by Alfred L. Kroeber (1906), the first comparative study of the southern California Creation myth was undertaken by Thomas T. Waterman (1909). The narratives used by Waterman included, according to his own count, seven Luiseño versions (here labeled Lu-1, Lu-2, Lu-4+Lu-5, Lu-6+Lu-7, Lu-8, Lu-9, and Lu-10), one Mohave version (Kroeber 1906:314-316; later more fully published as Mo-1 and Mo-2), and five Diegueño versions (Ip-1, Ip-3, Ku-1, Ku-7, and Qu-1). Note that Waterman (a) lumped together two pairs of Luiseño versions which are considered distinct here, (b) grouped Ipai and Kumeyaay accounts together as Diegueño, (c) included two versions of the separate Flute Lure myth (Ip-3 and Ku-7), and (d) ascribed to the Diegueño rather than to the Quechan a "Yuma" account (Qu-1) which had been conveyed through a Kumeyaay consultant.

Waterman employed for his comparative analysis a set of 13 "themes" which he considered to be present in most of the Luiseño versions. Slightly rephrased, these included: (1) a primeval origin through birth, rather than by creation; (2) origin of the sun by birth, rather than creation; (3) origin of mankind by birth, rather than creation; (4) origin of culture through a culture hero's teaching, rather than by its release; (5) origin of death in the precedent of a hero/god's death, rather than through a decision; (6) presence of a culture hero; (7) killing of a hero/god, typically through bewitching by the mythic character Frog; (8) apotheosis of a hero/god into a natural phenomenon, such as the moon or a bird; (9) misbehavior by Coyote, most commonly in stealing the dead hero/god's uncremated heart; (10) a general migration of mankind prior to its dispersal into tribes; (11) transformation of the First People into animals; (12) some reversal of modern conditions in primeval times, such as the existence of only a small land area, soft rocks, linguistic uniformity, or people eating dirt; and (13) brother-sister incest between Sky and Earth.

There are several problems with using these themes to evaluate relationships among the versions of the myth. Waterman's own ratings and his comments in the text of his article were inconsistent. Some of the themes were ambiguously or arbitrarily defined. Several were too redundant to be considered as independent tests of relatedness among the myths (e.g., numbers 1, 2, 3, and 13, or numbers 4 and 6). A majority of the themes were defined by general mythic issues, such as the origin of the world, man, death, culture, and so on. Such issues were addressed in creation myths in many regions, and they were likely to evoke a limited range of alternative solutions (origin by birth or by

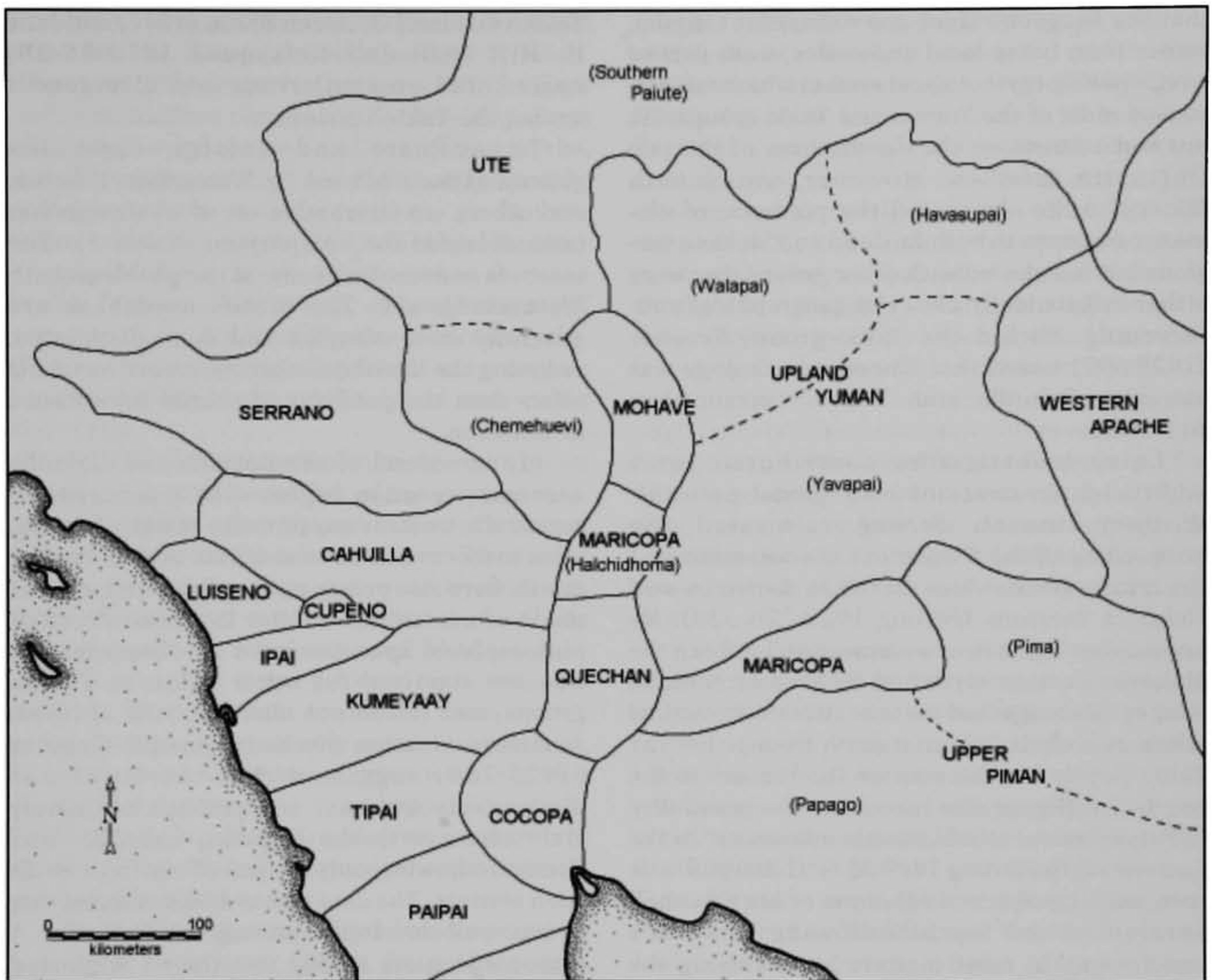

Figure 1. Ethnolinguistic groups having versions of the Creation and Flute Lure myths

creation; death as a necessity, an accident, or a mistake; etc.). Consequently, similarities between myths in such general features are not persuasive as evidence of historical connections rather than independent invention.

Waterman's own conclusion was that relationships among the Luiseño, Diegueño, and Mohave narratives available to him strikingly crosscut linguistic affiliations. He discerned strong similarities between the Luiseño and Mohave myths, but little or no relationship between Mohave and Diegueño versions, "only in the terminology or etymology concerned" (Waterman 1909:55). "The resemblance between the Luiseño and Diegueño is really inconsiderable (three out of thirteen elements), since any two mythologies, although totally unrelated, might agree on two or three episodes, especially episodes of the nature of those discussed" (Waterman 1909:55).

The question of regional relationships in southern California creation myths was raised again a few years later by Kroeber (1925:788-791). With a considerably wider sample of creation myth versions available to him, Kroeber's analysis of ethnic and geographic patterning was more nuanced than Waterman's, although he discussed the problem in less detail. He recognized

that the Diegueño (Ipai and Kumeyaay) myths, rather than being local anomalies, were part of a region-wide mythological system which encompassed most of the Yuman and Takic groups. He put some stress on the distinctness of the two linguistic families. However, along with Waterman, he also noted the presence of elements common to both Luiseño and Mohave versions but not shared with other groups that were either linguistically closer or geographically intervening. Within the Takic group, Kroeber (1925:692) noted that Cupeño mythology was closest to Cahuilla, and closer to Serrano than to Luiseño.

Later investigators contributed some additional observations on regional patterns. William Duncan Strong reiterated the uniqueness of the Diegueño Creation myth and the close similarities between Luiseño and Cahuilla versions (Strong 1929:326-328). He argued that the lack of a connection between the Mohave Creation myth and Mohave ceremonial song cycles suggested that the River Yumans had taken over their Creation myth from either the Takic peoples to the west or the Pimans to the southeast. Strong also hinted at "the possibility of Polynesian or other Oceanic influences" in the Luiseño myth (Strong 1929:327). C. Daryll Forde reviewed the external relations of his Quechan version of the myth, following Kroeber's conclusions in most matters but stressing the closeness of the Quechan version to the Mohave in its treatment of the creator's culture-hero son (Forde 1931:177-179). Anna H. Gayton (1935), in a brief overview of regional patterning in Native California traditional narratives, added cognate versions of the Creation myth from Upland Yuman to Kroeber's roster. Also following Kroeber, Gayton emphasized Luiseño-Mohave distinctiveness in the brother-sister incest theme, and she hypothesized a specifically Uto-Aztecan contribution in the emphasis on male and female progenitors. (However, the brother-sister incest theme was lacking from Mohave versions of the myth, and the male/female progenitors motif was present in Ipai and Maricopa as well as Mohave versions but was only weakly expressed or absent in the non-Luiseño Takic versions.) G. Hazen Shinn (1941) and Jane H. Hill (Hill and Nolasquez 1973:85-88) commented on similarities and divergences among the Takic versions.

To evaluate and enlarge upon the generalizations offered by Waterman, Kroeber, and others, an alternative set of 13 themes has been selected for comparison (Table 2). The intent is to overcome some of the problems with Waterman's set. The motifs used here are generally more complex and more distinctive, reducing the likelihood that they were anything other than the products of shared inheritance or diffusion.

(1) In several of the Luiseño and Cahuilla accounts, creation begins with a sequence of rather abstract or mysterious states of being, prior to more realistic or concrete events. Similar motifs were also present in one Ipai version. This mode of narration, whether it is considered as philosophical speculation or as obscurantism, was not reported for other Takic or Yuman groups, and it was not characteristic of North American creation myths in general. Kroeber (1925:788) suggested that the motif was distinctively Luiseño, and perhaps ultimately Gabrielino, with the Cupeño, Cahuilla, and Serrano showing only traces of an interest in such matters. The data now available suggest that it was well-developed among the Cahuilla. A reasonable guess is that this theme originated in Luiseño or Cahuilla culture, or possibly diffused to them from the Gabrielino, and that in early historic times it was in the process of diffusing southward to the Ipai, along with other religious innovations associated with the Chingichnish complex of religious ideas and practices (DuBois 1908b).

(2) Creation occurs through the sexual union of a female Earth and a male Sky (the latter might alternatively be Night, Sky Power, or Water), according to most Luiseño and Ipai variants. In Luiseño myths, the coupling is usually incestuous, Earth and Sky being sister and brother to each other, as well as mother and father to later beings. The general theme of mother Earth and father Sky was also clearly expressed in some Mohave, Maricopa, and Upper

Piman variants, and was more obscurely hinted at in Cahuilla, Kumeyaay, and Quechan versions. The motif was present farther east, with the Zuni and others. More remote similarities have been suggested with Japanese and Polynesian myths, but the analogies were not sufficiently specific to be persuasive as evidence of any prehistoric connections (cf. Rooth 1984:171-173). No clear geographical priority can be inferred on the basis of this regional distribution, although the motif was most fully developed in the Luiseño myths. The somewhat scattered pattern may suggest that the theme was a relatively old one within the region.

(3) The destruction of one or more prior worlds, before the creation of the present one, was reported in a few Upland Yuman, Maricopa, Upper Piman, and Quechan variants. The earlier worlds were most often destroyed by flooding. This theme had wider affiliations in the mythology of the Southwest and Mesoamerica, and it may well have diffused into western Arizona from the east or south. There was a vague analogy, but probably no real connection, between the destruction of prior worlds in this theme and the abortion of embryonic creations in Theme 1. World destruction was sometimes linked to the widely distributed emergence motif, noted in Theme 4 below.

(4) Two Heroes emerge from below a primeval ocean in Kumeyaay, Tipai, Paipai, Cocopa, Quechan, and Maricopa versions. The second of the Heroes usually becomes blind by opening his eyes during the emergence, often because the first Hero to emerge deceitfully claims to have opened his eyes. (For simplicity, central figures in the Creation myth versions will be referred to here as "Heroes". Often, in the various versions and incidents, such figures are more specifically identified as gods, creators, culture heroes, or early human leaders.) Kroeber (1925:638) noted this motif as exclusively Yuman, and it was not found in any of the Uto-Aztecan myths, but it was also absent from the Ipai, Mohave, and Upland Yuman variants. This southern Yuman theme may have been related in a general way to two creation myth motifs which were much more widely distributed (Rooth 1984; Thompson 1929). One was the earth-diver motif, prominent in central California but also present in most regions of North America. It begins with mythic figures floating on a primeval ocean, into which diving animals must be sent to dredge up material for making land. In one Ipai version of the Creation myth (Ip-1), the Heroes are present on a primeval lake, without having emerged up through it. A second, possibly related theme is the emergence motif, in which mythic characters travel up to the present world from a previous world below. The emergence motif was particularly characteristic of myths in the Southwest; it was found in one Kumeyaay (Ku-5) and several Upland Yuman versions. It is tempting to see the southern Yuman emergence-through-saltwater motif as a local synthesis or reconciliation of the earth-diver and emergence motifs.

(5) Rivalry in creation, usually between two Heroes identified as brothers, was a theme prominent in the Creation myth versions in most of the region's cultures. The rivalry typically takes the form of arguments over which of the two is senior, wiser, or more powerful, whose creations are properly made, and whether or not death should be permanent. Ipai, Kumeyaay, Tipai, Paipai, Cocopa, Quechan, Maricopa, Upper Piman, Cupeño, Cahuilla, and Serrano myths all had cognate versions of the theme. It was conspicuously lacking or attenuated in the Luiseño myths, which merely suggested a rivalry between mother Earth and father Sky; in the Mohave myths, which mentioned the two brothers but did not elaborate the theme; and in most Upland Yuman variants. Its geographical distribution was generally central within the region, and strongly crosscut the lines of linguistic inheritance.

(6) A related if less common theme was the production of malformed creatures by one of the rival Heroes. This was included in Kumeyaay, Cocopa, Quechan, Maricopa, Cupeño, Cahuilla, and Serrano versions. The creatures have webbed hands and feet in the Quechan, Maricopa, Cahuilla, and Serrano variants, and they have faces on both sides of their heads in

Cahuilla and Serrano accounts.

(7) Because of their conflicts, one of the Heroes leaves the world to go under the ground or into the ocean in Cahuilla, Cupeño, Serrano, Kumeyaay, Tipai, Paipai, Cocopa, Quechan, Maricopa, and Upper Piman Creation myths. In the process, the departing Hero is often responsible for causing earthquakes and raising up mountains upon a formerly level earth (Serrano, Cahuilla, Cupeño, and Kumeyaay) or for letting loose sickness into the world (Kumeyaay, Cocopa, Quechan, Maricopa, and Upper Piman).

(8) The revenge of Rattlesnake was another theme with a geographically scattered distribution. The defenseless Rattlesnake is physically abused by the First People, the Hero arms him/her with fangs (made from whiskers, thorns, coal, gravel, or sticks) or with poison (from herbs or tobacco smoke), and Rattlesnake bites and kills the tormenter. The theme was included in two of the Luiseño Creation myth versions and in most Cupeño, Cahuilla, Cocopa, Maricopa, and Upper Piman accounts, but not in Ipai, Kumeyaay, Tipai, Paipai, Quechan, Mohave, Upland Yuman, or Serrano myths. In some cases, the motif accounts for the origin of death or it provides a motive for killing the Hero, but often it is peripheral to the main narrative line, which may in part account for its scattered geographical distribution.

(9) The Hero tricks the First People into fatally shooting each other with bows and arrows in the Cahuilla, Cupeño, Serrano, Paipai, Cocopa, and Maricopa accounts. This episode is significant as the origin of death, the origin of warfare, or a motive for later killing the Hero.

(10) The killing of the Hero by Frog through witchcraft was another of the most commonly repeated themes. It was strongly developed in most Takic creation myths and in many Yuman versions, although it was found in only one Kumeyaay variant and was absent from the Tipai, Paipai, and Upper Piman myths. There was considerable variation in the way this theme was developed. Usually Frog is female, but sometimes apparently male; in a few cases, two frogs are involved. The motivation given for the bewitching also varied. In most Luiseño, Ipai, Cocopa, Quechan, and Mohave versions, the grievance against the Hero is a personal one: he has seen Frog's thin, flat hindquarters, and thinks her unattractive (in Luiseño and Ipai versions); he has molested his daughter Frog (in Quechan, Mohave, and Upland Yuman versions); or Frog wishes to avenge the killing of her brother Coyote by Rattlesnake, who had received his power from the Hero (in Cocopa versions). In a few Luiseño variants and more generally in Cupeño, Cahuilla, Serrano, and Maricopa accounts, it is the First People collectively who wish to kill the Hero. Several reasons for the community's anger were suggested: the Hero has become too old, too cruel, or too powerful; his policy concerning death is rejected; he has tricked people into killing each other with bows and arrows (Theme 9); he has given deadly fangs to Rattlesnake (Theme 8); or he has molested the female culture hero, Moon. The most common method of bewitching the Hero is for Frog to swallow the Hero's excrement, as attested in Cupeño, Cahuilla, Serrano, Cocopa, Quechan, Mohave, and Upland Yuman versions. This element may have originally been present, but bowdlerized, in some of the other accounts. As they were recorded, the alternative methods of bewitching included swallowing the Hero's spittle, vomit, hair, or swimming water; giving him poison internally or externally; spitting into a spring; and cursing. The wide but irregular distribution of the theme and the variation in its elements suggest that it was a relatively old motif within the regional mythology.

(11) After his bewitching, in many of the accounts the Hero does not die immediately, but undergoes a period of illness. During this period, other characters usually make genuine or pretended attempts to cure him, and sometimes he travels to distant mountains or hot springs. Often the dying Hero instructs the First People, in particular by naming the months or the phases of the moon through which his illness lasts. This theme was most extensively developed in the Luiseño and Ipai accounts. It was also present in some Cupeño, Cahuilla, Kumeyaay, Quechan, Maricopa, and Upland Yuman versions, and was

more weakly developed in Serrano, Cocopa, and Mohave versions. In the Upper Piman version, it is a subordinate character, Rabbit, bitten by Rattlesnake (in Theme 8), who undergoes a prolonged illness and whose heart is subsequently stolen by Coyote (in Theme 12, below). As with the associated theme of bewitchment, the prolonged dying was probably a relatively old motif in the region.

(12) After the Hero dies, when he is to be cremated, Coyote is sent away, usually to fetch fire for the funeral pyre. However, Coyote returns and is able to get to the pyre, typically by jumping over the head of Badger, and he steals and eats the Hero's heart. All of the region's cultures which had cognate versions of the Creation myth, except the poorly documented Tipai and Paipai myths, included this theme in at least some variants; it was in some ways the signature theme of the southern California Creation myth. Its universality within the region makes it difficult to draw any inferences about its origins.

(13) A final, specifically Yuman, theme was the First People's summoning of a Great Serpent, usually from the ocean to the south, and their killing of the Serpent. A characteristically Kumeyaay motif, it was also shared in some Ipai, Cocopa, Quechan, and Mohave versions, but not in any of the Uto-Aztecan myths. Knowledge, learning, or songs fly out of the dead Serpent's body in the Kumeyaay and Ipai versions.

THE FLUTE LURE MYTH

This complex epic was recorded in Ipai, Kumeyaay, Maricopa (Halchidhoma), Mohave, Upland Yuman (Havasupai), Cahuilla, Serrano, Ute (Chemehuevi and Moapa Southern Paiute), Upper Piman (Papago), and Western Apache versions (Table 3). The geographical distribution of the Flute Lure myth was therefore slightly wider than the distribution of the Creation myth, but it was also less continuous, at least as far as the documentation goes. Despite its geographical range, the versions of the myth showed an impressive degree of consistency in their basic motifs, and often in minor details as well.

A brief summary of the most common elements of the story may be helpful. An unmarried woman mysteriously becomes pregnant, usually either by Gopher or by the Sun, and gives birth to twin sons. Among other activities that are detailed, the precocious boys set out on a quest to capture eaglets from a rocky cliff. The older brother succeeds in getting the eaglets, but the boys quarrel over which of them should get which eaglet. The eaglets die during the trip back home, but the boys' mother revives them. The boys acquire and play flutes, and two sisters in a distant country hear the music. The sisters travel to find the music's source, and on the way they encounter a series of bird or animal imposters claiming to be the musicians. When the sisters finally arrive, the boys' mother is unfriendly toward them. The older and younger sisters lie down with the respective brothers, but only the younger couple has sex. The sisters go back to their home, and eventually the boys follow them, at the insistence of the younger brother. The sisters' father detects the arrival of his sons-in-law through the girls' laughter, and the boys are killed and eaten. The younger sister gives birth to a son, whose sex is concealed to prevent him from also being killed by his maternal grandfather. The precocious grandson ultimately kills those who were responsible for his father's death, variously including his grandfather, his mother, his aunt, and all of the members of his mother's community. He raises up the ghosts of his father and uncle, but is not able to bring them back to life. He travels away to join his paternal grandmother.

The early recorders of the Flute Lure myth recognized its region-wide distribution. Constance Goddard DuBois (1906b:146) reported that, according to her understanding, the story had originated among the Mohave, had spread from them to the Ipai, and from the Ipai had passed both south to the Kumeyaay and north to the Luiseño. Pliny Earle Goddard (1918), documenting the Western Apache variants, cited DuBois' Ipai account and quoted Kroeber as reporting that the myth was common among Yuman groups. Gayton (1935:589) noted the existence of Serrano, Upland Yuman,

Maricopa, and Ute versions and suggested possible links to Navaho and Piman myths.

The most detailed comparative study was made in the 1950s by Kroeber (1972). He analyzed the Mohave (Mo-4), Ipai (Ip-3), and Maricopa (Ma-3) renderings of the Flute Lure myth, compiling statistics on more than 100 narrative elements which were variously shared among or exclusive to each of the three versions. According to Kroeber's counts, the Mohave version was most aberrant, and the Maricopa version had most in common with the other two (Table 4). Drawing on additional evidence from other cultural patterns, Kroeber concluded that the most likely location for the origin for the Flute Lure myth was among one of the Yuman groups living along the lower Colorado River south of the Mohave.

For the present study, a new set of 67 narrative elements has been defined, comparable in their specificity to the set used by Kroeber (Table 5). However, elements common to all 12 versions or present in only a single version have been excluded. To evaluate the relative degree of similarity between each pair of versions, two statistics have been calculated. Index 1 is the number of story elements shared by both of the compared versions, divided by the total number of elements present in the version having the fewest elements (Table 6). This index measures the extent to which the two narratives were focused upon the same subjects. Index 2 considers those elements that had alternative states or values for a given element, sometimes matching and sometimes contrasting in any pair of versions. For instance, the father of the twin brothers may be specified as either Gopher or the Sun. Index 2 is the number of elements with matching states in the two compared versions, divided by the total number of elements with alternative states specified in both versions (Table 7). The second index measures the extent to which the two versions had specific similarities that contrasted with some other versions. Both indices attempt to minimize the effects of differences in the completeness or amount of detail with which the versions were recorded.

In general, the picture that emerges from these comparisons is the remarkable similarity among the Flute Lure versions across most of the region and the absence of strong patterning in the distribution of variations. The two Western Apache versions stood somewhat apart, for instance in lacking any discussion of the twin brothers' conception and upbringing or of the son's revenge. Because of the small number of shared elements, the statistical indices involving the Western Apache versions tend to be anomalous (e.g., Index 1 is only 0.4 for the two versions from the same group), and to minimize this effect, the two versions have been treated as a single version for purposes of statistical comparisons. The Ute (Southern Paiute and Chemehuevi) versions also lacked several key elements present in most of the other versions. Every version of the myth contained specific elements (not tabulated) which were unique, but there can be no doubt that the Flute Lure story had a common origin.

PATTERN INTERPRETATIONS

Considered together, the Creation and Flute Lure myths provide perspectives on change within the region's cultures and on interaction among its various ethnolinguistic groups.

One issue concerns the time depths represented in the myths, and by extension the long-term stability or fluidity of native traditions. It has sometimes been assumed that at least selected narratives were conserved for very long periods of time. For instance, Carobeth Laird (1984:207) wrote of the Chemehuevi version of the Flute Lure myth that "this is indeed a very ancient telling." Other lines of evidence suggest that change rather than conservatism was the rule with the region's traditional narratives, at least when considered on a time scale of several centuries (e.g., Laylander n.d.).

The relation of patterns in narrative distributions to lines of linguistic affiliation provides one test of relative stability or change in the myths. If a narrative had been present in the proto-culture, and if it had tended to be maintained substantially intact in descendant cultures, it would be expected that the later

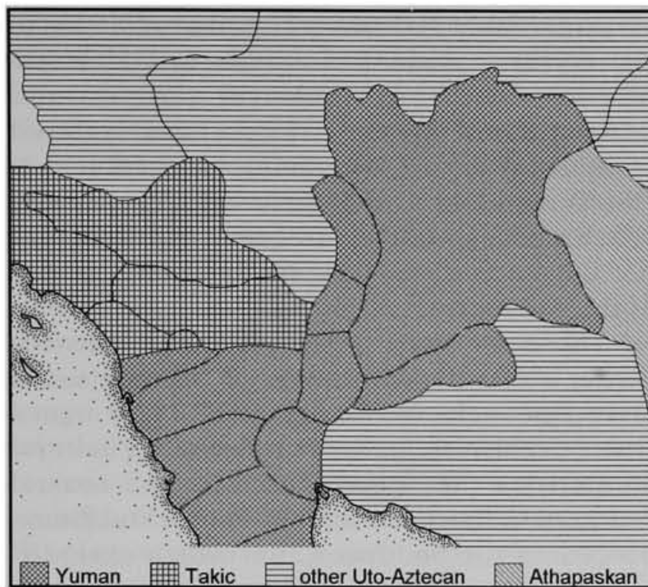

Figure 2. Linguistic families of the region

geographical range of the narrative would approximately match the range of the descendant cultures. The descendant cultures would also be expected to share varying degrees of similarity in their versions of the narrative corresponding approximately to the closeness of their lines of descent. If these expectations were not met – if the narrative was notably more restricted in its geographical distribution or if it showed patterns of variation freely crosscutting lines of cultural descent – a reasonable inference would be that the narrative as a whole had arisen subsequent to the proto-culture, or else that it had been subject to such extensive later change that it was effectively a later creation.

The extent to which patterning in both the Creation and the Flute Lure myths crosscut linguistic lines argues for fairly late origins and a moderate to-high-rate of change. At one extreme, the hypothesis of a common inheritance of these myths from Early Holocene or even Pleistocene times, when the ancestors of later Uto-Aztecan and Hokan speakers may have shared a common language, is ruled out by the absence of cognate myths among other groups which were located outside the immediate region but which were more closely related to the local Takic or Yuman speakers than those two groups were to each other. Conservation of the narratives from a somewhat later period – corresponding to the proto-Takic and proto-Yuman stages of differentiation, perhaps about 3,000-2,500 years ago, according to glottochronological estimates – is also rendered improbable by the ways in which variation in the narratives thoroughly crosscut the divisions between the two families (Figure 2). On a still shorter time scale, equivalent to glottochronological time depths on the order of 2,000-1,500 years, narrative variation is again found to crosscut rather than conform to the linguistic divisions between the Cupan and Serran branches of Takic, and between the Delta-California and River branches of Yuman (Figure 3). The most striking case is the Pai branch of Yuman, represented by two noncontiguous languages, Paipai in northern Baja California and Upland Yuman in western Arizona. Paipai and Upland Yuman speakers probably separated from each other less than 1,000 years ago (cf. Joël 1998). Unfortunately, the documentation of Paipai mythology is meager, but the available evidence shows no pattern of narrative similarities shared specifically between these two groups.

Another indication of relatively late diffusion and modification is provided by the two Western

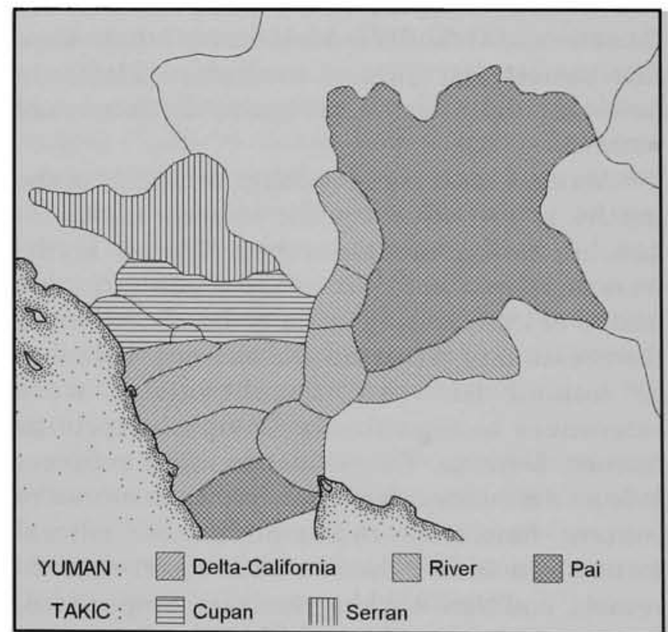

Figure 3. Yuman and Takic branches

Apache versions of the Flute Lure myth. The dating of the Apache intrusion into eastern Arizona is uncertain, but it evidently occurred not more than 1,000 years ago, and probably closer to 500-600 years ago (Gunnerson 1978). The Western Apache versions, although recognizably cognate with the others, were the most aberrant of all the versions, testifying to substantial modification subsequent to diffusion of the myth to the Apache, probably from the Yumans (or, conceivably but not likely, its diffusion to the Yumans from the Apache).

At the other extreme of the time scale, roughly the life span of a person, the evidence indicates that the myths were indeed traditional cultural products, and not merely something that could be freely reworked or reinvented by each narrator. While there were unique elements included in each version, there was also a noticeable degree of conformity in the myths as they were reported by different consultants belonging to the same ethnolinguistic group. Some recognizable continuity in the Luiseño Creation myth extended from Gerónimo Boscana's account in the 1820s (Boscana 1933) to the independent versions documented nearly a century later. If there were no clear proto-Uto-Aztecan, proto-Takic, or proto-Cupan models for the Creation myth, there were discernible Luiseño and Cahuilla models for it; if there were not consistent Yuman or Delta-California patterns, there was a recognizable Kumeyaay pattern.

Another measure of stability or fluidity in the myths is provided by the incorporation of anachronistic content into them. The two myths were supposed to be set in the earliest, mythic period of time, during or immediately following the creation of the world and the establishment of human lifeways; anachronisms were references to specifically late-prehistoric or historic features. This evidence again supports at least a moderate degree of fluidity in narrative content. References to late-prehistoric cultural features, including the bow and arrow, ceramic vessels, and New World agricultural crops (corn, beans, and squash) were fairly frequent, occurring in the majority of the recorded versions (Table 7). Historical-period additions to the myths included references to Old World human races, agricultural crops, and domesticated animals, as well as isolated mentions of ships (Qu-2), coins, and steel swords (Ku-5), and Old World textiles (Ut-2). Historic anachronisms were less frequent, but were also not uncommon, occuring in about one-quarter of the versions.

There are clues to the place of the myths within a relative chronology of regional social and religious change. Strong (1927, 1929) argued that a prehistoric link was reflected in cultural similarities that were shared by the coastal southern Californians and the Pueblo and Piman peoples of the Southwest, but which excluded the intervening Yumans, desert Uto-Aztecans, and Athapaskans. The intervening groups were hypothesized to have intruded into the region later, disrupting an earlier cultural continuum. The similarities proposed as a common heritage of coastal southern Californians, Pueblos, and Pimans involved aspects of social organization such as lineages, clans, and moieties, as well as ceremonial features including "the group-house, priest and fetish complex, the ceremonial ground-painting, asperging of water brought from a particular spring, placing of plume offerings in certain shrines, ceremonial smoking of tobacco, offering prayers for rain, initiation of boys, ceremonial pole climbing, eagle and whirling dances, clan ownership of eagles and personification of the gods" (Strong 1927:52). The Creation and Flute Lure myths did not conform to this pattern, being well-represented among both Takic and Yuman groups but not extending as far east as the Pueblos. If Strong's model for the emergence of social organization and ceremonialism in the region is accepted, the distribution of these traditional narratives must have occurred during a significantly later phase in regional relative chronology.

Although the Creation and Flute Lure myths both appear to have been fluid and mobile, there are some suggestive differences between the two. The geographical range of cognate versions of the Flute Lure myth was slightly greater, but the consistency between its versions was also

notably higher. Specific similarities among myth versions in adjacent groups were more pronounced in the case of the Creation myth. These patterns suggest that the Creation myth, in something like its recorded form, had probably been present in the region for a longer period of time and that it had been diffused less rapidly than the Flute Lure myth.

The two myths' differing degrees of conservatism are probably attributable to differences in function. The Creation myth served as a charter, explaining and justifying culturally mandated lifeways. It also provided content for songs and models for key rites of passage. Such factors gave the myth a sacred character, and they probably somewhat discouraged innovation, without entirely preventing it. The Flute Lure myth was less closely linked to more general beliefs and practices. It is true that some versions of the Flute Lure myth were explicitly set in the immediate aftermath of the creation (Ku-7, Mo-4), and the behavior of the myth's characters set precedents for later human behavior (Ip-3, Ku-7, Ma-3). Indeed, Waterman (1909) considered the story to be properly a part of the Creation myth. However, there was little continuity in the actors between the two sets of myths, the roles of nonhuman characters and supernatural events were a little more muted in the Flute Lure story, and its religious and ceremonial significance was evidently much less. Because of its less sacred content, the myth probably could be accepted into foreign cultures more easily than could the Creation myth.

Two types of narrative change may be distinguished: diffusion of whole narratives, and modification of narrative content. At least crude estimates can be offered for the rates of diffusion and modification relative to each other. If diffusion had occurred only slowly compared to the rate of narrative modification, it would be expected that regional gradients in the contents of narratives would have developed. Group B, receiving a narrative from A, would pass along a distinctively modified version to C, who would also leave their own imprint on the version ultimately adopted from them by D. On the other hand, if diffusion was rapid relative to the rate of modification, variation in content would be expected to lack any strong geographical patterning. The latter was the case for the Flute Lure myth. The versions of adjacent groups showed no more than a slight tendency to be more similar than the versions from groups at opposite ends of the region (see Tables 6 and 7). With the Creation myth, on the contrary, some themes and elements were more geographically localized, indicating a slower rate of diffusion relative to modification. It is unlikely that the Creation myth was being modified more rapidly than the Flute Lure myth; more probably, innovations in the Creation myth were being diffused more slowly.

A second issue addressable through traditional narratives concerns patterns of cultural interaction between various ethnolinguistic groups. Kroeber (1925) stressed the close cultural links among the Takic and Yuman groups of southern California and western Arizona. The distributions of the Creation and Flute Lure myths support this pattern, as against potential alternative links westward with the Chumash and Yokuts or southward with the Kiliwa and Cochimí. More tenuous links extended northward to Numic groups and farther eastward to Pimas and Athapaskans.

Some versions of the Creation myth contained references to other ethnolinguistic groups, usually to account for the origins of those peoples (Table 9). Nearly half of such references concerned groups whose territories were not adjacent to the group making the reference, yet few of them concerned groups which did not share cognate versions of either the Creation or the Flute Lure myth. This provides some additional confirmation that the cultural region defined by the shared myths formed a unit for significant interaction.

A key feature in regional social relationships was a system of military alignments that divided most of the region's ethnolinguistic groups into two apparently stable sets of allies or adversaries (White 1974). On one side ("Alliance A") were, among others, the Mohave, Quechan, Kumeyaay, Chemehuevi, Southern Paiute, Yavapai, Western

Apache, and Papago (Figure 4). Groups in the opposing set ("Alliance B") included the Cocopa, Maricopa, Pima, Havasupai, Walapai, Serrano, Cahuilla, Ipai, Paipai, and perhaps the Luiseño. If these divisions were relatively stable, and if they were pervasive in structuring intergroup relationships, it would be expected that they would have influenced the diffusion of traditional narratives and narrative elements, and that similarities in the myths discussed here would have been significantly greater between allied groups than between enemies. In fact, such expectations were not met. Variations in the Flute Lure myth crosscut alliance affiliations, and the versions of allies were on the average no more similar than the versions of adversaries, although there was some tendency for members of Alliance B to share similar myth elements (see Tables 6 and 7). In the variants of the Creation myth, most of the themes also crosscut the alliance system, although themes 1, 8, and 9 were not recorded for any Alliance A groups. The somewhat greater conformity within Alliance B as against Alliance A with respect to the narratives is an intriguing and presently unexplained feature.

The region encompassed substantial social and economic variability. Groups living along the Colorado and Gila rivers practiced agriculture and had a degree of nation-level political integration. The hunter-gatherers of coastal southern California were relatively sedentary, intensive in their subsistence practices, and demographically dense, while desert hunter-gatherers were often more mobile, sparsely settled, and opportunistic. The distribution patterns of the shared myths, themes, and elements freely crosscut such differences. There are no indications of either barriers to diffusion or preferential directionality in transmission based on any higher prestige enjoyed by one set of peoples or another.

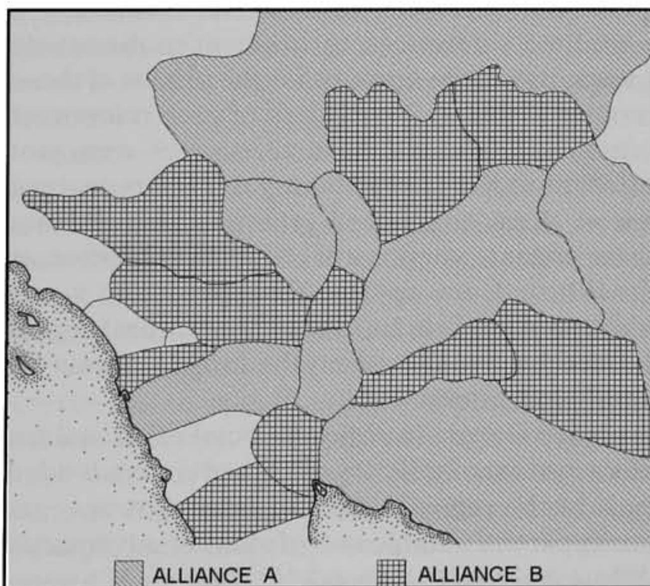

Figure 4. Military alliances

CONCLUSIONS

Comparisons of versions of the Creation and Flute Lure myths offer insights concerning processes of cultural change in the region. Considered in a single version, it is usually not possible to say whether a narrative theme or element was a recent invention or had been in use for several centuries, or possibly even for millennia. Nor is it normally possible to say whether the theme or element had originated within the culture where it was recorded or had been borrowed from outside. However, considered collectively and probabilistically, the evidence of regional patterning indicates that the narratives and their constituent themes and elements were subject to continuing elaboration or replacement, despite some tendency to conserve continuity in religiously important matters. The odds that a given motif had been in use in a particular culture for as long as 200-300 years were apparently fairly high, while the odds that it had originated in that culture and had been present for a millennium or more were very low.

The Takic and Yuman-speaking peoples formed a distinct unit with respect to their traditional narratives, although some interchange with Numic, Piman, and Athapaskan neighbors occurred. Within the region, the ways in which myths were shared were little affected by differences in linguistic relatedness, political-military alignment, social organization, or economic strategies.

REFERENCES

Benedict, Ruth
1926 Serrano Tales. Journal of American Folklore 39:1-17.

Blackburn, Thomas C.
1975 December's Child: A Book of Chumash Oral Narratives. Berkeley: University of California Press.

Boscana, Gerónimo
1933 Chinigchinich. Santa Ana: Fine Arts Press.

Crawford, James M.
1983 Cocopa Texts. University of California Publications in Linguistics 100.

Curtis, Edward S.
1907-30 The North American Indian. 20 vols. Norwood: Plimpton Press.

Curtis, Natalie
1909 Creation Myth of the Cochans (Yuma Indians). Craftsman 16:559.

Cushing, Frank Hamilton
1965 The Nation of the Willows. Flagstaff: Northland Press.

Davis, Edward H.
1921 Early Cremation Ceremonies of the Luiseño and Diegueño Indians of Southern California. Indian Notes and Monographs 7:91-110.

Densmore, Frances
1929 Papago Music. Bureau of American Ethnology Bulletin 90.

DuBois, Constance Goddard
1901 The Mythology of the Diegueños. Journal of American Folklore 14:181-185.
1904a The Story of the Chaup. Journal of American Folklore 17:217-242.
1904b Mythology of the Mission Indians. Journal of American Folklore 17:185-188.
1905 Religious Ceremonies and Myths of the Mission Indians. American Anthropologist 7:620-629.
1906a Mythology of the Mission Indians. Journal of American Folklore 19:52-60.
1906b Mythology of the Mission Indians. Journal of American Folklore 19:145-164.
1908a Ceremonies and Traditions of the Diegueño Indians. Journal of American Folklore 21:228-234.
1908b The Religion of the Luiseño Indians of Southern California. University of California Publications in American Archaeology and Ethnology 8:69-186.

Forde, C. Daryll
1931 Ethnography of the Yuma Indians. University of California Publications in American Archaeology and Ethnology 28:83-277.

Gayton, Anna H.
1935 Aerial Affiliations of California Folktales. American Anthropologist 37:582-599.

Gifford, Edward Winslow
1918 Clans and Moieties in Southern California. University of California Publications in American Archaeology and Ethnology 14:155-219.
1931 The Kamia of Imperial Valley. Bureau of American Ethnology Bulletin 97.
1932 The Southeastern Yavapai. University of California Publications in American Archaeology and Ethnology 29:177-252.
1933 Northeastern and Western Yavapai Myths. Journal of American Folklore 36:347-415.

Gifford, Edward Winslow, and Robert H. Lowie
1928 Notes on the Akwa'ala Indians of

Lower California. University of California Publications in American Archaeology and Ethnology 23:339-352.

Goddard, Ives
1996 Introduction. In: Handbook of North American Indians, Vol. 17, Languages, Ives Goddard, ed., pp. 1-16. Washington: Smithsonian Institution.

Goddard, Pliny Earle
1918 Myths and Tales from the San Carlos Apache. American Museum of Natural History Anthropological Papers 24:1-86.

Gunnerson, James H.
1978 Southern Athapaskan Archaeology. In: Handbook of North American Indians, Vol. 9, Southwest, Alfonso Ortiz, ed., pp. 162-169. Washington: Smithsonian Institution.

Harrington, John Peabody
1908 A Yuma Account of Origins. Journal of American Folklore 21:324-348.
1934 A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California. Smithsonian Miscellaneous Collections 92(4).

Hedges, Kenneth Everett
1970 An Analysis of Diegueño Pictographs. Masters thesis, San Diego State University.

Henshaw, H. W.
1972 The Luiseño Creation Myth. The Masterkey 46:93-100.

Hill, Jane H., and Rosinda Nolasquez, eds.
1973 Mulu'wetam, the First People: Cupeño Oral History and Language. Banning: Malki Museum Press.

Hooper, Lucille
1920 The Cahuilla Indians. University of California Publications in American Archaeology and Ethnology 16:315-380.

Joël, Judith
1998 Another Look at the Paipai-Arizona Pai Divergence. In: Studies in American Indian Languages: Description and Theory, Leanne Hinton and Pamela Munro, eds., pp. 32-40. University of California Publications in Linguistics 131.

Kelly, William H.
1977 Cocopa Ethnography. University of Arizona Anthropological Papers 29.

Kroeber, A. L.
1906 Two Myths of the Mission Indians of California. Journal of American Folklore 19:309-321.
1925 Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78.
1935 Walapai Ethnography. American Anthropological Association Memoir 42.
1948 Seven Mohave Myths. University of California Anthropological Records 11:1-70.
1972 More Mohave Myths. University of California Anthropological Records 27:1-160.

Laird, Carobeth
1984 Mirror and Pattern: George Laird's World of Chemehuevi Mythology. Banning: Malki Museum Press.

Laylander, Don
2001 Remembering Lake Cahuilla. In: Proceeding of the Millennium Conference: The Human Journey & Ancient Life in California's Deserts, Mark Allen, Judyth Reed, and M. C. Hall, eds., in preparation. Oral Conference Paper.

Lowie, Robert H.
1924 Shoshonean Tales. Journal of American Folklore 37:1-242.

Meigs, Peveril, III
1939 The Kiliwa Indians of Lower California. Iberoamericana 15.
1971 Creation Myth and Other Recollections of the Nijí Mishkwish. Pacific Coast Archaeological Society Quarterly 7(1):9-13.
1977 Notes on the Paipai of San Isidoro, Baja California. Pacific Coast Archaeological Society Quarterly 13(1):11-20.

Patencio, Francisco
1943 Stories and Legends of the Palm Springs Indians. Palm Springs: Palm Springs Desert Museum.

Quinn, Charles Russell, and Elena Quinn
1965 Edward H. Davis and the Indians of the Southwest United States and Northwest Mexico. Downey: Elena Quinn.

Rooth, Anna Birgitta
1984 The Creation Myths of the North American Indians. In: Sacred Narrative: Readings in the Theory of Myth, Alan Dundes, ed., pp. 166-181. Berkeley: University of California Press.

Russell, Frank
1908 The Pima Indians. Bureau of American Ethnology Annual Report 26:3-389.

Seiler, Hansjakob
1970 Cahuilla Texts. Indiana University Language Science Monograph 6.

Shinn, G. Hazen
1941 Shoshonean Days: Recollections of a Residence of Five Years among the Indians of Southern California, 1885-1889. Glendale: Arthur H. Clark.

Smithson, Carma Lee, and Robert C. Euler
1964 Havasupai Religion and Mythology. University of Utah Anthropological Papers 68.

Spier, Leslie
1923 Southern Diegueño Customs. University of California Publications in American Archaeology and Ethnology 20:294-358.
1933 Yuman Tribes of the Gila River. Chicago: University of Chicago Press.

Strong, William Duncan
1927 An Analysis of Southwestern Society. American Anthropologist 29:1-61.
1929 Aboriginal Society in Southern California. University of California Publications in American Archaeology and Ethnology 26:1-358.

Thompson, Stith
1929 Tales of the North American Indians. Bloomington: Indiana University Press.

Waterman, Thomas T.
1909 Analysis of the Mission Indian Creation Story. American Anthropologist 11:41-55.
1910 The Religious Practices of the Diegueño Indians. University of California Publications in American Archaeology and Ethnology 8:271-358.

White, Chris
1974 Lower Colorado River Area Aboriginal Warfare and Alliance Dynamics. In: 'Antap: California Indian Political and Economic Organization, Lowell John Bean and Thomas F. King, eds., pp. 113-135. Ballena Press Anthropological Papers 2. Ramona.

Table 1.
Versions of the Southern California Creation Myth

Ca-1	Unknown (Desert Cahuilla), ca. 1920; Hooper 1920:317-328
Ca-2	Charley Alamo (Cabezon), ca. 1926; Curtis 1907-30(15):106-110
Ca-3	William Pablo (Palm Canyon), ca. 1926; Curtis 1907-30(15):110-121
Ca-4	Alejo Patencio (Palm Springs), 1925; Strong 1929:109, 130-143
Ca-5	Francisco Patencio (Palm Springs), ca. 1939; Patencio 1943:1-32
Ca-6	Joe Lomas, 1964; Seiler 1970:38-62
Co-1	Sam Spa, ca. 1940-1951; Kelly 1977:115-120
Co-2	Charlie Huck, 1963-1967; Crawford 1983:13-31
Cu-1	Unknown, 1916-1917; Gifford 1918:192
Cu-2	Unknown, ca. 1916; Gifford 1918:199
Cu-3	Unknown, 1919-1920; Hill & Nolasquez 1973:1-4
Cu-4	Manuela Griffith and Salvadora Valenzuela, 1924-1925; Strong 1929:268-270
Cu-5	Rosinda Nolasquez, 1962; Hill & Nolasquez 1973:4-8
Ip-1	Cinon Duro (Mesa Grande), ca. 1901; DuBois 1901:181-184, 1904c:100-102
Ip-2	José Bastiano Lachapa (Los Conejos), ca. 1926; Curtis 1907-30(15):121-123
Ku-1	Unknown (Manzanita), ca. 1905; DuBois 1905:627-628
Ku-2	Unknown (Campo), ca. 1909; Waterman 1910:338-341
Ku-3	James McCarty Hetmiel (Campo), 1916-1917; Gifford 1918:170-172
Ku-4	James McCarty Hetmiel (Campo), 1920; Spier 1923:328-332
Ku-5	Narpai (Kamia), 1928-1929; Gifford 1931:75-81
Ku-6	Unknown, ca. 1930s; Hedges 1970:29-33
Lu-1	Unknown, ca. 1814-1826; Boscana 1933:27-30; Harrington 1934:10-15
Lu-2	Unknown (Juaneño), ca. 1814-1826; Boscana 1933:31-34
Lu-3	Unknown, 1884; Henshaw 1972:93-99
Lu-4	Unknown (La Jolla), ca. 1904; DuBois 1904b:185
Lu-5	Unknown, ca. 1904; DuBois 1904b:185-186
Lu-6	Unknown, ca. 1906; DuBois 1906a:52-58
Lu-7	Unknown, ca. 1906; DuBois 1906a:59-60
Lu-8	Unknown (Pauma), ca. 1904; Kroeber 1906:312-314
Lu-9	Salvador Cuevas (La Jolla), ca. 1908; DuBois 1908b:128-138
Lu-10	Lucario Cuevish (Rincon), ca. 1908; DuBois 1908b:138-148
Lu-11	Celso Calac (La Jolla), ca. 1921; Davis 1921:106-110; Quinn and Quinn 1965:106-107
Lu-12	Francisco Ardea (Pala), 1924-1925; Strong 1929:284-285
Ma-1	Unknown, ca. 1908; Curtis 1907-30(2):86-88
Ma-2	Kutox (Halchidhoma), ca.1929-1930; Spier 1933:345-353
Mo-1	Jo Nelson, 1903; Kroeber 1948:52-67
Mo-2	Nyavarup, 1902; Kroeber 1972:5-14
Mo-3	Unknown, ca. 1908; Curtis 1907-30(2):56-57
Pa-1	Jackrabbit, 1921-1922; Gifford and Lowie 1928:350-351; cf. Meigs 1977:15
Pi-1	Kâmâltkâk (Gila River), 1901-1902; Russell 1908:206-230
Qu-1	related by Kumeyaay José Santo Lopez, ca. 1908; DuBois 1908a:236
Qu-2	Joe Homer, ca. 1908-1929; Harrington 1908:328-347; Forde 1931:214-221
Qu-3	Unknown, ca. 1908; Curtis 1907-30(2):73-77
Qu-4	Unknown, ca. 1909; Curtis 1909:559-567
Se-1	John Morongo (Serrano/Cahuilla), ca. 1885; Shinn 1941:34-41
Se-2	Benjamin Morongo, 1916-1917; Gifford 1918:182-185
Se-3	Rosa Morongo, 1922; Benedict 1926:1
Ti-1	Calistra Tenjíl (Nejí), 1929; Meigs 1971:12
Up-1	Kohot (Havasupai), 1881; Cushing 1965:72-75
Up-2	Michael Burns (Southeastern Yavapai), 1929-1930; Gifford 1932:243-246
Up-3	Jim Stacey (Northeastern Yavapai), 1932; Gifford 1933:349-352
Up-4	Sam Ichesa (Western Yavapai), 1932; Gifford 1933:402-404
Up-5	Kuni (Walapai), 1929; Kroeber 1935:12-28

Ca = Cahuilla; Co = Cocopa; Cu = Cupeño; Ip = Ipai; Ku = Kumeyaay; Lu = Luiseño; Ma = Maricopa; Mo = Mohave; Pa = Paipai; Pi = Upper Piman; Qu = Quechan; Se = Serrano; Ti = Tipai; Up = Upland Yuman

Table 2.
Selected Themes in Versions of the Creation Myth

	mysterious, abstract creations	mother earth / father sky	prior worlds are destroyed	Heroes emerge through sea	quarrel between creators	malformed creations	one Hero goes under ground	Rattlesnake's revenge	people shoot each other	Frog bewitches Hero	Hero's prolonged illness	Coyote steals piece of corpse	Giant Serpent is killed
Ca-1	●	-	-	-	●	●	●	●	●	●	●	●	-
Ca-2	●	-	-	-	●	●	●	-	●	-	-	-	-
Ca-3	-	*	-	-	●	●	●	●	●	●	●	●	-
Ca-4	●	-	-	-	●	●	●	●	●	●	●	●	-
Ca-5	●	-	-	-	●	●	●	●	●	●	●	●	-
Ca-6	●	-	-	-	●	●	●	-	●	●	●	●	-
Co-1	-	-	-	●	●	●	●	●	●	●	●	●	●
Co-2	-	-	-	-	-	-	-	●	-	●	●	●	-
Cu-1	-	-	-	-	●	-	-	-	-	-	-	-	-
Cu-2	-	-	-	-	●	-	●	-	-	●	-	●	-
Cu-3	-	-	-	-	●	●	●	●	●	●	●	●	-
Cu-4	-	-	-	-	-	-	●	●	●	-	●	-	-
Cu-5	-	-	-	-	●	*	●	●	-	●	●	●	-
Ip-1	●	●	-	-	*	-	-	-	-	●	●	●	-
Ip-2	-	●	-	-	*	-	-	-	-	-	●	●	●
Ku-1	-	-	-	-	-	-	-	-	-	-	-	-	●
Ku-2	-	-		●	-	-	-	-		-	-	-	●
Ku-3	-	-	-	●	●	-	●	-	-	-	-	-	●
Ku-4	-	-	-	●	●	-	●	-	-	-	●	●	●
Ku-5	-	*	-	-	●	●	●	-	-	●	●	●	●
Ku-6	-	-	-	●	●	-	●	-	-	-	●	●	●
Lu-1	-	●	-	-	-	-	-	-	-	*	●	●	-
Lu-2	-	-	-	-	-	-	-	-	-	*	●	-	-
Lu-3	-	●	-	-	-	-	-	●	-	●	●	●	-
Lu-4	-	●	-	-	-	-	-	-	-	●	●	-	-
Lu-5	-	-	-	-	-	-	-	-	-	●	●	-	-
Lu-6	●	●	-	-	-	-	-	●	-	●	●	●	-
Lu-7	-	-	-	-	-	-	-	-	-	●	●	●	-
Lu-8	-	●	-	-	-	-	-	-	-	●	●	●	-
Lu-9	●	●	-	-	●	-	-	-	-	●	●	●	-
Lu-10	●	●	-	-	-	-	-	-	-	●	●	●	-
Lu-11	-	-	-	-	-	-	-	-	-	●	●	●	-
Lu-12	-	●	-	-	-	-	-	-	-	●	-	●	-
Ma-1	-	●	-	●	●	●	●	●	●	●	●	-	-
Ma-2	-	-	●	●	●	●	●	●	-	●	●	●	-
Mo-1	-	-	-	-	-	-	-	-	-	-	-	●	-
Mo-2	-	●	-	-	-	-	-	-	-	●	●	-	●
Mo-3	-	*	-	-	-	-	-	-	-	●	●	●	-
Pa-1	-	-	-	●	●	-	●	-	●	-	-	-	-
Pi-1	-	●	●	-	●	●	●	●	-	-	-	●	-
Qu-1	-	*	-	●	●	-	●	-	-	-	-	-	-
Qu-2	-	-	●	●	●	●	●	-	-	●	●	●	●
Qu-3	-	-	-	●	●	●	●	-	-	-	-	●	-
Qu-4	-	-	-	●	●	●	●	-	-	●	●	●	-
Se-1	-	-	-	-	●	●	●	-	-	●	-	●	-
Se-2	-	-	-	-	●	●	●	-	●	●	*	●	-
Se-3	-	-	-	-	●	-	*	-	-	●	-	●	-
Ti-1	-	-	-	●	●	-	●	-	-	-	-	-	-
Up-1	-	-	-	-	-	-	-	-	-	-	-	●	-
Up-2	-	-	●	-	-	-	-	-	-	-	●	●	-
Up-3	-	-	-	-	-	-	-	-	-	●	●	●	-
Up-4	-	-	●	-	●	-	-	-	-	●	●	●	-
Up-5	-	-	-	-	-	-	-	-	-	●	-	-	-

● = theme is present   * = theme is weakly suggested   - = theme is absent

Table 3.
Versions of the Flute Lure Myth

Ap-1	Albert Evans (San Carlos Apache), 1914; Goddard 1918:69-71
Ap-2	unknown (San Carlos Apache), 1914; Goddard 1918:71-72
Ca-7	Francisco Patencio (Palm Springs), ca. 1939; Patencio 1943:103-112
Ip-3	Antonio (Mesa Grande), ca. 1901; DuBois 1904a:217-242
Ku-7	Hatakek (Manzanita), ca. 1906; DuBois 1906b:146-162; cf. also DuBois 1906b:162-164
Ma-3	Kutox (Halchidhoma), ca.1929-1930; Spier 1933:367-397
Mo-4	Pete Sherman Avépãya, 1953; Kroeber 1972:100-109
Pi-2	Sivariano Garcia (Papago), ca. 1920s; Densmore 1929:54-77
Se-4	Rosa Morongo, 1922; Benedict 1926:2-7
Up-6	unknown (Havasupai), 1958; Smithson and Euler 1964:49-55
Ut-1	unknown (Moapa Southern Paiute), 1915; Lowie 1924:190-191
Ut-2	George Laird (Chemehuevi), ca. 1919-1940; Laird 1984:204-209

Ap = Western Apache; Ca = Cahuilla; Ip = Ipai; Ku = Kumeyaay; Ma = Maricopa; Mo = Mohave; Pi = Upper Piman; Se = Serrano; Up = Upland Yuman; Ut = Ute

Table 4.
Kroeber's Statistical Comparisons of Mohave, Maricopa, and Ipai Versions of the Flute Lure Myth

	Mohave	Maricopa	Ipai
Elements present only in this version	11	5	6
Elements absent only in this version	16	8	11
Total of positive and negative differentiating elements	27	13	17

Table 5.
Selected Elements in Versions of the Flute Lure Myth.

	Ma-3	Mo-4	Ip-3	Ku-7	Up-6	Ap-1+2	Ca-7	Se-4	Ut-1	Ut-2	Pi-2
Mother lives alone ● with sister ❍ in a community ✻	●	●	❍	●	.	.	.	●	✻	●	✻
Mother rejects suitors ●	.	.	●	.	.	.	●	.	.	.	●
Mother is impregnated while bathing/swimming ● fetching water ❍ urinating ✻	●	●	●	●	.	.	●	.	✻	✻	❍
Mother is impregnated by Gopher ● Sun ❍	●	●	●	.	.	.	●	❍	❍	❍	●
Several animals falsely claim paternity ●	●	.	●	.	.	.	.	●	.	.	●
Boys kill quails ● birds ❍	●	.	●	.	❍	.	.	❍	.	.	●
Boys cry until mother has birds properly cooked ● buried ❍	●	.	●	.	.	.	.	❍	.	.	●
Boys hunt successively bigger game ●	●	.	●	.	●	.	.	●	.	.	●
Mother assumes form of a stump, is almost shot by boys ●	●	.	●	●	.	.	.	.	.	.	.
Mother creates a deer, but boys only see its tracks ●	.	.	.	.	.	.	●	.	.	.	●
Boys kill a deer, but mother revives it ●	●	●	●	.	.	.	.	.	.	.	.
Boys seek eaglets at cliff ●	●	●	●	●	●	.	●	●	.	.	●
Boys transform themselves to get eaglets ●	●	●	.	.	.	.	●	●	.	.	●
Eaglets are successfully caught by older boy ● younger ❍ both ✻	●	●	●	●	✻	.	❍	✻	.	.	❍
Boys quarrel over choice of eaglets ●	●	●	●	●	.	.	●	●	.	.	●
Eaglets are killed by bad weather ●	●	●	●	●	.	.	.	.	.	.	●
Eaglets are buried with boys' bows and arrows ● boys' hair ❍	●	●	❍	●	.	.	.	.	.	.	.
Mother revives eaglets ●	●	●	●	●	.	.	.	●	.	.	●
Wood for bows and arrows is sought by boys ● Coyote ❍	❍	●	●	.	●	.	●	.	.	.	❍
Boys seek wood for flute in water ●	●	.	●	●	.	.	.	●	.	●	●
Seeking flute wood, boy encounters underwater animal ●	●	.	.	●	.	.	.	.	.	.	●
Flute wood is successfully obtained by older boy ● younger ❍ both ✻	●	.	●	●	.	.	.	✻	.	●	❍
Boys quarrel over preferred portion of flute wood ●	.	.	.	●	.	.	.	.	.	●	●
Flutes are made by mother ● boys ❍	●	●	●	●	.	.	●	❍	❍	❍	●
Boys live with their mother ● grandmother ❍	●	●	●	●	●	❍	●	●	●	●	●
When music is heard, sisters are bathing/swimming ● gathering food ❍ collecting wood ✻ getting up ❑	●	●	❍	●	.	✻	●	❍	.	.	❑
Flute music is heard first by older sister ● younger ❍	●	●	❍	●	.	●	❍	❍	.	.	●
Sisters are daughters of Buzzard ● Owl ❍	.	.	●	.	.	.	.	●	.	❍	●
Initiative to follow music comes from younger sister ● older ❍ Coyote ✻	.	.	●	❍	.	❍	.	●	.	✻	❍
Sisters' rejected suitors fail to make good music ●	●	●	●	.	●	●	●	●	●	●	●
Sisters' rejected suitors offer bad kinds of food ●	●	.	●	●	.	.	.	.	.	.	.
Mother tries to prevent boys' marriage to sisters ●	●	●	●	●	●	●	.	●	.	.	●
Mother is made to sleep ●	●	●	.	●	●	.	.	.	.	.	.
Younger boy is paired with younger sister ● older ❍	●	●	●	.	●	.	●	.	●	❍	.
Marriage is consumated by younger boy only ● both ❍	●	●	●	.	●	.	●	.	❍	●	.
Sisters return home at initiative of older sister ●	●	.	●	.	.	.	●	●	.	.	.
Sisters' departure causes misfortune for younger boy ● both ❍	●	●	●	●	●	.	.	❍	.	.	❍
Boys travel to visit their wives ●	●	●	●	●	●	●	●	●	●	●	●

Table 5 (Cont.).
Selected Elements in Versions of the Flute Lure Myth

	Ma-3	Mo-4	Ip-3	Ku-7	Up-6	Ap-1+2	Ca-7	Se-4	Ut-1	Ut-2	Pi-2
Boys leave signs to tell mother when they die ●	●	●	●	●	●	.	●	●	.	.	.
Mother tries to prevent boys leaving ●	●	●	●	●	.	.	.	●	.	.	-
Boys experience unfavorable omen during trip ●	●	●	●	●	.	.	.	●	.	-	-
Boys are transformed with stars ● into cottonwood down ❍ into flies ✻ into smoke ❑	●	❍	●	✻	.	.	❑	.	.	.	●
Boys enter sisters' house through roof ●	●	●	●	●	.	.	●	.	.	.	●
Sisters' laughter reveals boys' presence ●	●	.	●	●	.	.	.	.	●	●	●
Hostility to boys is led by sisters' father ● Coyote ❍ sisters ✻	●	●	●	●	✻	.	.	●	.	❍	●
Agent is sent to spy on boys ●	●	●	●	●		.	●	●	●	●	●
Spy is sisters' nephew ● their brother ❍ one sister's son ✻	●	●	●	.	.	.	●	✻	.	.	❍
Spy must be bribed with food repeatedly ● once ❍	●	●	●	●	.	.	●	❍	.	.	●
Leader of hostility against boys recruits allies ●	●	●	●	●	●	.	.	●	.	●	●
Enemies kill both boys ● only one ❍	●	●	●	●	●	❍	●	●	.	●	●
Boys are killed by hawk ● sisters' father ❍ whole group ✻	●	●	❍	❍	●	✻	●	●	.	✻	●
False claims to have killed boys are made by Coyote ● other ❍	●	❍	●	●	.	.	●	●	.	.	.
Enemies eat boys' corpses/blood ●	●	.	●	●	.	●	.	●	.	.	●
Enemies use boys' bones in games ●	.	.	●	●	.	.	●	●	.	.	.
Enemies wear boys' bones ●	.	.	●	●	.	.	.	.	.	.	.
Mother sees signs of boys' death ●	●	●	.	.	●	.	.	.	.	.	.
Mother mourns and travels away ●	●	●	.	.	.	.	.	.	.	.	●
Pregnancy of one sister ● both ❍	●	●	●	●	●	●	●	●	❍	●	●
Son is disguised as a girl to protect him ●	●	●	●	●	.	.	●	●	●	●	●
Son wins at gambling for mother's brother ● himself ❍	●	.	❍	●	.	.	●	❍	.	.	❍
Son kills maternal grandfather only ● most or all of community ❍	●	❍	❍	❍	❍	.	❍	❍	❍	❍	●
Son futilely raises ghost of both boys ● his father only ❍	●	.	❍	●	.	.	●	●	.	.	●
Son leaves to join father's mother ● father's father ❍ father ✻	●	●	●	●	●	.	●	●	✻	❍	●
Son causes his mother's death ● transformation ❍	.	❍	●	●	●	●	.	●	.	●	❍
Son causes his mother's sister's death ● transformation ❍	.	❍	.	❍	●	●	.	●	.	.	❍
Son joins his father's mother permanently ● temporarily ❍	❍	●	●	❍	❍	.	❍	❍	.	.	●
Son is/becomes a meteor/comet ●	●	.	●	●	.	.	.	.	.	.	.

Table 6.
Similarity of Flute Lure Myth Versions – Index 1

	Elements in Version	Index 1 Mean	Ma-3	Mo-4	Ku-7	Ip-3	Ca-7	Se-4	Ut-1	Ut-2	Pi-2	Ap-1+2
Up-6	25	0.74	0.92	0.92	0.72	0.88	0.60	0.80	0.53	0.52	0.80	0.69
Ma-3	58	0.90		0.96	0.88	0.91	0.91	0.89	1.00	0.85	0.87	0.77
Mo-4	45	0.85			0.78	0.89	0.83	0.73	0.93	0.77	0.82	0.85
Ku-7	49	0.80				0.88	0.71	0.78	0.73	0.81	0.82	0.92
Ip-3	59	0.92					0.94	0.96	1.00	0.96	0.89	0.92
Ca-7	35	0.77						0.77	0.87	0.58	0.83	0.62
Se-4	46	0.84							0.73	0.81	0.91	1.00
Ut-1	15	0.80								1.00	0.87	0.31
Ut-2	26	0.78									0.92	0.62
Pi-2	53	0.87										1.00
Ap-1+2	13	0.77										

Notes:
Index 1 is calculated by dividing the number of elements which are shared by both of the two compared versions by the total number of elements specified in the version with fewest specified elements.

Mean Values of Index 1 for:
all pairs (55 cases) = 0.82
Yuman pairs (10 cases) = 0.87 ; Uto-Aztecan pairs (10 cases) = 0.83; all same-family pairs (20 cases) = 0.85; Yuman/Uto-Aztecan cross pairs (25 cases) = 0.82; all cross-family pairs, including Athapascans (35 cases) = 0.80 pairs sharing a common boundary (23 cases) = 0.82; non-adjacent pairs (32 cases) = 0.82
Alliance A pairs (15 cases) = 0.81; Alliance B pairs (10 cases) = 0.86; all same-alliance pairs (25 cases) = 0.83; adversarial pairs (30 cases) = 0.82

Table 7.
Similarity of Flute Lure Myth Versions – Index 2

	Alternate-State Elements	Index 2 Mean	Ma-3	Mo-4	Ku-7	Ip-3	Ca-7	Se-4	Ut-1	Ut-2	Pi-2	Ap-1+2
Up-6	16	0.64	0.64	0.67	0.67	0.67	0.91	0.85	0.50	0.60	0.36	0.50
Ma-3	29	0.58		0.79	0.86	0.66	0.77	0.43	0.20	0.43	0.64	0.33
Mo-4	26	0.56			0.76	0.68	0.75	0.40	0.30	0.43	0.59	0.25
Ku-7	26	0.59				0.63	0.76	0.50	0.29	0.54	0.48	0.44
Ip-3	32	0.53					0.68	0.50	0.30	0.41	0.50	0.25
Ca-7	22	0.59						0.59	0.33	0.45	0.53	0.17
Se-4	27	0.51							0.57	0.57	0.38	0.33
Ut-1	11	0.32								0.50	0.25	0.00
Ut-2	18	0.46									0.20	0.50
Pi-2	29	0.43										0.33
Ap-1+2	9	0.31										

Notes:
Index 2 is calculated by dividing the number of elements having alternative states (e.g., eaglets are captured by older brother, or by younger brother) into the number of such elements which share the same state in both versions.

Mean Values of Index 2 for:
all pairs (55 cases) = 0.50
Yuman pairs (10 cases) = 0.70 ; Uto-Aztecan pairs (10 cases) = 0.44; all same-family pairs (20 cases) = 0.57;
Yuman/Uto-Aztecan cross pairs (25 cases) = 0.52; all cross-family pairs, including Athapascans (35 cases) = 0.46
pairs sharing a common boundary (23 cases) = 0.53; non-adjacent pairs (32 cases) = 0.48
Alliance A pairs (15 cases) = 0.39; Alliance B pairs (10 cases) = 0.67; all same-alliance pairs (25 cases) = 0.50;
adversarial pairs (30 cases) = 0.50

Table 8.
References to Late Prehistoric and Post-Contact Elements in the Creation and Flute Lure Myths

		Creation Myth	Flute Lure Myth
Late Prehistoric Elements	bow and arrow	Ca-1, Ca-2, Ca-3, Ca-4, Ca-5, Ca-6, Co-1, Cu-3, Cu-4, Cu-5, Ku-5, Lu-9, Lu-10, Ma-1, Mo-1, Pa-1, Pi-1, Qu-2, Se-2, Up-2, Up-3, Up-4, Up-5	Ap-2, Ca-7, Ip-3, Ku-7, Ma-3, Mo-4, Pi-2, Se-4, Up-6, Ut-2
	ceramic vessels	Ca-6, Co-1, Ku-5, Lu-4, Mo-1, Pi-1, Up-5	Ap-1, Ap-2, Ip-3, Ku-7, Ma-3, Mo-4, Pi-2, Se-4
	New World crops	Ca-1, Ca-4, Ca-5, Ku-5, Mo-1, Mo-2, Pi-1, Qu-2, Qu-4, Up-1, Up-2, Up-3, Up-4, Up-5	Ap-2, Ca-7, Ip-3, Ku-7, Ma-3, Mo-4, Pi-2
Post-Contact Elements	Old World races	Ca-1, Ca-4, Ca-5, Co-1, Ku-5, Lu-8, Ma-2, Mo-2, Pi-1, Qu-2, Qu-4, Up-5	—
	Old World crops	Ca-1, Ca-4, Ca-5, Mo-1, Mo-2, Up-5	Ip-3, Ma-3
	Old World animals	Ca-1, Ca-4, Co-1, Ku-5, Qu-2, Qu-4, Up-5	Ip-3, Up-6

Table 9.
References to Other Regional Ethnic Groups in the Creation Myths

				group to which reference was made													
(source group for Creation myth)	Cocopa	Diegueño*	Maricopa	Mohave	Paipai	Quechan	Upland Yuman	Upper Piman	Apache	Cahuilla	Cupeño	Serrano	Ute	Hopi	Kiliwa	Navaho	Zuni
Cocopa		●	●	●	●	●	●	●	-	-	-	-	-	-	●	-	-
Kumeyaay	●		●	●	●	●	●	●	-	●	-	-	●	-	-	-	-
Luiseño	-	●	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-
Maricopa	-	-		●	-	●	●	●	-	●	-	-	●	-	-	-	-
Mohave	●	●	●		-	●	●	-	-	-	-	●	●	-	-	-	-
Paipai	●	-	●	●		●	-	-	-	-	-	-	-	-	-	-	-
Quechan	●	●	●	●	-		●	●	●	●	-	-	●	-	-	-	-
Upland Yuman	-	-	-	●	-	-		-	-	-	-	-	●	●	-	●	●
Upper Piman	-	-	-	●	-	●	-		●	-	-	-	-	-	-	-	-

* Ipai, Kumeyaay, and Tipai were usually not distinguished in the myths.